

INEOS GROUP HOLDINGS S.A.

2013 ANNUAL REPORT

TABLE OF CONTENTS

	Page
Certain Definitions and Presentation of Financial and Other Information	ii
Forward-Looking Statements	vii
Historical and Current Market and Industry Data	viii
Financial Information Included in this Annual Report	
Risk Factors	
Selected Financial Information	30
Use of Non-GAAP Financial Measures	32
Operating and Financial Review and Prospects	33
Business	56
Management	91
Principal Shareholders	93
Certain Relationships and Related Party Transactions	
Description of Certain Indebtedness	96
Glossary of Selected Terms	G-1
Index to Extracted Financial Statements	

CERTAIN DEFINITIONS AND PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Unless indicated otherwise in this annual report or the context requires otherwise:

- all references to "INEOS Group", "INEOS", "Group", "we", "us" or "our" are to INEOS Group Holdings S.A. and its consolidated subsidiaries;
- all references to the "2016 IGH Notes Issuer", "2018 IGH Notes Issuer", "Parent" or "IGH" are to INEOS Group Holdings S.A. and not to any of its subsidiaries;
- all references to "INEOS AG" are to INEOS AG, the ultimate parent of IGH, through its controlling interest in the voting share capital of IH;
- all references to "INEOS Holdings" or "IHL" are to INEOS Holdings Limited, the direct parent company of the 2019 and 2020 Senior Secured Notes Issuer and an indirect wholly owned subsidiary of IGH;
- all references to "INEOS Capital" are to INEOS Capital Limited or to INEOS Capital Partners;
- all references to "**IEL**" are to INEOS Europe Limited, which is not part of the Group following the Refining Divestiture but is owned by the Entrepreneurial (Refining) Business JV;
- all references to "IH" are to INEOS Holdings AG, an indirect parent company of the Issuer;
- all references to "U.S. Borrower" are to INEOS US Finance LLC;
- all references to the "2010 Senior Facilities Agreement" are to the multicurrency term and revolving facilities agreement, dated May 12, 2010, as subsequently amended, supplemented, varied or restated from time to time, made between, among others, IGL, IHL, certain subsidiaries of the Issuer, Barclays Bank PLC and certain lenders;
- all references to the "2010 Senior Secured Credit Facilities" are to the facilities under the 2010 Senior Facilities Agreement, all of which were repaid in full on or before May 4, 2012;
- all references to the "2015 Senior Secured Notes" are to the €300,000,000 aggregate principal amount of 9¹/₄% Senior Secured Notes due 2015 and \$570,000,000 aggregate principal amount of 9% Senior Secured Notes due 2015 issued pursuant to the 2015 Senior Secured Notes Indenture, which were redeemed in full on May 15, 2013;
- all references to the "2015 Senior Secured Notes Indenture" are to the indenture dated May 12, 2010, between INEOS Finance plc, as issuer, the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee, principal paying agent and transfer agent, The Bank of New York Mellon, as U.S. paying agent and transfer agent, The Bank of New York Mellon (Luxembourg) S.A., as registrar, Luxembourg paying agent and Luxembourg Transfer Agent, and Barclays Bank PLC, as security trustee, as supplemented by the supplemental indentures dated as of May 27, 2010, November 9, 2010, January 31, 2011, January 31, 2011, March 15, 2011, April 1, 2011, May 31, 2011 and August 13, 2012, pursuant to which the 2015 Senior Secured Notes were issued:
- all references to the "2016 IGH Notes" and to the "2016 Notes" are to the €1,750,000,000 aggregate principal amount of $7^{7}/_{8}$ % Senior Notes due 2016 and \$750,000,000 aggregate principal amount of $8^{1}/_{2}$ % Senior Notes due 2016 issued pursuant to the 2016 IGH Notes Indenture, of which €1,032,130,000 aggregate principal amount of the $7^{7}/_{8}$ % Senior Notes due 2016 is currently outstanding and which will be redeemed in full with the proceeds of the Offering;
- all references to the "2016 IGH Notes Indenture" are to the indenture dated February 7, 2006, between the Issuer, as issuer, the guarantors named therein, The Bank of New York Mellon, as trustee, collateral agent, registrar and principal paying agent, and The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent and Luxembourg transfer agent, as supplemented by supplemental indentures dated as of March 16, 2006, December 20, 2006,

December 22, 2006, April 23, 2007, August 31, 2007, June 26, 2008, August 29, 2008, December 19, 2008, March 30, 2009, July 30, 2009, January 14, 2010, and April 6, 2010, May 12, 2010, November 9, 2010, January 31, 2011, January 31, 2011, March 15, 2011, April 1, 2011, May 31, 2011, August 13, 2012, September 1, 2013, December 19, 2013 and January 1, 2014, pursuant to which the 2016 IGH Notes were issued;

- all references to the "2016 IGH Notes Proceeds Loans" are to the loans advanced under the loan agreement, dated February 7, 2006 (as amended and restated as of May 8, 2013) between the Issuer, as lender, and IHL, as borrower, pursuant to which the gross proceeds of the 2016 IGH Notes issuance were advanced to IHL, as amended or partially repaid from time to time, including the partial or full repayment thereof, on or about the Issue Date, from the proceeds of the New IGH Notes Proceeds Loans;
- all references to the "2018 IGH Notes" and to the "2018 Notes" are to the €500,000,000 aggregate principal amount of 6¹/₂% Senior Notes due 2018 and \$678,000,000 aggregate principal amount of 6¹/₈% Senior Notes due 2018 issued pursuant to the 2018 IGH Notes Indenture;
- all references to the "2018 IGH Notes Indenture" are to the indenture dated May 14, 2013, between the Issuer, as issuer, the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee, collateral agent and principal paying agent, The Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent, registrar and Luxembourg transfer agent, and The Bank of New York Mellon as U.S. paying agent and transfer agent, as supplemented by the supplemental indentures dated as of June 5, 2013, September 1, 2013, January 1, 2014 and a fourth supplemental indenture to be dated on or before the Issue Date, pursuant to which the 2018 IGH Notes were issued;
- all references to the "2018 IGH Notes Proceeds Loans" are to the loans advanced under the loan
 agreement, dated May 8, 2013, between the Issuer, as lender, and IHL, as borrower, pursuant to
 which the gross proceeds of the 2018 IGH Notes issuance were advanced to IHL, as amended or
 partially repaid from time to time;
- all references to the "2019 and 2020 Senior Secured Notes Issuer" are to INEOS Finance plc;
- all references to the "2019 Senior Secured Notes" and to the "2019 Notes" are to the €500,000,000 aggregate principal amount of Floating Rate Notes due 2019 and \$1,000,000,000 aggregate principal amount of 8³/₈% Senior Secured Notes due 2019 issued pursuant to the 2019 Senior Secured Notes Indenture;
- all references to the "2019 Senior Secured Notes Indenture" are to the indenture dated February 10, 2012, among INEOS Finance plc, as issuer, the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee, principal paying agent and transfer agent, The Bank of New York Mellon, as U.S. paying agent and transfer agent, The Bank of New York Mellon (Luxembourg) S.A., as registrar, Luxembourg paying agent and Luxembourg Transfer Agent, and Barclays Bank PLC, as security trustee, as supplemented by the supplemental indentures dated as of March 1, 2012, August 13, 2012, September 1, 2013, December 19, 2013 and January 1, 2014, pursuant to which the 2019 Senior Secured Notes were issued;
- all references to the "2019 Senior Secured Notes Proceeds Loans" are to the loan advanced under the loan agreement, dated February 10, 2012, between INEOS Finance plc, as lender, and IHL, as borrower, pursuant to which the gross proceeds of the 2019 Senior Secured Notes issuance were advanced to IHL, as amended or partially repaid from time to time;
- all references to the "2020 Senior Secured Notes" and to the "2020 Notes" are to the \$775,000,000 aggregate principal amount 7¹/₂% Senior Secured Notes due 2020 issued pursuant to the 2020 Senior Secured Notes Indenture;
- all references to the "2020 Senior Secured Notes Indenture" are to the indenture dated May 4, 2012, among INEOS Finance plc, as issuer, the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee, principal paying agent and transfer agent, The Bank of New York Mellon, as U.S. paying agent and transfer agent, the Bank of New York Mellon

(Luxembourg) S.A., as registrar, Luxembourg paying agent and Luxembourg transfer agent and Barclays Bank PLC, as security trustee, as supplemented by the supplemental indentures dated as of May 29, 2012, August 13, 2012, September 1, 2013, December 19, 2013 and January 1, 2014, pursuant to which the 2020 Senior Secured Notes were issued;

- all references to the "2020 Senior Secured Notes Proceeds Loan" are to the loan advanced under the loan agreement, dated May 4, 2012, between INEOS Finance plc, as lender, and IHL, as borrower, pursuant to which the gross proceeds of the 2020 Senior Secured Notes issuance were advanced to IHL, as amended or partially repaid from time to time;
- all references to "BP" or "BP Group" are to BP p.l.c. and its consolidated subsidiaries;
- all references to the "BP Credit Documents" have the meaning ascribed to the term under the Intercreditor Deed;
- all references to the "BP Creditor Liabilities" are to all present and future liabilities and obligations owed by certain of the Guarantors to certain members of BP under or in connection with the BP Credit Documents and certain underlying trading agreements with BP, as further described under "Business—Agreements with BP—Related Agreements";
- all references to the "**BP Receivables**" are to those receivables owing to certain of our subsidiaries which are either owed by any member of BP or guaranteed by any member of BP;
- all references to the "Credit Support Deed" have the meaning ascribed to the term under the caption "Business—Agreements with BP—Related Agreements—The Credit Support Deed";
- all references to the "**Dollar Term Loans**" have the meaning ascribed to the term under the caption "Description of Certain Indebtedness—Senior Secured Term Loans—Overview", and as more fully defined under the Senior Secured Term Loan Agreement;
- all references to the "Entrepreneurial (Refining) Business" are to the entrepreneurial activities related to the Refining Business, which include the sales and distribution of refining products through an entrepreneur business model;
- all references to the "Entrepreneurial (Refining) Business JV" are to the joint venture that, following the Refining Divestiture, operates the Entrepreneurial (Refining) Business and is owned by PetroChina (50.1%) and INEOS Investments (49.9%);
- all references to the "Euro Term Loans" have the meaning ascribed to the term under the caption "Description of Certain Indebtedness—Senior Secured Term Loans—Overview", and as more fully defined under the Senior Secured Term Loan Agreement;
- all references to the "Existing IGH Notes" are to the 2016 IGH Notes (which were fully redeemed in February, 2014) and the 2018 IGH Notes;
- all references to the "Existing Notes" are to the 2016 IGH Notes, the 2018 IGH Notes, the 2019 Senior Secured Notes and the 2020 Senior Secured Notes, collectively;
- all references to the "Existing Notes Trustees" are to The Bank of New York Mellon, London Branch in its capacity as trustee under each of the Existing Indentures;
- all references to the "Films Business" are to the global films business which was sold to the Bilcare group on September 1, 2010;
- references to the "Fluor CDM Business" are to the portion of our fluorochemical business that we retained following the sale of our other property and assets used in connection with the fluorochemical business to Mexichem, S.A.B. de C.V. on March 31, 2010;

- all references to the "Grangemouth Divestiture" are to the disposals to INEOS Grangemouth Limited (a subsidiary of INEOS Holdings AG which lies outside of the Group) of the shares of INEOS Commercial Services UK Limited and INEOS Chemicals Grangemouth Limited (including the assets and liabilities relating to the petrochemical operations carried out by such entities at or in connection with the Grangemouth site) effective October 1, 2013;
- all references to "**IFRS**" are to the International Financial Reporting Standard as adopted by the European Union;
- all references to the "**IHL Pledged Shares**" are to 100% of the capital stock of IHL;
- all references to the "**Indenture**" are to the indenture governing the 2016 IGH Notes, the 2018 IGH Notes, the 2019 Senior Secured Notes and the 2020 Senior Secured Notes;
- all references to the "**Infrastructure Entity**" are to INEOS Infrastructure (Grangemouth) Limited, an entity that acquired certain infrastructure assets at Grangemouth, Scotland (principally a power station in Grangemouth, Scotland, and a terminal and other facilities), and which, following the Refining Divestiture, is jointly owned by INEOS Investments (50.0%) and the Refining Business JV (50.0%);
- all references to "Innovene" and the "Innovene business" refer to (a) all of BP's petrochemical operating units for olefins, polymers and other derivatives but excluding BP's Pasadena LAO operations, the Gelsenkirchen naphtha cracking operations and the Munchmunster olefins operation ("O&D"), (b) two integrated refinery plants in Grangemouth, United Kingdom and Lavéra, France, (c) a gas fractionator located in Hobbs, New Mexico and certain related pipelines and (d) existing O&D strategic joint venture investments other than BP's joint ventures with SECCO and in Malaysia, prior to giving effect to the Innovene Acquisition;
- all references to the "Innovene Acquisition" are to the purchase by the INEOS Group on December 16, 2005 of all of the shares and assets comprising the Innovene business pursuant to the Innovene Acquisition Agreement;
- all references to the "Innovene Acquisition Agreement" are to the Share Sale and Purchase Agreement dated October 7, 2005, as amended from time to time, among certain subsidiaries of BP, IHL, certain subsidiaries of IHL and INEOS Group Limited;
- all references to the "Intercreditor Deed" are to the intercreditor deed dated May 12, 2010, as amended and restated on December 23, 2010, as amended on February 18, 2011 and February 6, 2012, as amended and restated on May 4, 2012, and as amended and restated on May 8, 2013, and as subsequently amended, supplemented, varied or restated from time to time, among, *inter alios*, the Issuer, the guarantors acceded thereto, the facility agent under the Senior Secured Term Loans Agreement, Barclays Bank plc, as security trustee and the Existing Notes Trustees, and to which the Trustee will accede on the Issue Date:
- all references to the "INEOS ChlorVinyls Business" are to the businesses and assets of the INEOS Group engaged in the production of chlor- alkali and PVC, which were split-off in an indirect sale to Kerling on January 22, 2010;
- all references to "INEOS Investments" are to INEOS Investments (Jersey) Limited, an entity that is controlled by the principal shareholders of the Issuer, is not a member of the INEOS Group (but in which the INEOS Group holds certain ordinary shares and is and will be consolidated into our financial statements for so long as we retain the majority of the economic benefits of the entity) and, as a result of the Refining Divestiture, owns a 50.1% interest in the Refining Business JV, a 49.9% interest in the Entrepreneurial (Refining) Business JV, a 50.0% direct interest in the Infrastructure Entity and a 25.05% indirect interest in the Infrastructure Entity by virtue of its 50.1% stake in the Refining Business JV;
- all references to "INEOS Nova JV" are to the joint venture partnerships in Europe and North America with Nova Chemicals;

- all references to "**Kerling**" are to Kerling plc, an affiliate of ours that is indirectly controlled by our controlling shareholders, and its consolidated subsidiaries;
- all references to the "LC Facility" are to the on-demand letter of credit facility entered into by INEOS Treasury (UK) Limited on May 4, 2012, as further described under the caption "Description of Certain Indebtedness—Letter of Credit Facility";
- all references to "Long-Dated Term Loans" are to the Dollar Term Loans and Euro Term Loans, collectively, with each such loans maturing in May 2018 as further described under the caption "Description of Certain Indebtedness—Senior Secured Term Loans";
- all references to "Lux I" are to INEOS Luxembourg I S.A., which is a direct subsidiary of the Issuer:
- all references to "Lux II" are to INEOS Luxembourg II S.A., which is a direct subsidiary of Lux I;
- all references to the "Master Bilateral Netting Deed" have the meaning ascribed to the term under the caption "Business—Agreements with BP—Related Agreements—The Master Bilateral Netting Deed";
- all references to the "**Proceeds Loans**" are to the 2016 IGH Notes Proceeds Loans, 2018 IGH Notes Proceeds Loans, collectively, and the agreements in respect thereof;
- all references to "**PetroChina**" are to PetroChina International (London) Company Limited or one or more of its affiliates, as the context may require;
- all references to the "**Refining and Entrepreneurial JVs**" are to the Refining Business JV and the Entrepreneurial (Refining) Business JV, collectively;
- all references to the "Refining Business" are to the refining business, consisting principally of the
 crude oil refining operations carried out at the refineries located at Grangemouth, Scotland, and
 Lavéra, France, as reported on the historical financial statements of the Issuer under the Refining
 segment;
- all references to the "**Refining Business JV**" are to the joint venture that, following the Refining Divestiture, operates the Refining Business and is owned by PetroChina (49.9%) and INEOS Investments (50.1%);
- all references to the "**Refining Divestiture**" are to the disposal on July 1, 2011, by subsidiaries of Lux I of (i) the Refining Business and the Entrepreneurial (Refining) Business to joint ventures formed between PetroChina and INEOS Investments and (ii) the Infrastructure Entity to a joint venture formed by INEOS Investments (50.0%) and the Refining Business JV (50.0%);
- all references to the "Security Assignment" have the meaning ascribed to the term under the caption "Business—Agreements with BP—Related Agreements—The Security Assignment";
- all references to the "**Securitization Program**" are to the securitization program as further described under the caption "Description of Certain Indebtedness—Securitization Program";
- all references to the "Senior Secured Note Documents" have the meaning ascribed to the term in the Intercreditor Agreement, including but not limited to the 2019 Senior Secured Notes Indenture and the 2020 Senior Secured Notes Indenture;
- all references to the "Senior Secured Term Loans" are to the credit facilities which have been made available under the Senior Secured Term Loans Agreement at the date of this annual report, as further described under the caption "Description of Certain Indebtedness—Senior Secured Term Loans":

- all references to the "Senior Secured Term Loans Agreement" are to the credit agreement dated as of April 27, 2012, among, *inter alios*, INEOS Finance plc and INEOS US Finance LLC, as borrowers, certain subsidiaries of the Issuer, Barclays Bank PLC and certain lenders, as subsequently amended (including by the Amendment Agreement), supplemented, varied, novated, extended or replaced from time to time under one or more credit facilities;
- all references to "**Styrolution**" are to Styrolution Group GmbH, in which our controlling shareholders (through a joint venture) indirectly own a 50.0% interest, and its consolidated subsidiaries;
- all references to "**subsidiaries**" are to all, whether operating or non-operating, the direct and indirect subsidiaries of the Issuer in the Group;
- all references to the "**Trustee**" are to the Bank of New York Mellon, London Branch in its capacity as trustee under the Indenture.

Unless otherwise stated, references to capacities of INEOS' facilities refer to the "nameplate capacities," or theoretical maximum production capacity of such facilities; the effective capacity of such facilities may, however, in fact be more or less than the nameplate capacity due to the current operating conditions and asset configuration of each facility.

All references to "tonnes" are to metric tonnes.

We have provided definitions for some of the industry terms used in this annual report in the "Glossary of Selected Terms" beginning on page G-1 of this annual report.

FORWARD-LOOKING STATEMENTS

This annual report includes "forward-looking statements," within the meaning of the U.S. securities laws, based on our current expectations and projections about future events, including:

- the cyclical and highly competitive nature of our businesses;
- our high degree of leverage and significant debt service obligations, as well as our ability to generate sufficient cash flow to service our debt;
- our sales growth across our principal businesses and our strategy for controlling costs, growing margins, increasing manufacturing capacity and production levels, and making capital expenditures;
- our ability to deleverage through strategic disposals of certain assets and non-core businesses;
- · raw material costs or supply arrangements;
- our technological and manufacturing assets and our ability to utilize them to further increase sales and the profitability of our businesses;
- impacts of climate change, including regulatory requirements on greenhouse gas emissions, the costs to purchase emissions allowances and the physical risks to our facilities of severe weather conditions;
- current or future health, safety and environmental requirements and the related costs of maintaining compliance with, and addressing liabilities under, those requirements;
- operational hazards, including the risk of accidents that result in injury to persons and environmental contamination:
- our ability to retain existing customers and obtain new customers;

- our ability to develop new products and technologies successfully;
- our ability to successfully integrate acquired businesses with our historical business and realize anticipated synergies and cost savings, including with respect to businesses acquired;
- currency fluctuations;
- our ability to attract and retain members of management and key employees; and
- our relationship with our shareholders.

All statements other than statements of historical facts included in this annual report including, without limitation, statements regarding our future financial position, risks and uncertainties related to our business, strategy, capital expenditures, projected costs and our plans and objectives for future operations, may be deemed to be forward-looking statements. These forward-looking statements are subject to a number of risks and uncertainties, including those identified under the "Risk Factors" section in this annual report. Words such as "believe," "expect," "anticipate," "may," "intend," "will," "should," "estimate" and similar expressions or the negatives of these expressions are intended to identify forward-looking statements. In addition, from time to time we or our representatives, acting in respect of information provided by us, have made or may make forward-looking statements orally or in writing and these forward-looking statements may be included in but are not limited to press releases (including on our website), reports to our security holders and other communications. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Any forward-looking statement speaks only as of the date on which it is made and we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements referred to above and contained elsewhere in this annual report, including those set forth under the section entitled "Risk Factors."

The risks described in the "Risk Factors" section in this annual report are not exhaustive. Other sections of this annual report describe additional factors that could adversely affect our business, financial condition or results of operations. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, you should not place undue reliance on forward-looking statements as a prediction of actual results.

HISTORICAL AND CURRENT MARKET AND INDUSTRY DATA

Historical and current market data used throughout this annual report were obtained from internal company analyses, consultants' reports and industry publications. In particular, information has been provided by Nexant Limited ("Nexant") and PCI Acrylonitrile Limited, each company an industry consultant. Industry surveys and publications generally state that the information contained therein has been obtained from sources believed to be reliable, but the accuracy and completeness of information contained therein is not guaranteed. While we accept responsibility for the accurate extraction and reproduction of this market data, we have not independently verified such data and cannot guarantee its accuracy or completeness. In addition, certain statements in this annual report regarding the petrochemical industry, our position in that industry and our market share are based on internal company estimates, our experience and investigations of market conditions and our review of industry positions. We cannot assure you that any of the assumptions underlying those statements are accurate or correctly reflect our position in the industries. Similarly, internal company analyses, while believed by us to be reliable, have not been verified by any independent sources, and neither we nor any of the initial purchasers make any representation as to the accuracy of such information. While we are not aware of any misstatements regarding any industry or similar data presented herein, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed under the "Risk Factors" section in this annual report.

viii

FINANCIAL INFORMATION INCLUDED IN THIS ANNUAL REPORT

We have included in this annual report extracts from the INEOS Group Holdings S.A. audited financial statements for each of the three years in the period ended December 31, 2013, prepared in accordance with IFRS.

RISK FACTORS

Risks Relating to Our Businesses and Industries

Cyclicality of the petrochemical industry—Changing market demands and prices may negatively affect our operating margins and impair our cash flows, which, in turn, could affect our ability to make payments on our debt or to make further investments in our businesses.

Cyclicality and volatility in supply and demand in the petrochemical industry may affect our prices and may negatively impact our operating margins and cash flows and cause us to incur losses. For example, if industry margins in the petrochemical industry were to return to their 2001 or fourth quarter of 2008 levels or decline more significantly than they have in the past, then this may result in a material adverse effect on our business, results of operations and cash flow. Any cyclical downturn may affect our prices and may negatively impact our operating margins and cash flows and cause us to incur losses. Furthermore, increased volatility in industry margins could have a significant impact on our short-term results. In such cases, we would have to absorb any losses or borrow additional funds. If we experience significant margin volatility or if we generate losses over a prolonged period and are unable to obtain additional funds, our liquidity could be materially adversely affected and our ability to make debt payments would be impaired.

The relationship between supply and demand in the petrochemical industry in general, and in our various petrochemical segments historically, has been highly cyclical. This is primarily because product supply is driven by alternating periods of substantial capacity additions and periods in which no or limited capacity is added. Historically, the markets for some of our products have tended to follow trends in economic growth and have experienced alternating periods of constrained supply, causing prices and margins to increase, followed by periods of capacity additions, resulting in oversupply and declining prices and margins. In response, companies typically reduce capacity or limit further capacity additions, eventually causing the market to be relatively undersupplied. Any slowdown in growth for any reason could have a disproportionately negative effect on industry margins for our petrochemical products.

Historically, margins in the petrochemical industry have been volatile due to a number of factors, most of which are beyond our control. These factors include:

- short-term utilization rate fluctuations due to planned and unplanned plant outages;
- political and economic conditions, which drive rapid changes in prices for our key feedstocks, including the price of crude oil, gas and naphtha;
- · customers' inventory management policies; and
- exchange rate fluctuations.

In addition, we and other petrochemical companies with large asset bases in Europe face pressures due to the fact that many of our key customers in Europe are subject to competition with low-cost producers in Asia. If our European customers are unable to successfully compete with Asian manufacturers, they could reduce their volume of purchases, including from us, or cease making such purchases altogether. To a lesser extent we are also exposed to the risk of our customers in North America being unable to compete in the global marketplace. Each of these risks could materially adversely affect our business, results of operations and financial condition.

Raw materials and suppliers—If we are unable to pass on increases in raw material prices, or to retain or replace our key suppliers, our results of operations may be negatively affected.

Our margins are largely a function of the relationship between the prices that we are able to charge for our products and the costs of the feedstocks we require to make these products. The prices for a large portion of our raw materials are cyclical. Prices fell significantly at the end of 2008, before gradually increasing during 2009 and 2010. Prices continued to increase throughout 2011 before remaining broadly at these levels in 2012 and 2013.

While we attempt to match raw material price increases with corresponding product price increases, our ability to pass on increases in the cost of raw materials to our customers is, to a large extent, dependent upon our contractual arrangements and market conditions. There may be periods of time during which we are not able

to recover increases in the cost of raw materials due to our contractual arrangements or to weakness in demand for, or oversupply of, our products. Specifically, timing differences in pricing between raw material prices, which may change daily, and product prices, which in many cases are negotiated only monthly or less often, sometimes with an additional lag in effective dates for increases, have had and may continue to have a negative effect on profitability. Even in periods during which raw material prices decline, we may suffer decreasing profits if raw material price reductions occur at a slower rate than decreases in the selling prices of our products. In addition, when raw material costs decrease, customers may seek relief in the form of lower sales prices. Furthermore, some of our customers take advantage of fluctuating prices by building inventories when they expect product prices to decrease.

Further, volatility in costs and pricing can result in commercial disputes with customers and suppliers with respect to interpretations of complex contractual arrangements. Significant adverse resolution of any such disputes could also reduce our profitability.

We obtain a significant portion of our raw materials from selected key suppliers. If any of these suppliers is unable to meet its obligations under present supply agreements, we may be forced to pay higher prices to obtain the necessary raw materials and we may not be able to increase prices for our finished products. Therefore, volatility in raw material prices or interruptions in supply could place increased pressure on our margins and reduce our cash flow, which could impair our ability to make debt payments or make further investments in our business.

If we fail to maintain our relationships with our current suppliers, our suppliers offer pricing and other terms that are not satisfactory to us or a supplier fails to supply raw materials that meet our quality, quantity and cost requirements, we may be unable to fill our customers' orders on a timely and cost-effective basis or in the required quantities, which could result in order cancellations, decreased revenues or loss of market share and damage to our reputation.

Global economy—Our industry is affected by global economic factors including risks associated with a recession and our customers' access to credit.

We face risks attendant to changes in consumer demand for goods that incorporate our products, economic environments, changes in interest rates and instability in securities markets around the world, among other factors. In particular, a worsening economic climate can result in decreased industrial output and decreased consumer demand for products including automobiles, consumer goods and building materials, all of which incorporate our products. Adverse economic conditions can affect consumer and business spending generally, which would result in decreased demand for goods that incorporate our products and have an adverse affect on our results of operations.

Our financial results are substantially dependent upon the overall economic conditions in the United States, the European Union and Asia. An extended recession in any of these locations or globally—or public perceptions that result in declining economic conditions—could substantially decrease the demand for our products and adversely affect our business. For example, as a result of an economic downturn, in 2008 and 2009, we experienced decreased demand for many of our products. Moreover, many of our customers rely on access to credit to adequately fund their operations. The inability of our customers to access credit facilities may adversely affect our business by reducing our sales, increasing our exposure to accounts receivable bad debts and reducing our profitability.

Currency fluctuations—We are exposed to currency fluctuation risks in several countries that could adversely affect our profitability.

Although we report our results in euro, we conduct a significant portion of our business in countries that use currencies other than the euro, and we are subject to risks associated with currency fluctuations.

Our results of operations may be affected by both the transaction effects and the translation effects of foreign currency exchange rate fluctuations. We are exposed to transaction effects when one of our subsidiaries incurs costs or earns revenue in a currency different from its functional currency. Fluctuations in exchange rates may also affect the relative competitive position of our manufacturing facilities, as well as our ability to market our products successfully in other markets. We are exposed to currency fluctuation when we convert currencies that we may receive for our products into currencies required to pay our debt, or into currencies in which we purchase raw materials, meet our fixed costs or pay for services, which could result in a gain or loss depending on fluctuations in exchange rates. In particular, a large proportion of our manufacturing costs and our selling,

general and administrative expenses are incurred in currencies other than the euro, principally the U.S. dollar and the British pound, reflecting the location of our sites and corporate and business support centers. At the same time, although many of our sales are invoiced in currencies other than the euro, our consolidated revenues are reported in euro. Therefore, our financial results in any given period are materially affected by fluctuations in the value of the euro relative to the U.S. dollar, British pound and other relevant currencies. If the value of the euro declines against currencies in which our obligations are denominated or increases against currencies in which our revenues are denominated, our results of operations and financial condition could be materially affected.

International operations—We are exposed to risks related to conducting operations in several different countries.

We currently have manufacturing facilities located in the United Kingdom, France, the United States, Germany, Belgium, Norway, Canada and Italy. Notwithstanding the benefits of geographic diversification, our business is subject to risks related to the differing legal, political, social and regulatory requirements and economic conditions of many jurisdictions. Risks inherent in international operations include the following:

- general economic, social or political conditions in the countries in which we operate could have an adverse effect on our earnings from operations in those countries;
- compliance with a variety of laws and regulations in various jurisdictions may be burdensome;
- unexpected or adverse changes in laws or regulatory requirements in various jurisdictions may occur;
- the imposition of withholding taxes or other taxes or royalties on our income, or the adoption of other restrictions on foreign trade or investment, including currency exchange controls;
- adverse changes in export duties, quotas and tariffs and difficulties in obtaining export licenses;
- intellectual property rights may be more difficult to enforce;
- transportation and other shipping costs may increase;
- staffing difficulties, national or regional labor strikes or other labor disputes;
- the imposition of any price controls; and
- difficulties in enforcing agreements and collecting receivables.

In addition, our operations in Germany currently benefit from an exemption to the surcharge that is added to the price of electricity in Germany. In December 2013, the EU Commission initiated a formal investigation procedure against Germany in connection with this system and the exemptions for energy intensive industries. In the event that the EU Commission determines that the exemptions violate EU law, we would no longer benefit from any exemption to the surcharge, which would lead to increased energy costs which may have a material adverse effect on our business, results of operations and financial condition.

Competition—We face significant competition in our industries, whether through efforts of new or current competitors or through consolidation of existing customers, which may adversely affect our competitive position, sales and overall operations.

The markets for most of our products are highly competitive. We are exposed to the competitive characteristics of several different geographic markets and industries. Competition in most of our industries is based primarily on price and, to a lesser extent, on product performance, product quality, product deliverability and customer service. Our principal competitors vary from business to business and range from large global petrochemical companies to numerous smaller regional companies. Some of our competitors are larger and more vertically integrated than we are and therefore may be able to manufacture products more economically than we can. In addition, some of our competitors have greater financial, technical, research and technology and marketing resources than we do. Furthermore, some of our competitors are fully or partially state owned and could have broader goals than maximizing profits, such as investing in the economies of their respective

countries and providing local employment and therefore may continue to provide capacity and products even at unprofitable price points creating downward pricing pressure on our products. As the markets for our products expand, we expect that existing competitors may commit more resources to the markets in which we operate, further enhancing competition. All of the above could hinder our ability to compete effectively in the markets in which we operate in the future and our competitive position and results of operations may suffer as a result. For example, in the petrochemical industry in Europe, where the majority of our petrochemical assets are concentrated, and, to a lesser extent, in North America, we face competitive pressures from companies with facilities in the Middle East, which enjoy substantial cost advantages due to access to low-cost gas feedstock available in this region. In addition, our export business in Europe faces competitive pressures from export businesses in North America (including our own North American operations) due to the abundance and use of low cost ethane in North America. These cost advantages are particularly significant when oil prices are high, as has sometimes been the case in recent years. The competitive pressure we experience could be exacerbated if the Chinese economy fails to grow as expected, in which case more of the product manufactured in the Middle East to meet the growth expected in China could be redirected to Europe and North America, potentially resulting in greater supply to these markets and corresponding downward pricing pressure.

In addition, a number of our customers are participants in industries that are undergoing consolidation. We could lose these customers to competitors if they are acquired by, or consolidate with, other companies that have relationships with our competitors.

Customers—We are subject to the risk of loss resulting from nonpayment or nonperformance by our customers.

Our credit procedures and policies may not be adequate to minimize or mitigate customer credit risk. Our customers may experience financial difficulties, including bankruptcies, restructurings and liquidations. These and other financial problems that may be experienced by our customers, as well as potential financial weakness in our industry, may increase our risk in extending trade credit to customers. A significant adverse change in a customer relationship or in a customer's financial position could cause us to limit or discontinue business with that customer, require us to assume more credit risk relating to that customer's receivables or limit our ability to collect accounts receivable from that customer, all of which could have a material adverse effect on our business, results of operations, financial condition and liquidity.

Refining Divestiture—We are dependent on contractual arrangements with the Refining and Entrepreneurial JVs, and if we are unable to obtain the requisite feedstocks, services or utilities from these entities, our businesses could be adversely affected.

On July 1, 2011, we disposed of the Refining Business and the Entrepreneurial (Refining) Business to the Refining and Entrepreneurial JVs. In addition, we disposed of the Infrastructure Entity to the Refining Business JV (50.0%) and INEOS Investments (50.0%). See "The Refining Divestiture" for a more detailed discussion of the Refining Divestiture.

The Refining Business JV provides feedstocks that are used in our petrochemical plants in the productions of olefins. The olefins in turn are feedstocks that are used in the Chemical Intermediates segment of our business. If we are unable to continue to receive the feedstocks required by our businesses from the Refining Business JV, which owns the Refining Business, our businesses may be adversely affected.

In addition, the Entrepreneurial (Refining) Business JV provides our businesses with certain entrepreneurial activities disposed of in connection with the Refining Divestiture, which are still used by our businesses. In the event we are unable to continue to receive the benefit of these entrepreneurial activities, our businesses may be adversely affected.

We have entered into several contractual arrangements with the Refining and Entrepreneurial JVs to allow the INEOS Group to continue to receive the requisite feedstocks and access to entrepreneurial activities and utilities services. However, there is no guarantee that (i) the Refining and Entrepreneurial JVs will deliver the requisite feedstocks or access to entrepreneurial activities or utilities services, set forth in the contractual arrangements, (ii) we will be able to find other suppliers to cover any shortfalls in the feedstock supplies or entrepreneurial activities or utilities services that we require and (iii) any agreements we enter into with other suppliers will be on terms as favorable as those under the agreements that have been executed with the Refining and Entrepreneurial JVs. See "The Refining Divestiture."

Grangemouth Divestiture—We face a risk of loss if the divested operations are unable to repay the credit facility extended to the related party subsidiary.

On October 1, 2013, the Group transferred the shares of INEOS Chemicals Grangemouth Limited and INEOS Commercial Services UK Limited (including the assets, liabilities (including pension liabilities) and petrochemical business) to INEOS Grangemouth Limited, a newly created subsidiary of INEOS Holdings AG, our indirect parent company. The business was re-domiciled in the U.K. to enable it to be eligible for support under the U.K. government's Infrastructure Loan Guarantee Scheme in order to improve the cost base at the site and invest in new infrastructure to allow the site to import gas from the U.S. by 2016. The survival plan will require a total investment of €350 million over the next three years, including €150 million to build the infrastructure needed for gas imports.

As part of this plan, the Group has put in place a €200 million revolving credit facility from the Group to the Grangemouth petrochemical business to fund the ongoing operations and investments required at the site. There is no assurance that the divested operations will receive support under the Infrastructure Loan Guarantee Scheme. It is also possible that costs to INEOS Grangemouth Limited to improve the site will be significantly higher than the estimated total investments contained in the survival plan. If the plan is unsuccessful, INEOS Grangemouth Limited may be unable to repay the the revolving credit facility, resulting in losses for the Group. See "The Grangemouth Divestiture."

Inability to maximize utilization of assets—We may be adversely affected if we are unable to implement our strategy to maximize utilization of assets.

Our results of operations are materially influenced by the degree to which we utilize our assets in order to achieve maximum production volumes. We cannot guarantee that we will be able to implement our strategy of maximizing utilization of assets in accordance with our plans or at all. For example, the number and length of turnarounds (scheduled outages of a unit in order to perform necessary inspections, tests to comply with industry regulations and any maintenance activities that may be necessary) and unplanned outages have had, and may in the future have, an impact on our operating results, even if such outages are covered by insurance.

Joint ventures—Several of our petrochemical facilities are owned and operated in joint ventures with third parties. We do not control these joint ventures, and actions taken by our joint venture partners in respect of these joint ventures could materially adversely affect our business.

Several of our petrochemical facilities are owned and operated in whole or part by joint ventures with one or more third parties. These facilities include portions of the facility in Lavéra, France, various units of which are operated by joint ventures with Total, S.A. ("Total"), and the facility in Cedar Bayou, Texas, which is operated by Chevron Phillips Chemical Company LLC ("Chevron Phillips") in a 50/50 joint venture with Chevron Phillips. The cracker facility in Rafnes, Norway, is operated by a joint venture between us and INEOS Norge AS, a company held under common control. We also signed a memorandum of understanding in July 2013 to form a joint venture with Sasol to construct a facility to manufacture HDPE. While we have a certain amount of influence over each of these joint ventures, we do not control them and are therefore dependent on our respective joint venture partners to cooperate with us in making decisions regarding the relevant joint venture. Moreover, the day-to-day operation of the relevant facilities is the responsibility of the management team of the joint venture or our joint venture partner. Therefore, our ability to influence these operations on a day-to-day basis is limited and we may be unable to prevent actions that we believe are not in the best interests of our joint ventures or our company as a whole. Any such actions could materially adversely affect our business, results of operations and financial condition.

Climate change—Existing and proposed regulations to address climate change by limiting greenhouse gas emissions may cause us to incur significant additional operating and capital expenses.

Our operations result in emissions of greenhouse gases ("GHG"), such as carbon dioxide and methane. Growing concern about the sources and impacts of global climate change has led to a number of national and supranational legislative and administrative measures, both proposed and enacted, to monitor, regulate and limit carbon dioxide and other GHG emissions. In the EU, our emissions are regulated under the European Union Emissions Trading Scheme ("EU ETS"), an EU-wide trading system for industrial GHG emissions. The EU ETS is anticipated to become progressively more stringent over time, including by reducing the number of allowances to emit GHG that EU member states will allocate without charge to industrial facilities. Such measures could result in increased costs for us to: (i) operate and maintain our facilities; (ii) install new emission

controls; (iii) purchase or otherwise obtain allowances to emit GHGs; and (iv) administer and manage our GHG emissions program.

In the United States, we are required to monitor and report to the U.S. Environmental Protection Agency ("EPA") annual GHG emissions from certain of our U.S. facilities. In addition, EPA is moving forward with efforts to regulate GHG emissions under the Clean Air Act ("CAA") and other existing legislation as comprehensive climate change legislation has not yet been enacted by the U.S. Congress. For example, EPA has promulgated regulations which subject the GHG emissions of certain newly constructed or modified facilities to pre- construction and operating program requirements. Pursuant to these requirements, newly constructed or modified facilities with the potential to emit certain quantities of GHGs are required to implement "best available control technology," which can include carbon efficiency standards, GHG emission concentration limits, specific technology requirements or other measures.

In addition, EPA has issued final regulations under the CAA that establish air emission controls for oil and natural gas production and natural gas processing operations. Specifically, EPA's rule package includes New Source Performance Standards to address emissions of sulfur dioxide and volatile organic compounds, or VOCs, and a separate set of emission standards to address hazardous air pollutants frequently associated with oil and natural gas production and processing activities. Significant uncertainty exists as to how GHG regulations will in the future impact large stationary sources, such as our facilities in the United States, and what costs or operational changes these regulations may require. We continue to monitor the situation closely.

At the international level, in December 2009, more than 27 nations, including the United States and China, signed the Copenhagen Accord, which includes a non-binding commitment to reduce GHG emissions. As a result of commitments made at the UN climate conference in Durban, South Africa in December 2011 (the "Durban Platform"), the international community is continuing to negotiate a binding treaty by 2015 that would require reductions in GHG emissions by developed countries beginning in 2020. In addition, the U.S. Congress has from time to time considered adopting legislation to reduce emissions of GHGs and almost one-half of U.S. states have already taken legal measures to reduce emissions of GHGs primarily through the planned development of GHG emission inventories and or/regional GHG gas cap-and-trade programs. Although the U.S. Congress has not adopted such legislation at this time, it may do so in the future, along with other countries (in addition to the EU), and we cannot yet predict the form such regulation will take (such as a cap-and-trade program, technology mandate, emissions tax or other regulatory mechanism) or, consequently, estimate any costs that we may be required to incur in respect of such requirements, for example, to install emissions control equipment, purchase emissions allowances, administer and manage our GHG emissions program, or address other regulatory obligations. Such requirements could also adversely affect our energy supply, or the costs (and types) of raw materials we use for fuel. Regulations controlling or limiting GHG emissions could have a material adverse impact on our business, financial condition or results of operations, including by reducing demand for our products.

Environmental matters—We will have ongoing costs and may have substantial obligations and liabilities arising from health, safety, security and environmental ("HSSE") laws, regulations and permits applicable to our operations.

Our businesses are subject to a wide range of HSSE laws and regulations in all of the jurisdictions in which we operate. These requirements govern our facilities and our operations, including the manufacture, storage, handling, treatment, transportation and disposal of hazardous substances and wastes, wastewater discharges, air emissions (including GHG emissions), noise emissions, operation and closure of landfills, human health and safety, process safety and risk management and the clean up of contaminated sites. Many of our operations require permits and controls to monitor or prevent pollution, and these permits are subject to modification, renewal and revocation by issuing authorities. We have incurred, and will continue to incur, substantial ongoing capital and operating expenditures to ensure compliance with current and future HSSE laws, regulations and permits or the more stringent enforcement of such requirements.

We expect that our operations will be subject in the future to new and increasingly stringent HSSE laws, regulations and permits and that substantial costs will be incurred by us to ensure continued compliance. We anticipate that these laws, regulations and permits will continue to require us to incur substantial costs and impose additional obligations. If we do not predict accurately the amount or timing of costs of any future compliance, remediation requirements or private claims, our environmental provisions may be inadequate and the related impact on our business, financial condition or results of operations in any period in which such costs need to be incurred could be material. Given the nature of our business, violations of HSSE requirements, whether currently alleged or arising in the future, may result in substantial fines or penalties, the imposition of

other civil or criminal sanctions, cleanup costs, claims for personal injury or property damages, the installation of costly pollution control equipment, or restrictions on, or the suspension of, our operating permits or activities.

At certain sites where we operate, regulators have alleged or we have otherwise learned that these sites may be in noncompliance with HSSE laws and/or the permits which authorize operations at these sites. Some of these allegations or instances of noncompliance are ongoing, and substantial amounts may need to be spent to attain and/or maintain compliance. In addition, we have in the past paid, and in the future may pay, penalties to resolve such matters. Our businesses and facilities have experienced, and in certain cases, are in the process of investigating or remediating, hazardous materials in the soil and groundwater at locations where we operate and/or adjacent properties and/or natural resources at public and private lands not owned by us.

Many of our sites have an extended history of industrial chemical processing, storage and related activities, and may currently be subject to engineering or institutional controls or restrictions or may become subject to such controls or restrictions in the future. We are currently, and from time to time have been or may be, required to investigate and remediate releases of hazardous materials or contamination at or migrating from certain of these sites, as well as properties we formerly owned, leased or operated. We are, and in the future may be, responsible for investigating and cleaning up contamination at off-site locations where we or our predecessors disposed of or arranged for the disposal or treatment of hazardous wastes. Under some environmental laws, including the U.S. Comprehensive Environmental Response, Compensation and Liability Act, commonly referred to as "Superfund," liability can be imposed retroactively, without regard to fault or knowledge, and on a joint and several basis. In addition, we also could be subject to claims by government authorities, individuals and other third parties seeking damages for alleged personal injury or property or natural resource damages resulting from environmental contamination or hazardous exposure caused by our operations, facilities or products. The discovery of previously unknown contamination, or the imposition of new obligations to investigate or remediate contamination at our facilities, could result in substantial unanticipated costs. We could be required to establish or substantially increase financial reserves for such obligations or liabilities and, if we fail to accurately predict the amount or timing of such costs, the related impact on our business, financial condition or results of operations in any period in which such costs need to be incurred could be material. In addition, HSSE laws and regulations can impose various financial responsibility requirements on us, and pursuant to these requirements we may be required to post bonds, create trust funds or provide other assurances that we will be able to remediate contamination at our sites and comply with our decommissioning obligations once our facilities reach the end of their useful lives.

Our operations involve the intensive use of hazardous materials and we have been from time to time subject to claims made for damage to property or injury, including adverse health effects, to employees and other persons, resulting from the HSSE impacts of our operations. There can be no assurance that claims made in the future will not have a material adverse effect on our reputation, business, financial condition or results of operations.

Our financial results may be adversely affected if environmental liability arises for which we are not adequately indemnified or from a disposal of assets or businesses for which we provided a seller's indemnification in respect thereof. Although we believe that the indemnities given by the selling parties from whom we have acquired assets or businesses will help defray the costs associated with pre-acquisition environmental liabilities, our financial results may still be adversely affected to the extent that:

- the sellers do not fulfill their respective indemnification obligations;
- we breach our obligations not to undertake certain activities that may aggravate existing conditions or to mitigate associated losses;
- we do not fulfill our indemnification obligations for other environmental liabilities owed as part of certain disposals of assets or businesses; or
- we incur significant costs for pre-acquisition conditions that are not covered by the indemnities.

Potential hazards—Our operations are subject to hazards which could result in significant liability to us.

Our operations are subject to hazards associated with chemical manufacturing and the related use, storage, transportation and disposal of raw materials, products and wastes. These hazards include explosions, fires, severe weather (including but not limited to hurricanes on the U.S. Gulf Coast or other adverse weather that some believe is increasing as a result of climate change) and natural disasters, accidents, mechanical

failures, discharges or releases of toxic or hazardous substances or gases, transportation interruptions, human error, pipeline leaks and ruptures and terrorist activities. These hazards can cause personal injury and loss of life, severe damage to or destruction of property and equipment as well as environmental damage, and may result in suspension of operations and the imposition of civil and criminal liabilities, including penalties and damage awards. While we believe our insurance policies are in accordance with customary industry practices, such insurance may not cover all risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We may incur losses beyond the limits, or outside the coverage, of our insurance policies, including liabilities for environmental violations and contamination. In addition, from time to time, various types of insurance for companies in our industries have not been available on commercially acceptable terms or, in some cases, have not been available at all. In the future, we may not be able to obtain coverage at current levels, and our premiums may increase significantly on coverage that we maintain. Costs associated with unanticipated events in excess of our insurance coverage could have a material adverse effect on our business, competitive or financial position or our ongoing results of operations. For additional related disclosure, see "Business—Health, Safety, Security and the Environment."

Third parties—Our business and operations are subject to business interruption risks due to the actions of third parties, which could have a material adverse effect on our business, reputation, financial condition and results of operations.

Due to the nature of our business, we are at risk of business interruption due to the actions of third parties. For example, many of our vendors and subcontractors have operations that are also subject to HSSE risks associated with the use of hazardous materials. Any future HSSE-related incidents affecting our vendors and subcontractors may result in significant regulatory actions, fines and other penalties, including restrictions, prohibitions or sanctions on their operations, and could impair their ability to perform their contracts with us or could otherwise subject us to liability, all of which could have a material adverse effect on our business, reputation, financial condition and results of operations. In addition, if any facilities experience damage due to any number of hazards caused by third parties, our reputation, business and results of operations may be adversely affected.

Product stewardship regulation—Our business could be adversely affected by chemical safety regulation of our products and raw materials.

We use and manufacture hazardous chemicals that are subject to regulation by the EU and by many national, provincial and local governmental authorities in the countries in which we operate. In order to obtain regulatory approval of certain new products and production processes, we must, among other things, demonstrate to the relevant authorities that the product is safe for its intended uses and that we are capable of manufacturing the product in accordance with applicable regulations. The process of seeking approvals can be time-consuming and subject to unanticipated and significant delays. Approvals may not be granted to us on a timely basis, or at all. Any delay in obtaining, or any failure to obtain or maintain, these approvals would adversely affect our ability to introduce new products, to continue distributing existing products and to generate revenue from those products, which could have a material adverse effect on our business and prospects. New laws and regulations may be introduced in the future that could result in additional compliance costs, confiscation, recall or monetary fines, any of which could prevent or inhibit the development, distribution and sale of our products.

In addition, some of our products (including our raw materials) are subject to extensive environmental and industrial hygiene regulations governing the registration and safety analysis of their component substances. For example, in connection with the EU's Registration, Evaluation and Authorization of Chemicals ("REACH") Regulation or the new EU Classification, Labelling and Packaging ("CLP") Regulation, any key raw material, chemical or substance, including our products, could be classified as having a toxicological or health-related impact on the environment, users of our products, or our employees.

In Ontario, Canada, the Toxics Reduction Act requires reduction in the use of toxic substances. Among other things, this regulation requires tracking, public toxic substance reduction plans and reporting. Similar regulations are being considered in other jurisdictions, including the United States, which could result in additional requirements, including testing and record-keeping obligations, on our operations.

For example, butadiene is a known carcinogen in laboratory animals at high doses and is being studied for its potential adverse human health effects. The U.S. Occupational Safety and Health Administration currently limits the permissible employee exposure to butadiene. If studies on the health effects of butadiene result in additional regulations in the United States or new regulations in Europe that further restrict or prohibit

the use of, and exposure to, butadiene, we could be required to change our operations, which could affect the quality of our products and increase our costs.

The regulation or reclassification of any of our raw materials or products could adversely affect the availability or marketability of such products, result in a ban on its import, purchase or sale, or require us to incur increased costs to comply with notification, labeling or handling requirements, each of which could result in a material adverse effect on our business, financial condition and results of operations.

Litigation—We are subject to certain risks related to litigation filed by or against us, and adverse results may harm our business.

We cannot predict with certainty the cost of defense, the cost of prosecution or the ultimate outcome of litigation and other proceedings filed by or against us, including remedies or damage awards, and adverse results in any litigation and other proceedings may materially harm our business. Litigation and other proceedings may include, but are not limited to, actions relating to intellectual property, commercial arrangements, environmental, health and safety, joint venture agreements, labor and employment or other harms resulting from the actions of individuals or entities outside of our control. In the case of intellectual property litigation and proceedings, adverse outcomes could include the cancellation, invalidation or other loss of material intellectual property rights used in our business and injunctions prohibiting our use of business processes or technology that are subject to third-party patents or other third-party intellectual property rights. Litigation based on environmental matters or exposure to hazardous substances in the workplace or from our products could result in significant liability for us. Adverse outcomes could have a material adverse effect on our business.

Product liability—We may be liable for damages based on product liability claims.

The sale of our products involves the risk of product liability claims arising out of the use of, or exposure to, our products or the chemicals in them. While most of our products have some hazardous properties, some of them, such as acrylonitrile, require specialized handling procedures due to their acute and chronic toxicity. Furthermore, our polymer products have widespread end uses in a variety of consumer industries, including food packaging and medical applications. A successful product liability claim or series of claims against us in excess of our insurance coverage for payments for which we are not otherwise indemnified or have not otherwise provided could have a material adverse effect on our business, financial condition or results of operations and cash flows. In particular, we could be required to increase our debt or divert resources from other investments in our business in order to discharge any such claims.

In addition, we license our polyethylene, polypropylene, polystyrene, polyvinylchloride, vinyl chloride monomer, ethylene dichloride and acrylonitrile technologies to third parties. Generally, our licensing agreements provide that any liability arising from the implementation of such technology is retained by us during the first 18 months of the agreements. As a result, we are liable for any damages arising from the implementation by our licensees of our technology during this period.

Key personnel—Our success depends on the continued service of certain key personnel.

Our success depends in significant part upon the continued service of our directors and senior management, including James A. Ratcliffe, Andrew Currie, John Reece and Jim Dawson and the executive officers at each of our business divisions. In addition, our future growth and success also depends on our ability to attract, train, retain and motivate skilled managerial, sales, administration, operating and technical personnel. We generally do not have employment agreements with, and we do not maintain any "key man" life insurance for, any member of our senior management. The loss of one or more of our key management or operating personnel, or the failure to attract and retain additional key personnel, could have a material adverse impact on our business, financial condition and results of operations.

Employee relations—We depend on good relations with our workforce, and any significant disruption could adversely affect us.

As of December 31, 2013, we employed approximately 6,800 people (measured as full-time equivalents ("FTEs")) in our operations around the world, not including employees of our joint ventures. The majority of our employees are unionized. In addition, a majority of our employees reside in countries in which employment laws provide greater bargaining or other rights to employees than the laws of the United States. These employment rights may require us to expend greater time and expenses in altering or amending employees' terms of employment or making staff reductions. For example, most of our employees in Europe are

represented by works councils which generally must approve changes in conditions of employment, including salaries and benefits. Further, a labor disturbance or work stoppage at any of our facilities as a result of any changes to our employment terms and conditions or for any other reason could have a material adverse effect on that facility's operations and, potentially, on our business, results of operations and financial condition.

Intellectual property—The failure of our patents, trademarks and confidentiality agreements to protect our intellectual property could adversely affect our business.

Proprietary protection of our processes, apparatuses and other technology is important to our business, including both our manufacturing and our licensing activities. Our actions to protect our proprietary rights may be insufficient to prevent others from developing similar products to ours. In addition, the laws of many foreign countries do not protect our intellectual property rights to the same extent as the laws of the United States and the United Kingdom. Furthermore, any pending patent application filed by us may not result in an issued patent, or if patents are issued to us, such patents may not provide meaningful protection against competitors or against competitive technologies. You should be aware that the expiration of a patent or the failure of our patents to protect our formulations, processes, apparatuses, technology or proprietary know-how could result in intense competition, with consequent erosion of profit margins. In addition, our competitors and any other third parties may obtain patents that restrict or preclude our ability to lawfully manufacture and market our products in a competitive manner, which could materially adversely affect our business, results of operations and financial condition.

We also rely upon unpatented proprietary know-how and continuing technological innovation and other trade secrets to develop and maintain our competitive position. While it is our policy to enter into confidentiality agreements with our employees and third parties to protect our intellectual property, there can be no assurances that:

- our confidentiality agreements will not be breached;
- such agreements will provide meaningful protection for our trade secrets or proprietary know-how;
 or
- adequate remedies will be available in the event of an unauthorized use or disclosure of these trade secrets and know-how.

In addition, there can be no assurances that others will not obtain knowledge of these trade secrets through independent development or other access by legal means.

In the past we have received communications asserting that our products or their applications infringe on a third party's proprietary rights. Currently, there is no material pending litigation against us regarding any intellectual property claim but we cannot assure you that there will not be future claims. Such claims, regardless of merit, could subject us to costly litigation and divert our technical and management personnel from their regular responsibilities. Furthermore, if such claims are adversely determined against us, we could be forced to suspend the manufacture of products using the contested intellectual property and our business, financial condition and operating results could be adversely affected if any such products are material to our business.

We may also initiate lawsuits to defend the ownership of our inventions and our intellectual property. Like defending against litigation, initiating litigation relating to intellectual property rights is costly and may divert technical and management personnel from their normal responsibilities. Furthermore, we may not prevail in any such litigation or proceeding. A determination in an intellectual property litigation or proceeding that results in a finding of a non-infringement by others to our intellectual property or an invalidation of our patents may result in the use by competitors of our technologies or processes and sale by competitors of products that resemble our products, which may adversely affect our ability to compete as well as create increased supply and corresponding downward pricing pressure.

Internal controls—If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results or prevent fraud.

We have designed and continue to design our internal controls with the objective of providing reasonable assurance that (1) our transactions are properly authorized; (2) our assets are safeguarded against unauthorized or improper use; and (3) our transactions are properly recorded and reported, all to permit the

preparation of our consolidated financial information in conformity with applicable accounting principles. We design our internal controls through the use of internal resources, external consultants and, as the case may be, with joint venture partners.

Any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events. Because of these and other inherent limitations of control systems, there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. Any failure to maintain adequate internal controls or to be able to produce accurate consolidated financial information on a timely basis could increase our operating costs and materially impair our ability to operate our business.

Feedstock supply from BP—BP provides us with a substantial proportion of our feedstock requirements, and several of our sites depend entirely on BP for their supply of raw materials.

BP accounts for a substantial proportion of our petrochemical feedstock requirements. While the substantial majority of these feedstocks are secured by long-term contracts (as generally described in the section entitled "Business—Agreements with BP"), BP may terminate each of these agreements for cause or, after the initial terms, notice of one to three years. If we lose BP as a supplier or if, as a result of operational problems at any of its facilities, BP is unable or unwilling to supply us with raw materials in the required quantities or at all, we could experience disruptions that could force us to shut down facilities. In addition, we could experience substantial delays in finding suitable replacement feedstocks on commercially viable terms. At sites that are deeply integrated with BP's facilities and therefore depend entirely on BP for the supply of raw materials, we may be unable to find a suitable alternative supplier. If BP fails to supply us with raw materials at any of these sites, we may be forced to close the affected facilities, either temporarily or permanently. If any of these risks materialize, our business, results of operations and financial condition could be materially adversely affected.

Credit Support Deed—The credit support we may be required to provide under our Credit Support Deed with BP may be substantial.

In connection with the Innovene Acquisition, we entered into a series of arrangements with BP, including a number of commercial and transitional support agreements, among them, the Credit Support Deed.

Under the Credit Support Deed, IHL and BP agreed to provide reciprocal credit support for trade obligations under any agreement between such parties or their affiliates. Further, each of BP and IHL has agreed to guarantee the payment obligations (with gross-ups for any required withholding or deduction) of BP or IHL (and their respective affiliates), as the case may be, under any trading agreement between such parties. In addition, our obligations to BP are guaranteed by each of the guarantors under the Indentures and the Senior Secured Term Loans. As of December 31, 2013, the aggregate principal amount of our net trade obligations to BP was \$161.3 million. This number could increase or decrease significantly because it will vary in accordance with the amount of feedstock purchased or sold between the parties.

The additional credit support required of INEOS under the Credit Support Deed could be substantial. Any failure to provide such credit support under the Credit Support Deed would constitute a default under the Credit Support Deed. The Credit Support Deed provides that in the event we fail to comply with any provision of the Credit Support Deed, we default on indebtedness of \$250 million owed to third parties (or \$50 million or more owed to BP) when due or we experience certain bankruptcy events (each, a "default"), BP may suspend performance of its obligations under any agreement between us and BP and, if such default is not remedied within specific time period, BP may terminate all such agreements.

Senior Secured Term Loans Agreement and the Indentures—Our Senior Secured Term Loans Agreement and the Indentures impose, significant operating and financial restrictions, which may prevent us from capitalizing on business opportunities and taking certain actions.

Our Senior Secured Term Loans Agreement and the Indentures impose, significant operating and financial restrictions on us. These restrictions include limitations on our ability to:

- make investments and other restricted payments, including dividends;
- incur additional indebtedness;

- sell our assets or consolidate or merge with or into other companies;
- enter into joint ventures; and
- make capital expenditures.

Our Senior Secured Term Loans Agreement and the Indentures contain, covenants that may adversely affect our ability to finance our future operations and capital needs and to pursue available business opportunities. A breach of any of these covenants could result in a default in respect of the related debt. If a default were to occur, the relevant holders or the relevant lenders (as applicable) of such debt could elect to declare the debt, together with accrued interest and other fees, immediately due and payable and, subject to certain limitations, proceed against any collateral securing that debt. Refer to "Description of Certain Indebtedness" for further information.

Future acquisitions—Any future acquisitions may prove difficult for us to consummate.

We have a history of making acquisitions and in the future we may acquire companies or assets engaged in similar or complementary businesses to our own if we identify appropriate acquisition targets. However, restrictions in the Senior Secured Term Loans Agreement and the Indentures may limit or preclude our ability to make certain acquisitions or capital expenditures. Further, we may use debt financing for any permitted acquisitions, which would increase our debt service requirements. In order to manage any acquisitions we successfully complete, we will need to expand and continue to improve our operational, financial and management information systems. If making acquisitions or integrating any acquired business diverts too much management attention from the operations or our core businesses, this could adversely affect our financial condition and results of operations. Any acquisition that we make could be subject to a number of risks, including:

- problems with effective integration of operations;
- the inability to maintain key pre-acquisition business relationships;
- increased operating costs;
- costs related to achieving or maintaining compliance with laws, rules or regulations;
- the loss of key employees of the acquired company;
- exposure to unanticipated liabilities; and
- difficulties in realizing projected efficiencies, synergies and cost savings.

We cannot assure you that any acquisition we consummate will ultimately provide the benefits we originally anticipate. Furthermore, we may not succeed in identifying attractive acquisition candidates or financing and completing potential acquisitions on favorable terms.

Credit and capital market conditions—Adverse conditions in the credit and capital markets may limit or prevent our ability to borrow or raise capital.

While we believe we have facilities in place that should allow us to borrow or otherwise raise funds as needed, adverse conditions in the credit and financial markets could prevent us from obtaining financing, if the need arises. Our ability to invest in our businesses and refinance maturing debt obligations could require access to the credit and capital markets and sufficient bank credit lines to support cash requirements. If we are unable to access the credit and capital markets, we could experience a material adverse effect on our financial position or results of operations.

Pension plans—Significant changes in pension fund investment performance or assumptions relating to pension costs may adversely affect the valuation of pension obligations, the funded status of pension plans, and our pension cost.

Our funding policy for pension plans is to accumulate plan assets that, over the long run, will approximate the present value of projected benefit obligations. Our pension cost is materially affected by the discount rate used to measure pension obligations, the level of plan assets available to fund those obligations at the measurement date and the expected long-term rate of return on plan assets. Significant changes in investment performance or a change in the portfolio mix of invested assets may result in corresponding increases and decreases in the valuation of plan assets, particularly equity securities, or in a change of the expected rate of return on plan assets. Any change in key actuarial assumptions, such as the discount rate, would impact the valuation of pension obligations, affecting the reported funded status of our pension plans as well as the net periodic pension cost in the following fiscal years. Any declines in the fair values of the pension plans' assets could require additional payments by us in order to maintain specified funding levels. Our pension plans are subject to legislative and regulatory requirements of applicable jurisdictions.

Eurozone—Market perceptions concerning the instability of the euro, the potential re-introduction of individual currencies within the eurozone, or the potential dissolution of the euro entirely, could have adverse consequences for us with respect to our outstanding debt obligations that are euro-denominated.

As a result of the credit crisis in Europe, in particular in Greece, Italy, Ireland, Portugal and Spain, the European Commission created the European Financial Stability Facility (the "EFSF") and the European Financial Stability Mechanism (the "EFSM") to provide funding to eurozone countries in financial difficulties that seek such support. In March 2011, the European Council agreed on the need for eurozone countries to establish a permanent stability mechanism, the European Stability Mechanism (the "ESM"), to be activated by mutual agreement and to assume the role of the EFSF and the EFSM in providing external financial assistance to eurozone countries after June 2013. In December 2011, the European Council and each eurozone country agreed to a package of measures designed to restore confidence and address the continued tensions in financial markets, including (i) bringing forward implementation of the ESM from June 2013 to as soon as Member States representing 90% of the capital commitments to the ESM have ratified the ESM Treaty, which occurred on September 27, 2012, and (ii) a new fiscal compact between all 17 eurozone countries and, subject to parliamentary vote, all other non-eurozone countries (except the United Kingdom) to put deficit restrictions on Member State budgets, with associated sanctions for those Member States who violate the specified limits. Despite these measures, concerns persist regarding the debt burden of certain eurozone countries and their ability to meet future financial obligations, the overall stability of the euro and the suitability of the euro as a single currency given the diverse economic and political circumstances in individual Member States. These and other concerns could lead to the re-introduction of individual currencies in one or more Member States, or, in particularly dire circumstances, the possible dissolution of the euro entirely. Should the euro dissolve entirely, the legal and contractual consequences for holders of euro-denominated obligations and for parties subject to other contractual provisions referencing the euro such as supply contracts would be determined by laws in effect at such time. These potential developments, or market perceptions concerning these and related issues, could adversely affect our outstanding debt obligations that are euro-denominated, and, as we have a substantial amount of debt denominated in euro, our financial condition may be materially affected. Furthermore, the Senior Secured Term Loans Agreement and the Indentures contain, covenants restricting our and our subsidiaries' corporate activities. Certain of such covenants impose limitations based on euro amounts (e.g., the amount of additional indebtedness we or our subsidiaries may incur). As such, if the euro were to significantly decrease in value, the restrictions imposed by these covenants would become tighter, further restricting our ability to finance our operations and conduct our day- to-day business.

Risks Relating to our Notes and Our Capital Structure

Significant indebtedness—Our level of indebtedness could adversely affect our ability to react to changes in our business, and we may be limited in our ability to fulfill our obligations with respect to the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes and to use debt to fund future capital needs.

As of December 31, 2013, we had total consolidated loans and borrowings of €7,297.4 million as compared to total equity of negative €963) million. In addition, we had €190 million available for future borrowings under the unused portion of our Securitization Program. Our substantial indebtedness could have important consequences to holders of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes by adversely affecting our financial position including, but not limited to:

- requiring us to dedicate all of our cash flow from operations (after the payment of operating expenses) to payments with respect to our indebtedness, thereby reducing the availability of our cash flow for working capital, capital expenditures, acquisitions, joint ventures, product research and development, and other general corporate expenditures;
- increasing our vulnerability to, and reducing our flexibility to respond to, adverse general economic or industry conditions;
- limiting our flexibility in planning for, or reacting to, competition or changes in our business or industry;
- limiting our ability to borrow additional funds and increasing the cost of any such borrowing;
- · restricting us from making strategic acquisitions or exploring business opportunities; and
- placing us at a competitive disadvantage relative to competitors that have less debt or greater financial resources.

Any of these or other consequences or events could have a material adverse effect on our ability to satisfy our debt obligations, including with respect to the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes. Our ability to make payments on and refinance our indebtedness will depend on our ability to generate cash from our operations. Our ability to generate cash from operations is subject, in large part, to general economic, competitive, legislative and regulatory factors and other factors that are beyond our control. We may not be able to generate enough cash flow from operations nor obtain enough capital to service our debt or fund our planned capital expenditures.

A portion of our debt (including the floating rate portion of our 2019 Senior Secured Notes and debt under the Senior Secured Term Loans Agreement) bears or will bear interest at a variable rate which is based on EURIBOR or LIBOR, as applicable, plus an agreed margin and certain additional costs. Fluctuations in our borrowing costs may increase our overall debt obligations and could have a material adverse effect on our ability to service our debt obligations.

In addition, we may be able to incur substantial additional debt in the future, including indebtedness in connection with any future acquisition. The terms of the Indentures and the Senior Secured Term Loans Agreement permit our subsidiaries to do so, in each case, subject to certain limitations. If new debt is added to our current debt levels, the risks that we now face could intensify. Moreover, some of the debt we may incur in the future could be structurally senior to the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, and may be secured by collateral that does not secure the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes.

For further information regarding our substantial leverage and for more information about our outstanding indebtedness, see also "Operating and Financial Review and Prospects" and "Description of Certain Indebtedness".

Restrictive covenants in our debt instruments—We are subject to restrictive debt covenants that may limit our ability to finance our future operations and capital needs and to pursue business opportunities and activities. If we default under these covenants, we will not be able to meet our payment obligations.

The Senior Secured Term Loans Agreement and the Indentures contain a number of significant covenants that restrict some of our and our subsidiaries' corporate activities, including our and their ability to:

- incur or guarantee additional debt and issue certain preferred stock;
- make restricted payments, including paying dividends or making other distributions and prepaying or redeeming subordinated debt or equity;
- create or incur certain liens;
- sell, lease or transfer certain assets;

- enter into arrangements that restrict dividends or other payments to us;
- create encumbrances or restrictions on the payment of dividends or other distributions, loans or advances and on the transfer of assets:
- engage in certain transactions with affiliates;
- · create unrestricted subsidiaries; and
- consolidate, merge or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis.

All of these limitations are or will be subject to significant exceptions and qualifications. The covenants to which we are subject could limit our ability to finance our future operations and capital needs and our ability to pursue business opportunities and activities that may be in our interest.

Also, the Senior Secured Term Loans Agreement requires us and some of our subsidiaries to comply with certain affirmative covenants. See "Description of Certain Indebtedness—Senior Secured Term Loans."

Our ability to comply with these covenants and restrictions may be affected by events beyond our control. These include prevailing economic, financial and industry conditions. If we breach any of these covenants or restrictions, we could be in default under the Senior Secured Term Loans Agreement. This would permit the lenders to take certain actions, including declaring all amounts that we have borrowed under the Senior Secured Term Loans Agreement to be due and payable, together with accrued and unpaid interest. A failure to pay such amounts would also result in an event of default under the Indentures. If we are unable to repay our debt to the lenders, they could proceed against the collateral that secures the debt under the Senior Secured Term Loans Agreement, the 2016 Notes, the 2018 Notes and the 2020 Notes, certain hedging liabilities and certain cash management liabilities and the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes. If the debt under our Senior Secured Term Loans Agreement, the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes and the 2020 Notes or any other material financing arrangement that we enter into were to be accelerated, our assets may be insufficient to repay in full the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes and our other debt.

Securitization Program—We use the Securitization Program to meet some of our liquidity requirements, and are subject to various covenants under the Securitization Program, which, if we are unable to comply with them, could result in the acceleration of our debt.

Unless the maturity date of the Securitization Program is extended, the Securitization Program will mature in December 2016. We satisfy a significant amount of our short-term liquidity needs with amounts available under the Securitization Program. While we have in principle agreed to terms with our securitization providers, our ability to refinance the Securitization Program could be affected by a number of factors, including volatility in the financial markets, contractions in the availability of credit, including in interbank lending, and changes in investment markets, including changes in interest rates, exchange rates and returns from equity, property and other investments. Our liquidity will be adversely affected if we are unable to refinance the Securitization Program on acceptable terms or at all, and we can provide no assurance we will be able to do so.

The availability under the Securitization Program varies depending on the underlying receivables. For a more detailed discussion, please see "Description of Certain Indebtedness—Securitization Program." In addition, the Securitization Program contains various covenants, and if we fail to comply with these covenants, a default may occur under the Securitization Program. In particular, the Securitization Program contains a covenant requiring amendments (which might be substantial) to be made to the Securitization Program to ensure it complies with relevant risk retention requirements by January 1, 2015. If a default occurs under the Securitization Program, we may need to fund our working capital requirements from other sources.

No Revolving Credit Facility—We do not have a revolving credit facility, which may adversely affect our short-term liquidity.

In addition to our Securitization Program, we have historically relied upon a revolving credit facility to meet our short-term liquidity needs. We no longer have a revolving credit facility. While we believe we have sufficient cash on our balance sheet to meet our working capital needs, such amounts may not be sufficient.

Should we require cash in an amount exceeding the cash available for cash collateralized letters of credit, our short-term liquidity will be adversely affected.

Ability to repay and service debt—To repay or refinance and service our debt, we will require a significant amount of cash.

Our ability to make principal or interest payments when due on our indebtedness, including the Senior Secured Term Loans Agreement and the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, will depend upon our future performance and our ability to generate cash. Our ability to generate cash depends on many factors beyond our control. The ability of our subsidiaries to transfer monies upstream to us, as well as to pay operating expenses and to fund planned capital expenditures, any future acquisitions and research and development efforts, will depend on our businesses' ability to generate cash in the future, as well as limitations that may be imposed under applicable law. This, to an extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors, including those factors discussed in this "Risk Factors" section, many of which are beyond our and our subsidiaries' control. Please see "Selected Consolidated Financial Information" and "Operating and Financial Review and Prospects." If we sustain losses in the future, our ability to repay and service our debt may be materially impaired.

If we are unable to generate sufficient cash flow to meet our payment obligations, we may be forced to reduce or delay planned expansions or capital expenditures, sell significant assets, discontinue specified operations, obtain additional funding in the form of debt or equity capital or attempt to restructure or refinance all or a portion of our debt on or before maturity. We cannot assure you that we would be able to accomplish any of these alternatives on a timely basis or on commercially reasonable terms, if at all. In addition, the terms of our debt, including the Senior Secured Term Loans Agreement, the Indentures, will limit our ability to pursue any of these alternatives. If we are unsuccessful in any of these efforts, we may not have sufficient cash to meet our obligations.

Financing a change of control offer—We may not be able to raise the funds necessary to finance a change of control offer required by the Indenture and, if this occurs, we would be in default under the Indenture.

Under the terms of the Indentures, we will be required to offer to repurchase the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, as applicable, if certain events constituting a change of control occur. Our obligations under the Senior Secured Term Loans Agreement could also be accelerated upon the occurrence of a change of control under the Indentures, or other change of control events. It is possible that we may not have sufficient funds at the time of a change of control to repurchase any or all of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, or repay our outstanding obligations under the Senior Secured Term Loans Agreement. We expect that we would require third party financing to make an offer to purchase the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes or to repay our outstanding obligations under the Senior Secured Term Loans Agreement upon a change of control. We cannot assure you that we would be able to obtain such financing. Our failure to repurchase any or all of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, as applicable, would be an event of default under the Indentures and would cause a cross default under the Senior Secured Term Loans Agreement.

The change of control provisions contained in the Indentures may not protect the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes in the event of highly leveraged transactions and other important corporate events, including reorganizations, restructurings or mergers that may adversely affect you, because these transactions may not involve a change in voting power or beneficial interest of the magnitude required to trigger the change of control provisions or, even if they do, may not constitute a "Change of Control" as defined in the applicable Indenture.

Except as described in the change of control provisions the Indentures will not contain provisions that would require us to offer to repurchase or redeem the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, as applicable, in the event of a reorganization, restructuring, merger, recapitalization or similar transaction.

The definition of "Change of Control" under the Indentures will include a disposition to any person of "all or substantially all" of the assets of the applicable issuer and its restricted subsidiaries taken as a whole. Although there is a limited body of case law interpreting the phrase "all or substantially all," there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances, there may be a degree of uncertainty as to whether a particular transaction would involve a disposition of "all or substantially all" of the assets of the applicable issuer and its restricted subsidiaries taken as a whole. As a result, it may be

unclear as to whether a change of control has occurred and whether the applicable issuer is required to make an offer to repurchase the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes.

Finance Subsidiary and Holding Company Issuers—The 2019 and 2020 Notes Issuer is a finance company and the 2016 and 2018 Notes Issuer is a holding company, neither of which has independent operations and each is dependent on payments under the applicable Funding Loan to provide it with funds to meet its obligations under the the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable.

The 2019 and 2020 Notes Issuer is a wholly-owned finance company that conducts no business operations. It has limited assets, no subsidiaries and a limited ability to generate revenues. The only significant assets of the 2019 and 2020 Notes Issuer are the funding loans made by it to IHL (in respect of the 2019 Notes, the "2019 Funding Loan" and, in respect of the 2020 Notes, the "2020 Funding Loan"). The 2019 and 2020 Notes Issuer's material liabilities include the the 2019 Notes, the 2020 Notes and the guarantee of obligations under the Senior Secured Term Loans, the BP Creditor Liabilities and the 2016 Notes, the 2018 Notes and any additional debt it may incur in the future. See "Description of Certain Indebtedness."

The 2016 and 2018 Notes Issuer is a holding company that conducts no business operations. It has limited assets and a limited ability to generate revenues. The only significant assets of the 2016 and 2018 Notes Issuer are (i) the funding loans made by it to IHL (the "2016 Funding Loan", the "2018 Funding Loan" and, together with the 2019 Funding Loan and the 2020 Funding Loan, the "Funding Loans") and (ii) its ownership of 100% of the shares of INEOS Luxembourg I S.A. The 2016 and 2018 Notes Issuer's material liabilities include the 2016 and 2018 Notes and the guarantee of obligations under the Senior Secured Term Loans, the BP Creditor Liabilities, the 2019 Notes, the 2020 Notes and any additional debt it may incur in the future.

As such, the 2019 and 2020 Notes Issuer and the 2016 and 2018 Notes Issuer are dependent upon payments from IHL to make any payments due on the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable. If IHL fails to make scheduled payments on the Funding Loans, it is not expected that the 2019 and 2020 Notes Issuer or the 2016 and 2018 Notes Issuer will have any other sources of funds that would allow them to make payments on their respective indebtedness. In addition, IHL is a holding company that conducts no independent business operations.

The ability of our subsidiaries to make payments to IHL to fund payments on the Funding Loans will depend upon their cash flows and earnings which, in turn, will be affected by all of the factors discussed in these "Risk Factors."

The payment of dividends and the making, or repayment, of loans and advances to IHL by IHL's direct subsidiaries and such payments by its indirect subsidiaries to their respective parent entity are subject to various restrictions. Existing and future debt of certain of these subsidiaries may prohibit the payment of dividends or the making, or repayment, of loans or advances to IHL or its parent entities. The terms of the Intercreditor Deed also restrict certain intra-group payments (other than payments under the 2019 Funding Loan or the 2020 Funding Loan). In addition, the ability of any of IHL's direct or indirect subsidiaries to make certain distributions may be limited by the laws of the relevant jurisdiction in which the subsidiaries are organized or located, including financial assistance rules, corporate benefit laws and other legal restrictions which, if violated, might require the recipient to refund unlawful payments.

Although the Indentures and the Senior Secured Term Loans limit the ability of IHL's subsidiaries to enter into future consensual restrictions on their ability to pay dividends and make other payments to IHL, there are significant qualifications and exceptions to these limitations. We cannot assure the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes that arrangements with IHL's subsidiaries and the funding permitted by the agreements governing existing and future indebtedness of IHL's subsidiaries will provide IHL with sufficient dividends, distributions or loans to fund payments on the Funding Loans when due. See "Description of Certain Indebtedness."

Junior security interests—The 2016 and 2018 Notes are secured only by junior pledges of certain of our assets, which are subject to certain limitations, and are not secured by any assets of the guarantors other than the shares of IHL, and the lenders under the Senior Secured Term Loans, the holders of the 2019 Notes and the 2020 Notes and BP are entitled to remedies available to a secured lender, which gives them priority over the holders of the 2016 and 2018 Notes to collect amounts due to them.

The 2016 and 2018 Notes are secured only by junior pledges of the 2016 Funding Loan, the 2018 Funding Loan and 100% of the shares of IHL, pledged by INEOS Holdings (Investments) Limited, and the

guarantees are not secured by any other assets of the guarantors. Our obligations under the Senior Secured Term Loans, the 2019 Notes, the 2020 Notes and the BP credit support deed are secured by, among other things, a first-priority pledge of substantially all our assets (including intellectual property rights) and substantially all the assets of certain of the guarantors. Furthermore, the Indentures permit us to incur additional debt that can be secured by liens on the collateral securing the 2016 and 2018 Notes that rank senior to, or equally with, the liens on collateral that secure the 2016 and 2018 Notes. If we become insolvent or are liquidated, or if payment under the Senior Secured Term Loans, the 2019 Notes or the 2020 Notes or in respect of any other secured indebtedness is accelerated, the lenders under the Senior Secured Term Loans or holders of the the 2019 Notes or the 2020 Notes or other secured indebtedness will be entitled to exercise the remedies available to a secured lender under applicable law (in addition to any remedies that may be available under documents pertaining to the Senior Secured Term Loans, the 2019 Notes, the 2020 Notes or other senior debt).

Upon the occurrence of any default under the Senior Secured Term Loans (and even without accelerating the indebtedness under the Senior Secured Term Loans), the 2019 Notes Indenture or the 2020 Notes Indenture, the Senior Facility Agent (as defined in the Intercreditor Deed) (on the instructions of the lenders under the Senior Facility Agreement holding more than 50% of the outstanding principal amount of the Term Loans) or the relevant Senior Secured Notes Trustee (as defined in the Intercreditor Deed), as applicable, may be able to prohibit the payment of the 2016 and 2018 Notes and guarantees either by limiting our ability to access our cash flow or under the subordination provisions contained in the Intercreditor Deed. In addition, the junior pledges on the assets securing the 2016 and 2018 Notes may be released in certain circumstances without any action by the 2016 and 2018 Notes Trustee or the holders of the 2016 and 2018 Notes. See "Description of Certain Indebtedness". In addition, the value of the collateral securing the 2016 and 2018 Notes may not be sufficient to satisfy the obligations under the 2016 and 2018 Notes and guarantees. See the risk factors entitled "Sufficiency of the collateral—The collateral may not be sufficient to secure the obligations under the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes" and "Value of collateral—The collateral is subject to casualty risks".

Realization of collateral—It may be difficult to realize the value of the collateral securing the 2019 Notes and the 2020 Notes.

The collateral securing the the 2019 Notes and the 2020 Notes is subject to any and all exceptions, defects, encumbrances, liens and other imperfections permitted under the 2019 Notes Indenture and the 2020 Notes Indenture and accepted by other creditors that have the benefit of first-priority security interests in the collateral securing the 2019 Notes and the 2020 Notes from time to time, including since after the respective date the 2019 Notes and the 2020 Notes were first issued. The existence of any such exceptions, defects, encumbrances, liens and other imperfections could adversely affect the value of the collateral securing the 2019 Notes and the 2020 Notes as well as the ability of the Security Trustee (as defined below) to realize or foreclose on such collateral. Furthermore, the first-priority ranking of security interests can be affected by a variety of factors, including, among others, the timely satisfaction of perfection requirements, statutory liens or recharacterization under the laws of certain jurisdictions.

The security interests of the Security Trustee are subject to practical problems generally associated with the realization of security interests in collateral. For example, the Security Trustee may need to obtain the consent of a third party to enforce a security interest. We cannot assure the holders of the 2019 Notes and the 2020 Notes that the Security Trustee will be able to obtain any such consents. We also cannot assure the holders of the 2019 Notes and the 2020 Notes that the consents of any third parties will be given when required to facilitate a foreclosure on such assets. Accordingly, the Security Trustee may not have the ability to foreclose upon those assets and the value of the collateral may significantly decrease.

In addition, our business requires a variety of national, state and local permits and licenses. The continued operation of properties that comprise part of the collateral and which depend on the maintenance of such permits and licenses may be prohibited. Our business is subject to regulations and permitting requirements and may be adversely affected if we are unable to comply with existing regulations or requirements or changes in applicable regulations or requirements. In the event of foreclosure, the transfer of such permits and licenses may be prohibited or may require us to incur significant cost and expense. Further, we cannot assure the holders of the 2019 Notes and the 2020 Notes that the applicable governmental authorities will consent to the transfer of all such permits. If the regulatory approvals required for such transfers are not obtained or are delayed, the foreclosure may be delayed, a temporary shutdown of operations may result and the value of the collateral may be significantly decreased.

Sufficiency of the collateral—The collateral may not be sufficient to secure the obligations under the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes.

The 2019 Notes and the 2020 Notes and the guarantees granted thereunder are secured by security interests in the same collateral that secures the obligations under the Senior Secured Term Loans, certain hedging liabilities and certain cash management liabilities and, with respect to certain collateral, the 2016 and 2018 Notes (on a second-ranking basis) and the BP Creditor Liabilities (on a prior-ranking basis with respect to the BP Receivables). The collateral may also secure additional debt to the extent permitted by the terms of the Senior Secured Term Loans, the 2019 Notes Indenture, the 2020 Notes Indenture and the Intercreditor Deed, including certain hedging obligations and cash management arrangements. The rights of the holders of the 2019 Notes and the 2020 Notes to the collateral would be diluted by any increase in the debt (or, in the case of the 2019 Notes and the 2020 Notes, first-priority debt) secured by the relevant collateral or a reduction of the collateral securing the the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable.

The value of the collateral and the amount to be received upon a sale of such collateral will depend upon many factors, including, among others, the ability to sell the collateral in an orderly sale, the condition of the economies in which operations are located and the availability of buyers. The book value of the collateral should not be relied on as a measure of realizable value for such assets. All or a portion of the collateral may be illiquid and may have no readily ascertainable market value. Likewise, we cannot assure the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes that there will be a market for the sale of the collateral, or, if such a market exists, that there will not be a substantial delay in its liquidation. In addition, the share pledges of an entity may be of no value if that entity is subject to an insolvency or bankruptcy proceeding. The collateral is located in a number of countries, and the multijurisdictional nature of any foreclosure on the collateral may limit the realizable value of the collateral. The collateral will be released in connection with an enforcement sale pursuant to the Intercreditor Deed.

Limitations on the value of the collateral—The 2019 Notes and the 2020 Notes will be secured only to the extent of the value of the assets that have been granted as security for the 2019 Notes and the 2020 Notes.

If there is an event of default on the 2019 Notes or the 2020 Notes, the holders of the 2019 Notes or the 2020 Notes, as applicable, will be secured only to the extent of the value of the assets that have been granted as security for the 2019 Notes or the 2020 Notes, as applicable. Not all of the INEOS Group's assets secure the 2019 Notes and the 2020 Notes. In addition, in the future, the obligations to provide additional guarantees and grant additional security over assets, whether as a result of the acquisition or creation of future assets or subsidiaries or otherwise, is subject to agreed security principles under the 2019 Notes Indenture and the 2020 Notes Indenture and, in certain circumstances, indirectly through the Senior Secured Term Loans, subject to certain other agreed security principles. To the extent that lenders under the Senior Secured Term Loans are granted security, the negative pledge in each of the 2019 Notes Indenture and the 2020 Notes Indenture may require such security to also be granted for the benefit of the holders of the 2019 Notes and the 2020 Notes. The agreed security principles set forth in the Senior Secured Term Loans contain a number of limitations on the rights of the lenders to be granted security in certain circumstances. The operation of the agreed security principles may result in, among other things, the amount recoverable under any collateral provided being limited or security not being granted or perfected over a particular type or class of assets. Accordingly, the agreed security principles may affect the value of the security provided by the 2019 and 2020 Notes Issuer and the guarantors of the 2019 Notes and the 2020 Notes.

To the extent that the claims of the holders of the 2019 Notes and the 2020 Notes exceed the value of the assets securing the 2019 Notes and 2020 Notes and other obligations, those claims will rank equally with the claims of the holders of all other existing and future senior unsecured indebtedness ranking *pari passu* with the 2019 Notes and the 2020 Notes. As a result, if the value of the assets pledged as security for the 2019 Notes and the 2020 Notes is less than the value of the claims of the holders of the 2019 Notes and the 2020 Notes, those claims may not be satisfied in full before the claims of certain unsecured creditors are paid.

Challenges to collateral—The grant of collateral to secure the 2019 Notes and the 2020 Notes might be challenged or voidable in an insolvency proceeding.

The grant of collateral in favor of the Security Trustee may be voidable by the grantor or by an insolvency trustee, liquidator, receiver or administrator or by other creditors, or may be otherwise set aside by a court, or be unenforceable if certain events or circumstances exist or occur, including, among others, if the grantor is deemed to be insolvent at the time of the grant, or if the grant permits the secured parties to receive a

greater recovery than if the grant had not been given and an insolvency proceeding in respect of the grantor is commenced within a legally specified "clawback" period following the grant.

For example, certain collateral was secured after the respective issue dates of the 2019 Notes and the 2020 Notes. If the grantor of such security interest were to become subject to a bankruptcy or winding up proceeding after the respective issue date, any mortgage or security interest in collateral delivered after the respective issue date would face a greater risk than security interests in place on the respective issue date of being avoided by the grantor or by its trustee, receiver, liquidator, administrator or similar authority, or otherwise set aside by a court, as a preference under insolvency law. To the extent that the grant of any security interest is voided, holders of the 2019 Notes and the 2020 Notes would lose the benefit of the security interest.

Structural subordination—The 2016 and 2018 Notes and each guarantee will be structurally subordinated to the liabilities and any preferred stock of the non-guarantor subsidiairies.

Some, but not all, of our subsidiaries will guarantee the 2016 and 2018 Notes. Unless a subsidiary is a guarantor of such obligations, our subsidiaries do not have any obligation to pay amounts due on the 2016 and 2018 Notes or to make funds available for that purpose. Accordingly, you and the holders should only rely on the guarantees of the 2016 and 2018 Notes to provide credit support in respect of payments of principal or interest on the 2016 and 2018 Notes.

Our operating subsidiaries are separate and distinct legal entities and those of our subsidiaries that do not guarantee the 2016 and 2018 Notes have no obligation, contingent or otherwise, to pay any amounts due pursuant to the 2016 and 2018 Notes or to make any funds available therefor, whether by dividends, loans, distributions or other payments, and do not guarantee the payment of interest on, or principal of, the 2016 and 2018 Notes. Generally, claims of creditors of a non-guarantor subsidiary, including trade creditors, and claims of any preferred stockholders of the subsidiary, will have priority with respect to the assets and earnings of the subsidiary over the claims of creditors of its parent entity, including claims against IHL by IGH under the Proceeds Loans and by noteholders under the guarantees. In the event of any foreclosure, dissolution, winding-up, liquidation, reorganization, administration or other bankruptcy or insolvency proceeding of any of our non-guarantor subsidiaries, the creditors of the guarantors (including the holders of the 2016 and 2018 Notes) will have no right to proceed against such subsidiary's assets and holders of their indebtedness and their trade creditors will generally be entitled to payment in full of their claims from the assets of those subsidiaries before any guarantor, as direct or indirect shareholder, will be entitled to receive any distributions from such subsidiary. As such, the 2016 and 2018 Notes and each guarantee and the Proceeds Loans are each structurally subordinated to the creditors (including trade creditors) and any preferred stockholders of our non-guarantor subsidiaries.

Contractual subordination—The right of holders of the 2016 and 2018 Notes to receive payments on the guarantees will be junior to the guarantors' obligations under the Senior Secured Term Loans, the 2019 Notes, the 2020 Notes and their obligations under the Credit Support Deed.

The 2016 and 2018 Notes are guaranteed by IHL and certain of our other subsidiaries. These guarantees rank behind, and are subordinated to, all of the guarantors' existing and future obligations under the Senior Secured Term Loans, certain hedging liabilities and certain cash management liabilities, the 2019 Notes, the 2020 Notes, the Credit Support Deed and any other Designated Senior Indebtedness (as defined in the 2016 and 2018 Notes Indentures) of the guarantors. These guarantees will also rank behind any guarantees of debt that we or IHL are permitted by the 2016 and 2018 Notes Indentures to incur in the future that is secured by liens on all or substantially all of the assets securing the obligations under the Senior Secured Term Loans, the 2019 Notes and the 2020 Notes and guaranteed by all or substantially all of our subsidiaries that guarantee obligations under Senior Secured Term Loans, the 2019 Notes and the 2020 Notes. The guarantees provide that they will not become due until 179 days after an event of default under the 2016 and 2018 Notes has occurred or earlier, in limited circumstances. In addition, the guarantees may be released in certain circumstances without any action by the 2016 and 2018 Notes Trustee or the holder of the 2016 and 2018 Notes.

All payments on the guarantees and the 2016 and 2018 Funding Loans are also effectively prohibited by the terms of the guarantees and the Intercreditor Deed, respectively, if a specified payment event of default occurs under the Senior Secured Term Loans or the Credit Support Deed until the default has been remedied and for 179 days from the date notice is served on IGH and INEOS Group Limited by the facility agent under the Senior Secured Term Loans in the event that certain other events of default occur. See "Description of Certain Indebtedness—Intercreditor Deed".

Release of collateral and guarantees—There are circumstances other than repayment or discharge of the 2019 Notes and the 2020 Notes under which the collateral securing the 2019 Notes and the 2020 Notes and the guarantees granted thereunder will be released automatically and under which the guarantees will be released automatically, without the consent of the holders of the 2019 Notes, the holders of the 2020 Notes, the 2019 Notes Trustee or the 2020 Notes Trustee.

Under various circumstances, collateral securing the 2019 Notes and the 2020 Notes and the guarantees granted thereunder will be released automatically, including:

- in connection with any sale of the property or assets to a person that is not Parent, Lux I or a Restricted Subsidiary, if the sale or other disposition does not violate the requirements of the limitation on sales of assets provisions in the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, or is otherwise permitted in accordance with the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable;
- if such collateral is an asset of a guarantor (other than Parent) or any of its subsidiaries, in connection with any sale or other disposition of capital stock of that guarantor to a person that is not Lux I or a Restricted Subsidiary that does not violate the requirements of the limitation on sales of assets provisions in the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable;
- in the case of a guarantor that is released from its guarantee pursuant to the terms of the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, the security documents or the Intercreditor Deed or any additional intercreditor deed (which release shall be of the liens on the property and assets, and capital stock, of such guarantor);
- if Lux I designates any Restricted Subsidiary to be an Unrestricted Subsidiary in accordance with the applicable provisions of the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, (which release shall be of the Liens on the property and assets, and capital stock, of such subsidiary);
- upon legal defeasance, covenant defeasance or satisfaction and discharge of the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, as provided therein;
- as described in the modifications and amendments provisions in the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable;
- with respect to liens on the Funding Loans and certain other proceeds loans, upon the payment in full or other discharge of the applicable proceeds loans; and
- to release and/or re-take any lien on any collateral to the extent otherwise permitted by the terms of the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, the security documents governing the collateral or the Intercreditor Deed or any additional intercreditor agreement.

Under various circumstances, guarantees of the 2019 Notes will be released automatically, including:

- with respect to a guarantor that is a Restricted Subsidiary of Lux I (a "2019 Notes Subsidiary Guarantor"), in connection with any sale or other disposition (including any transfer to certain joint ventures) of all or substantially all of the assets of such 2019 Notes Subsidiary Guarantor (including by way of merger or consolidation) (including, for the avoidance of doubt, after giving effect to any substantially concurrent sales or other dispositions to IGH, Lux I, a guarantor or a Restricted Subsidiary) to a Person that is not (either before or after giving effect to such transaction) the Parent, Lux I, a guarantor or a Restricted Subsidiary, if the sale or other disposition does not violate the requirements of the limitation on sale of assets provisions in the 2019 Notes Indenture;
- with respect to a 2019 Notes Subsidiary Guarantor, in connection with any other sale or other disposition (including any transfer to certain joint ventures) of all or substantially all of the capital stock (or the shares of any holding company of such 2019 Notes Subsidiary Guarantor (other than Lux I or IGH)) of such 2019 Notes Subsidiary Guarantor to a Person that is not (either before or after giving effect to such transaction) IGH, Lux I, a Guarantor or a Restricted Subsidiary, if the

sale or other disposition does not violate the requirements of the limitation on sale of assets provisions in the 2019 Notes Indenture;

- with respect to a 2019 Notes Subsidiary Guarantor, if the Parent designates any such 2019 Notes Subsidiary Guarantor to be an Unrestricted Subsidiary in accordance with the applicable provisions of the 2019 Notes Indenture;
- with respect to a 2019 Notes Subsidiary Guarantor, upon covenant defeasance of the 2019 Notes Indenture as provided for therein;
- upon legal defeasance or satisfaction and discharge of the 2019 Notes Indenture as provided therein:
- so long as no event of default has occurred and is continuing, such 2019 Notes Subsidiary Guarantor is unconditionally released and discharged from its liability with respect to Indebtedness in connection with which such guarantee was executed pursuant to the limitation on issuances of guarantees provisions of the 2019 Notes Indenture;
- as described in the mergers and modifications and amendments provisions in the 2019 Notes Indenture; and
- with respect to a 2019 Notes Subsidiary Guarantor that is an Immaterial Subsidiary (as defined in the 2019 Notes Indenture), so long as no event of default has occurred and is continuing under the 2019 Notes Indenture, to the extent that such 2019 Notes Subsidiary Guarantor (i) is unconditionally released and discharged from its liability with respect to the Senior Secured Term Loans and (ii) does not guarantee any other credit facility or public debt.

Under various circumstances, guarantees of the 2020 Notes will be released automatically, including:

- with respect to a guarantor that is a Restricted Subsidiary of Lux I (a "2020 Notes Subsidiary Guarantor"), in connection with any sale or other disposition (including any transfer to certain joint ventures) of all or substantially all of the assets of such 2020 Notes Subsidiary Guarantor (including by way of merger or consolidation) (including, for the avoidance of doubt, after giving effect to any substantially concurrent sales or other dispositions to the Parent, Lux I, a guarantor or a Restricted Subsidiary) to a Person that is not (either before or after giving effect to such transaction) the Parent, Lux I, a guarantor or a Restricted Subsidiary, if the sale or other disposition does not violate the requirements of the limitation on sale of assets provisions in the 2020 Notes Indenture;
- with respect to a 2020 Notes Subsidiary Guarantor, in connection with any other sale or other disposition (including any transfer to certain joint ventures) of all or substantially all of the capital stock (or the shares of any holding company of such 2020 Notes Subsidiary Guarantor (other than Lux I or the Parent)) of such 2020 Notes Subsidiary Guarantor to a Person that is not (either before or after giving effect to such transaction) the Parent, Lux I, a Guarantor or a Restricted Subsidiary, if the sale or other disposition does not violate the requirements of the limitation on sale of assets provisions in the 2020 Notes Indenture;
- with respect to a 2020 Notes Subsidiary Guarantor, if the Parent designates any such 2020 Notes Subsidiary Guarantor to be an Unrestricted Subsidiary in accordance with the applicable provisions of the 2020 Notes Indenture;
- with respect to a 2020 Notes Subsidiary Guarantor, upon covenant defeasance of the 2020 Notes Indenture as provided therein;
- upon legal defeasance or satisfaction and discharge of the 2020 Notes Indenture as provided therein;
- so long as no event of default has occurred and is continuing, such 2020 Notes Subsidiary Guarantor is unconditionally released and discharged from its liability with respect to Indebtedness

in connection with which such guarantee was executed pursuant to the limitation on issuances of guarantees provisions of the 2020 Notes Indenture;

- as described in the mergers and modifications and amendments provisions in the 2020 Notes Indenture; and
- with respect to a 2020 Notes Subsidiary Guarantor that is an Immaterial Subsidiary (as defined in the 2020 Notes Indenture) so long as no event of default has occurred and is continuing under the 2020 Notes Indenture, to the extent that such 2020 Notes Subsidiary Guarantor (i) is unconditionally released and discharged from its liability with respect to the Senior Secured Term Loans, the 2019 Notes and (ii) does not guarantee any other credit facility or public debt.

In addition, certain guarantees and collateral of the 2019 Notes and the 2020 Notes are subject to release upon enforcement sale or other disposition as contemplated under the Intercreditor Deed. Unless consented to, the Intercreditor Deed provides that the Security Trustee shall not, in an enforcement scenario, exercise its rights to release the guarantees or security interests in the collateral unless the relevant sale or disposal is made:

- for consideration all or substantially all of which is in the form of cash or cash equivalents;
- to the extent there is a release of guarantees or security granted for the benefit of the holders of the 2016 Notes, concurrently with the discharge or release of the indebtedness of the disposed entities to certain other creditors, including the creditors under the Senior Secured Term Loans and holders of the 2019 Notes or the 2020 Notes; and
- pursuant to a public auction or a fair value opinion obtained from an internationally recognized investment bank or accounting firm selected by the Security Trustee.

See "Description of Certain Indebtedness-Intercreditor Deed."

Release of collateral and guarantees—There are circumstances other than repayment or discharge of the 2016 and 2018 Notes under which the collateral securing the 2016 and 2018 Notes and the guarantees will be released automatically and under which the guarantees will be released automatically, without the consent of the holders of the 2016 and 2018 or the 2016 and 2018 Notes Trustee.

Under various circumstances, collateral securing the 2016 and 2018 Notes will be released automatically, including:

- in connection with any sale of the property or assets to a Person that is not IGH or a Restricted Subsidiary, if the sale or other disposition complies with the requirements of the limitation on sale of assets provisions in the 2016 and 2018 Notes Indentures, regardless of whether such requirements are otherwise applicable, or is otherwise permitted in accordance with the 2016 and 2018 Notes Indentures;
- upon legal defeasance, covenant defeasance or satisfaction and discharge of the 2016 and 2018 Notes Indentures as provided therein;
- in connection with any collateral that secures the 2016 and 2018 Notes pursuant to the limitation on liens provisions of the 2016 and 2018 Notes Indentures as the result of the creation of an Initial Lien (as defined therein), upon release of the Initial Lien; or
- in connection with an enforcement sale or other disposition pursuant to the Intercreditor Deed.

Under various circumstances, guarantees will be released automatically, including:

with respect to a guarantor, in connection with any sale or other disposition of all or substantially
all of the assets of that guarantor (including by way of merger or consolidation) to a Person that is
not (either before or after giving effect to such transaction) IGH or a Restricted Subsidiary, if the
sale or other disposition complies with the requirements of the limitation on sale of assets

provisions in the 2016 and 2018 Notes Indentures, regardless of whether such requirements are otherwise applicable;

- with respect to a guarantor, in connection with any other sale or other disposition of all or substantially all of the capital stock (or the shares of any holding company of such guarantor (other than IGH or any Parent (as defined in the 2016 and 2018 Notes Indentures))) of that guarantor to a Person that is not (either before or after giving effect to such transaction) IGH or a Restricted Subsidiary, if the sale or other disposition complies with the requirements of the limitation on sale of assets provisions in the 2016 and 2018 Notes Indentures, regardless of whether such requirements are otherwise applicable;
- with respect to a Subsidiary Guarantor (as defined in the 2016 and 2018 Notes Indentures), if IGH
 designates any Restricted Subsidiary that is a guarantor to be an Unrestricted Subsidiary in
 accordance with the applicable provisions of the 2016 and 2018 Notes Indentures;
- upon legal defeasance or satisfaction and discharge of the 2016 and 2018 Notes Indentures as provided therein; and
- as described in the modifications and amendments provisions in the 2016 and 2018 Notes Indentures.

In addition, certain guarantees and collateral of the 2016 and 2018 Notes will be subject to release upon enforcement sale as contemplated under the Intercreditor Deed. Unless consented to, the Intercreditor Deed and the 2016 and 2018 Notes Indentures provide that the Security Trustee shall not, in an enforcement scenario, exercise its rights to release the guarantees or security interests in the collateral unless the relevant sale or disposal is made:

- for consideration all or substantially all of which is in the form of cash or cash equivalents;
- if the 2016 and 2018 Notes Trustee confirms to the Security Trustee that the majority of holders of the 2016 and 2018 Notes have approved the release;
- to the extent there is a release of guarantees or security granted for the benefit of the holders of the 2016 and 2018 Notes, concurrently with the discharge or release of the indebtedness of the disposed entities to certain other creditors, including the creditors under the Senior Secured Term Loans and holders of the 2019 Notes and 2020 Notes; and
- pursuant to a public auction or a fair value opinion has been obtained from an internationally recognized investment bank or accounting firm selected by the Security Trustee.

Post-petition interest—The value of the collateral securing the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes may not be sufficient to secure post-petition interest in the United States.

In the event of a bankruptcy, liquidation, dissolution, reorganization or similar proceeding against us in the United States, holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes will only be entitled to post-petition interest under the United States Bankruptcy Code to the extent that the value of their security interest in the collateral is greater than their pre-bankruptcy claim. Holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes that have a security interest in collateral with a value equal or less than their pre-bankruptcy claim will not be entitled to post-petition interest under the United States Bankruptcy Code. No appraisal of the fair market value of the collateral has been prepared and therefore the value of the noteholders' interest in the collateral may not equal or exceed the principal amount of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes.

Controlling shareholders—The interests of our principal shareholders may conflict with your interests.

Messrs. Ratcliffe, Currie and Reece own INEOS AG, our ultimate parent holding company. Mr. Ratcliffe controls INEOS AG. Our controlling shareholder has power to elect all of the directors of our companies, to change their management, to approve any changes to their organizational documents and to approve any acquisitions or dispositions. As a result, his actions can affect our strategic decisions, our legal and capital structure and our day-to- day operations. In addition, our principal shareholders may have an interest in

pursuing acquisitions, divestitures or other transactions that, in their judgment, could enhance their equity investment, even though these transactions might involve risks to you. In the event of a conflict of interest between you and our principal shareholders, their actions could affect our ability to meet our payment obligations to you.

Enforcement in Multiple Jurisdictions—Enforcing your rights as a holder of the 2016 Notes, the 2018 Notes, the 2019 Notes, the 2020 Notes or under the guarantees granted thereunder or security across multiple jurisdictions may prove difficult.

The 2019 and 2020 Notes Issuer is incorporated under the laws of England and Wales, the 2016 and 2018 Notes Issuer is incorporated under the laws of Luxembourg, and the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes are guaranteed by the guarantors, which are incorporated or organized under the laws of Belgium, Canada, England and Wales, Germany, Ireland, Jersey, Luxembourg, Malta, Norway, Singapore, Switzerland and certain states in the United States. In the event of a bankruptcy, insolvency or similar event, proceedings could be initiated in Belgium, Canada, England and Wales, Germany, Ireland, Jersey, Luxembourg, Malta, Norway, Singapore, Switzerland and certain states in the United States. Proceedings could also be initiated in Scotland or France to enforce noteholders' rights against collateral located in Scotland or France. Such multi-jurisdictional proceedings are likely to be complex and costly for creditors and otherwise may result in greater uncertainty and delay regarding the enforcement of the noteholders' rights. The rights of holders of the 2016 Notes, the 2018 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes and the collateral securing obligations under the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes will be subject to the insolvency and administrative laws of several jurisdictions and there can be no assurance that they will be able to effectively enforce their rights in such complex, multiple bankruptcy, insolvency or similar proceedings.

In addition, the bankruptcy, insolvency, administrative and other laws of the guarantors' jurisdictions of organization may be materially different from, or in conflict with, each other and those of the United States, including in the areas of rights of creditors, priority of governmental and other creditors, ability to obtain post-petition interest and duration of the proceeding. The application of these laws, or any conflict among them, could call into question whether any particular jurisdiction's law should apply, adversely affect the ability of the holders of the the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes to enforce their rights under the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable, and the applicable guarantees and security in those jurisdictions or limit any amounts that they may receive.

Moreover, in certain jurisdictions, it is unclear whether all security interests in the collateral give the Security Trustee a right to prevent other creditors from foreclosing on and realizing the collateral or whether certain security interests only give the Security Trustee and the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes priority (according to their rank) in the distribution of any proceeds of such realization. Accordingly, the Security Trustee and the holders of the 2019 Notes and the 2020 Notes (and, to the extent of the 2016 and 2018 Notes collateral, the holders of the 2016 and 2018 Notes) may not be able to avoid foreclosure by other creditors (including unsecured creditors) on the collateral.

The laws of certain of the jurisdictions in which the guarantors are organized limit the ability of these subsidiaries to guarantee debt of, or provide security for, other companies.

Perfection of Security Interests—The rights of the holders of the 2019 Notes and the 2020 Notes in the collateral may be adversely affected by the failure to perfect security interests in the collateral.

Under applicable law, a security interest in certain tangible and intangible assets can only be properly perfected, and its priority retained, through certain actions undertaken by the secured party and/or the grantor of the security. The liens in the collateral securing the 2019 Notes and the 2020 Notes may not be perfected with respect to the claims of the 2019 Notes and the 2020 Notes if we or the Security Trustee fails or is unable to take the actions we are or it is required, as the case may be, to take to perfect any of these liens. In addition, applicable law requires that certain property and rights acquired after the grant of a general security interest, such as real property, equipment subject to a certificate and certain proceeds, can only be perfected at or promptly following the time such property and rights are acquired and identified.

The 2019 Notes Trustee, the 2020 Notes Trustee or the Security Trustee may not monitor, or we may not comply with our obligations to inform the 2019 Notes Trustee, the 2020 Notes Trustee or the Security Trustee of, any future acquisition of property and rights by us, and the necessary action may not be taken to properly perfect the security interest in such after-acquired property or rights. Such failure may result in the

invalidity of the security interest in the collateral or adversely affect the priority of the security interest in favor of the 2019 Notes and the 2020 Notes against third parties. Neither the 2019 Notes Trustee nor the 2020 Notes Trustee nor the Security Trustee has any obligation to monitor the acquisition of additional property or rights by us or the perfection of any security interest.

Guarantees and collateral limitations—The guarantees and pledges of collateral will be subject to certain limitations on enforcement and may be limited by applicable laws or subject to certain defenses that may limit their validity and enforceability.

The Indentures will provide that certain guarantees will be limited to the maximum amount that can be guaranteed by the relevant guarantor without rendering the relevant guarantee voidable or otherwise ineffective under applicable law and enforcement of each guarantee would be subject to certain generally available defenses. These laws and defenses include those that relate to corporate benefit, fraudulent transfer or conveyance, voidable preference, financial assistance, corporate purpose, capital maintenance or similar laws, regulations or defenses affecting the rights of creditors generally.

Although laws differ among various jurisdictions, in general, under fraudulent conveyance and other laws, a court could subordinate or void the guarantees and, if payment had already been made under a guarantee, require that the recipient return the payment to the relevant Guarantor, if the court found that:

- the relevant guarantee was incurred with actual intent to hinder, delay or defraud creditors or shareholders of the Guarantor or, in certain jurisdictions, even when the recipient was simply aware that the Guarantor was insolvent when it granted the relevant guarantee;
- the guarantor did not receive fair consideration or reasonably equivalent value for the relevant guarantee and the Guarantor was: (i) insolvent or rendered insolvent because of the relevant guarantee; (ii) undercapitalized or became undercapitalized because of the relevant guarantee; or (iii) intended to incur, or believed that it would incur, indebtedness beyond its ability to pay at maturity;
- the relevant guarantees were held to exceed the corporate objects of the Guarantor or not to be in the best interests or for the corporate benefit of the Guarantor; or
- the amount paid or payable under the relevant guarantee was in excess of the maximum amount permitted under applicable law.

The measures of insolvency for purposes of fraudulent transfer laws vary depending upon applicable governing law. Generally, an entity would be considered insolvent if, at the time it incurred indebtedness:

- the sum of its debts, including contingent liabilities, is greater than the fair value of all its assets;
- the present fair saleable value of its assets is less than the amount required to pay the probable liability on its existing debts and liabilities, including contingent liabilities, as they become due; or
- it cannot pay its debts as they become due.

If a court were to find that the issuance of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes or a guarantee of any of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes was a fraudulent conveyance or held it unenforceable for any other reason, the court could hold that the payment obligations under the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes or such guarantee are ineffective, or require the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes to repay any amounts received with respect to the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes or such guarantee. In the event of a finding that a fraudulent conveyance occurred, you may cease to have any claim in respect of the relevant Guarantor and would be a creditor solely of IGH and, if applicable, of the other Guarantors under any guarantees which have not been declared void.

Additionally, any future pledge of collateral in favor of the collateral agent, including pursuant to security documents delivered after the date of the Indentures, might be avoidable by the pledgor (as debtor-in-possession) or by its trustee in bankruptcy if certain events or circumstances exist or occur, including, among others, if the pledgor is insolvent at the time of the pledge, the pledge permits the holders of the 2016

Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes to receive a greater recovery than if the pledge had not been given and a bankruptcy proceeding in respect of the pledger is commenced within 90 days following the pledge, or in certain circumstances, a longer period.

In addition, under the terms of the Indentures, we will be permitted in the future to incur additional indebtedness and other obligations that may share in the liens on the collateral securing the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes and the liens on the collateral securing our other secured debt. The granting of new security interests may require the releasing and retaking of security or otherwise create new hardening periods in certain jurisdictions. The applicable hardening period for these new security interests will run from the moment each new security interest has been granted or perfected. At each time, if the security interest granted or recreated were to be enforced before the end of the respective hardening period applicable in such jurisdiction, it may be declared void or ineffective or it may not be possible to enforce it. Further, certain security documents governing security interests granted by the Guarantors will provide that the amounts guaranteed by such security interests will be limited to the extent of the amount guaranteed by such Guarantor. Therefore, limitations in the guarantees will also serve to limit the amounts guaranteed by the pledges of collateral.

Insolvency laws—Relevant insolvency laws in England and other jurisdictions may provide you with less protection than U.S. bankruptcy law.

The 2019 and 2020 Notes Issuer and certain of the guarantors of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes are incorporated under the laws of England and Wales. Therefore, any insolvency proceedings by or against the 2019 and 2020 Notes Issuer or such guarantors would likely be based on English insolvency laws. The 2016 and 2018 Notes Issuer and certain of the guarantors are incorporated under the laws of Luxembourg. Therefore, any insolvency proceedings by or against the 2016 and 2018 Notes Issuer or such guarantors would likely be based on Luxembourg insolvency laws. The other guarantors and the Scottish grantors are incorporated or organized or have assets located in Belgium, Canada, France, Germany, Ireland, Jersey, Luxembourg, Malta, Norway, Scotland, Singapore, Switzerland and the United States.

The procedural and substantive provisions of the insolvency laws in many of the jurisdictions in which the guarantors are organized are generally more favorable to secured creditors than comparable provisions of U.S. law and afford debtors and unsecured creditors only limited protection from secured creditors. Due to the nature of such insolvency laws and the unsecured nature of the claims of holders of the 2016 and 2018 Notes against the relevant guarantors, the ability of holders of the 2016 and 2018 Notes to protect their interests will be more limited than would be the case under U.S. bankruptcy laws. The lenders under the Senior Secured Term Loans and the holders of the 2019 Notes and the 2020 Notes have first ranking security on substantially all of the assets of IHL and substantially all of the assets of the guarantors. As a result, after the enforcement of the assets securing the Senior Secured Term Loans, the 2019 Notes or the 2020 Notes, the Senior Security Agent (as defined in the Intercreditor Deed) at the request of the senior creditors under the Intercreditor Deed whose senior credit participations constitute the simple majority in aggregate principal amount of the total senior credit participations will have effective control of and the right to direct the disposition of the assets of IHL and those subsidiaries.

In the event that any one or more of the 2019 and 2020 Notes Issuer, the 2016 and 2018 Notes Issuer, the guarantors, any future guarantors thereof, if any, or any other of our subsidiaries experienced financial difficulty, it is not possible to predict with certainty in which jurisdiction or jurisdictions insolvency or similar proceedings would be commenced, or the outcome of such proceedings. Guarantees and security provided by entities organized in jurisdictions not discussed herein are also subject to material limitations pursuant to their terms, by statute or otherwise. Any enforcement of the guarantees or security after bankruptcy or an insolvency event in such other jurisdictions will be subject to the insolvency laws of the relevant entity's jurisdiction of organization or other jurisdictions. The insolvency and other laws of each of these jurisdictions may be materially different from, or in conflict with, each other, including in the areas of rights of secured and other creditors, the ability to void preferential transfer, priority of governmental and other creditors, ability to obtain post-petition interest and duration of the proceeding. The application of these laws, or any conflict among them, could call into question whether any particular jurisdiction's laws should apply, adversely affect your ability to enforce your rights under the guarantees or the security in these jurisdictions and limit any amounts that you may receive.

Enforcement of civil liabilities—You may not be able to recover in civil proceedings for U.S. securities law violations.

We and most of the Guarantors are companies incorporated outside the United States. Most of our directors and executive officers and the directors and executive officers of the Guarantors are non-residents of the United States. Although we and the Guarantors have submitted to the jurisdiction of certain New York courts in connection with any action under U.S. securities laws, you may be unable to effect service of process within the United States on our directors and executive officers or the directors and executive officers of the Guarantors. In addition, as most of our assets and those of our directors and executive officers are located outside of the United States, you may be unable to enforce against them judgments obtained in the U.S. courts predicated upon civil liability provisions of the Federal securities laws of the United States. In addition, we have been informed that it is questionable whether an English court would accept jurisdiction and impose civil liability if proceedings were commenced in England predicated solely upon U.S. Federal securities laws.

Lack of public market—There may not be an active trading market for the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, in which case the relevant noteholders' ability to sell their 2016 Notes, 2018 Notes, 2019 Notes or 2020 Notes may be limited.

The 2016 Notes, 2018 Notes, 2019 Notes, and the 2020 Notes are listed on the Official List of the Luxembourg Stock Exchange and traded on the Luxembourg Stock Exchange's Euro MTF Market. Changes in the overall market for high yield securities and changes in our financial performance or in the markets where we operate may adversely affect the liquidity of the trading market in the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes and the market price quoted for such notes. As a result, we cannot assure the noteholders that an active trading market will continue for the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes. As a result, there is no assurance that there will be an active trading market for the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes. If no active trading market develops, holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes may not be able to resell their 2016 Notes, the 2018 Notes, the 2020 Notes, as applicable, at a fair value, if at all

Historically, the markets for non-investment grade debt such as the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes have been subject to disruptions that have caused substantial volatility in their prices. Future trading prices for the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes will depend on many factors, including, among other things, prevailing interest rates, our operating results and the market for similar securities. The market, if any, for the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes may be subject to similar disruptions. Any disruptions may have an adverse effect on the holders of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes, regardless of our prospects and financial performance.

Although the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes are listed on the Official List of the Luxembourg Stock Exchange and admitted to trading on the Euro MTF, we cannot assure you that the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes will remain listed. Although no assurance is made as to the liquidity of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes as a result of the admission to trading on the Euro MTF, failure to be approved for listing or the delisting of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes or the 2020 Notes, as applicable, from the Official List may have a material effect on a holder's ability to resell the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes , as applicable, in the secondary market.

In addition, the Indentures allow for the issuance of additional 2016 Notes, the 2018 Notes, 2019 Notes and 2020 Notes in the future which could adversely impact the liquidity of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes.

Transfer of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes —The transfer of the 2016 Notes, the 2018 Notes, the 2019 Notes and the 2020 Notes is restricted.

The 2016 Notes, 2018 Notes, 2019 Notes and 2020 Notes and the guarantees thereof have not been registered under the Securities Act or the securities laws of any jurisdiction and, unless so registered, may not be offered or sold except pursuant to an exemption from, or transaction not subject to, the registration requirements of the Securities Act and any other applicable laws. We have not agreed to or otherwise undertaken to register the 2016 Notes, 2018 Notes, 2019 Notes and 2020 Notes, and neither we nor the 2019 and 2020 Notes Issuer nor the 2016 and 2018 Notes Issuer have any intention to do so.

Book-entry interests—Certain considerations relating to book-entry interests.

Unless and until the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable, in definitive registered form, or definitive registered notes, are issued in exchange for book-entry interests, owners of book-entry interests will not be considered owners or holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable. The common depositary for Euroclear and Clearstream (or its nominee) will be the sole holder of the global notes representing any euro-denominated 2016 Notes, 2018 Notes or 2019 Notes, as applicable, and the custodian for DTC (or its nominee) will be the sole holder of the global notes representing our dollar-denominated 2018 Notes, 2019 Notes or 2020 Notes, as applicable. After payment to the common depositary or the custodian, as applicable, the relevant issuer will have no responsibility or liability for the payment of interest, principal or other amounts to the owners of book-entry interests. Accordingly, if you own a book-entry interest, you must rely on the procedures of DTC, Euroclear or Clearstream, as applicable, and if you are not a participant in DTC, Euroclear or Clearstream, on the procedures of the participant through which you own your interest, to exercise any rights of a holder under the 2016 Notes Indenture, the 2018 Note Indenture, the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable.

Unlike the holders of the the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, owners of book-entry interests will not have the direct right to act upon the relevant issuer's solicitations for consents, requests for waivers or other actions from holders of the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes, as applicable. Instead, if you own a book-entry interest, you will be permitted to act only to the extent you have received appropriate proxies to do so from DTC, Euroclear or Clearstream. There can be no assurance that procedures implemented for the granting of such proxies will be sufficient to enable you to vote on any request actions on a timely basis.

Similarly, upon the occurrence of an event of default under the 2016 Notes Indenture, the 2018 Notes Indenture, the 2019 Notes Indenture or the 2020 Notes Indenture, as applicable, unless and until definitive registered notes are issued in respect of all book-entry interests, if you own a book-entry interest, you will be restricted to acting through DTC, Euroclear or Clearstream. We cannot assure you that the procedures to be implemented through DTC, Euroclear or Clearstream will be adequate to ensure the timely exercise of rights under the 2016 Notes, the 2018 Notes, the 2019 Notes or the 2020 Notes.

Foreign currency exchange risks—You may face currency exchange risks by investing in the Notes.

Certain portions of our indebtedness are denominated and payable in euro, while other portions are denominated and payable in dollars. If you measure your investment returns by reference to a currency other than the currency in which your indebtedness are denominated, investment in such indebtedness entails foreign currency exchange-related risks due to, among other factors, possible significant changes in the value of the dollar or the euro, as applicable, relative to the currency you use to measure your investment returns, caused by economic, political and other factors which affect exchange rates and over which we have no control. Depreciation of the dollar or the euro, as applicable, against the currency by reference to which you measure your investment returns would cause a decrease in the effective yield of the relevant indebtedness below their stated coupon rates and could result in a loss to you when the return on such indebtedness is translated into the currency by reference to which you measure your investment returns. There may be tax consequences for you as a result of any foreign currency exchange gains or losses resulting from your investment in our indebtedness. You should consult your tax advisor concerning the tax consequences to you of acquiring, holding and disposing of our indebtedness.

Interest rate risks—Certain of our borrowings bear interest at floating rates that could rise significantly, increasing our interest cost and reducing cash flow.

A substantial part of our indebtedness bears interest at per annum rates equal to EURIBOR, LIBOR and similar benchmarks, in each case adjusted periodically, plus a spread. These interest rates could rise significantly in the future, thereby increasing our interest expenses associated with these obligations, reducing cash flow available for capital expenditures and hindering our ability to make payments on our indebtedness.

SELECTED FINANCIAL INFORMATION

The following table sets forth selected historical consolidated financial information for INEOS Group Holdings S.A. for the years ended December 31, 2013, December 31, 2012 and December 31, 2011. The financial data for each of the years ended December 31, 2013 and 2012 and 2011 treats the results of operations of our Refining Business as a discontinued operation.

	At or for the year ended December 31,		
	2013	2012	2011
		(€in millions)	
Income Statement:			
Revenue	16,622.7	18,188.2	17,586.4
Cost of sales	(15,027.3)	(17,233.1)	(15,844.5)
Gross profit	1,595.4	955.1	1,741.9
Distribution costs	(222.2)	(228.4)	(240.6)
Administrative expenses	(300.0)	(234.4)	(277.1)
Operating profit	1,073.2	492.3	1,224.2
Total share of loss of associates and jointly controlled entities using the			
equity accounting method	(49.8)	(14.7)	(67.8)
Profit on disposal of fixed assets	0.1	-	3.5
Loss on disposal of businesses	(248.1)	-	(2.1)
Profit before net finance costs	775.4	477.6	1,157.8
Net finance costs	(596.7)	(594.6)	(687.7)
Profit/(loss) before tax from continuing operations	178.7	(117.0)	470.1
Tax (charge)/credit	(312.9)	(158.5)	(234.4)
(Loss)/profit for the year from continuing operations	(134.2)	(275.5)	235.7
(Loss)/profit from discountinued operations, net of tax	-	(11.0)	140.7
(Loss)/profit for the year	(134.2)	(286.5)	376.4
Other Financial Data:			
EBITDA before exceptionals ⁽⁴⁾	1,511.5	1,516.8	1,713.5
Depreciation, amortization and impairment	412.4	1,009.9	453.5
Capital expenditures ⁽¹⁾	540.6	461.1	396.2
Total Indebtedness ⁽²⁾	7,297.4	7,399.5	6,666.8
Net debt ⁽³⁾	6,167.4	6,164.1	6,084.4

⁽¹⁾ Capital expenditures represents payments to acquire property, plant and equipment as recorded on the consolidated cash flow statements. Included within the capital expenditures are €nil million (2012: €nil million, 2011: €54.8 million) relating to the discontinued Refining business.

⁽²⁾ Total debt represents long-term debt plus short-term debt, including finance lease obligations before deduction of unamortized debt issuance costs. Under IFRS, debt issuance costs are deducted from the related debt amounts for the purposes of balance sheet presentation and are amortized over the life of the debt.

⁽³⁾ Net debt represents total debt less cash and cash equivalents.

⁽⁴⁾ EBITDA before exceptionals represents operating profit before depreciation, amortization, impairment and exceptional charges. In accordance with IFRS, we use both the FIFO and weighted average cost methods of accounting for purposes of determining our inventory cost in connection with the preparation of our audited annual consolidated financial information. EBITDA before exceptionals is based on the FIFO and weighted average cost methods of accounting for inventory used in connection with the preparation of such financial information. EBITDA before exceptionals is derived from income statement line items calculated in accordance with IFRS on a historical cost basis. Although our EBITDA-based measures should not be considered a substitute measure for operating profit, profit, cash flows from operating activities or other measures of performance as defined by IFRS, we believe that they provide useful information regarding our ability to meet future debt service requirements. The EBITDA measure presented may not be comparable to similarly titled measures used by other companies.

The reconciliation of INEOS' operating profit to EBITDA before exceptionals is as follows:

	Year ended December 31,		
	2013	2012	2011
	(€	in million	is)
Operating profit	1,073.2	492.3	1,224.2
Depreciation, amortization and impairment	412.4	1,009.9	453.5
Exceptional charges	25.9	14.6	35.8
EBITDA before exceptionals	1,511.5	1,516.8	1,713.5

Use of Non-GAAP Financial Measures

We have presented certain information in this annual report based on non-GAAP measures. As used in this annual report, this information includes "EBITDA before exceptionals".

EBITDA before exceptionals represents operating profit before depreciation, amortization, impairment and exceptional charges. In accordance with IFRS, we use both the first in first out ("FIFO") and weighted average cost methods of accounting for purposes of determining our inventory cost in connection with the preparation of our audited annual consolidated financial information. EBITDA before exceptionals is based on the FIFO and weighted average cost methods of accounting for inventory used in connection with the preparation of such financial information. EBITDA before exceptionals is derived from income statement line items calculated in accordance with IFRS on historical cost basis.

EBITDA before exceptionals, is not a measure of financial performance under IFRS. EBITDA-based measures are non-GAAP measures. We believe that the presentation of EBITDA-based measures enhances an investor's understanding of our financial performance. However, EBITDA-based measures should not be considered in isolation or viewed as a substitute for operating profit, profit, cash flows from operating activities or other measures of performance as defined by IFRS. These EBITDA-based measures, as used herein, are not necessarily comparable to other similarly titled captions of other companies due to potential inconsistencies in the method of calculation. Our management has used, and expects to use, EBITDA-based measures to assess operating performance and to make decisions about allocating resources among our various segments. In assessing our overall performance and the performance of each of our segments, management reviews EBITDA-based measures as a general indicator of performance compared to prior periods. Furthermore, management and employee bonuses can be linked to the EBITDA-based performance of the business and the region in which they work. Our EBITDA-based measures exclude items that management does not consider in assessing operating performance. Our management believes it is useful to eliminate such items because it allows management to focus on what it considers to be a more meaningful indicator of operating performance and ability to generate cash flow from operations.

The information presented by EBITDA before exceptionals is unaudited and has not been prepared in accordance with IFRS or any other accounting standards. In addition, the presentation of this measure is not intended to and does not comply with the reporting requirements of the SEC; compliance with its requirements would require us to make changes to the presentation of this information.

Presentation

Rounding adjustments have been made in calculating some of the financial information included in this annual report. Figures shown as totals in some tables and elsewhere may not be exact arithmetic aggregations of the figures that precede them.

In this annual report, unless otherwise indicated: all references to the "EU" are to the European Union; all references to "euro" or "€" are to the lawful currency of the European Union; all references to the "U.K." are to the United Kingdom; all references to "pounds sterling," "Sterling," "Sterling," "British pounds" or "£" are to the lawful currency of the United Kingdom; all references to the "United States" or the "U.S." are to the United States of America; and all references to "U.S.\$," "U.S. dollars," "dollars" or "\$" are to the lawful currency of the United States.

OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This summary highlights selected information contained elsewhere in this annual report. It is not complete and does not contain all the information that you should consider before investing in the notes. The following summary should be read in conjunction with and is qualified in its entirety by the more detailed information included elsewhere in this annual report. You should read the entire annual report, including the more detailed information in the financial information and the related notes included elsewhere in this annual report, before making an investment decision. See the section entitled "Risk Factors" for factors that you should consider before investing in the notes and the section entitled "Forward-Looking Statements" for information relating to the statements contained in this annual report that are not historical facts.

Overview

Combined Business

We are one of the world's largest chemical companies as measured by revenue. Our business has highly integrated, world-class chemical facilities and production technologies. We have leading global market positions for a majority of our key products and a strong and stable customer base. We operate 27 manufacturing sites in eight countries throughout the world, including a petrochemical facility in Lavéra, France which is co-located and fully integrated with a refinery. We are led by a highly experienced management team with, on a combined basis, over 100 years of experience in the chemical industry. As of December 31, 2013 our total chemical production capacity was approximately 22,000 kta, of which 65% was in Europe and 35% was in North America.

We operate our business through three segments: Olefins & Polymers Europe, Olefins & Polymers North America and Chemical Intermediates. As a result of the Grangemouth Divestiture, effective October 1, 2013, the operations at the site at Grangemouth, U.K. which formed part of our Olefins & Polymers Europe segment, are no longer part of the Group. Prior to the consummation of the Refining Divestiture, we also operated a fourth segment, Refining. See "The Refining Divestiture." The products we manufacture are derived from crude oil and natural gas, and include olefins, polymers and various petrochemical products directly or indirectly derived from olefins. Our products serve a broad and diverse range of end markets, including packaging, construction, automotive, white goods/durables, agrochemicals and pharmaceuticals.

Our highly integrated, world class production facilities and technological know-how allow us to process raw materials into higher value added products. We own four sites integrated with crackers and polymer units, one of which is integrated with the Lavéra refinery we disposed of in connection with the Refining Divestiture. Typically, these four sites account for approximately 65% of our olefin and polymer volumes. The Refining Divestiture was principally a disposal of the Refining segment of the Group, as reported in our financial statements. In connection with the Refining Divestiture, we entered into several contractual arrangements with the Refining and Entrepreneurial JVs and the Infrastructure Entity to ensure our sites continue to benefit from the feedstocks that the refineries provide. See "The Refining Divestiture." In addition, we will continue to benefit from shared utilities and infrastructure assets located at all of the integrated sites, including Lavéra. In Europe, approximately 90% of our ethylene and propylene output is typically sold internally. The polyolefins plants on our three major sites in Europe receive more than 95% of their feedstock supply from our integrated crackers. Similarly, in the United States, much of our olefin feedstock requirements for our polymer business is supplied by either our Chocolate Bayou cracker in Texas or by integrated third party facilities, such as the Tesoro facility in Carson, California. We believe that with our highly integrated facilities we are able to capture attractive margins across the value chain, enjoy greater certainty of feedstock supply, reduce logistical costs, improve energy management and optimize our product slate.

We benefit from the cost advantages of operating large-scale, well-invested, highly integrated facilities strategically located near major transportation facilities and customer locations. Since January 1, 2007, we and our predecessors have invested more than €2.8 billion (including investments in divested assets) in our production facilities to ensure that they operate efficiently, resulting in integrated, and state-of-the-art production units. We believe these investments allow us to operate at lower cost and higher utilization rates than most of our competitors, and enable us to maintain positive margin and cash flows even during downturns in industry cycles or customer demand. For the year ended December 31, 2013, our revenue was €1.6 billion and our EBITDA before exceptionals was €1.5 billion.

Over the past several years, we have implemented a range of strategic initiatives designed to lower our operating costs, increase our profitability and further enhance our market position. These include fixed asset

investments to expand our capacity in higher value products, to enhance productivity at our existing facilities, and to reduce our fixed cost structure through headcount reductions, production line closures and system upgrades. In addition, we have shifted our product portfolio to focus on more differentiated products, exited low-margin businesses and implemented premium pricing strategies designed to improve our margins. We believe these initiatives provide us with a strong platform to drive growth, create significant operating leverage and position us to benefit from volume recovery in our end markets.

Since April 1998, when INEOS was established with the acquisition of the Belgian "Oxide" assets from Inspec plc, we have significantly expanded, both through a series of strategic acquisitions of businesses and assets from major chemical companies, and through organic growth. The combination of INEOS and Innovene in December 2005 represented a transformational milestone for our company, providing global scale and further upstream integration. During 2007, we acquired the Borealis petrochemical manufacturing business in Norway. In 2008, we acquired the former BP vinyl acetate monomer/ethyl acetate business in Hull, United Kingdom, and the former BASF acrylonitrile business in Seal Sands, United Kingdom. In 2009, we transferred certain companies and businesses out of the INEOS Group to INEOS Industries Holdings Ltd. These businesses consumed a significant amount of cash in the three years prior to transfer and were forecast to continue to be a significant drain on cash resources (due to either difficult trading conditions or significant investment requirements over the next two to three years). The transferred businesses comprised the ABS, Styrenics, Melamines, Healthcare, Bio and Films Italia Srl businesses, together with our shareholding in the INEOS Nova JV. In 2010, we sold our ChlorVinyls business, our business associated with fluorochemicals and our global films business. In addition, on January 31, 2011, we completed the Swiss reorganization, with IGH becoming the issuer in respect of the 2016 IGH Notes.

In connection with the Refining Divestiture, we transferred our Refining Business, our Entrepreneurial (Refining) Business and certain infrastructure assets to three joint ventures, each of which is not a member of the INEOS Group but may be an "Affiliate" under the Indenture because it is owned in part by, and in some cases operated or controlled by, entities controlled by or under common control with the principal shareholders of IGH. Please see "The Refining Divestiture" for a further description of the disposal of our Refining Business and Entrepreneurial (Refining) Business.

Most recently, on October 1, 2013, we completed the Grangemouth Divestiture to a newly created subsidiary of INEOS Holdings AG, our indirect parent company. See "The Grangemouth Divestiture."

Key Factors Affecting Our Results of Operation

Our results of operations are driven by a combination of factors affecting the refining (prior to the Refining Divestiture), petrochemical and chemical intermediate markets generally, including general economic conditions, prices of raw materials, global supply and demand for our products and environmental legislation, including climate change initiatives. Our results of operations are also impacted by company-specific structural and operational factors. Set forth below is an overview of the key drivers that have affected the historical results of operations, and are expected to affect our future results of operations.

Supply and Demand in the Petrochemical Industry

Margins in the petrochemical industry are strongly influenced by industry utilization. As demand for petrochemical products approaches available supply, utilization rates rise, and prices and margins typically increase. Historically, this relationship has been highly cyclical due to fluctuations in supply resulting from the timing of new investments in capacity and general economic conditions affecting the relative strength or weakness of demand. Generally, capacity is more likely to be added in periods when current or expected future demand is strong and margins are, or are expected to be, high. Investments in new capacity can result, and in the past frequently have resulted, in overcapacity, which typically leads to a reduction of margins. In response, petrochemical producers typically reduce capacity or limit further capacity additions, eventually causing the market to be relatively undersupplied. The bottom of the last cycle was reached in 2001 and continued through 2002 due to weak demand and substantial capacity additions. Since 2003, stronger demand and limited capacity investments led to improved utilization rates and rising contribution margins until their peak in 2007.

The global economic downturn in 2008 saw volumes and margins for olefins and polymers decrease significantly in the fourth quarter of that year. Market conditions continued to be weak in 2009 before seeing a significant upturn in 2010 as demand improved. The recent global macroeconomic uncertainties resulting, inter alia, from sovereign debt risks in the eurozone have again caused demand to weaken and margins to drop to bottom of cycle levels. According to Nexant, from a supply perspective, downward pressure on operating rates

will ease over the next couple of years as the start-up of a major wave of new capacity in Asia and the Middle East over the period 2009-2011 is now essentially complete. Recovery now depends, to a large extent, on demand growth, which in turn is dependent on the timing, speed and magnitude of the global macro-economic recovery. Most commentators are expecting a gradual recovery (stronger and faster in North America and Asia than in Europe), leading to a gradual tightening of the supply/demand balance for many petrochemical products, with the attendant firming of margins. However, the rate of margin recovery in the petrochemical industry is highly dependent on the actual speed of global macro-economic growth. In addition to the global petrochemical cycle, margins are also susceptible to potentially significant swings in the short term. This volatility, which may be global or isolated in individual regions, can be caused by a number of factors, including fluctuations in utilization rates due to planned or unplanned plant outages, political and economic conditions driving rapid changes in prices for key feedstocks, exchange rate fluctuations and changes in inventory management policies by petrochemical customers (such as inventory building or de-stocking in periods of expected price increases).

Historical Supply and Demand in the European Refining Industry

The refinery industry in Europe historically has been characterized by low but steady growth in demand for most refinery products, and cyclical margins due to periodic overcapacity and supply shortages in various regional markets. The market is also subject to seasonal fluctuations in the consumption of particular types of refinery products, such as higher gasoline and diesel consumption during the summer driving season, and higher home heating oil consumption during the winter months. During recent years, the dieselization of the road fleet, and the rapid growth of the commercial transport and airline sectors have led to a structural shortage of middle distillate fuels and a supply overhang of gasoline.

In the aggregate, refining industry margins experienced a sharp upturn after 2002, with the 2004-2008 periods returning strong growth. This was the result of rapidly increasing world demand leading to increasing utilization of the available refining capacity. Refining capacity additions were not sufficient to keep pace with the demand in general, and this especially applied to the middle distillate products (for example, diesel, jet and gas oil), where growth was substantial. In late 2008, demand dropped rapidly as a result of the deterioration in the global economy. For much of 2009 to 2011, margins languished at the bottom of cycle levels, as the system adjusted to the prevailing demand level. Industry experts expect a gradual recovery over the next few years in the refining sector. The actual pace of the recovery in margins is heavily dependent on the pace of recovery in end-user product demand. Even given planned capacity additions, middle distillate capacity could come under pressure if the recovery in demand emerges more quickly than forecast, potentially resulting in higher margins in the near term.

On July 1, 2011, we completed the Refining Divestiture, which consisted of the disposal of (i) the Refining Business and the Entrepreneurial (Refining) Business to the Refining and Entrepreneurial JVs formed between PetroChina and INEOS Investments (which is not owned by the IGH or any of its subsidiaries) and (ii) the Infrastructure Entity to a joint venture formed between INEOS Investments and the Refining Business JV. The Refining Divestiture was principally a disposal of our Refining segment, as reported on our financial statements. See "The Refining Divestiture."

Asset Utilization

Our results of operations are materially influenced by the degree to which we utilize our assets in order to achieve maximum production volumes. As a low-cost producer, we believe in operating our facilities at full capacity. We believe this allows us to maintain positive margins and cash flows, even during downturns in industry cycles or customer demand, more readily than some of our competitors who have higher production costs. We intend to achieve growth in production volume by improving utilization rates within the defined availability of an asset, improving availability of an asset by minimizing planned and unplanned facility downtime and improving capacity of an asset through de-bottlenecking projects.

For example, the number and length of turnarounds (scheduled outages of a unit in order to perform necessary inspections and testing to comply with industry regulations and to permit us to carry out any maintenance activities that may be necessary) carried out in any given period can impact operating results. When possible, we seek to schedule the timing of turnarounds to coincide with periods of relatively low demand for the products of the relevant units. Olefins crackers typically undergo major turnarounds every four or five years, with each turnaround lasting four to six weeks. Turnarounds for polymers and derivatives units are more frequent, typically every one to two years, but generally last only seven to 10 days. Likewise, unplanned outages, such as the fires at the Chocolate Bayou facility in August 2005 and at the Lavéra facility in December 2012, the impact of Hurricane Ike in autumn 2008 and the lightning strike at the Chocolate Bayou site in

November 2010, can impact our operating results, even if such outages are covered by insurance. Similarly, planned or unplanned outages of our competitors can positively affect our operating results by decreasing the supply of product in the market.

Oil and Gas Price Movements

Feedstock costs are a significant component of the operating costs of our petrochemical business. The costs of the feedstocks we require to make our petrochemical products (naphtha, ethane, butane and propane) are principally driven by the price of oil and natural gas. According to the U.S. Energy Administration, the spot price for Brent crude oil increased from approximately \$19 per barrel in January 2002 to approximately \$111 per barrel in December 2013, while the natural gas Industrial price in Texas increased from \$2.85 per thousand cubic feet in January 2002 to \$4.12 per thousand cubic feet in December 2013. During 2008, there was a significant level of volatility in crude oil prices and thus petrochemical products, with crude oil prices reaching their peak of approximately \$147 per barrel in July 2008 before decreasing sharply to approximately \$41 per barrel by the end of 2008. They have since risen to approximately \$111 per barrel in December 2013. The recovery of crude oil prices in 2010 and 2011 has once again led to an increase in revenues. However, our ability to pass on price increases for crude is limited due to the impact of time lags resulting from the repricing intervals of our contracts with suppliers and customers, particularly in the petrochemical business. While most of our feedstock contracts reprice daily, our contracts with customers generally reprice on a monthly basis. A further limitation is that many of our customers take advantage of fluctuating prices by building inventories when they expect prices to increase and reducing inventories when they expect prices to decrease. The effect of these time lags and our customers' inventory management policies on our ability to pass through feedstock price increases is magnified in periods of high volatility. In addition, changes in oil and gas prices have a direct impact on our working capital levels. In general, increases in feedstock prices lead to an increase in our working capital and decreases in feedstock prices lead to a decrease in our working capital.

Implementation of Cost Reduction

We have historically focused on implementing our strategies of reducing costs by making rapid reductions in underlying fixed costs and implementing an efficient corporate and management structure and maximizing the utilization of our assets. Our ability to continue to reduce costs will impact, among other things, our profitability and capacity plans.

Refining Divestiture

On July 1, 2011, we completed the Refining Divestiture, which consisted of the disposal of (i) the Refining Business and the Entrepreneurial (Refining) Business to the Refining and Entrepreneurial JVs formed between PetroChina and INEOS Investments (which is not owned by IGH or any of its subsidiaries) and (ii) the Infrastructure Entity to a joint venture formed between INEOS Investments and the Refining Business JV. The Refining Divestiture was principally a disposal of the Refining segment of IGH, as reported on our financial statements. See "The Refining Divestiture."

Grangemouth Divestiture

On October 1, 2013, the Group transferred the assets and liabilities (including pension liabilities) and business of the Grangemouth petrochemical operations to a newly created subsidiary of INEOS Holdings AG, our indirect parent company. The business has now re-domiciled in the UK to enable it to be eligible for support under the U.K. government's Infrastructure Loan Guarantee Scheme. The transfer out of the Group was completed at a fair value of fail. The operations at Grangemouth have been losing cash for the past four years due to a combination of a high fixed cost base at the site and a decline in suitable feedstock supplies. See "The Grangemouth Divestiture."

Debt Structure

As of December 31, 2013, we had €7,297.4 million (December 31, 2012: €7,399.5 million) of indebtedness. Our future results of operations, and in particular our net finance charges, will be significantly affected by the amount of indebtedness, including the interest we pay on our indebtedness. The servicing of this indebtedness will impact, among other things, our cash flows and our cash balance.

Foreign Exchange Rate Fluctuations

Our results of operations may be affected by both the transaction effects and translation effects of foreign currency exchange rate fluctuations. A substantial portion of our revenue is generated in, or linked to, the U.S. dollar and euro. In our European petrochemical business, product prices, certain feedstock costs and most other costs are denominated in euro and British pounds. In our U.S. petrochemical and chemical intermediates businesses, product prices, raw material costs and most other costs are primarily denominated in U.S. dollars. In the Refining Business, which we have disposed of in connection with the Refining Divestiture, the prices of finished products and of the underlying raw materials are primarily denominated in U.S. dollars, while our costs are largely denominated in euro and British pounds. We generally do not enter into foreign currency exchange instruments to hedge our foreign currency exposure, although we have done so in the past and we may do so in the future. We also believe that we benefit from natural hedging to the extent that we have been able to match the currencies of our cash flows and long-term indebtedness.

Our reporting currency is the euro, and our results of operations will be impacted by the relative strength of the euro against other currencies, including the U.S. dollar and the British pound.

Environmental Considerations

Our results of operations are affected by environmental laws and regulations, including those relating to GHG emissions, and environmental risks and goals generally. We have invested, and will continue to invest, a significant amount of financial and technical resources in order to achieve and maintain compliance with environmental requirements. From time to time, we also incur remediation and decommissioning costs at our current and former production facilities, as well as at other locations.

Environmental considerations can also impact the markets in which we operate, including our position with respect to our competitors.

Results of Operations

The consolidated financial information of INEOS are prepared in accordance with IFRS. The income statement data for the years ended December 31, 2013, December 31, 2012 and December 31, 2011 represent the consolidated results of the Company.

The financial data for the year ended December 31, 2011 includes the results of operations of our Refining Business, which was disposed of in connection with the Refining Divestiture on July 1, 2011, and was not included in our financial information for the year ended December 31, 2012 and will not be included in our financial information going forward. The financial data for each of the year ended December 31, 2011 treats the results of operations of our Refining Business as a discontinued operation. Refer to note 3 to our audited consolidated financial statements. Additionally, the results for the years ended December 31, 2013, 2012 and 2011 include the results of the Grangemouth petrochemicals business, which was disposed of in connection with the Grangemouth Divestiture on October 1, 2013. Refer to note 3 to our audited consolidated financial statements.

Description of Key Line Items

Set forth below is a brief description of the composition of the key line items of our consolidated income statement accounts:

- Revenue. Group revenue represents the invoiced value of products sold or services provided to third parties net of sales discounts and value- added taxes. It also excludes our share of joint venture revenue. The pricing for products sold is determined by market prices (market contracts and arrangements) or is linked by a formula to published raw material prices plus an agreed additional amount (formula contracts). Services provided to third parties include administrative and operational services provided to other chemical companies with units on our sites, and services under tolling arrangements. Under tolling arrangements, customers pay for or provide raw materials to be converted into a certain specified product, for which we charge a toll fee.
- Cost of sales before exceptional items. Cost of sales before exceptional items includes fixed and variable production costs. Such production costs typically include the costs of raw materials,

packaging, utilities, direct wages and salaries, repairs and maintenance, waste disposal and effluent treatment, consumables, attributable depreciation charges and directly attributable overheads, including wages and salaries, depreciation charges and overheads that are attributable to production. Fixed costs included in the cost of sales are rent, depreciation, repairs and maintenance, while variable costs include raw materials, packaging, consumables and wages and salaries.

- Exceptional impairment charge. Exceptional impairment charge is those expenses which, because of their size or nature, are disclosed to give a proper understanding of the underlying results for the period. These expenses are mainly related to the impairment of property, plant and equipment.
- *Distribution costs*. Distribution costs typically include the costs of warehousing, carriage and freight, together with sales and distribution wages and salaries and depreciation on property, plant and equipment used for sales and distribution.
- Administrative expenses before exceptional items. Administrative expenses typically include
 indirect wages and salaries and indirect overheads. Indirect overheads would include such items as
 insurance costs, legal and professional fees and office supplies. Administrative expenses also
 include the depreciation of property, plant and equipment not directly attributable to production or
 sales and distribution.
- Exceptional administrative expenses. Exceptional administrative expenses are those expenses which, because of their size or nature, are disclosed to give a proper understanding of the underlying results for the period. These expenses are mainly related to business restructuring and the provision for severance payments.
- Share of profit/(loss) of associates and jointly controlled entities using the equity accounting method. Share of profit/(loss) of associates and jointly controlled entities using the equity accounting method relates to the results from the investment in associated undertakings and joint ventures.
- Total finance income. Total finance income includes interest receivable on funds invested, expected return on defined benefit pension plan assets, net fair value gain on derivatives and net foreign exchange gains.
- Finance costs. Finance costs includes interest payable, finance charges on finance leases, unwinding of the discount on provisions, net fair value losses derivatives and net foreign exchange losses
- Exceptional finance costs. Exceptional finance costs are those costs which, because of their size or nature, are disclosed to give a proper understanding of the underlying results for the period. These costs are mainly related to call premia and the write-off of unamortized debt issue costs following modification or redemption of debt.

Consolidated Results

The following table sets forth, for the periods indicated, revenue and expenses and such amounts as a percentage of revenue:

	INEOS Group Holdings S.A.					
	For the year ended December 31,					
	2013	3	2012		2011	
	€m	%	€m	%	€m	%
Revenue	16,622.7	100.0	18,188.2	100.0	17,586.4	100.0
Cost of sales before exceptional items	(15,027.3)	(90.4)	(16,714.7)	(91.9)	(15,844.5)	(90.1)
Exceptional impairment charge	-		(518.4)	(2.8)		
Total cost of sales	(15,027.3)	(90.4)	(17,233.1)	(94.7)	(15,844.5)	(90.1)
Gross profit	1,595.4	9.6	955.1	5.3	1,741.9	9.9
Distribution costs	(222.2)	(1.3)	(228.4)	(1.3)	(240.6)	(1.4)
Administrative expenses before exceptional						
items	(274.1)	(1.6)	(219.8)	(1.2)	(241.3)	(1.4)
Exceptional administrative expenses	(25.9)	(0.2)	(14.6)	(0.1)	(35.8)	(0.1)
Operating profit	1,073.2	6.5	492.3	2.7	1,224.2	7.0
Share loss of associates and jointly						
controlled entities before exceptional						
items	(49.8)	(0.3)	(14.7)	(0.1)	(67.8)	(0.4)
Profit on disposal of fixed assets	0.1	-	-	-	3.5	-
Loss on disposal of businesses	(248.1)	(1.5)		_	(2.1)	
Profit before finance costs	775.4	4.7	477.6	2.6	1,157.8	6.6
Total finance income	115.7	0.7	151.6	0.8	83.5	0.5
Finance costs before exceptional item	(591.3)	(3.6)	(746.2)	(4.0)	(771.2)	(4.4)
Exceptional finance costs	(121.1)	(0.7)		_		
Profit/(loss) before tax from continuing						
operations	178.7	1.1	(117.0)	(0.6)	470.1	2.7
Tax charge	(312.9)	(1.9)	(158.5)	(0.8)	(234.4)	(1.3)
(Loss)/profit after tax from continuing						
operations	(134.2)	(0.8)	(275.5)	(1.5)	235.7	1.4
(Loss)/profit from discontinued operations	-		(11.0)	(0.1)	140.7	0.7
(Loss)/profit for the year	(134.2)	(0.8)	(286.5)	(1.6)	376.4	2.1

Year Ended December 31, 2013 Compared With Year Ended December 31, 2012

Consolidated

Revenue. Revenue decreased by €1,565.5 million, or 8.6%, to €16,622.7 million for the year ended December 31, 2013 as compared to €18,188.2 million for the year ended December 31, 2012. The decrease in revenues was primarily driven by lower sales volumes for the year ended December 31, 2013 as compared to the year ended December 31, 2012. Volumes decreased significantly in the Phenol business, driven primarily by lower demand in the domestic markets as well as lower export shipments. In addition the impact of a fire on a compressor in Lavéra in December 2012 resulted in the partial closure of the cracker during the year ended December 31, 2013, which constrained volumes in the O&P Europe segment. The decrease was partially offset by increased volumes within the O&P North America segment, which were up approximately 6% for the year ended December 31, 2013 as compared to the year ended December 31, 2012. The decrease in revenues was also due to lower overall selling prices which were down due to lower feedstock prices as crude oil prices fell to an average of \$109/bbl for the year ended December 31, 2013 as compared to \$112/bbl for the year ended December 31, 2012. Revenues have also decreased as a result of the depreciation of the U.S. dollar by approximately 3% against the euro for the year ended December 31, 2013 as compared to the year ended December 31, 2012. In addition the Group divested its O&P UK petrochemicals operations on October 1, 2013, which had generated approximately €274 million of revenue in the fourth quarter of 2012.

Cost of sales. Cost of sales decreased by €1,687.4 million, or 10.1%, to €15,027.3 million for the year ended December 31, 2013 as compared to €16,714.7 million for the year ended December 31, 2012. The decrease in cost of sales follows the decrease in sales volumes and feedstock prices for the year ended December 31, 2013 as compared to year ended December 31, 2012. In addition the Group divested its O&P UK

petrochemicals operations on October 1, 2013, which had cost of sales of approximately €321 million in the fourth quarter of 2012.

Exceptional impairment charge. Exceptional impairment charge was €nil million for the year ended December 31, 2013 as compared to €18.4 million for the year ended December 31, 2012. The exceptional impairment charge in 2012 related to an impairment of the O&P Europe segment's property, plant and equipment at its Grangemouth site following an impairment review of these assets.

Gross profit. Gross profit increased by €640.3 million, or 67.0%, to €1.595.4 million for the year ended December 31, 2013 as compared to €55.1 million for the year ended December 31, 2012. The increase is largely due to the exceptional impairment charge of €518.4 million that was recognised in the year ended December 31, 2012 following an impairment of the Grangemouth property, plant and equipment within the O&P Europe segment. The increase also reflects the improved margins in O&P North America for the year ended December 31, 2013 as compared to the year ended December 31, 2012, following high cracker operating rates and top of cycle margins as the business again benefited from its flexibility to be able to utilise cheaper NGL feedstocks to maintain healthy margins. Partially offsetting this increase was the adverse impact of a fire on a compressor at the cracker in Lavéra in December 2012. The partial closure of the cracker during the year ended December 31, 2013 adversely impacted the results by approximately a net €85 million, reflecting lost margins less insurance proceeds agreed to date. In addition the Phenol business was adversely impacted by a reduction in sales volumes due to lower demand in domestic markets and lower export shipments for the year ended December 31, 2013 as compared to the year ended December 31, 2012. The Nitriles business also experienced a decrease in profitability for the year ended December 31, 2013 as compared to the year ended December 31, 2012, driven primarily by weak margins as a result of soft demand in the ABS and acrylic fibre markets and additional competitor capacities coming on line in Asia resulting in an over supplied market.

Distribution costs. Distribution costs decreased by €6.2 million, or 2.7%, to €222.2 million for the year ended December 31, 2013 as compared to €28.4 million for the year ended December 31, 2012. The decrease in distribution costs is primarily due to lower sales volumes for the year ended December 31, 2013 as compared to the year ended December 31, 2012.

Administrative expenses before exceptional items. Administrative expenses before exceptional items increased by €4.3 million, or 24.7%, to €274.1 million for the year ended December 31, 2013 as compared to €219.8 million for the year ended December 31, 2012. The increase in administrative expenses is primarily due to improved employee performance bonuses in North America and higher pension costs in Germany for the year ended December 31, 2013 as compared to year ended December 31, 2012.

Exceptional administrative expenses. Exceptional administrative expenses increased by €1.3 million, or 77.4%, to €25.9 million for the year ended December 31, 2013 as compared to €14.6 million for the year ended December 31, 2012. During the year ended December 31, 2013 the Group closed its vinyl acetate monomer facility in Saltend, Hull, United Kingdom resulting in exceptional administrative expenses of €19.4 million. This charge related to losses on onerous contracts, decommissioning and demolition costs, severance and general closure costs. Following the Group relocation of its corporate headquarters to Switzerland exceptional administrative expenses of €6.5 million (€0.8 million in 2012) were also incurred in 2013 in relation to employee relocations costs and legal and professional fees. In 2012 restructuring costs of €12.0 million were incurred in relation to the reorganization of the O&P Europe operations. In addition plant closure costs of €1.8 million were also charged in 2012 following the closure of the polyisobutylene plant in Whiting, Indiana.

Operating profit. Operating profit increased by €580.9 million, or 118.0%, to €1,073.2 million for the year ended December 31, 2013 as compared to €492.3 million for the year ended December 31, 2012.

Share of loss of associates and jointly controlled entities. Share of loss of associates and jointly controlled entities was a loss of €49.8 million for the year ended December 31, 2013 as compared to a loss of €14.7 million for the year ended December 31, 2012. The share of loss primarily reflects our share of the results of the Refining joint venture with PetroChina. European refining margins were weak for the year ended December 31, 2013, reflecting the continued soft demand trend across the continent.

Profit on disposal of fixed assets. Profit on disposal of fixed assets was €0.1 million for the year ended December 31, 2013 as compared to a €nil million for the year ended December 31, 2012.

Loss on disposal of businesses. Loss on disposal of businesses was €248.1 million for the year ended December 31, 2013 as compared to a loss of €0.2 million for the year ended December 31, 2012. On October 1,

2013 the Group completed the Grangemouth divestiture which comprised the disposal of its Grangemouth petrochemicals operations, including the assets and pension and other liabilities resulting in a loss on disposal of €248.1 million.

Profit before net finance costs. Profit before net finance costs increased by €297.8 million, or 62.4%, to €775.4 million for the year ended December 31, 2013 as compared to €477.6 million for the year ended December 31, 2012.

Finance income. Finance income decreased by €35.9 million to €15.7 million for the year ended December 31, 2013 as compared to €151.6 million for the year ended December 31, 2012. The decrease is largely due to lower foreign exchange gains associated with short term intra group funding which was €5.3 million for the year ended December 31, 2013 as compared to €3.6 million for the year ended December 31, 2012.

Finance costs before exceptional item. Finance costs before exceptional item decreased by €154.9 million to €591.3 million for the year ended December 31, 2013 as compared to €746.2 million for the year ended December 31, 2012. The decrease in finance costs primarily reflects a decrease in foreign exchange losses associated with short term intra group funding which was a loss of €16.5 million for the year ended December 31, 2013, as compared to a loss of €79.5 million for the year ended December 31, 2012. The decrease in finance costs for the year ended December 31, 2013 also reflects the lower interest rates on the Group's debt following the refinancing in May 2013. The finance costs for the year ended December 31, 2012 were also impacted by the write off of debt issue costs of €18.1 million following the redemption of the Senior Facilities Agreement in May 2012.

Exceptional finance costs. Exceptional finance costs were €121.1 million for the year ended December 31, 2013 as compared to €nil million for the year ended December 31, 2012. As a result of the substantial modification of the Senior Secured Term Loan facility in May 2013 the unamortized debt issue costs of €4.9 million were written off. In addition following the redemption of the 2015 Senior Secured Notes and the partial redemption of the 2016 Senior Notes, the Group recognized a charge of €16.0 million in respect of the write-off of the associated unamortized debt issue costs. The May 2013 refinancing also resulted in call premia of €70.2 million being paid which were charged for the year ended December 31, 2013. The call premia were paid on the early redemption of the 2015 Senior Secured Notes and the 2016 Senior Notes, together with the re-pricing of the Senior Secured Term Loans.

Profit/(loss) before tax from continuing operations. Profit / (loss) before tax from continuing operations increased by €295.7 million, to €178.7 million for the year ended December 31, 2013 as compared to a loss of €17.0 million for the year ended December 31, 2012.

Tax charge. Tax charge increased by €154.4 million to a charge of €312.9 million for the year ended December 31, 2013 as compared to a charge of €158.5 million for the year ended December 31, 2012. The increase in the effective tax rate was partly due to the mix of profitability across the regions within the Group during the year ended December 31, 2013 as compared to the prior year. Profits have generally been made in regions with significantly higher rates than the standard rate in Luxembourg of 29.2% (such as Canada and U.S.), while losses have been made in regions with lower rates than the standard rate (such as Switzerland). The increase in taxation was also due to a reduction in the UK deferred tax asset balances in the year after the enactment by the UK tax authorities of a reduced corporation tax rate, together with the non-deductibility of the loss on disposal of the Grangemouth operations made in the year.

(Loss)/profit after tax from continuing operations. (Loss)/profit after tax from continuing operations decreased by €141.3 million to a loss of €34.2 million for the year ended December 31, 2013, as compared to a loss of €275.5 million for the same period in 2012.

(Loss)/profit from discontinued operations. (Loss)/profit from discontinued operations decreased by €1.0 million to €nil million for the year ended December 31, 2013, as compared to a loss of €1.0 million for the same period in 2012. The 2012 loss from discontinued operations related to a further adjustment in respect of the Refining disposal following a working capital settlement adjustment.

Loss for the year. Loss for the year decreased by €152.3 million to a loss of €134.2 million for the year ended December 31, 2013 as compared to a loss of €286.5 million for the year ended December 31, 2012.

Business Segments

The Group reports under three business segments: O&P North America, O&P Europe and Chemical Intermediates.

The following table provides an overview of the historical revenue and EBITDA before exceptionals of each of the business segments for the periods indicated:

	For the year ended December 31,	
	2013	2012
	(€in mi	illions)
Revenue		
Continuing operations		
O&P North America	3,551.2	3,443.1
O&P Europe	7,437.5	7,889.0
Chemical Intermediates	8,146.2	9,367.0
Eliminations	(2,512.2)	(2,510.9)
	16,622.7	18,188.2
EBITDA before exceptionals		
Continuing operations		
O&P North America	913.6	706.0
O&P Europe	86.5	122.2
Chemical Intermediates	511.4	688.6
	1,511.5	1,516.8

O&P North America

Revenue. Revenue in the O&P North America segment increased by €108.1 million, or 3.1%, to €3,551.2 million for the year ended December 31, 2013, as compared to €3,443.1 million for the year ended December 31, 2012. The increase was driven by higher sales volumes which were up approximately 6% for the year ended December 31, 2013 as compared to the year ended December 31, 2012 driven by increased ethylene and polyethylene sales. Weighted average sales prices were virtually flat for the year ended December 31, 2013 as compared to the year ended December 31, 2012 as lower ethylene prices were largely offset by increased polypropylene and polyethylene prices. Partially offsetting the increase in revenue was the depreciation of the U.S. dollar by approximately 3% against the euro for the year ended December 31, 2013 as compared to the year ended December 31, 2012 which adversely impacted revenues when translated in to euros.

EBITDA before exceptionals. EBITDA before exceptionals in the O&P North America segment increased by €207.6 million, or 29.4%, to €13.6 million for the year ended December 31, 2013, as compared to €706.0 million for the year ended December 31, 2012. The business has continued to benefit from its flexibility to be able to utilise cheaper gas feedstock to maintain good margins. The U.S. cracker business environment was strong with top of cycle margins and high operating rates throughout the year ended December 31, 2013, as weighted average margins increased across all product lines driven by increased polyethylene and ethylene margins. The increase in sale volumes for the year ended December 31, 2013 as compared to the year ended December 31, 2012 also led to an improvement in performance. There were also increased inventory holding gains of approximately €2 million for the year ended December 31, 2013 as compared to inventory holding losses of approximately €0 million for the year ended December 31, 2012. Partially offsetting these increases was the depreciation of the U.S. dollar by approximately 3% against the euro for the year ended December 31, 2013 as compared to the year ended December 31, 2012.

O&P Europe

Revenue. Revenue in the O&P Europe segment decreased by €451.5 million, or 5.7%, to €7,437.5 million for the year ended December 31, 2013, as compared to €7,889.0 million for the year ended December 31, 2012. The decrease in revenue is primarily due to lower selling prices for the year ended December 31, 2013 as compared to the year ended December 31, 2012, driven by a steep decline in the butadiene price due to lower global demand and new competitor capacity coming on line. Revenue has also been impacted as a result of the negative impact on volumes following the Lavéra cracker outage after a fire on the compressor at the end of December 2012 which resulted in the partial closure of the cracker during the year

ended December 31, 2013. In addition the O&P UK business at Grangemouth was divested on October 1, 2013 which contributed approximately €274 million of revenue in the fourth quarter of 2012.

EBITDA before exceptionals. EBITDA before exceptionals in the O&P Europe segment decreased by €35.7 million or 29.2% to €86.5 million for the year ended December 31, 2013, to €122.2 million for the year ended December 31, 2012. The results for the year ended December 31, 2013 have been adversely impacted by the fire on a compressor at the cracker in Lavéra in December 2012. The partial closure of the cracker in Lavéra during the year ended December 31, 2013 adversely impacted the results by approximately a net €60 million, reflecting lost margins less insurance proceeds agreed to date. The adverse performance for the year ended December 31, 2013 as compared to year ended December 31, 2012 was also driven by inventory holding losses of approximately €15 million for the year ended December 31, 2013, as compared to inventory holding gains of approximately €39 million for the year ended December 31, 2012.

Chemical Intermediates

Revenue. Revenue in the Chemical Intermediates segment decreased by €1,220.8 million, or 13.0%, to €3,146.2 million for the year ended December 31, 2013, as compared to €3,367.0 million for the year ended December 31, 2012. The Oligomers business experienced a decrease in revenue for the year ended December 31, 2013, as compared to the year ended December 31, 2012 driven by a decrease in sales volumes primarily due to a reduction in PIB volumes following the impact of the Lavéra fire in December 2012, competitor challenges for SO in Asia and weakness in LAO pricing in Asia. This decrease was partially offset by an increase in selling prices as average prices increased across all product lines for the year ended December 31, 2013, as compared to the year ended December 31, 2012. The Oxide business revenue increased for the year ended December 31, 2013, as compared to the year ended December 31, 2012, primarily due to a change in the product mix of the business as the Antwerp ethylene terminal entered service for the first time in May 2013. This increase was partially offset by a decrease in the average selling prices for the year ended December 31, 2013, as compared to the year ended December 31, 2012, particularly in the solvents business which was adversely impacted by subdued European demand and strong competition from cheaper imports. The Phenol business revenues decreased for the year ended December 31, 2013, as compared to the year ended December 31, 2012 driven primarily by a fall in sales volumes. Total sales volumes for the business was down by approximately 19% for the year ended December 31, 2013, as compared to the year ended December 31, 2012, driven by lower demand in the domestic markets as well as lower export shipments. This decrease in revenue was partially offset by an increase in acetone prices for the year ended December 31, 2013 as compared to year ended December 31, 2012. Nitriles revenues decreased for the year ended December 31, 2013, as compared to the year ended December 31, 2012, driven by lower sales volumes reflecting the ongoing over supply which led to significantly reduced industry operating rates. The difficult market also resulted in a decrease in the average acrylonitrile sales price, which was lower for the year ended December 31, 2013 as compared to the year ended December 31, 2012.

EBITDA before exceptionals. EBITDA before exceptionals in the Chemical Intermediates segment decreased by €177.2 million, or 25.7%, to €511.4 million for the year ended December 31, 2013, as compared to €688.6 million for the year ended December 31, 2012. The results for the year ended December 31, 2013, have been adversely impacted in the Chemical Intermediates segment by the fire on a compressor at the cracker in Lavéra in December 2012. The partial closure of the cracker in Lavéra during the year ended December 31, 2013 adversely impacted the results of the Oxide and Oligomers businesses by approximately a net €25 million, reflecting lost margins less insurance proceeds agreed to date. The Oligomers business profitability decreased for the year ended December 31, 2013, as compared to the year ended December 31, 2012, driven by a reduction in sales volumes following the impact of the Layéra fire in December 2012 and weaknesses in the Asian market. This decrease in profitability was partially offset by improved margins for the year ended December 31, 2013, as compared to the year ended December 31, 2012, following strong comonomer sales and drilling fluid sales to the U.S. Gulf Coast, as well as solid European sales which benefited LAO margins. The Oxide business results for the year ended December 31, 2013, decreased as compared to the year ended December 31, 2012 primarily due to higher fixed costs due to increased manpower and maintenance costs from the Antwerp ethylene terminal. Margins were flat as good margins on EO/EG were offset by a decrease in solvent margins, which came under pressure from increased competition during 2013. The Phenol business performance declined for the year ended December 31, 2013 as compared to the year ended December 31, 2012, primarily due to a reduction in sales volumes driven by weak sales opportunities and lower phenol margins which were only partially offset by better acetone margins. The Nitriles business experienced a decrease in profitability for the year ended December 31, 2013, as compared to the year ended December 31, 2012 driven primarily by weak margins as a result of soft demand in the ABS and acrylic fibre markets and additional capacity coming on line

in Asia resulting in an over supplied market. Higher priced U.S. feedstock also squeezed margins as these increased raw material costs could not be passed onto customers due to the weak market.

Year Ended December 31, 2012 Compared With Year Ended December 31, 2011

Consolidated

Revenue. Revenue increased by €601.8 million, or 3.4%, to €18,188.2 million for the year ended December 31, 2012, as compared to €17,586.4 million in 2011. The increase in revenue reflects the impact of higher feedstock costs in the O&P Europe segment driven by a weaker euro, although this was partially offset by a fall in sales volumes across all segments. In addition the appreciation of the U.S. dollar compared to the euro by approximately 8% in 2012 compared to 2011 has positively impacted the reported revenues of the U.S. dollar reported businesses within the Group. Product prices were relatively flat in 2012 compared to 2011, which followed the small change in the price of crude oil from an average of \$111/bbl in 2011 to an average of \$112/bbl in 2012.

Cost of sales before exceptional items. Cost of sales before exceptional items increased by €870.2 million, or 5.5%, to €16,714.7 million for the year ended December 31, 2012, as compared to €15,844.5 million in 2011. The increase reflects the appreciation of the U.S. dollar compared to the euro by approximately 8% in 2012 compared to 2011 which has adversely impacted the euro reported cost of sales before exceptional items.

Exceptional impairment charge. Exceptional impairment charge was €18.4 million for the year ended December 31, 2012 as compared to €nil million for the year ended December 31, 2011. The exceptional impairment charge relates to the impairment of the O&P Europe segment's property, plant and equipment at its Grangemouth site following an impairment review of these assets.

Gross profit. Gross profit decreased by €786.8 million, or 45.2%, to €955.1 million for the year ended December 31, 2012, as compared to €1,741.9 million in 2011. The decrease is largely due to the exceptional impairment charge of €318.4 million for the year ended December 31, 2012 following an impairment of the Grangemouth property, plant and equipment within the O&P Europe segment. The O&P Europe segment was also impacted by closure of the Elgin gas field in the North Sea. The field was closed after the discovery of a gas leak in March 2012 and remained closed throughout 2012. The closure forced the O&P Europe business to utilise more expensive imported feedstocks for its gas cracker in Grangemouth, which adversely impacted the results by €45 million for the full year. In addition there was a fire on a compressor at the cracker in Lavera which impacted the results by €6 million in December 2012. The fourth quarter of 2011was also impacted by some exceptional events by approximately €30 million due to delayed restarts following turnarounds within the O&P Europe business at its Koln and Grangemouth crackers. Partially offsetting the decrease was the appreciation of the U.S. dollar against the euro by approximately 8% in 2012 compared to 2011 which positively impacted the results of our U.S. dollar reporting businesses.

Distribution costs. Distribution costs decreased by €12.2 million, or 5.1%, to €228.4 million for the year ended December 31, 2012, as compared to €240.6 million for the same period in 2011. The decrease is primarily due to a fall in sales volumes across all segments for the year ended December 31, 2012 as compared to the same period in 2011, which has resulted in lower distribution costs being incurred during 2012.

Administrative expenses before exceptional items. Administrative expenses before exceptional items decreased by €1.5 million, or 8.9%, to €19.8 million for the year ended December 31, 2012, as compared to €241.3 million for the same period in 2011. The decrease in administrative expenses before exceptional items is partly due to the closure of the Oligomers polyisobutylene plant in Whiting, Indiana during 2012. In addition the group continues to benefit from its fixed cost reduction programs which has resulted in additional cost savings for the year ended December 31, 2012 as compare to the same period in 2011.

Exceptional administrative expenses. Exceptional administrative expenses decreased by €1.2 million, or 59.2%, to €14.6 million for the year ended December 31, 2012, as compared to €35.8 million for the same period in 2011. During the year ended December 31, 2012 restructuring costs of €12 million were incurred in relation to the reorganization of the O&P Europe operations. In addition plant closure costs of €1.8 million were charged following the closure of the polyisobutylene plant in Whiting, Indiana. Following the Group relocation of its corporate headquarters to Switzerland exceptional administrative expenses of €0.8 million (€32.6 million in 2011) were also incurred in 2012 in relation to employee relocations costs and legal and professional fees. In 2011 restructuring costs of €1.2 million were also charged relating to the continued

restructuring program of the acquired Innovene business. Plant closure costs of €2.0 million were also charged in 2011 in relation to the closure of the cumene plant at Port Arthur, Texas.

Operating profit/(loss). Operating profit decreased by €731.9 million, or 59.8%, to €492.3 million for the year ended December 31, 2012, as compared to €1,224.2 million for the same period in 2011.

Share of loss of associates and jointly controlled entities before exceptional items. Share of loss of associates and jointly controlled entities before exceptional items decreased by €3.1 million to a loss of €14.7 million for the year ended December 31, 2012, as compared to a loss of €67.8 million for 2011. The losses reflect our share of losses incurred within the Refining joint venture with PetroChina which was formed in July 2011. The reduction in the losses reflects the improved performance of the joint venture in the year ended December 31, 2012 as compare to 2011.

Profit on disposal of fixed assets. Profit on disposal of fixed assets was €nil million for the year ended December 31, 2012 as compared to €3.5 million for the year ended December 31, 2011. The profit in 2011 relates to the sale of a plant at Antwerp, Belgium by the Oxide business during 2011.

Loss on disposal of businesses. Loss on disposal of businesses was €nil million for the year ended December 31, 2012, as compared to a loss of €2.1 million for the same period in 2011. The loss during 2011 relates primarily to the disposal of Glebe Mines and a further adjustment to the 2010 Films business disposal which resulted in a net loss of €2.1 million.

Profit before finance costs. Profit before finance costs decreased by €680.2 million to a profit of €177.6 million for the year ended December 31, 2012, as compared to €1,157.8 million for the same period in 2011.

Total finance income. Total finance income increased by €8.1 million, or 81.6%, to €151.6 million for the year ended December 31, 2012, as compared to €3.5 million for the same period in 2011. This increase is largely attributable to higher foreign exchange gains in 2012 as compared to 2011.

Total finance costs. Total finance costs decreased by €2.0 million, or 3.2%, to €746.2 million for the year ended December 31, 2012, as compared to €771.2 million for the same period in 2011. The decrease is primarily due to a lower securitisation balance throughout 2012 as compared to 2011 which has resulted in a decrease in the interest charged on the facility. In addition the reversal of 2011 net fair value losses on derivatives of €12.7 million in 2012 has resulted in a reduction in the total finance costs items in 2012. This decrease was partially offset by exchange losses associated with short-term intra-group funding of €79.5 million for the year ended December 31, 2012 as compared to €nil million in 2011.

(Loss)/profit before tax from continuing operations. (Loss)/profit before tax from continuing operations decreased by €587.1 million to a loss of €17.0 million for the year ended December 31, 2012, as compared to a profit of €470.1 million for the same period in 2011.

Tax (charge)/credit. Tax decreased by €75.9 million to a charge of €158.5 million for the year ended December 31, 2012, as compared to a charge of €234.4 million for the same period in 2011. There was a tax charge in 2012 despite the overall loss made due to the mix of profitability across the regions within the group during the year. Profits have generally been made in regions with significantly higher rates than the standard 28.8% (such as Canada, USA) whilst losses have been made in regions with lower rates than the standard 28.8% (such as Switzerland).

(Loss)/profit after tax from continuing operations. (Loss)/profit after tax from continuing operations decreased by $\oplus 11.2$ million to a loss of $\oplus 275.5$ million for the year ended December 31, 2012, as compared to a profit of $\oplus 235.7$ million for the same period in 2011.

(Loss)/profit from discontinued operations. (Loss)/profit from discontinued operations decreased by €151.7 million to €1.0 million for the year ended December 31, 2012, as compared to a profit of €140.7 million for the same period in 2011. The 2011 profit relates to the Refining business which was classified as a discontinued operation following the disposal of the business to a new joint venture between PetroChina and INEOS Investments (Jersey) Limited, a related party, on July 1, 2011 which resulted in a profit on disposal of €76.3 million. The 2012 loss from discontinued operations relates to a further adjustment in respect of the Refining disposal following a working capital settlement adjustment.

(Loss)/profit for the year. (Loss)/profit for the year decreased by €62.9 million to a loss of €286.5 million for the year ended December 31, 2012 as compared to a profit of €376.4 million for the same period in 2011.

Business Segments

The Company has previously reported under four business segments: O&P North America, O&P Europe, Chemical Intermediates and Refining. On July 1, 2011, the Group disposed of its Refining Business to a new joint venture between PetroChina and INEOS Investments (Jersey) Limited, a related party, and as such the Refining segment has been treated as a discontinued operation for the years ended December 31, 2011 and 2010.

The following table provides an overview of the historical Group revenue and EBITDA before exceptionals of each of the business segments for the periods indicated:

	For the year ended December 31,	
	2012	2011
	(€in m	illions)
Revenue		
Continuing operations		
O&P North America	3,443.1	3,591.2
O&P Europe	7,889.0	7,523.3
Chemical Intermediates	9,367.0	9,775.4
Eliminations	(2,510.9)	(3,303.5)
Revenue from continuing operations	18,188.2	17,586.4
Discontinued operations		
Refining	-	6,261.8
Eliminations	<u>-</u>	(891.6)
	18,188.2	22,956.6
EBITDA before exceptionals		
Continuing operations		
O&P North America	706.0	477.6
O&P Europe	122.2	358.3
Chemical Intermediates	688.6	877.6
EBITDA before exceptionals from continuing operations	1,516.8	1,713.5
Discontinued operations		
Refining	_	126.4
	1,516.8	1,839.9

O&P North America

Revenue. Revenue in the O&P North America segment decreased by €48.1 million, or 4.1%, to €3,443.1 million for the year ended December 31, 2012, as compared to €3,591.2 million for the year ended December 31, 2011. This decrease resulted primarily from falling finished goods prices from 2011 to 2012 along with a small decrease in sales volume in 2012 due to a major planned olefins turnaround at the Chocolate Bayou facility. Partially offsetting this decrease in revenue was the appreciation of the US dollar by approximately 8% against the euro in the year ended December 31, 2012, as compared to the same period in 2011.

EBITDA before exceptionals. EBITDA before exceptionals in the O&P North America segment increased by €28.4 million, or 47.8%, to €706.0 million for the year ended December 31, 2012, as compared to €477.6 million for the year ended December 31, 2011. The increase was largely due to higher product margins in 2012 as compared to 2011 due to a tighter supply and demand environment with improving domestic demand. The business continued to benefit from its flexible feedstock advantage to enable it to use cheaper gas feed stocks rather than higher priced naphtha. These increases were augmented by the appreciation of the U.S. dollar against the euro of approximately 8% in 2012. Partially offsetting these increases were inventory holding losses of €9.7 million for the year ended December 31, 2012 as compared to €nil million in 2011.

O&P Europe

Revenue. Revenue in the O&P Europe segment increased by €365.7 million, or 4.9%, to €7,889.0 million for the year ended December 31, 2012, as compared to €7,523.3 million for the year ended December 31, 2011. The increase in revenue reflects the impact of higher feedstock costs driven by a weaker euro which resulted in higher sales prices, although this was partially offset by a weaker supply/demand environment. Underlying feedstock costs were flat in US dollar terms, although naphtha price volatility was severe with it reaching an all time high in euro terms during 2012. Volumes were approximately 6% lower for the year ended December 31, 2012, as compared to the year ended December 31, 2011, driven by the weaker environment as well as supply constraints in the North Sea.

EBITDA before exceptionals. EBITDA before exceptionals in the O&P Europe segment decreased by €36.1 million, or 65.9%, to €122.2 million for the year ended December 31, 2012, as compared to €58.3 million for the year ended December 31, 2011. Core demand for major product was weak during 2012 due to ongoing industrial contraction within the European Union and export opportunities to the east substantially closed. Partially offsetting this was the global butadiene supply/demand balance which was exceptionally tight in the first half of 2012 yielding historically high butadiene-naphtha spreads. Butadiene profitability was a significant component of the overall profitability of olefins. This was underpinned by strong automotive demand against a background of industry rationalization which constrained supply. During the second half of 2012 demand weakened and butadiene-naphtha spreads returned to more normal historical levels. Whilst production rates and profitability in monomer products remained constrained by weak derivative demand we did benefit from increased profitability in the C6 chain due to healthy US export opportunities as increased cracking of light feedstocks limited supply. Lower exports from Asia and improved US demand growth helped demand whilst limited pygas feedstock availability in Europe due to low European cracker operating rates meant margins also benefitted from limited supply. In the polymer business the global and European macroeconomic concerns which were seen growing through the second half of 2011 continued throughout 2012. As a result both volumes and margins per tonne declined in 2012 as compared to 2011. In particular the fourth quarter of 2012 was exacerbated by heavy destocking across the chain towards the year end. In addition to the weaker market conditions the business also suffered from a lack of feedstock for the KG cracker at Grangemouth. This was due to the closure of the Elgin gas field in the North Sea after the discovery of a gas leak in March 2012 which remained closed during the rest of 2012 resulting in a negative impact on the results of approximately €45 million. In addition there were two significant cracker turnarounds at Rafnes and Lavera during 2012, both of which had unplanned extended outages including a fire in December at the Lavera site which impacted the results by €6 million. In addition our G4 cracker at Grangemouth had an unplanned outage following scheduled maintenance. Finally the segment had inventory holding gains of €39 million for the year ended December 31, 2012 as compared to gains of €21million in 2011 which positively impacted the segments performance.

Chemical Intermediates

Revenue. Revenue in the Chemical Intermediates segment decreased by €408.4 million, or 4.2%, to €9,367.0 million for the year ended December 31, 2012, as compared to €9,775.4 million for the year ended December 31, 2011. Softening demand in 2012 resulted in a decrease in revenues following a fall in sales volumes and final selling prices across most products in the segment as compared to 2011. The Oligomers business experienced a decrease in volumes across most product lines as a result of the challenging economic environment and the closure of the Whiting PIB plant. In addition selling prices were also down as regional prices moved downwards in line with the underlying raw material costs. Oxide revenues were also down as sales volumes decreased in 2012 as compared to the prior year across most product lines primarily due to uncertain economic circumstances, operational issues in Lavera and a force majeure by a supplier at our Hull site. The Nitriles business also saw a decrease in revenues during the year as compared to 2011 as acrylonitrile volumes fell as underlying demand weakened and industry destocking led to significantly reduced industry operating rates. In addition acrylonitrile sales prices fell away during 2012 as lower raw material prices led to lower selling prices. Phenol revenues increased in 2012 as compare to 2011 driven by higher benzene raw material costs which resulted in a 13% increase for phenol. This increase was partially offset by lower sales volumes due to a weakening in global demand across all regions.

EBITDA before exceptionals. EBITDA before exceptionals in the Chemical Intermediates segment decreased by €189.0 million, or 21.5%, to €688.6 million for the year ended December 31, 2012 as compared to €877.6 million for the year ended December 31, 2011. The Chemical Intermediates segment experienced an overall decrease in margins and volumes during 2012 as compared to 2011. The Oligomers business performance in 2012 was slightly down on the prior year due to a reduction in sales volumes and to a lesser extent margins. The Oxide business experienced a decrease in margins across its product portfolio driven by

higher raw material costs which squeezed margins as they could no longer be passed on to customers. During 2012 the Nitriles business experienced a significant decrease in margins following a weakening in demand and industry destocking which also led to lower sale volumes in 2012 as compared to 2011. The Phenol business experienced an increase in performance in 2012 as compared to 2011 which was primarily driven improved margins. Partially offsetting this increase was a reduction in volumes which were adversely impacted during 2012 due to weaker sales opportunities.

Liquidity and Capital Resources

Capital Resources

Our historical liquidity requirements have arisen primarily from the need for us to meet our debt service requirements, to fund capital expenditures for the general maintenance and expansion of our production facilities and for new facilities, and to fund growth in our working capital.

Our primary sources of liquidity are cash flows from operations of subsidiaries, cash on our balance sheet and borrowings under the Securitization Program. Our ability to generate cash from our operations depends on future operating performance, which is in turn dependent, to some extent, on general economic, financial, competitive market, legislative, regulatory and other factors, many of which are beyond our control.

We believe that our operating cash flows, together with the cash resources and future borrowings under the Securitization Program, will be sufficient to fund our working capital requirements, anticipated capital expenditures and debt service requirements as they become due, although this may not be the case.

Financing Arrangements

In February 2014 the Group issued \$590 million and €600 million of Senior Notes due 2019. The proceeds of the refinancing were used to redeem the remaining euro-denominated Senior Notes due 2016.

In May 2013 the Group successfully completed the re-pricing and up-sizing of its Senior Secured Term Loans and issued the 2018 Senior Notes. The refinancing of the Senior Secured Term Loans comprised a \$371 million, two-year term loan, a \$1.977 billion five-year term loan, a \$640 million five-year add-on term loan, a €494 million five-year term loan, and a €350 million five-year add-on term loan. The re-pricing led to a reduction in the margins on the Group's existing Senior Secured Term Loans. In addition, the proceeds from the additional €350 million and \$640 million term loans were used to repay the Group's existing 2015 Senior Secured Notes, to pay transaction fees and expenses and for general corporate purposes. The 2018 Senior Notes were issued in two tranches, a \$678 million aggregate principal amount tranche of 6.125% Senior Notes due 2018 and a €300 million aggregate principal amount tranche of 6.50% Senior Notes due 2018. The Group used the proceeds from the 2018 Senior Notes to refinance all of its outstanding U.S. dollar-denominated 2016 Senior Notes and to redeem €300 million aggregate principal amount of its outstanding euro-denominated 2016 Senior Notes pursuant to a partial redemption.

In February 2012 the Group issued \$1.0 billion 2019 Senior Secured Notes and €500.0 million floating rate 2019 Senior Secured Notes. In May 2012 the Group issued \$775 million 2020 Senior Secured Notes and Senior Secured Term Loans totaling \$3,025 million. The net proceeds from the 2019 Senior Secured Notes and the 2020 Senior Secured Notes and the Existing Secured Term Loans were used to repay all of the remaining indebtedness under the 2010 Senior Secured Credit Facilities.

The Group also has a €1,000 million Securitization Program in place, which matures in December 2016.

The Group has a €250.0 million LC Facility. Under the terms of the facility the Group undertakes to provide cash collateral to cover any letters of credit, guarantees, bonds or indemnities issued under the facility.

As of December 31, 2013, we had a total of €1,032.1 million Senior Notes due 2016, ⊕90.8 million Senior Notes due 2018, €1,223.8 million Senior Secured Notes due 2019 and €560.9 million Senior Secured Notes due 2020 outstanding. In February 2014 the Senior Notes due 2016 were redeemed in full with the proceeds from the issuance of the Senior Notes due 2019.

Capital Expenditures

As part of our strategy to focus capital investments on improving returns, we have instituted measures to ensure the most efficient uses of capital investment. We intend to manage capital expenditures to maintain our well invested asset base.

During the years ended December 31, 2013, 2012 and 2011 net capital expenditures analyzed by business segment were as follows:

	For the year ended December 31,		
	2013	2012	2011
	,		ns)
O&P North America			
O&P Europe	162.3	122.4	113.0
Chemical Intermediates	136.9	197.2	175.6
Continuing operations	540.6	461.3	341.4
Refining (prior to disposal)	-	-	54.8
Total			

The main capital expenditures for the year ended December 31, 2013 were the purchase of a feedstock pipeline in Texas, U.S. for €6.3 million, expenditure on the Mont Belvieu to Stratton Ridge pipeline connections and lateral lines to our Chocolate Bayou site, USA and an expansion of a furnace within the O&P North America segment, additional spend on a project to improve the feedstock flexibility of the KG cracker in Grangemouth, Scotland and turnarounds within the O&P Europe segment at Lillo, Belgium and a major overhaul in Köln, Germany. In addition there was some further capital expenditure on the finalization of the ethylene terminal project in Antwerp, Belgium within the Chemical Intermediates segment. The remaining capital expenditure related primarily to sustenance expenditure. Capital expenditures of €48.4 million were incurred in the Grangemouth operations (within the O&P Europe segment) before its divestiture on October 1, 2013.

During 2012 there was a scheduled cracker turnaround and a new furnace expansion at the Chocolate Bayou site within the O&P North America segment and turnarounds within the O&P Europe segment at the Rafnes, Norway and Lavéra, France sites together with a benzene pipeline repair at Lavéra and a G4 cracker outage at the Grangemouth, Scotland site. In addition there was further capital expenditure on the ethylene terminal project in Antwerp, Belgium within the Chemical Intermediates segment. The remaining capital expenditure related primarily to sustenance expenditure.

During 2011 there were scheduled turnarounds within the Refining, O&P Europe and Chemical Intermediate segments at the Grangemouth, Lavéra and Köln sites and a scheduled cracker turnaround within the O&P North America segment at Chocolate Bayou. In addition there was initial spend on the new ethylene terminal in Antwerp in the Chemical Intermediates segment. The remaining capital expenditure related primarily to sustenance capital expenditure. Capital expenditures in the Refining segment occurred prior to July 1, 2011.

We expect that our aggregate capital expenditure for 2014 will be approximately €450 million which includes growth capital expenditure relating largely to projects in the O&P North America, Oxide and Oligomers businesses and maintenance expenditures (including turnarounds) across the Group's manufacturing facilities.

Working Capital

We anticipate that our working capital requirements will vary due to changes in raw material costs, which affect inventory and account receivables levels, and sales volumes. Working capital levels typically develop in line with raw material prices, although timing factors can affect flows of capital. We expect to fund our working capital requirements with cash generated from operations and drawings under our Securitization Program.

Cash Flows

During the years ended December 31, 2013, 2012 and 2011 our net cash flow was as follows:

_	For the year ended December 31,		
	2013	2012	2011
		(€in millions)	
Cash flow from operating activities	997.6	1,129.8	1,164.3
Cash flow from investing activities	(534.8)	(452.5)	294.1
Cash flow from financing activities	(532.8)	(22.0)	(1,478.4)

Cash flows from operating activities

Net cash flow from operating activities was an inflow of ⊕97.6 million for the year ended December 31, 2013 compared to an inflow of €1,129.8 million for the year ended December 31, 2012. The inflow was due to the profit generated from operations, partially offset by working capital outflows of €149.0 million for the year ended December 31, 2013 compared to an outflow of €1.6 million for the year ended December 31, 2012. The working capital outflow for the year ended December 31, 2013 reflects the impact of additional levels of inventory following the purchase of the Seminole feedstock pipeline in Texas, U.S. in 2013, the impact of the Antwerp ethylene terminal entering service for the first time in May 2013 and a major turnaround at the Köln site in the fourth quarter of 2013, which led to a working capital build up towards the end of the year.

Net cash flow from operating activities was an inflow of €1,129.8 million for the year ended December 31, 2012 compared to €1,164.3 million for the year ended December 31, 2011. The decrease in operating cash flows was primarily due to a decrease in profitability of the business during 2012 largely offset by improvements in working capital. There were working capital outflows of €1.6 million in 2012 compared to outflows of €06.3 million in 2011. Raw material prices were relatively flat across the year in 2012 compared to the large increases seen in 2011.

Taxation payments of €319.9 million were made for the year ended December 31, 2013 compared to payments of €229.3 million for the year ended December 31, 2012. The payments for the year ended December 31, 2013 primarily reflect payments on account made to the tax authorities in the U.S., Canada and Germany. The mix of profitability of the Group has changed in 2013 as compared to 2012, with a higher proportion of income sourced in the U.S. and Canada. As a consequence, this has led to an increase in the overall amount of tax payable by the Group as corporate tax rates are higher in those countries. In addition the conclusion of a scheduled tax audit in Germany resulted in additional tax payments being made in the year ended December 31, 2013 in relation to prior years. The taxation payments of €29.3 million made in the year ended December 31, 2012 primarily reflect payments made in the U.S. and Canada.

Taxation payments of €29.3 million were made in the year ended December 31, 2012 compared to payments of €134.9 million for the year ended December 31, 2011. The payments for the year ended December 31, 2012 primarily reflect payments on account made to the tax authorities in the U.S. and Canada. The mix of profitability of the Group has changed in 2012 as compared to 2011, with a higher proportion of income sourced in the U.S. and Canada. As a consequence, this has led to an increase in the overall amount of tax payable by the Group as corporate tax rates are higher in those countries. The payments made in the year ended December 31, 2011 primarily reflect payments made in the U.S., Canada and France.

Cash flows from investing activities

There were no other significant cash flows from investing activities in the year ended December 31, 2013 and 2012 other than the acquisition of property, plant and equipment (see "—Capital Expenditures" above).

On July 1, 2011, the Group successfully completed the Refining Divestiture, upon completion of which the Group received 674.2 million cash consideration (after expenses). Subsequently, in October 2011, the Group paid our counterparty to the Refining Divestiture an amount equal to 66.2 million out of cash on hand as part of the completion adjustment mechanics.

In the year ended December 31, 2011, the Group received deferred proceeds of €6.0 million in relation to the sale of the fluorochemicals business.

Interest payments of €65.3 million were made in the year ended December 31, 2013 compared to €672.7 million for the year ended December 31, 2012. The interest payments during the year ended December 31, 2013 relate to monthly cash payments in respect of the Senior Secured Term Loans and the Securitization Program, semi-annual interest payments on the 2016 Senior Notes, 2018 Senior Notes, 2019 Senior Secured Notes and a final interest payment on the 2015 Senior Secured Notes which were redeemed in May 2013, quarterly interest payments on the 2019 Senior Secured Notes and €70.2 million of call premia in relation to the May 2013 refinancing of the 2015 Senior Secured Notes and 2016 Senior Notes. The interest payments during 2012 relate to monthly cash payments in respect of the Senior Secured Term Loans, the 2010 Senior Secured Credit Facilities and the Securitization Program, semi-annual interest on the 2015 Senior Secured Notes, 2020 Senior Secured Notes and on the 2016 Senior Notes and quarterly interest payments on the 2019 Senior Secured Notes. In addition the Group paid €146.2 million of accrued PIK interest as a result of the repayments made on the term loans under the 2010 Senior Secured Credit Facilities from the proceeds of the Existing Senior Secured Term Loans, 2019 Senior Secured Notes and the 2020 Senior Secured Notes.

Interest payments of €672.7 million were made in the year ended December 31, 2012 (December 31, 2011: €54.8 million). The interest payments during 2012 relate to monthly cash payments in respect of the Senior Secured Term Loans, the 2010 Senior Secured Credit Facilities and the Securitization Program, semi-annual interest on the 2015 Senior Secured Notes, 2020 Senior Secured Notes and on the 2016 IGH Notes and quarterly interest payments on the 2019 Senior Secured Notes. In addition the Group paid €146.2 million of accrued PIK interest as a result of the repayments made on the term loans under the 2010 Senior Secured Credit Facilities from the proceeds of the Existing Senior Secured Term Loans, 2019 Senior Secured Notes and the 2020 Senior Secured Notes. The interest payments during 2011 relate to monthly cash payments in respect of the 2010 Senior Secured Credit Facilities and the Securitization Program and semi-annual interest on the 2015 Senior Secured Notes and the 2016 IGH Notes. In addition during 2011 the Group paid €30.7 million of accrued PIK interest as a result of the prepayment made on the term loans under the 2010 Senior Facilities Agreement from the proceeds of the Refining disposal.

In May 2013 new Senior Secured Term Loans of €350 million and \$640 million resulting in a combined cash inflow of €38.5 million were issued to redeem the 2015 Senior Secured Notes of €735.1 million and fund the cost of refinancing which included call premia of €70.2 million and debt issue costs of €18.9 million. In addition new 2018 Senior Notes of €300 million and \$678 million were issued resulting in a combined cash inflow of €1,017.5 million. The proceeds from the dollar-denominated 2018 Senior Notes were used to redeem in full the dollar-denominated 2016 Senior Notes of \$677.5 million (€17.1 million) while the proceeds from the euro-denominated 2018 Senior Notes were used to partially redeem €300 million of the euro-denominated 2016 Senior Notes.

The Group made no repayment or drawdown (December 31, 2012 repayment of €194.5 million, December 31, 2011 repayment of €68.4 million) on the Securitization Program during 2013.

The Group made scheduled repayments of €30.8 million on the Senior Secured Term Loans during the year ended December 31, 2013 compared to scheduled repayments of €17.9 million for the year ended December 31, 2012.

In July 2013 the Group entered into a bilateral bank loan agreement to fund some specific capital expenditure at the Köln, Germany site, resulting in an inflow of €14.3 million for the year ended December 31, 2013.

The revolving credit facility under the 2010 Senior Facilities Agreement was cancelled in May 2012 as a result of the redemption of the 2010 Senior Facilities Agreement. The Group made a repayment of €293.0 million on the revolving credit facility under the 2010 Senior Facilities Agreement during 2012 (December 31, 2011 €43.7 million).

In February 2012 the Group issued \$1.0 billion 2019 Senior Secured Notes and €00.0 million floating rate 2019 Senior Secured Notes, resulting in a combined cash inflow of €1,262.5 million. The proceeds of the 2019 Senior Secured Notes were used to repay senior debt of €1,231.2 million (plus the associated PIK interest of €9.0 million). In May 2012 the Group issued \$775 million 2020 Senior Secured Notes and the borrowings under the Existing Senior Secured Term Loans totaling \$3,025 million, resulting in a combined cash inflow of €2,875.6 million. The net proceeds from the 2020 Senior Secured Notes and the Existing Secured Senior Term Loans were used to repay all of the outstanding term loan and revolving credit facility indebtedness under the

2010 Senior Facilities Agreement, including the associated PIK interest of €7.2 million. The Group paid associated debt issue costs of €1.7 million in relation to the issue of the 2019 Senior Secured Notes, the 2020 Senior Secured Notes and the borrowings under the Existing Senior Secured Term Loans during the year ended December 31, 2012. Debt issue costs of €10.7 million were paid in the year ended December 31, 2011 in relation to a 25bps deferred consent fee payable to the 2010 Senior Facilities Agreement holders, following the issue of the 2015 Senior Secured Notes in May 2010.

During the year ended December 31, 2012 the Group made scheduled repayments under the Existing Senior Secured Term Loans of €17.9 million. During the year ended December 31, 2011 the Group made scheduled repayments under the 2010 Senior Facilities Agreement of €39.9 million.

On July 29, 2011, the Group used the net cash proceeds from the Refining Divestiture along with cash on hand to permanently repay €646.1 million of term loans and the associated €30.7 million of PIK interest under the 2010 Senior Facilities Agreement.

The Company made dividend payments of €34.0 million in the year ended December 31, 2013 (December 31, 2012: €25.0 million, December 31, 2011: €13.8 million).

Net debt

Total net debt as at December 31, 2013 was €6,167.4 million (December 31, 2012: €6,164.1 million). The Group held net cash balances of €1,130.0 million as at December 31, 2013 (December 31, 2012: €1,235.4 million) which included restricted cash of €191.9 million used as collateral against bank guarantees and letters of credit. The Group had availability under undrawn working capital facilities of €190 million as at December 31, 2013.

Total net debt as at December 31, 2012 was €6,164.1 million (December 31, 2011: €6,084.4 million). The Group held net cash balances of €1,235.4 million as at December 31, 2012 (December 31, 2011: €82.4 million) which includes restricted cash of €218.8 million used as collateral against bank guarantees and letters of credit. The Group had availability under the Securitization Program of €200.0 million as at December 31, 2012. The revolving credit facility under the 2010 Senior Facilities Agreement was cancelled in May 2012 as a result of the redemption of the 2010 Senior Facilities Agreement.

The Group entered into two interest rate caps in May 2012 to hedge the variable interest rate exposures on the €500.0 million of floating rate 2019 Senior Secured Notes. The interest rate caps have a strike price of 1.25% per annum, which is in line with the EURIBOR floor on the floating rate 2019 Senior Secured Notes of 1.25% per annum. These derivative instruments expire in May 2015.

For additional information about our hedging transactions and derivative financial instruments, see note 25 to the audited consolidated financial statements.

Off-Balance Sheet Arrangements

We use various customary off-balance sheet arrangements, such as operating leases, to finance our business. None of these arrangements has or is likely to have a material effect on our results of operations, financial condition or liquidity.

Quantitative and Qualitative Disclosures About Market Risk

In the ordinary course of our business, we are exposed to a variety of market risks arising from fluctuations in foreign currency exchange rates, interest rates and commodity prices. To manage these risks effectively, we may enter into hedging transactions and use derivative financial instruments, pursuant to established internal guidelines and policies, to mitigate the adverse effects of these market risks. We do not enter into financial instruments for trading or speculative purposes.

In the case of commodities, this exposure principally arises from movements in the prices of the feedstocks we require to make our products. To manage this exposure, we generally acquire raw materials and sell finished products at posted or market-related prices, which are typically set on a quarterly, monthly or more frequent basis in line with industry practice. We seek to minimize reductions in our margins by passing through feedstock cost increases to our customers through higher prices for our products.

Our cash flows and earnings are subject to exchange rate fluctuations. In our Refining Business, which we disposed of in connection with the Refining Divestiture, the prices of finished products and of the underlying raw materials are primarily denominated in U.S. dollars, whereas our other costs are largely denominated in euro and British pounds. In our European petrochemical business, product prices, certain feedstock costs and most other costs are denominated in euro and British pounds. From time to time, we may enter into foreign currency exchange instruments to minimize the short-term impact of movements in foreign exchange rates.

Critical Accounting Estimates and Judgments

We have reviewed our selection and application of principal accounting policies and related financial disclosures. The preceding discussion of past performance is based upon our consolidated financial information, which has been prepared in accordance with IFRS. Our significant accounting policies are described in note 1 to the audited consolidated financial information. The application of these accounting policies requires that management make estimates and judgments. On an ongoing basis, we evaluate our estimates, which are based on historical experience and market and other conditions, and on assumptions that we believe to be reasonable. Actual results may differ from these estimates due to actual market and other conditions, and assumptions being significantly different than was anticipated at the time of the preparation of these estimates. Such differences may affect our financial results. We have chosen to highlight certain policies that we consider critical to the operations of our business and understanding our consolidated financial information. These policies have been discussed and agreed upon with our audit committee. We believe the following estimates affect the application of our most critical accounting policies and require our most significant judgments.

The following areas are considered to involve a significant degree of judgment or estimation (this section should be read in conjunction with note 32 to the consolidated financial statements of INEOS Group Holdings S.A. as of and for the year ended December 31, 2013 (included elsewhere in this annual report).

Fair Value Measurement on Business Combination

The amount of goodwill initially recognized as a result of a business combination is dependent on the allocation of the purchase price to the fair value of the identifiable assets and liabilities acquired. The determination of the fair value of the acquired assets and liabilities is to a considerable extent based upon management's judgment, and estimates and assumptions made.

Allocation of the purchase price affects the results of the Group as intangible assets are amortized over their estimated useful lives, whereas goodwill is not amortized. This could lead to differing amortization charges based on the allocation to indefinite and finite lived intangible assets.

On acquisition of a business, the identifiable intangible assets may include customer contracts, customer relationships and preferential supply contracts. The fair value of these assets is determined by discounting estimated future net cash flows generated by the asset. The use of different estimates and assumptions for the expectations of future cash flows and the discount rate would change the valuation of these intangible assets.

Taxation

Management is required to estimate the tax payable in each of the jurisdictions in which the Group operates. This involves estimating the actual current tax charge or credit, together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which may be included on the consolidated balance sheet of the Group. Management has performed an assessment as to the extent to which future taxable profits will allow the deferred asset to be recovered. The calculation of the Group's total tax charge necessarily involves a significant degree of estimation in respect of certain items whose tax treatment cannot be finally determined until resolution has been reached with the relevant tax authority, or, as appropriate, through a formal legal process.

The Group has, from time to time, contingent tax liabilities arising from trading and corporate transactions in the United Kingdom and overseas jurisdictions. After appropriate consideration, management makes provision for these liabilities based on the probable level of economic loss that may be incurred and which is reliably measurable.

The breadth of the Group's structure with operations in many geographic locations makes the use of estimates and assumptions more challenging. The resolution of issues is not always within the control of the Group and can be reliant upon the efficiency of the legal processes in the relevant jurisdictions in which the Group operates, and as a result issues can, and often do, take many years to resolve.

Post-Retirement Benefits

The Group operates a number of defined benefit post-employment schemes. Under IAS 19 Employee Benefits, management is required to estimate the present value of the future defined benefit obligation of each of the defined benefit schemes. The costs and year-end obligations under defined benefit schemes are determined using actuarial valuations.

Provisions

Provisions are recognized for the cost of remediation works where there is a legal or constructive obligation for such work to be carried out. Where the estimated obligation arises upon initial recognition of the related asset, the corresponding debit is treated as part of the cost of the related asset and depreciated over its estimated useful life. Other provisions are recognized in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgment to existing facts and circumstances, which can be subject to change.

Estimates of the amounts of provisions recognized are based on current legal and constructive requirements, technology and price levels. Because actual outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes.

Impairment Reviews

IFRS requires management to test for impairment of goodwill and other intangible assets with indefinite lives, on an annual basis, and of tangible and intangible assets with finite lives if events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

An impairment test requires an assessment as to whether the carrying value of assets can be supported by its recoverable amount. Management calculates the recoverable amount based on the net present value of the future cash flows derived from the relevant assets, using cash flow projections which have been discounted at an appropriate discount rate.

In calculating the net present value of the future cash flows, certain assumptions and estimates are required to be made in respect of highly uncertain matters, such as management's expectations of future margins, growth rates of various revenue streams and long-term growth rates.

For the purpose of impairment testing (when required), to assess whether any impairment exists, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in the planned use of buildings, plant or equipment, or closure of facilities, the presence or absence of competition, lower than expected asset utilization from events, such as unplanned outages, strikes and hurricanes, technical obsolescence or lower than anticipated sales of products with capitalized intellectual property rights, could result in shortened useful lives or impairment. Changes in the discount rates used could also lead to impairments.

Segment Aggregation

IFRS 8 "Operating Segments" permits two or more operating segments to be aggregated into one for disclosure purposes when individual segments have characteristics so similar that they can be expected to have essentially the same future prospects. Management applies this judgment when aggregating the businesses within the Chemical Intermediates segment. In doing so they take into account that the businesses all have similar economic characteristics, similar products, services and types of customers and similar past cyclical financial performance.

Recent developments

Senior Notes 2019

In February 2014 the Group issued \$590,000,000 $5^7/_8\%$ and $600,000,000 5^3/_4\%$ million of Senior Notes due 2019. The proceeds of the refinancing were used to redeem the Senior Notes due 2016.

BUSINESS

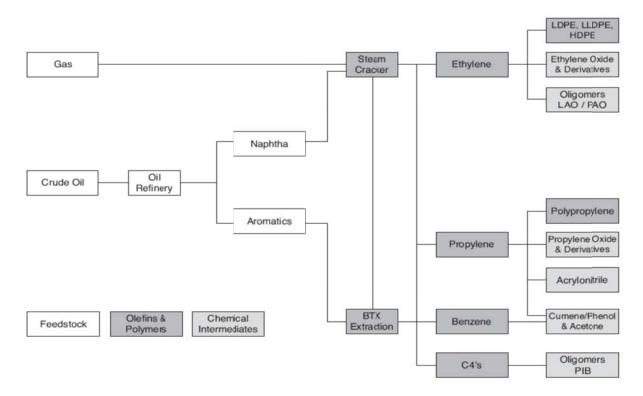
Introduction

We are one of the world's largest chemical companies as measured by revenue. Our business has highly integrated, world-class chemical facilities and production technologies. We have leading global market positions for a majority of our key products and a strong and stable customer base. We operate 27 manufacturing sites in eight countries throughout the world, including a petrochemical facility in Lavéra, France which is co-located and fully integrated with a refinery. We are led by a highly experienced management team with, on a combined basis, over 100 years of experience in the chemical industry. As of December 31, 2013 our total chemical production capacity was approximately 22,000 kta, of which 65% was in Europe and 35% was in North America.

We operate our business through three segments: Olefins & Polymers Europe, Olefins & Polymers North America and Chemical Intermediates. As a result of the Grangemouth Divestiture, effective October 1, 2013, the operations at the site at Grangemouth, U.K. which formed part of our Olefins & Polymers Europe segment, are no longer part of the Group. Prior to the consummation of the Refining Divestiture, we also operated a fourth segment, Refining. See "The Refining Divestiture." The products we manufacture are derived from crude oil and natural gas, and include olefins, polymers and various petrochemical products directly or indirectly derived from olefins. Our products serve a broad and diverse range of end markets, including packaging, construction, automotive, white goods/durables, agrochemicals and pharmaceuticals.

Our highly integrated, world class production facilities and technological know-how allow us to process raw materials into higher value added products. We own four sites integrated with crackers and polymer units, one of which is integrated with the Lavéra refinery we disposed of in connection with the Refining Divestiture. Typically, these four sites account for approximately 65% of our olefin and polymer volumes. The Refining Divestiture was principally a disposal of the Refining segment of the Group, as reported in our financial statements. In connection with the Refining Divestiture, we entered into several contractual arrangements with the Refining and Entrepreneurial JVs and the Infrastructure Entity to ensure our sites continue to benefit from the feedstocks that the refineries provide. See "The Refining Divestiture." In addition, we will continue to benefit from shared utilities and infrastructure assets located at all of the integrated sites, including Lavéra. In Europe, approximately 90% of our ethylene and propylene output is typically sold internally. The polyolefins plants on our three major sites in Europe receive more than 95% of their feedstock supply from our integrated crackers. Similarly, in the United States, much of our olefin feedstock requirements for our polymer business is supplied by either our Chocolate Bayou cracker in Texas or by integrated third party facilities, such as the Tesoro facility in Carson, California. We believe that with our highly integrated facilities we are able to capture attractive margins across the value chain, enjoy greater certainty of feedstock supply, reduce logistical costs, improve energy management and optimize our product slate.

The extent of our business integration from upstream to downstream for our major products is summarized as follows:



We benefit from the cost advantages of operating large-scale, well-invested, highly integrated facilities strategically located near major transportation facilities and customer locations. Since January 1, 2007, we and our predecessors have invested more than €2.8 billion (including investments in divested assets) in our production facilities to ensure that they operate efficiently, resulting in integrated, and state-of-the-art production units. We believe these investments allow us to operate at lower cost and higher utilization rates than most of our competitors, and enable us to maintain positive margin and cash flows even during downturns in industry cycles or customer demand. For the year ended December 31, 2013, our revenue was €1.6 billion and our EBITDA before exceptionals was €1.5 billion.

Over the past several years, we have implemented a range of strategic initiatives designed to lower our operating costs, increase our profitability and further enhance our market position. These include fixed asset investments to expand our capacity in higher value products, to enhance productivity at our existing facilities, and to reduce our fixed cost structure through headcount reductions, production line closures and system upgrades. In addition, we have shifted our product portfolio to focus on more differentiated products, exited low-margin businesses and implemented premium pricing strategies designed to improve our margins. We believe these initiatives provide us with a strong platform to drive growth, create significant operating leverage and position us to benefit from volume recovery in our end markets.

Since April 1998, when INEOS was established with the acquisition of the Belgian "Oxide" assets from Inspec plc, we have significantly expanded, both through a series of strategic acquisitions of businesses and assets from major chemical companies, and through organic growth. The combination of INEOS and Innovene in December 2005 represented a transformational milestone for our company, providing global scale and further upstream integration. During 2007, we acquired the Borealis petrochemical manufacturing business in Norway. In 2008, we acquired the former BP vinyl acetate monomer/ethyl acetate business in Hull, United Kingdom, and the former BASF acrylonitrile business in Seal Sands, United Kingdom. In 2009, we transferred certain companies and businesses out of the INEOS Group to INEOS Industries Holdings Ltd. These businesses consumed a significant amount of cash in the three years prior to transfer and were forecast to continue to be a significant drain on cash resources (due to either difficult trading conditions or significant investment requirements over the next two to three years). The transferred businesses comprised the ABS, Styrenics, Melamines, Healthcare, Bio and Films Italia Srl businesses, together with our shareholding in the INEOS Nova JV. In 2010, we sold our ChlorVinyls business, our business associated with fluorochemicals and our global films business. In addition, on January 31, 2011, we completed the Swiss reorganization, with IGH becoming the issuer in respect of the 2016 IGH Notes.

In connection with the Refining Divestiture, we transferred our Refining Business, our Entrepreneurial (Refining) Business and certain infrastructure assets to three joint ventures, each of which is not a member of the INEOS Group but may be an "Affiliate" under the Indenture because it is owned in part by, and in some cases operated or controlled by, entities controlled by or under common control with the principal shareholders of IGH. Please see "The Refining Divestiture" for a further description of the disposal of our Refining Business and Entrepreneurial (Refining) Business.

Most recently, on October 1, 2013, we completed the Grangemouth Divestiture to a newly created subsidiary of INEOS Holdings AG, our indirect parent company. See "The Grangemouth Divestiture."

The following table provides an overview of our capacity, global market position and leading regional market positions with respect to our key petrochemical products.

	Full-year capacity as of	
Key products	December 31, 2013	Selected market positions ⁽¹⁾
	(Kilotonnes)	
Ethylene	3,660	#4 in Western Europe
		#6 in U.S.
Propylene	1,475	#2 in Western Europe
		#13 in U.S.
Polyethylene	2,745	#4 in Western Europe
		#4 in U.S.
Polypropylene	1,415	#5 in Western Europe
		#6 in U.S.
Ethylene Oxide	935	#1 in Western Europe
		#7 Globally
Ethanolamines	230	#1 in U.S.*
		#1 Globally*
		#3 in Western Europe*
Phenol	1,870	#1 Globally
		#1 in Western Europe
		#3 in U.S.
Acetone	1,139	#1 Globally
		#1 in Western Europe
		#3 in U.S.
Acrylonitrile	1,324	#1 Globally
		#1 in Western Europe
		#1 in U.S.
Linear Alpha Olefins	585	#3 Globally
		#1 in Western Europe
		#3 in U.S.
Poly Alpha Olefins	205	#1 Globally
		#1 in Western Europe
D.1.1.1	0.0	#1 in U.S.
Polyisobutylene	80	#4 Globally*
		#2 in Western Europe*

Sources: Nexant and INEOS-2013

As the assets of INEOS Chemicals Grangemouth Limited and INEOS Commercial Services UK Limited were transferred out of IGH on October 1, 2013 in connection with the Grangemouth Divestiture, their capacity has been excluded from this estimation of market ranking for IGH. However, the Grangemouth assets remain within the broader INEOS family of companies and there has been no restriction to, or change in, the competitive dynamic that the assets exercise within the European market as a part of the INEOS family of companies. In management's view, it is helpful to consider the Grangemouth assets in order to reflect the relative overall commercial strength of the INEOS family of companies, which is the same as that of O&P Europe within IGH. The market positions of certain key O&P Europe products within the Western European market on this basis that would vary from the above market positions are as follows: Ethylene: #1 in Western Europe and Polyethylene: #1 in Western Europe.

Merchant market sales

In our olefins and polymers businesses, we produce olefins, other cracker products, such as butadiene and benzene, and a broad range of polyolefin polymers. We are among the largest producers of olefins and polymers in the world. The focus of our olefins business in Europe and North America is on ethylene and propylene, which are the two largest volume olefins globally and are key building blocks for polymers. The olefins we make are primarily used as feedstock for our derivatives businesses. In addition, we sell olefins to third-party customers for a variety of industrial and consumer applications, including the manufacture of plastics, rubber and fiber. In our polymers business, we focus on polyethylene and polypropylene.

We operate a total of 13 sites for olefins and polyolefins, including our large integrated olefins cracker and polyolefin facilities at Köln, Germany, Lavéra, France, Rafnes, Norway, and Chocolate Bayou, Texas, United States. These facilities support our highly competitive proprietary polyolefin process technologies, which are also marketed and licensed by our INEOS Technologies business in cooperation with our olefins and polymers businesses. The technologies include our cost-effective gas phase polypropylene technology, our specialized technology for high-density polyethylene and our flexible proprietary "swing" technology for both linear low-density and high-density polyethylene.

The North American and European markets for olefins and polyolefins are quite distinct, with separate pricing structures and distribution channels. As a result, each market may experience different rates of growth and levels of return. Therefore, we operate these two businesses separately and report them as two distinct segments—INEOS Olefins & Polymers Europe and INEOS Olefins & Polymers North America. For the year ended December 31, 2013, our Olefins & Polymers Europe and Olefins & Polymers North America businesses contributed €7.4 billion and €3.5 billion of revenue and €8.5 million and €13.6 million of EBITDA before exceptionals, respectively, excluding inter-segmental eliminations.

Chemical Intermediates

Chemical intermediates are higher-value-added chemical products used as key components in a wide variety of consumer and industrial products. In our Chemical Intermediates business, we utilize olefins as key raw materials and produce a wide range of products including phenol, acetone, alpha olefins, ethylene oxide and derivatives and nitriles.

We have four main product groups within our Chemical Intermediates business: INEOS Nitriles, INEOS Oligomers, INEOS Oxide and INEOS Phenol. The activities of INEOS Enterprises and INEOS Technologies are also included within Chemical Intermediates. Together they produce a wide range of products including phenol, acetone, alpha olefins, ethylene oxide and derivatives, acrylonitrile, ammonia and nitric acid. We have a total of 16 manufacturing sites globally, with many of our plants integrated either directly with their key raw materials on-site, or integrated via pipeline connection.

We are the world's leading producer of phenol, which is an essential starting material for a wide range of applications in the electrical/electronics, automotive, construction and household/furniture industries. Our main product in the nitriles sector is acrylonitrile, which is used in the production of acrylic fibers and acrylonitrile butadiene styrene plastic. We are also among the largest volume suppliers of linear and poly alpha olefins in the world. Additionally, we are the largest producer of ethylene oxide in Europe and have a range of associated products, including ethylene glycol, propylene oxide, propylene glycol and acetate esters.

As referenced above, through INEOS Technologies, we are a leading developer and licensor of technologies to the global petrochemical industry. This not only includes technologies for the manufacturing of polyolefins, but also those for polystyrene, nitriles, maleic anhydride, ethylene dichloride and polyvinyl chloride, and chlor-alkali. In addition, we manufacture and supply high-quality catalysts and additives in support of these technologies to major companies around the world, and also to our own manufacturing assets. For the year ended December 31, 2013, our Chemical Intermediates revenue and EBITDA before exceptionals were €3.2 billion and €511.4 million, respectively, excluding intersegmental eliminations.

Business Segments

Set forth below is a discussion of our business along the segment lines of Olefins & Polymers Europe, Olefins & Polymers North America and Chemical Intermediates in the following areas: products, manufacturing, raw materials and energy, transportation, customers and contracts, research and intellectual property and competition.

Olefins and Polymers

We operate two Olefins and Polymers businesses: Olefins & Polymers Europe and Olefins & Polymers North America. Set forth below is a general discussion of the products, manufacturing, research and intellectual property, transportation and competition, followed by a more detailed review of the products, manufacturing, raw materials and energy and customers and contracts, of our Olefins & Polymer Europe business and our Olefins & Polymers North America business.

Products

The following table provides an overview of our key olefin and polymer products and their principal applications. All market positions are provided by Nexant, as measured by average annual capacity for 2013.

Key products	Principal applications	Selected market positions ⁽⁴⁾
Olefins and related products		
Ethylene ⁽¹⁾	Polyethylene, polyvinyl	
	chloride, ethylene oxide and	#4 in Western Europe
	styrene	#6 in U.S.
Propylene ⁽²⁾	Polypropylene, acrylonitrile,	#2 in Western Europe
	cumene and propylene oxide	#13 in U.S.
Butadiene	Synthetic rubbers and	
	acrylonitrile butadiene	
	styrene	#1 in Western Europe
Benzene	Styrene, cumene and nylon	#8 in Western Europe
Polymers		
Polyethylene (high-density	Films for packaging,	
polyethylene, low-density	agricultural applications,	
polyethylene, linear low-density	molded products, pipes and	#4 in Western Europe ⁽³⁾
polyethylene)	C	#4 in U.S.
Polypropylene	Molded products, filaments,	#5 in Western Europe
	fibers and films	#6 in U.S.

⁽¹⁾ In Europe, we consume more ethylene than we produce, which allows us to operate our crackers in Europe at higher operating rates than the industry average. In North America, the olefin crackers at our Chocolate Bayou facility manufacture substantially more ethylene than is required by our polymers and derivatives units in the Gulf Coast region. As a result, we sell substantial amounts of the ethylene that we produce to customers in the Gulf Coast region of the United States.

Source for market positions: Nexant and INEOS.

Set forth below is a description of the principal petrochemical products and their applications.

• Ethylene. According to Nexant, ethylene is the world's most widely used petrochemical in terms of volume, accounting for over one-third of the global production of primary petrochemicals. It is the key building block used to produce a large number of higher value added chemicals, including polyethylene, polyvinyl chloride via ethylene dichloride and styrene via ethylenezene. Ethylene is a flammable gas and is a primary olefin obtained in a cracking process as previously described. Because ethylene is a gas, it must be transported either by pipeline or in the form of a highly pressurized and refrigerated liquid, which is expensive.

⁽²⁾ In Europe and North America, we consume more propylene than we produce. Our propylene consumption is primarily related to the production of polypropylene, propylene oxide, oxo-alcohols, phenol and acrylonitrile.

⁽³⁾ According to Nexant, measured by average annual capacity for 2013, we are the second largest manufacturer of high-density polyethylene in Europe and the fourth largest manufacturer of linear low-density polyethylene in Europe.

⁽⁴⁾ As the assets of INEOS Chemicals Grangemouth Limited and INEOS Commercial Services UK Limited were transferred out of IGH on October 1, 2013 in connection with the Grangemouth Divestiture, their capacity has been excluded from this estimation of market ranking for IGH. However, the Grangemouth assets remain within the broader INEOS family of companies and there has been no restriction to, or change in, the competitive dynamic that the assets exercise within the European market as a part of the INEOS family of companies. In management's view, it is helpful to consider the Grangemouth assets in order to reflect the relative overall commercial strength of the INEOS family of companies, which is the same as that of O&P Europe within IGH. The market positions of certain key O&P Europe products within the Western European market on this basis that would vary from the above market positions are as follows: Ethylene: #1 in Western Europe and Polyethylene: #1 in Western Europe.

While ethylene itself has no consumer applications, demand for ethylene is driven essentially by its use as feedstock for various thermoplastics, which are plastics that soften when heated and harden again when cooled, including polyethylene and other polymer derivatives. Aside from being the feedstock for polyethylene production, demand for ethylene is also driven by the manufacture of ethylene oxide and derivatives, ethylene dichloride and ethyl benzene. According to Nexant, the global market for ethylene is forecast to grow at 4.7% per annum through 2018 versus forecast GDP growth of 4.1% during the same period, driven by polyethylene applications such as high-density polyethylene and linear low-density polyethylene.

• **Propylene.** Propylene is a flammable gas which is derived as a co-product either of the refinery fluid catalytic cracker process used to make gasoline or of the steam cracking process used to make ethylene. More recently, propylene is also being produced from processes such as propane dehydrogenation and metathesis. Propylene is an important feedstock for a significant number of industrial products and is the main feedstock for polypropylene and acrylonitrile. Propylene is marginally easier to transport than ethylene and may be shipped by pipeline, road, rail or ship.

Global propylene demand is driven essentially by its use as feedstock for various thermoplastics and by the level of demand for propylene derivatives, particularly polypropylene, propylene oxide, acrylonitrile, oxo-alcohols, cumene and acrylic acid. Growth in the demand for polypropylene has stemmed from the substitution of non-polymers (paper, wood, glass and metal, etc.), due to a relative cost advantage and superior performance. According to Nexant, the global market for propylene is projected to grow at 4.9% per annum through 2018, driven by polypropylene demand.

• **Butadiene.** Butadiene is a gas and is one of the co-products of the steam cracking process used to manufacture ethylene and propylene. Butadiene is used primarily in the production of polymers, principally synthetic rubbers such as styrene-butadiene rubber, which is used to make tires and other rubber products. Other polymers made from butadiene include acrylonitrile-butadiene styrene and styrene-butadiene latex. Butadiene is also used to make ethylidene norbornene monomer.

Butadiene demand is driven primarily by growth in consumption of synthetic rubber. According to Nexant, the global market for butadiene is projected to grow at an average of 3.7% per annum through 2018.

Benzene. Benzene is used to produce a number of petrochemical intermediates, such as styrene, cumene for phenol and acetone, cyclohexane and nitrobenzene. It is mainly produced from refinery processes or as a co-product of steam cracker operations.

Styrene is the largest chemical outlet for benzene at around 51% of demand. The second largest outlet for benzene, accounting for 20% of demand, is cumene which is nearly all consumed in phenol production with acetone formed as a co product. For 2013, Nexant estimated the global benzene demand to be almost 44.1 million tons, with approximately 71% being consumed in the production of ethylbenzene for the styrenics industry and cumene for the phenolics industry. Nexant forecasts an average global growth rate in demand of approximately 4% per year in the 2013-2018 period.

• *Polyethylene*. Polyethylene is the world's most widely used thermoplastic and is made by the polymerization of ethylene. Polyethylene is often classified by its density, because greater density corresponds with greater material rigidity.

The world's largest volume polyethylene is high density polyethylene, which has a relatively high degree of tensile strength. Plastic containers represent the most common household use of high density polyethylene. At the opposite end of the spectrum is low density polyethylene, which was the first type of polyethylene to be developed. Plastic bags represent the most common household use of low density polyethylene. Both high density polyethylene and low density polyethylene are also commonly used for molding applications. Linear low density polyethylene, which was developed in the 1970s, can usually be manufactured at a slightly lower cost than low density polyethylene and has similar basic properties. While low density polyethylene and linear low density polyethylene are to a certain extent substitutable for each other, one may be more suitable than the other for a specific application.

Film is the largest single use of global polyethylene production and the primary driver of demand, representing approximately one half of worldwide polyethylene consumption. Film includes a myriad of end use applications, from food packaging to trash bags, stretch films and shrink films. Blow molding and injection molding are the next largest uses and are also important demand drivers. In the blow molded category, blow molded bottles are the single largest end use. Nexant forecasts an average global growth rate in demand of approximately 5.0% per year in the 2013-2018 period.

• **Polypropylene.** Polypropylene is the world's second most widely used thermoplastic after polyethylene and is among the fastest growing categories of thermoplastics. It is manufactured by the polymerization of propylene. The rapid growth of polypropylene-based products reflects the superior cost and performance characteristics of this material. As one of the industry's most versatile polymers, polypropylene is achieving a portion of its growth by displacing other polymers, such as polyethylene and polystyrene.

The largest end use segment of the polypropylene industry is injection molding, followed by film and sheet applications. Injection molded polypropylene includes a wide variety of end uses, such as packaging, automotive and appliances. End use segments for films and sheets include food bags, tape and wrappings for consumer goods. Polypropylene is a thermoplastic characterized by its rigidity and resistance to high temperatures, chemicals and fatigue combined with a greater density. Polypropylene has a heat distortion temperature of 140°C to 200°C, which makes it particularly suitable for "hot fill" applications, which are manufactured using injection molding. As a result, polypropylene is the most significant material used in molded containers and automotive applications. Polypropylene fibers are also used in fabrics and carpets.

Various industry experts expect the demand for ethylene and other cracker products and derivatives to grow at an average rate of around 4.0% to 4.5% per annum (subject to macroeconomic assumptions), in the period up to 2017, with higher growth rates in the developing economies and lower growth rates in the more mature OECD economies. According to Nexant, the global polypropylene market is projected to grow at 5.2% per annum through 2018. Nexant expects that the demand for polypropylene in Asia will continue to grow at higher rates than North America and Europe, primarily as a result of growth in the Chinese market.

Manufacturing

Olefins are produced primarily by the steam cracking of hydrocarbon feedstocks. In steam cracking, a gaseous or liquid hydrocarbon feed, such as naphtha, liquefied petroleum gas or ethane, is diluted with steam and briefly heated in a furnace without the presence of oxygen. Typically, the reaction temperature is very high, at around 850°C, but the reaction is only allowed to take place very briefly. In modern cracking furnaces, the reaction time is further reduced to milliseconds, resulting in gas velocities faster than the speed of sound, to improve yield. After the cracking temperature has been reached, the gas is quickly quenched to stop the reaction in a transfer line heat exchanger. The products produced in the reaction depend on the composition of the feed, the hydrocarbon-to-steam ratio and on the cracking temperature and furnace residence time.

Light hydrocarbon feeds, such as ethane, liquefied petroleum gas or light naphtha, yield product streams rich in the lighter alkenes, including ethylene, propylene and butadiene. Heavier hydrocarbon feeds (full-range and heavy naphthas, as well as other refinery products) yield some of these products too, but also yield products rich in aromatic hydrocarbons and hydrocarbons suitable for inclusion in gasoline or fuel oil. Higher cracking temperatures (also referred to as higher levels of "severity") favor the production of ethylene and benzene, whereas lower cracking temperatures (lower levels of "severity") produce higher amounts of propylene, C4-hydrocarbons and liquid products.

Depending on feedstock, varying levels of ethylene, propylene and other by-products are achieved. Ethane produces the most ethylene but the least propylene. Naphtha produces substantially less ethylene, roughly one-third of that of ethane, but produces more propylene and significantly more by-products.

The main polyolefins are the thermoplastics, polyethylene and polypropylene, which are produced by the polymerization of the olefin monomers ethylene and propylene, respectively. While the majority of polyethylene and polypropylene are homopolymers (a combination of the same monomers), a growing proportion is copolymers, (polymers that are produced from a combination of two or more monomers).

Polyolefins are produced using a number of different technologies that are widely available, including one high-pressure process and three low-pressure processes (Solution, Slurry and Gas Phase). All of the technologies are constantly being adapted to improve product qualities and reduce production costs. For commodity products, produced on modern scale technology, the cost structure of these technologies is similar. Increased cost structures for producing specialty products are typically justified by premium margins.

The following is a summary of the four processes:

High-Pressure Process.

This was the original process used to produce polyethylene and is still in use today. This process is a free radical polymerization that does not require the use of a catalyst, operating at pressures above 1,000 and up to 3,500 bar and temperatures from 150° to 340°C. Originally conducted in a high-pressure autoclave, current processes more commonly use a tubular reactor. This process is used to produce low-density polyethylene, characterized by long-chain branching, considerable flexibility and clarity. Because of the high-pressures involved, this process involves higher risk than low-pressure processes and requires expensive and specialized equipment; consequently, fewer high-pressure processes have been constructed in recent years.

Low-Pressure Processes.

These processes typically operate below 200 bar and have lower capital intensity but require the aid of a catalyst. In addition, it is common to add a comonomer (butene or hexene in the case of polyethylene, and ethylene in the case of polypropylene) to tailor the resultant polymer properties.

- Solution Process. This process operates at temperatures above the melting point of the polyolefin (above 130°C for polyethylene and above 140°C for polypropylene) and employs metallocene or Ziegler-Natta catalysts and a solvent to dissolve the growing polymer chains. This process is best suited to make high-density polyethylene (having very few chain branches, and those branches that do exist are short—only a few carbon atoms in length) and linear low-density polyethylene (having many short-chain branches, which may be contrasted to low-density polyethylene with many long-chain branches). Solution processes have the ability to produce narrow molecular weight distribution polyolefins.
- Slurry (or Suspension) Process. This process is a continuous low temperature (60°-105°C, 20-35 bar for polyethylene or 60°-85°C, 35-50 bar for polypropylene) process in which polymer forms as a solid particle in the presence of a catalyst while suspended in a liquid slurry. In the case of polyethylene, the polymerization takes place in an inert liquid carrier such as isobutane. In the case of polypropylene, the polymerization takes place in liquid hexane, heptane, or even liquid propylene monomer. When propylene is utilized as the carrier liquid, the process is often referred to as "bulk slurry." The carrier liquid serves to aid in the removal of heat as it carries the growing polymer particles through the reaction process. The catalyst may be chromium on silica (polyethylene only), Ziegler- Natta, or metallocene. The reactor may be a stirred tank or a pipe-loop reactor, in either case jacketed to aid in removal of the heat of reaction. One or more reactors may be placed in series to broaden the molecular weight distribution and produce bimodal polyolefins. This process is best suited to making high-density polyethylene and homopolymer polypropylene. One advantage of this process over other high-density polyethylene processes is the ability to make rapid grade transitions, which makes it particularly well suited to the manufacture of specialty polyethylene products.
- Gas Phase. As the name implies, polymerization occurs with the solid polymer particles produced on a heterogeneous catalyst in the gas phase. Like the slurry process, the catalyst may be chromium on silica (polyethylene only), Ziegler-Natta, or metallocene. In the reactor, the growing polyolefin particles are fluidized and cooled by the gaseous reactants and/or nitrogen, or sub-fluidized and mechanically agitated. Liquid monomer may be added and flashed to aid in the removal of heat. The reaction takes place at low temperature (80°-100°C for polyethylene and about 60°-85°C for polypropylene) and pressure (15-35 bar). A gas phase process has advantages over slurry and solution processes in that the heat of reaction is very effectively removed and operates with lower hydrocarbon inventories. In addition, high-ethylene content copolymers of polypropylene can be produced in this process. This process is best suited to the manufacture of

linear low-density polyethylene, high-density polyethylene and all types of polypropylene, including homopolymer, random copolymer, impact copolymer and soft thermoplastic polyolefin.

Post polymerization, any catalyst is deactivated, the polyolefin is freed of any solvent, unreacted monomer or liquid diluent, and the resulting polyolefin flake or crumb is combined with additives and extruded into pellets prior to sale to downstream fabricators.

Several of these technologies have recently been adapted to run multiple reactions in series, yielding a product with a wider bi-modal molecular weight distribution that provides superior strength or unique characteristics such as high-impact resistance.

All polyolefin groups participate in mature markets and therefore larger plants of all process technologies are being built with capacities of 200,000-500,000 tonnes per year.

Research and Intellectual Property

Our olefins and polymers businesses are supported by technology centers in Naperville (United States), Brussels (Belgium), Rosignano (Italy) and Lavéra (France), which in turn support the following highly competitive proprietary process technologies that we believe together form one of the most comprehensive technology packages available in the Olefins and Polymers industry. These technologies are marketed and licensed by the INEOS Technologies business in cooperation with the European and North American olefins and polymers businesses.

- Gas phase polypropylene technology. Our gas phase polypropylene technology enables the cost-effective production of high-performance polypropylene plastics. This technology has been licensed to 26 companies worldwide.
- *High-density polyethylene technology*. We own specialized technology for the manufacture of high-density polyethylene that is characterized by low capital investments and low operating costs and is particularly well-adapted to the manufacture of high-performance materials such as high pressure pipe, one of the fastest growing segments of the high-density polyethylene market. This technology has been licensed to 18 companies worldwide.
- Gas phase polyethylene technology. This technology is designed to serve the linear low-density polyethylene and high-density polyethylene markets, which are the fastest growing segments of the commodity polyethylene markets. The technology is characterized by low capital investment, low operating cost, low emissions and waste, and no requirement for the use of additional solvents. This technology has been licensed to 31 petrochemical companies worldwide. The technology allows the manufacturer to "swing" the use of installed production capacity between the two grades of polyethylene.

Transportation

We have access to a comprehensive transportation network and associated logistics infrastructure through a combination of ownership and long-term contracts. We believe that this network enables us to move feedstocks and products at competitive rates and provides us with access to the merchant market, enabling us to manage demand and supply imbalances across the petrochemical value chain in response to market conditions.

Because pipelines are the most efficient and least expensive mode of transportation, we consider them to be of strategic importance. We own some of the pipelines we use, while others are consortium-owned pipelines in which we hold a stake or are provided to us by dedicated operators under long-term contracts. Other pipelines in Europe may be accessed without a contract as long as the appropriate tariff is paid.

Where we are reliant on access to shipping channels, we either own or hold stakes in the relevant terminals and storage facilities or have secured access to them through long-term contracts. However, we do not own any of the ships we use and instead rely on an extensive network of third-party shipping companies which make capacity available to us on a spot or term contract basis that is managed by our own in-house Marine Assurance Service.

Competition

We face intense competition in the olefins and polymers markets in which we compete. Given that most of the products are commodities, the main competitive criterion is price. In certain segments of the polyethylene and polypropylene markets, where products must satisfy specified technical performance criteria, competition is also based on performance, quality and customer service. A key competitive factor is the ability to manage costs successfully, which requires management focus on reducing unit costs and improving efficiency. The main drivers in this respect include technology, scale, feedstock access, asset utilization, logistics and the ability to execute capital projects efficiently.

Because polymers are easily transported in bulk shipping containers or rail cars, there is significant trade between regions. Globally we compete against a large number of polymer companies, many of which have capacity in multiple regions and who market their products in Europe, Asia and North America. Our competitors include Lyondell-Basell, Sabic, Dow and ExxonMobil.

Olefins & Polymers Europe

Set forth below is a discussion of the products, manufacturing, raw materials and energy, transportation and customers and contracts, for our Olefins & Polymers Europe business.

Overview

The following table provides a breakdown of the revenues and EBITDA before exceptionals for the Olefins & Polymers Europe business for the dates indicated:

	December 31,		
	2013	2012	2011
	((€in millions))
Revenue ⁽¹⁾	7,437.5	7,889.0	7,523.3
EBITDA before exceptionals ⁽²⁾	86.5	122.2	358.3

⁽¹⁾ Revenue excludes revenue from discontinued operations. Excludes inter-segmental eliminations.

(2) For more information on how we calculate EBITDA before exceptionals, see "Presentation of Financial and Non-GAAP Information—Use of Non-GAAP Financial Measures."

Products

In Olefins & Polymers Europe, we manufacture in our upstream business ethylene, propylene, butadiene, raffinate 1 and 2, benzene, toluene and gasoline blending components and in our downstream business low-density polyethylene, linear low-density polyethylene and high-density polyethylene and polypropylene. In our upstream business, the majority of our ethylene and propylene is either used for polyolefins production or sold to other INEOS businesses as feedstock. Our butadiene, raffinate 1, benzene, toluene and gasoline blending components are sold to producers of synthetic rubber, ABS plastics, oligomers, cumene, styrene and polyurethanes and are traded on the open markets. Olefins & Polymers Europe is the largest butadiene producer in Western Europe and the fourth largest ethylene and polyolefin producer.

In our downstream business, we are a leader in a number of markets that permit significant scope for product differentiation. Our market focus for polypropylene is on growing our differentiated portfolios in specialty film, rigid packaging, sheet, high modulus pipe, caps and heat seal films, where we are a leading worldwide supplier. Our linear low-density polyethylene production is primarily sold to customers in the film sector, and we are achieving very significant growth in super-tough metallocene film based on our proprietary catalyst technology. Our low-density polyethylene products are based on autoclave technology which is particularly well-suited to specialty applications in the wire and cable, medical and coatings sectors. Our high-density polyethylene is targeted at premium markets such as pressure pipes, organoleptic caps and closures, organoleptic blow-molded long-life milk bottles and car fuel tank systems. We believe that our competitive position in the worldwide polyethylene and polypropylene markets is strengthened by our proprietary technologies: Innovene PEg (gas phase) which allows both linear low density and high density polyethylene to be produced from a single reactor, Innovene PEs (slurry) which allows the production of high

strength multi-model, high density polyethylene and Innovene PP gas phase which permits the manufacture of differentiated copolymer grades.

Manufacturing

Olefins & Polymers Europe operates eight sites including five standalone polyolefin sites at Lillo and Geel in Belgium, Sarralbe, France, Bamble, Norway and Rosignano, Italy, as well as the following large integrated olefin cracker and polyolefin facilities at:

- Köln, Germany;
- Lavéra, France; and
- Rafnes, Norway.

These facilities have a total capacity of 6,100 kilotonnes for the production of ethylene, propylene, butadiene, benzene, polyethylene and polypropylene. In Europe, we own and operate three major cracker complexes, one that is integrated with the refinery in Lavéra, France, and two additional complexes in Köln, Germany, and Rafnes, Norway. Each of these sites includes polyolefins and other olefin-derivatives units. The Norway cracker is a 50/50 joint venture with Kerling, a related party. The Lavéra facility consists of a combination of units wholly owned by us and various 50/50 joint ventures with Total. One of our olefin crackers, in Rafnes, is a very efficient gas cracker, feeding from advantaged gas sources in the North Sea. The other olefin crackers at Köln and Lavéra are naphtha crackers, each with significant gas cracking flexibility. This flexibility enables management of feedstock mix in response to changes in economic and market conditions, resulting in the maximization of margins. All of these crackers are either co-located with, or connected by pipeline to, polyolefins and other olefin-derivative units, enabling us to realize economies of scale, optimize the margin across a broad portfolio of olefin-derivatives, improve our facilities' energy management and minimize logistics costs.

The cracker complex in Lavéra, France, is physically integrated with a refinery located on the same site. This integration allows leveraging of the sites' feedstocks, infrastructure, energy management and workforce. For example, the refinery provides the olefin cracker with its feedstocks including naphtha, liquefied petroleum gas, butanes, and propylene and in return receives pygas and other raffinates, which could be a gasoline blending component, and hydrogen for use in the hydrocracking of middle distillates. Moreover, because the olefin cracker and refinery share a single site, we incur minimal transportation costs in moving petrochemical feedstock from the refinery into the cracker complex with optimum associated working capital requirements.

The cracker complex in Köln, Germany, is located in the center of one of the key industrial clusters of Germany, accessing gas and naphtha feedstocks by pipeline and ship from the Rotterdam area in the Netherlands, one of the world's most competitive naphtha supply regions. It is the fourth largest cracker complex in Europe, is very reliable and benefits from considerable downstream integration with a wide portfolio of olefin derivatives on- and off-site, including polyethylene, ethylene oxide, nitriles, oligomers, and ABS engineering plastic and synthetic rubber. Like the other cracker sites, Köln can also sell its excess ethylene and propylene to the merchant market via ethylene pipelines and its own barge jetty on the River Rhine. In particular, Köln sits at the center of Europe's largest ethylene pipeline network owned by ARG, a company jointly owned by INEOS and four other European petrochemical companies. Rafnes and Lavéra are also connected to dedicated ethylene liquefaction and export terminals.

The Noretyl ethylene cracker in Rafnes is operated as a tolling plant for ourselves and Kerling (each with a 50% share) converting natural gas liquid feedstock to ethylene and propylene under a processing agreement, with both owners paying Noretyl a conversion fee for its services. The Noretyl ethylene cracker has been modernized and expanded to its present annual capacity of 570,000 tonnes of ethylene and approximately 105,000 tonnes of propylene.

While our four large standalone polyethylene and polypropylene sites in Lillo, Geel, Sarralbe and Rosignano are not co-located on cracker sites, they are all located on major olefin pipelines or in the case of Rosignano, connected to its own ethylene terminal through which it imports ethylene by ship. Our Northern European sites also benefit from connection to Europe's largest ethylene terminal, at our site in Zwijndrecht, Antwerp. In each case, this infrastructure provides each of these facilities with flexibility in sourcing their feedstock. Moreover, all of these sites are located in close proximity to their customers.

Since acquiring Olefins & Polymers Europe, we have undertaken a significant improvement and restructuring program across our asset base to significantly enhance its long-term cost-competitiveness. In general, cost efficiencies have been substantially improved across all aspects of the business. In addition, we have undertaken the closure of the following non-differentiated laggard polyolefin units: 175 kta PP units at Sarralbe, 200 kta PP units at Geel and 145 kta PP units at Bamble. In each case selected customers have been supported by supply from our other units. The asset base has also been added to via the acquisition of the very efficient Noretyl gas cracker at Rafnes and associated polyolefins at Bamble in Norway in 2007.

Significant investments have also been made in the asset capability, including the building of a 100 kta swing furnace on the Köln cracker. In Köln, the linear low density polyethylene unit has been converted to highly differentiated metallocene capability (a proprietary catalyst technology that permits the production of super-tough film grades). A key improvement theme of our polyolefins business has been to increase the volume of differentiated polymers produced from 30% on acquisition to 55% by the end of 2013 with plans to increase this still further to 65% by 2015.

Our manufacturing facilities are periodically shut down for scheduled turnarounds, to carry out necessary inspections and testing to comply with industry regulations and to carry out any maintenance activities that may be necessary. Olefins crackers typically undergo major turnarounds every five to six years, with each turnaround lasting four to six weeks. Our Rafnes cracker is on a nine year turnaround cycle. Polymers units are subject to more frequent maintenance shutdowns, typically one turnaround every one or two years, but each turnaround lasts only seven to ten days. A significant focus in prior years was placed on enhancing process safety and further improving reliability by initiating a series of process safety audits and reliability reviews to give assurance about the adequacy of our critical safety management systems and that the necessary plans are in place to drive reliability.

Raw Materials and Energy

The primary feedstocks for our olefin crackers are oil-based naphthas and natural gas liquids including ethane, propane and butane. The use of naphthas in particular results in the production of a significant amount of co-products such as propylene, butadiene and benzene, as well as gasoline blending components, while the use of natural gas liquids results in the production of a smaller amount of co-products. Our naphtha requirements are sourced from the on-site refinery in Lavéra, France and from external suppliers.

BP is our single most important external supplier of naphtha and gas, via a special joint sourcing agreement. Most of the petrochemical feedstocks purchased from BP are pursuant to hydrocarbon sale and purchase agreements with varying durations. In addition, a substantial proportion of our feedstock requirements are also obtained on the commodity markets.

We continue to look for sources of attractive feedstock and in 2012 we announced the completion of supply and infrastructure agreements that will secure a significant volume of ethane feedstock from the U.S. for use in our Norwegian cracker complex. We agreed a long term deal with Range Resources for the lifting of ethane from the Marcus Hook Facility from 2015. Range Resources is one of the leading U.S. independent upstream companies.

The costs of the feedstocks required to make our products are principally driven by the price of oil and natural gas.

The majority of our crackers' production is consumed as feedstock by our polymers and chemical intermediates units. However, INEOS is a very significant net buyer of ethylene and propylene production because of the scale and diversity of our polyolefins and chemical intermediates portfolio in Europe and hence we leverage this scale to purchase very competitive ethylene and propylene on the merchant market, both from European and deep-sea sources, through supply contracts and swaps with other petrochemical companies. This activity has been further augmented by the construction of Europe's largest ethylene terminal at our site in Zwijndrecht, Antwerp which was commissioned in 2013.

Although energy is generated at several of our sites, including as part of petrochemical manufacturing processes, we are a significant net purchaser of both electricity and gas. In the past we have typically procured our requirements from local producers or utilities at local market prices, however, we are increasingly moving to a more integrated process to take more advantage of our scale and changing energy markets.

Customers and Contracts

We have approximately 1,900 customers worldwide whom are serviced by an in-house team of business, sales and technical service personnel. Customers of our upstream business tend to be major European petrochemical companies, who use our products to make a wide range of polymers, synthetic rubber, intermediates and specialty chemicals. In our downstream business we sell to a large number of companies in a variety of plastic conversion industries involving rigid and flexible packaging, pipe, car fuel systems, rotomoulding, wire and cable, medical and other industrial and consumer products. In Olefins & Polymers Europe as a whole, no single customer accounts for more than 5% of our annual revenues and our top 10 customers account for less than 15% of our annual revenues.

In our upstream business the majority of our ethylene, propylene and raffinate 1 and a substantial portion of our benzene production is sold to other INEOS olefin-derivative businesses at market-related transfer prices. Approximately 70% of the olefin requirements of our downstream polyolefin business is satisfied by internal supply from our own crackers, while the rest is sourced from the open market. Our remaining production of ethylene, propylene, butadiene, raffinate 1, benzene, toluene and gasoline blends are sold directly to customers predominately via contracts of 1-3 years duration, with pricing either freely negotiated, cost-plus or market-referenced (such as ICIS or Platts public quotes). Pricing therefore changes daily or monthly. A significant change to how the European market prices ethylene and propylene took place in early 2009 when the contract price system changed from quarterly to monthly, to reflect more dynamically changes in supply and demand. At the beginning of 2011, this monthly contract pricing was extended to include butadiene.

In our downstream business the majority of our polyolefin production is sold directly to customers predominately via contracts of 1-3 years duration, with pricing either freely negotiated, cost-plus or market-referenced (such as ICIS or Platts public quotes). Pricing therefore changes weekly or monthly depending on the pricing mechanism. The majority of sales are enacted in Europe, with exports outside the 27 EU countries accounting for approximately 20% of total polyolefin sales volumes and supported via our worldwide network of distributors and agents.

Olefins & Polymers North America

Set forth below is a discussion of the products, manufacturing, new materials and energy and customers and contracts, for our Olefins & Polymers North America business.

Overview

The following table provides a breakdown of the revenues and EBITDA before exceptionals for the Olefins & Polymers North America business for the dates indicated:

	December 31,		
	2013	2012	2011
		(€in millions)	
Revenue ⁽¹⁾	3,551.2	3,443.1	3,591.2
EBITDA before exceptionals ⁽²⁾	913.6	706.0	477.6

⁽¹⁾ Revenue excludes revenue from discontinued operations. Excludes inter-segmental eliminations.

(2) For more information on how we calculate EBITDA before exceptionals, see "Presentation of Financial and Non-GAAP Information"

Products

Our olefin products—ethylene, propylene, butadiene, mixed butenes, and crude benzene—are the basic building blocks for a vast family of petrochemicals produced by our chemical manufacturing customers. A significant portion of our olefin output serves as feedstock for our polymers production, while the remaining output is sold to affiliates and third parties.

The only type of polyethylene we manufacture in Olefins & Polymers North America is slurry loop high-density polyethylene. Our high-density polyethylene products are sold to customers for use in manufacturing food packaging, household chemical containers, pipe, injection-molded products such as caps

and closures, and crates and pails. Our polypropylene is transformed into crates and trays, food packaging, carpets, automotive products, DVD cases, rope and toys. Consumables such as caps, closures, film and packaging represent approximately 75% of our polymer sales volume.

Manufacturing

The key assets of Olefins & Polymers North America include the following:

- the Chocolate Bayou, Texas, facility, one of the largest cracker installations in North America;
- the Battleground, Texas, facility, one of the largest North American high-density polyethylene facilities and integrated with the Chocolate Bayou site through a company-owned pipeline system;
- a 50% joint venture in the Horizon High-Density Polyethylene Plant located at Chevron Phillips' Cedar Bayou, Texas, site;
- the Carson Polypropylene Plant—integrated with the Tesoro refinery at Carson, California; and
- the Hobbs Fractionation Unit, which can process 1,455 kta of Natural Gas Liquids feedstock for our Chocolate Bayou cracker.

All of the olefins crackers are either co-located with, or connected by pipeline to, polymers units, enabling them to realize economies of scale, improve their facilities' energy management and minimize logistics costs.

In North America, our olefins and polymers business comprises five sites including major facilities in Chocolate Bayou, Texas, and Battleground, Texas. In 2013, the Chocolate Bayou and Battleground facilities had total production volumes of approximately 3,500 kilotonnes inclusive of olefins, polyethylene and polypropylene finished goods only. Two expansions were fully realized in 2012 which added approximately 45 kilotonnes of ethylene and approximately 18 kilotonnes of high-density polyethylene capacity. There was a permanent shutdown of one polypropylene unit at Chocolate Bayou in late 2007 and two polypropylene lines were closed at Battleground in early 2009.

Chocolate Bayou is one of the largest cracker installations in the Gulf Coast region and, according to Nexant, is the third largest site by ethylene capacity in the United States. The site has access to cavern storage, rail service, and approximately 500 miles of pipeline, either owned or leased by us. This allows integration to our polymer assets and our Hobbs fractionation unit, and permits the site to place its surplus ethylene and other products either directly in the local merchant market or in storage to bridge time lags between production and consumption. The scale of the Chocolate Bayou crackers should also enable the leveraging of the facility's infrastructure and workforce. Another key strength of the facility is the crackers' flexible design. While their main feedstock is natural gas liquid gas-based feedstock, which is obtained from various sources, including approximately 45% from our natural gas liquid fractionator near Hobbs, New Mexico, the commodity markets and Marathon's refinery in Texas City, Texas, the facility also has the ability to process naphtha. This flexibility enables management of feedstock mix in response to changes in economic and market conditions. All of our polymers facilities in North America are either connected with the Chocolate Bayou crackers or are adjacent to facilities operated by third parties with whom we have feedstock arrangements.

Among our North American polymers units, our key facility is the site at Battleground, Texas, which hosts both polypropylene and high-density polyethylene production. Our high-density polyethylene site is the fourth largest high-density polyethylene complex in North America. Battleground is integrated with Chocolate Bayou by way of a pipeline system owned by us. In July 2013 we signed a Memorandum of Understanding with the intent to form a joint venture to manufacture high-density polyethylene with Sasol at our Battleground site. Complementing our Battleground polymers production is our Carson polypropylene unit and our 50% ownership interest in the Cedar Bayou Horizon high-density polyethylene line. The Horizon line, which is operated by Chevron Phillips, is one of the largest single slurry loop high density polyethylene lines in North America.

Raw Materials and Energy

Our procurement efforts remain focused on expanding access to low cost materials, services and equipment and creating independence from sole or limited sources of supply. We are connected via pipeline to multiple hydrocarbon suppliers at Chocolate Bayou Works and Battleground Manufacturing Complex to ensure a secure supply at reasonable costs.

We, together with our North American affiliates, have centralized the purchasing of energy, natural gas, rail routes and propylene (including refinery-, chemical- and polymer-grades), providing scale, common voice in the market and, in the case of propylene, flexibility to manage our supply and demand. Our olefins and polymers business primarily uses naphtha and NGLs as the basic feedstocks for our olefins crackers.

Although most external feedstock supplies of the business are available from a variety of third parties, our Carson Polypropylene Plant depends on raw materials from the Tesoro refinery located on the same site and has no convenient access to alternative supply channels. Most of the petrochemical feedstocks purchased from Tesoro are part of a long-term contractual agreement. In addition, a substantial proportion of our feedstock requirements is also obtained on the commodity markets. We manage the procurement and trading of our feedstocks internally.

Our U.S. ethylene production capacity exceeds our U.S. consumption. We, thus, sell ethylene on the merchant market through supply contracts and swaps with other petrochemical and refining companies. Our propylene production is lower than consumption. To address this shortfall, we purchase propylene on the merchant market through supply contracts and swaps with other petrochemical and refining companies.

Although energy is generated at several of our sites, including as part of petrochemical manufacturing processes, we are a significant net purchaser of both electricity and gas. Typically we procure our requirements from local producers or utilities at local market prices.

Customers and Contracts

We work with customers to meet evolving market requirements. We market our products both directly—business to business—and through authorized distributors. We have a small base of olefins customers and approximately 350 polymer customers worldwide. Our industrial customers include a large number of companies in a variety of downstream industries involving rigid packaging, fibers and flexible packaging.

Most of our olefins sales are by multi-year contracts, with prices subject to monthly industry pricing. Our polymer sales are to customers in the merchant market and are made either on contract or spot terms. Some contracts are based on negotiated prices, while others are based on pricing formulas or refer to spot market rates.

Chemical Intermediates

Overview

Set forth below is a discussion of the products, manufacturing, raw materials and energy, customers and contracts, research and intellectual property and competition for our Chemical Intermediates activities. This includes the following key businesses: INEOS Nitriles, INEOS Oligomers, INEOS Oxide, INEOS Phenol, INEOS Enterprises and INEOS Technologies.

The following table provides a breakdown of the revenue and EBITDA before exceptionals of the Chemical Intermediates business for the periods and as of the dates indicated:

_	For the year ended December 31,		
_	2013	2012	2011
		(€in millions)	
Revenue ⁽¹⁾		9,367.0	9,775.4
EBITDA before exceptionals ⁽²⁾	511.4	688.6	877.6

⁽¹⁾ Excludes inter-segmental eliminations.

⁽²⁾ For more information on how we calculate EBITDA before exceptionals, see "Presentation of Financial and Non-GAAP Information."

Products

The following table provides an overview of our key chemical intermediate products and their principal applications:

Business	Key Products	Principal Applications
INEOS Nitriles	. Acrylonitrile	Acrylic fibers and acrylonitrile butadiene
		styrene and styrene acrylonitrile polymers
	Acetonitrile	Performance solvent for pharmaceuticals
		industry
	Hydrogen Cyanide	Gold extraction, perspex manufacture and
		animal feeds
	Acetone Cyanohydrin	Chemical intermediates and perspex
		manufacture
	Ammonium Sulphate	Fertilizers
INIEOG OU	Oxazole	Chemical intermediates
INEOS Oligomers	. Linear aipna olefins	Co-monomers for polyethylene, synthetic
	Dolyalpha alafina	lubricants, detergents and oil drilling chemicals
	Polyalpha olefins Polybutene	Synthetic lubricants Fuel additives, lubricants, coatings, adhesives,
	rolybutene	sealants and cable insulation
	Isoolefins, Isoparaffins and	Tire manufacture, specialty acids,
	Specialties	agrochemicals, fragrances, cosmetics and
	Speciaties	blowing agents
INEOS Oxide	. Ethylene oxide and derivatives,	Polyester resins, fibers, film,
	including ethylene glycol,	antifreeze/coolants, industrial detergents,
	ethanolamines, alkoxylates, glycol	agrochemicals, surfactants, cosmetics,
	ethers and GasSpec TM gas-treating	construction chemicals, glyphosates,
	amines	pharmaceuticals, synthetic lubricants and oil
		and gas processing
	Propylene oxide and derivatives,	Polyurethane foam, polyester resins and
	including propylene glycols	de-icing
	Oxo-Alcohols	Chemical intermediates primarily for
	Ed. 1.1.	plasticizers
	Ethylidene norbornene monomer	ethylene propylene diene monomer rubber
	Glycol Ether Esters Ethyl and Butyl Acetates	Surface coating, paints Surface coating, inks, paints, process solvents
	Ethylene Glycol	Automotive antifreeze/coolants
INEOS Phenol		Bisphenol A for the production of
I (LOS I Hello)	. I hellor	polycarbonates and epoxy resins, phenolic
		resins, pharmaceuticals and nylon
		intermediates
	Acetone	Methylmethacrylate, polymethylmethacrylate,
		bisphenol A, pharmaceuticals, solvents,
		coatings, personal care products and
		agrochemicals
	Cumene	Primary raw material for the production of
		phenol and acetone
	Alphamethylstyrene	Heat resistant thermoplastics, tackifiers,
INFOC Entounuigos	Ammonio	coatings and antioxidants
INEOS Enterprises	. Allillonia	Intermediate used to produce a range of products, including nitric acid, polymer resins
		and textiles
	Nitric Acid	Polyurethanes
	CDM	Environmental emissions credits
INEOS Technologies	. Technology licenses for polyethylene,	License, design and support for construction
 	polypropylene, polystyrene, vinyls	and operation of petrochemical production
	and acrylonitrile	plants
	Catalyst and Additives	Polymers, vinyls and acrylonitrile

INEOS Nitriles. Our main product in the nitriles sector is acrylonitrile. According to Nexant, measured by expected average annual capacity for 2013, we are the largest manufacturer of acrylonitrile in the world. The primary applications for acrylonitrile are acrylic fiber and acrylonitrile butadiene styrene plastics. We employ safeguards to ensure the safe handling of Nitriles' products including the use of specially designed railcars and pipelines for transportation to nearby customers. We believe that our competitive position in the worldwide acrylonitrile market is strengthened by our proprietary fluid bed acrylonitrile process and related catalysts.

In addition, the Nitriles business produces acetonitrile, hydrogen cyanide, acetone cyanohydrin, ammonium sulphate and oxazole.

INEOS Oligomers. Measured by expected average annual capacity, we are the largest producer of polyalpha olefins worldwide and the third largest linear alpha olefins producer. As a "full-range" linear alpha olefins producer, we manufacture a broad range of co-produced linear alpha olefins and must manage production levels consistent with our ability to utilize or sell the entire product slate. As different segments of the linear alpha olefins market tend to grow at different rates, the business has developed a variety of internal and external outlets for the key products, which allow the plants to operate with minimal constraints. Our unique technology does allow some flexibility to adjust our product slate, in order to emphasize certain linear alpha olefins products and de-emphasize others as demand fluctuates. The primary applications for linear alpha olefins are as comonomers for polyethylene and use in detergents, lubricants and drilling fluids. Polyalpha olefins are primarily used in synthetic motor oils, transmission fluids and other demanding lubricant applications such as wind turbines.

Specialty Oligomers products are manufactured from C4/C5 olefins and are used as intermediates in a variety of high margin applications such as tire manufacture, specialty acids, agricultural chemicals and plastic additives. Applications for polybutene are diverse, from cosmetics and personal care products, through sealants and adhesives to fuel additives.

INEOS Oxide. We manufacture ethylene and propylene oxides, from which we produce a range of derivatives including ethylene glycol, propylene glycol, EO and PO Alkoxilates and Glycol Ethers. We believe, as measured by expected aggregate annual capacity for 2013, we are the largest producer of ethylene oxide and ethylene glycol in Western Europe and one of only two producers of ethylidene norbornene monomer in the world.

Ethylene oxide is a highly reactive, flammable and toxic molecule. As a consequence, ethylene oxide producers typically use a significant proportion of their ethylene oxide for captive production or sell it to third parties located reasonably close to, or on, their ethylene oxide production sites. The majority of ethylene oxide produced in Western Europe is used for captive production and there are virtually no ethylene oxide imports into, or exports from, Western Europe. INEOS Oxide uses its ethylene oxide production for the captive production of ethylene glycol, ethylene oxide derivatives and sales to third parties.

Our ethylene oxide derivatives include ethanolamine, a broad range of alkoxylates, glycol ethers and GasSpecTM gas treating amines. We own and operate one of the world's largest ethanolamine units and produce a family of molecules that are used in applications such as agrochemicals, surfactants (used in personal care products and detergent formulations), cement additives, textile chemicals, metal working fluids, electronics and pigments. We have four alkoxylate reactors based in Antwerp, which we use to make a broad range of alkoxylates used in household detergents, herbicides, industrial cleaners, petroleum production, cosmetics, pharmaceuticals, synthetic lubricants and surface coating. We also operate one of Europe's largest glycol ether assets to produce a range of methyl, ethyl and buthyl glycol ethers used as solvents in surface coatings and inks, and as jet fuel de-icers. We also produce GasSpecTM gas treating amines, which are high performance specialty chemical formulations, often patent protected, which are used in oil and gas processing in order to remove hydrogen sulphide and carbon dioxide from natural gas, gasoline and ammonia production streams.

We are one of only two suppliers of ethylidene norbornene (ENB) monomer globally and the only producer in Europe. Ethylidene norbornene monomer is used in the production of ethylene propylene diene monomer (EPDM) rubber, a high performance rubber that is both wear and weather resistant and is increasingly used in place of conventional rubbers in automobiles, roofing materials and household appliances.

Ethylene glycol is used primarily as a feedstock to produce polyethylene terephthalate for film, fiber and resin and in a variety of other industrial applications including antifreeze/coolants for automotive vehicles.

Ethyl acetate is primarily used as a solvent and diluent, favored because of its low cost, low toxicity and agreeable odor. For example, it is commonly used to clean circuit boards and some nail varnish remover. Coffee beans and tea leaves are decaffeinated with this solvent. It is also used in paints as an activator or hardener and is present in confectionery, perfumes and fruits. In addition, we produce Buthyl acetates which are used as solvents in surface coatings, inks and pharmaceutical manufacturing.

INEOS Phenol. According to Nexant, measured by average annual capacity in 2013 we are the largest producer of phenol in the world. Our global manufacturing capacity is two times that of our closest competitor and four times that of the next largest European producer. Phenol is a primary material for a large number of chemical products. In recent years, the use of phenol for the production of bisphenol A, an intermediate product used to produce polycarbonate and epoxy resins, has increased substantially and is now the largest phenol application. Polycarbonate is an engineering thermoplastic material which, due to its superior optical qualities, structural strength and weight, has a wide range of uses, including CDs and DVDs, optic-fibers, optical lenses, bulletproof glass and other ballistic resistant materials, structural parts in cars and trucks and housings for electrical household appliances and office equipment. Epoxy resins are used in a wide variety of applications including coatings, adhesives and composite materials, such as carbon fiber.

Phenol is also combined with formaldehyde to produce phenolic resins, which represent the second largest commercial use of phenol. Phenolic resins are used in a wide range of applications, including plywood and oriented strand board, furniture, insulation materials, laminates, foundry molds and adhesives.

The next largest application for phenol is as the raw material for caprolactam and adipic acid for the production of nylon intermediates. Major uses include engineering thermoplastics and synthetic fibers for clothing and carpeting.

Since phenol and acetone are produced together in a fixed ratio, we are also the largest producer of acetone in the world with more than twice as much capacity as the next largest competitor. The largest commercial use of acetone is for solvents, either through the use of acetone itself as a solvent or through the acetone-based production of solvents. The second largest commercial use of acetone is the manufacture of methylmethacrylate. Methylmethacrylate is used to manufacture polymethylmethacrylate resins, including acrylic sheets and compounds for molding and extrusion. Acrylic sheets and compounds are used in a wide range of architectural and industrial applications, ranging from point of sale retail displays to glazing and decorative light panels. The third major use of acetone is in the production of bisphenol A.

Alphamethylstyrene is formed as an intermediate product during the phenol and acetone production process. It is used in heat resistant thermoplastics, tackifiers, coatings and antioxidants.

INEOS Enterprises. Ammonia production finds major application in the fertilizer industry, but in the case of INEOS Enterprises is used in the production of acrylonitrile, nylon and other non-fertilizer applications. Nitric acid is similarly used in the fertilizer industry, and for INEOS Enterprises is primarily used in the manufacture of polyurethanes. In this highly competitive market, we benefit from a cost base lower than that of many of our competitors, having an advantaged location within our Köln integrated petrochemical site and supplying 80% of our customer volume directly by pipeline.

In October 2013, the Vinyl Acetate Monomer facility in Saltend, Hull, United Kingdom was closed.

Clean development mechanism (CDM) activities utilize proven technology for the abatement of fluorocarbon emissions. We were, until 2013, a participant in three CDM projects in India and Korea which have successfully operated our abatement technology. Reductions in emissions were achieved at all locations and following successful periodic verifications, certified emission reductions (CERs) were issued by the United Nations Framework Convention on Climate Change, which we then marketed.

INEOS Technologies. INEOS Technologies is a leading developer and licensor of polyolefin, polystyrene, nitriles, maleic anhydride, and vinyls technologies to the global petrochemical industry. It manufactures and supplies high-quality catalysts and additives in support of these technologies to major companies around the world as well as to our own manufacturing assets.

We view technology licensing as an effective way of establishing our products in the market and of generating additional income. In addition, we believe that the ability to offer a comprehensive technology package is a substantial advantage in attracting potential joint venture partners for equity investments in regions characterized by low feedstock costs and high growth, such as the Middle East, North Africa, Russia and China.

Our approach to licensing varies from technology to technology to take into account the prevailing market conditions. For example, licensing of acrylonitrile technology is highly selective, whereas our gas phase polyethylene technology is licensed widely.

Under INEOS' ownership, the business has grown its overall licensing market share in all product lines, and, on the basis of market share data, we are the leading licensor of polyethylene, polypropylene, polystyrene, polyvinylchloride, vinyl chloride monomer, ethylene dichloride, and acrylonitrile technologies. A total of 57 major new licenses have been agreed since the beginning of 2008, through the activities of our sales offices located in Lisle, Illinois, United States, Lyndhurst, United Kingdom, and Shanghai, China, and we have agreed a total of 378 licenses in 54 countries.

We market and sell the catalysts and additives required to operate the processes. We manufacture catalysts for polyethylene, polypropylene, acrylonitrile and maleic anhydride, and have established toll-manufacturing arrangements for polypropylene catalysts, ethylene dichloride catalysts and some polyethylene catalysts, and for process additives for the polyvinylchloride process. Manufacturing facilities exist in Lima, Ohio, United States (acrylonitrile catalysts), Green Lake, Texas, United States (maleic anhydride catalysts), Lavéra and Sarralbe, France (both polyethylene catalysts) and Dahej, India (polyolefin catalysts).

In order to sustain the competitiveness of our process technologies and catalysts, we invest a substantial proportion of our Technologies profits in research and development. We have major research centers in Naperville, Illinois, United States, and Lavéra, France. In addition, the business has research or pilot facilities in Neder-over-Heembeek, Belgium, Runcorn, England, and Porto Marghera, Italy.

Our proprietary gas phase polyethylene technology serves the linear low-density polyethylene and high-density polyethylene markets, which are the fastest growing segments of the commodity polyethylene markets. We also own a slurry phase technology (characterized by low capital and operating costs) for the manufacture of specialized high-density polyethylene products. Our acrylonitrile technology is known in the industry as the propylene ammoxidation process, in which propylene and ammonia are converted into acrylonitrile. We have provided five generations of acrylonitrile catalysts, and there is continuing industry demand for these catalysts. Our polyvinyl chloride process allows for rapid production rates without the need for chilled water to cool the reactors, providing substantial capital savings by eliminating the need for expensive refrigeration systems. We have developed and sell a range of leading additives to enable smooth and optimized running of the polyvinyl chloride production process. We also offer a range of technologies and catalysts for the manufacture of ethylene dichloride and vinyl chloride.

Manufacturing

INEOS Nitriles operates from four sites, two in the United States and two in Europe. Our Green Lake, Texas, facility is one of the largest facilities for acrylonitrile and related products in the world. The second U.S. site is in Lima, Ohio, and is an integrated nitriles complex, producing acrylonitrile and related products, with access to feedstock from an adjacent refinery. Lima also manufactures acrylonitrile catalysts for other facilities on a global basis. In Europe, we manufacture at the former BASF site in Seal Sands in the north east of England and in Köln, Germany.

INEOS Oligomers operate from five sites split across Europe and North America. Joffre, in Alberta, Canada, is one of the newest linear alpha olefins units in the world and has access to low-cost ethylene feedstock derived from Canadian gas. The other North American asset is located in La Porte, Texas and it manufactures polyalpha olefins. In Europe, production of polybutene takes place in Lavéra, France, production of linear alpha olefins and polyalpha olefins occurs in Feluy, Belgium, and specialty oligomers are manufactured in Köln, Germany.

INEOS Oxide operates from six sites, in Antwerp, Belgium, Plaquemine, Louisiana, United States, Lavéra, France, Köln, Germany, Hull, United Kingdom, and a small facility in Freeport, Texas, United States. Our largest production facility is at the Antwerp complex on the coast of Belgium. This site has direct or indirect connections to four major ethylene pipelines linking it to most ethylene crackers in Northwest Europe. It also has pipeline connections to pipelines for nitrogen, oxygen, natural gas and ship/rail logistic capabilities for sourcing bulk feedstocks of propylene oxide, butadiene, acetic acid and alcohols. In addition, the site has its own jetty facility on the Schelde River which links it to the port of Antwerp and the Amsterdam-Rotterdam-Antwerp ("ARA") pipeline and with rail and road tanker loading facilities. We produce ethanolamine at our Plaquemine plant located on the Mississippi/Gulf Coast of the United States. This is a prime location for chemicals

production due to advantaged access to feedstock and direct access to sea jetties and close proximity to our customer base.

INEOS Phenol operates phenol and acetone plants at sites in Gladbeck, Germany; Antwerp, Belgium; and Mobile, Alabama in the United States. All three sites use our own proprietary technology, which has significant advantages in energy consumption and other factors over competing technologies. Our Gladbeck plant is located in the industrial heartland of Germany known as the *Ruhrgebiet*. It receives all of its raw materials by pipeline from our own production, as well as other suppliers, and the finished products go out by rail and truck with most customers situated within a 100 kilometer radius. It is the largest single train unit in the world. Our Antwerp site, the largest capacity site in the world, is located in the Antwerp industrial area with direct deepwater access. All of the cumene reaches the site via ship. The majority of the site's end-products are transported to customers by ship, with the balance being transported by road. Our Mobile, Alabama, United States, plant is located on Mobile Bay on the Gulf of Mexico, close to several major consumers. All cumene is supplied via ship mainly from producers on the Gulf Coast. About half of the phenol and acetone produced is transported via ship and barge while the balance goes out by rail and road.

INEOS Enterprises manufactures ammonia and nitric acid at the Köln complex in Germany. In October 2013, the vinyl acetate monomer facility in Saltend, Hull, United Kingdom was closed.

INEOS Technologies operates a catalyst production unit in Lima, Ohio, United States, but in general utilizes third parties for the toll manufacture of the majority of our catalyst and additives products.

Raw Materials and Energy

Acrylonitrile is manufactured from propylene, ammonia and air with the use of a special catalyst. Acrylonitrile is toxic and flammable and, unless chemical stabilizers are added for storage and shipment, can undergo an explosive chemical reaction. We employ safeguards to ensure the safe handling of nitriles, including the use of specially designed railcars and pipelines for transportation to nearby customers.

Ethylene is the primary feedstock for the production of the linear alpha olefins of INEOS Oligomers. In Joffre, ethylene is supplied from the neighboring, globally cost advantaged Nova facility. In Europe, the Feluy facility is supplied both by pipeline and now via the new INEOS deep-sea terminal. Poly alpha olefins are made by reacting selected linear alpha olefins together. The C4 olefin raffinate 1 is the feedstock for polyisobutylenes and is primarily supplied from the INEOS Lavéra cracker complex and occasionally purchased from other Mediterranean cracker facilities. Our unit in Lavéra, France is supplied feed primarily from within the site but supply can also be supplemented by the import of rail and marine cargos.

INEOS Oxide's principal raw material is ethylene. Our Antwerp complex is the largest chemical site in Europe and the largest ethylene consumer in Europe, and we benefit from this. This supply flexibility is further bolstered by access to or ownership of major ethylene deep sea terminals connected to the ARA pipeline network. We have short and medium-term contracts of one to five years that generally specify minimum and maximum volumes with several different suppliers. The cost of our key feedstock ethylene supply is based on a discount to the current Northwestern European contract price.

Cumene, which is made from the combination of benzene and propylene, is INEOS Phenol's main raw material. We acquire cumene from our suppliers pursuant to four different types of contractual arrangements. Under a toll contract, we supply the benzene and propylene required for the production of cumene to our suppliers, who then convert these inputs into cumene. For this service, we are charged a conversion fee reflecting the supplier's costs and a margin. Under the second type of contractual arrangement, the suppliers charge us for cumene according to contractually agreed formulas based on benzene and propylene market prices and agreed yield factors. A conversion fee is added to the charge. The third type of arrangement is the toll contract, discussed above, pursuant to which customers pay for or provide raw materials to us and receive, in exchange for a toll fee, corresponding phenol and acetone outputs in fixed proportions. Finally, we also make some incidental purchases of cumene in the open market. As a result of these arrangements, we are exposed to changes in the market contract and spot rates for benzene and propylene. We believe that our use of toll contracts with customers and formula-based contracts can reduce our exposure to raw material price fluctuations.

INEOS Enterprises' key raw material is natural gas. Natural gas is supplied from utility companies via pipeline from the German natural gas grid to the Köln plant to manufacture ammonia.

Customers and Contracts

INEOS Nitriles has approximately 200 customers worldwide, with the top 10 customers accounting for 74% of revenue. Major customers include, in Asia, Chi Mei, LG, Samsung and Toray, and, in Europe, Styrolution, Aksa, Dralon, Sabic and Styron. We are the only supplier to provide customers with the security of supply from capacity in the United States and in Europe and the only supplier to service all key regions of the world: United States, Europe and Asia (including the Indian subcontinent).

INEOS Oligomers has approximately 450 worldwide customers with its top 10 customers accounting for approximately half of revenue. Major customers typically include large polyethylene manufacturers, such as Dow Chemical and Nova, and leading lubricant, surfactant and drilling fluid companies.

INEOS Oxide sells most of its products to leading chemical manufacturers, including Dow, Cognis, Monsanto, DSM, Bayer, Indorama and DuPont. The majority of our sales are made pursuant to short- and medium-term market contracts of one to five years in duration. Under a long-term swap agreement entered into with Dow Chemical as part of the ethanolamine and GasSpecTM gas treating amines acquisition in February 2001, we swap a significant proportion of our ethylene glycol production from our Antwerp facilities for an equivalent volume of ethylene oxide production from Dow Chemical's ethylene oxide plant in Plaquemine. We generally determine the prices for our chemicals on a monthly or quarterly basis based on current market conditions, including raw material costs. Other than ethylene oxide prices, which are based on the European market price, our prices are generally based on the international market price.

INEOS Phenol sells to most of the major phenol and acetone consumers globally, including Bayer, Dow, Sabic, DSM, Evonik and Lucite, to name just a few. We generate approximately 65% of our total sales from our 10 largest customers with whom we have developed strong relationships over more than 50 years of doing business. Many of our sales contracts include provisions whereby raw material price changes are passed through automatically insulating our margins from volatile changes in raw material markets.

INEOS Enterprises sells its ammonia products predominantly to on-site internal customers for the production of acrylonitirile and nitric acid, but also supplies to external customers for a wide range of applications.

Research and Intellectual Property

The market position of our Chemical Intermediates business is supported by a range of technologies. Our main technology in this area is the proprietary fluid bed acrylonitrile process and related catalysts. We believe that this technology is the leading nitriles manufacturing technology and, we believe, it is used in more than 90% of the world acrylonitrile production. The other supplier of acrylonitrile technology, Asahi Kasei Corporation of Japan, tends to maintain the technology for its own use only, thus providing INEOS with considerable leverage in this sector.

INEOS Technologies as a business takes responsibility to focus resources onto more fundamental improvements of the capital operating costs of the different technology platforms, and catalyst and additive performance, including development of novel catalysts and additives. The operating businesses focus on applications and improvements to existing asset performance.

For example, since 1995, INEOS Phenol has filed in excess of 20 patent applications for new process technology, including acetone recycling, improvements in product quality and process optimization.

Our policy is to protect all of our significant technologies by seeking patents and where appropriate, defending and enforcing our intellectual property rights. We believe that this strategy allows us to preserve the advantages of the products we sell and the technologies we use and license, and helps us to maximize the return on our investment in research and development. We own, or have rights to, approximately 3,660 patents or patent applications (including patents pending), divided into approximately 450 patent families, in the United States, Europe and various other regions. In order to protect confidential technical information which is not subject to patent protection, we rely on trade secret law and frequently enter into confidentiality agreements with our employees, customers and partners.

While we believe that our intellectual property provides competitive advantages, we do not regard our business as being materially dependent on any single patent, trade secret or trademark.

In addition to our patents and trade secrets, we are party to licensing and other agreements authorizing us to use patents, trade secrets, confidential technical information and related technology owned by third parties and operate within the scope of patents owned by third parties.

In addition, we own a number of registered trademarks, including our Innovene brand. We police our existing trademarks and enforce our legal entitlements in situations where third parties infringe upon any of these rights.

Competition

Although INEOS Nitriles competes with numerous manufacturers of acrylonitrile, we are by far the largest producer in the world. In addition, 90% of the world's acrylonitrile capacity is based on our process technology. Our most significant competitor is Asahi Kasei Corporation, which is the market leader in Asia. Other competitors include Ascend in North America and DSM in Europe.

The main competitors for INEOS Oligomers in linear alpha olefins are Royal Dutch Shell, Chevron Phillips and Sasol Limited. For polyalphaolefins, major competitors include: Chevron Phillips and Exxon Mobil. For polyisobutylene, major competitors include: Daelim and TPC.

The main competitors of INEOS Oxide in the ethylene glycol, antifreeze, ethylene oxide and ethylene oxide derivatives markets are BASF, Shell and Dow Chemical, while those in acetate esters include BASF and E-Oxo. Our only competitor in the ethylidene norbornene monomer merchant market is JX Nippon Oil & Energy.

In Europe, the major competitors for INEOS Phenol are Cepsa, Novapex, Borealis and Versalis. In North America, our major competitors are Shell, Honeywell and Axiall.

Integration is the key factor supporting the competitive status for INEOS Enterprises. In the global market for ammonia, we face over 90 competitive production units located in 33 countries. Thirty of these units are within Western Europe.

The Refining Divestiture

On July 1, 2011, subsidiaries of Lux I disposed of (i) the Refining Business and the Entrepreneurial (Refining) Business to joint ventures formed between PetroChina and INEOS Investments and (ii) the Infrastructure Entity to a joint venture owned by INEOS Investments (50.0%) and the Refining Business JV (50.0%), herein referred to as the "Refining Divestiture." The disposal of the Refining Business, the Entrepreneurial (Refining) Business and the Infrastructure Entity was principally a disposal of the Refining segment of the INEOS Group as reported on the financial statements of IGH. It is expected that the Refining Divestiture will create a strong strategic partnership for the Refining Business, which is anticipated in turn will improve the long-term sustainability of the refineries, enhance security of supply for customers and secure jobs and skills in both the United Kingdom and France.

The Refining Business and the Entrepreneurial (Refining) Business disposed of in connection with the Refining Divestiture consist principally of the crude oil refining operations carried out at the refineries located at Grangemouth, Scotland, and Lavéra, France, and related entrepreneurial activities, as reported on the historical financial statements of IGH under the Refining segment. The Refining Divestiture also involved the transfer to the Infrastructure Entity of certain related infrastructure assets (principally a power station in Grangemouth, Scotland, and a terminal and other facilities). Following the Refining Divestiture, the INEOS Group and the Refining Business share certain assets and will continue to rely on each other for certain goods and services, which include the purchase of feedstock by the INEOS Group from the Refining Business JV, the sale by the INEOS Group of certain hydrocarbons to the Refining Business JV and the provision of certain administrative services to each other (such as security, emergency response, accounting, employee relations, procurement and site management). The Infrastructure Entity acquired the related infrastructure assets and provides certain infrastructure goods and services (such as power and access to terminals) to the INEOS Group and the Refining Business JV. The Infrastructure Entity was transferred by the INEOS Group as part of the Refining Divestiture and is jointly owned by INEOS Investments and the Refining Business JV. Upon the consummation of the Refining Divestiture, service and asset-sharing arrangements were executed to govern the ongoing use of the shared infrastructure and services.

As a result of the Refining Divestiture and related transactions, on July 1, 2011, we received cash proceeds (after expenses) equal to €674.2 million and 400 shares in INEOS Investments, subscribed for at an aggregate subscription price of \$1.015 billion. For more information, please see Note 3 "Disposals" to the audited consolidated financial statements of INEOS Group Holdings S.A. included elsewhere in this annual report. Subsequently, in October 2011, we paid our counterparty to the Refining Divestiture an amount equal to €16.2 million out of cash on hand as part of the agreed completion adjustment mechanics. The ordinary shares have the right to receive an amount equal to all amounts received by INEOS Investments (net of a good faith estimate of its audit, company secretarial and other administrative expenses, as determined by the directors of INEOS Investments) in respect of its investments, including its equity interest in the Refining and Entrepreneurial JVs and the Infrastructure Entity, and INEOS Investments shall be obliged to distribute to the INEOS Group, subject to applicable legal requirements, in the form of dividends or as a return of capital, all amounts received by it in respect of such investments, less such audit, company secretarial and other administrative expenses. For so long as any amounts under the Senior Secured Term Loans Agreement and any of the 2016 IGH Notes are outstanding, a holder of the ordinary shares will be entitled to receive all returns of a capital nature made by INEOS Investments, including upon a merger, sale or similar transaction involving, or a winding-up or liquidation of, INEOS Investments. While we do not have voting control of INEOS Investments, the INEOS Group does retain the majority of the current economic benefits of the entity as we are entitled to receive the foregoing amounts through the ordinary shares we hold. By virtue of the Group's retained economic interest in INEOS Investments, the INEOS Group consolidates INEOS Investments as a subsidiary in its consolidated financial statements. The investments in the Refining Business held by INEOS Investments are therefore accounted for as investments in joint ventures in the consolidated financial statements of the INEOS Group. Once all amounts under the Senior Secured Term Loans Agreement have been repaid and the 2016 IGH Notes have been redeemed or repaid, on a return of capital or on a winding up of INEOS Investments (or otherwise), the holders of the ordinary shares shall be entitled to, in priority to any payment to holders of any other class of shares, \$1.015 billion of the total capital returned to the voting shareholders. The ordinary shares are unsecured equity interests. Subject to applicable law, the ordinary shares do not carry voting rights other than class voting rights in relation to changes in the Articles of Association of INEOS Investments that would affect the rights of the ordinary shares, including the issuance of shares ranking pari passu or prior to the ordinary shares, or in relation to any proposal to wind-up INEOS Investments. Except with respect to the limited class voting rights of the ordinary shares, the voting shares of the principal shareholders of IGH have 100% of the voting rights of INEOS Investments.

On July 29, 2011, we used the net cash proceeds from the Refining Divestiture along with cash on hand to permanently repay €646.1 million of term loans and the associated €30.7 million of PIK interest under the 2010 Senior Facilities Agreement. In connection with the Refining Divestiture, on July 1, 2011, the INEOS Group also repaid the 2005 Senior Secured Credit Facilities with cash on hand.

The Lavéra refinery is integrated to INEOS-owned and JV petrochemical assets at the Lavéra site. This integration allows maximization of the value from hydrocarbon flows between refining and petrochemicals, as well as to leverage the sites' infrastructure, energy management, shared services and workforce. Upon the consummation of the Refining Divestiture, service and asset-sharing arrangements were executed to govern the ongoing use of the shared infrastructure and services. We do not anticipate any interruption to these services or the provision of feedstocks that flow into our remaining three business segments, as discussed further under the caption "Refining Divestiture—Contractual Arrangements with the Refining and Entrepreneurial JVs".

The Grangemouth Divestiture

On October 1, 2013, the Group completed the Grangemouth Divestiture which comprised the disposal of its Grangemouth petrochemicals operations, including the assets and pension and other liabilities, to a newly created subsidiary of INEOS Holdings AG, our indirect parent company. The Grangemouth Divestiture was implemented due to concerns that the operations carried out by INEOS Commercial Services UK Limited and INEOS Chemicals Grangemouth Limited at the Grangemouth site had been loss-making for the previous four years, primarily due to a high fixed-costs base at the Grangemouth site and a decline in suitable feedstock supplies and the need to implement a survival plan for the business in order to improve its cost base and to enable it to invest in new infrastructure to allow the site to import gas from the U.S. by 2016.

Prior to the completion of the Grangemouth Divestiture:

(A) INEOS Commercial Services UK Limited transferred certain assets and liabilities which did not primarily relate to its Grangemouth petrochemicals operations to INEOS Sales (UK) Limited and, in connection with this transfer, INEOS Sales (UK) Limited acceded as a

guarantor to the Senior Secured Term Loans, the 2019 Senior Secured Notes, the 2020 Senior Secured Notes, the Existing IGH Notes and granted security over substantially all of its assets in accordance with the requirements of the Senior Secured Term Loans, the 2019 Senior Secured Notes and the 2020 Senior Secured Notes;

- (B) INEOS Europe AG transferred certain assets and liabilities to INEOS Commercial Services UK Limited, primarily related to the Grangemouth petrochemicals operations, the intention being that all commercial activities associated with such operations be consolidated within INEOS Commercial Services UK Limited; and
- (C) INEOS Commercial Services UK Limited transferred to INEOS Sales (UK) Limited certain goods and materials stored at warehouses in Italy.

Completion of the Grangemouth Divestiture was effected by INEOS European Holdings Limited disposing of all of the shares in INEOS Chemicals Grangemouth Limited and INEOS Commercial Services UK Limited (the companies carrying on the Grangemouth petrochemicals operations and holding the related assets and pension and other liabilities) to INEOS Grangemouth Limited, an indirect subsidiary of INEOS AG which lies outside of the Group. The fair market value of the shares was determined to be €nil and the shares in each company were therefore transferred for a nominal consideration. In connection with the share transfers, INEOS Chemicals Grangemouth Limited and INEOS Commercial Services UK Limited were automatically released from their obligations under the Senior Secured Term Loans, the 2019 Senior Secured Notes, the 2020 Senior Secured Notes and the Existing IGH Notes and the security granted over their shares and assets was released in accordance with the terms of the Senior Secured Term Loans, the 2019 Senior Secured Notes and the 2020 Senior Secured Notes.

The plan formulated for the survival of the Grangemouth operations requires a total investment of €350 million over the next three years. This investment includes €150 million to build the infrastructure needed to allow the site to import gas from the U.S. It is proposed that this investment will be funded through borrowings supported by the U.K. government's Infrastructure Guarantee Scheme, for which the separate Grangemouth business will now be eligible. As part of this plan, IHL has also made available to INEOS Commercial Services UK Limited a €200 million revolving credit facility to fund the ongoing operations and investments required by the Grangemouth business. The revolving credit facility is guaranteed by INEOS Chemicals Grangemouth Limited and secured by the assets of both INEOS Commercial Services UK Limited and INEOS Chemicals Grangemouth Limited. As of December 31, 2013, €20 million has been drawn on the revolving credit facility by INEOS Commercial Services UK Limited.

Contracts have been put in place to ensure that the companies in the INEOS Group retain access to the chemical feedstock (primarily naphtha) produced by the Refining JV at Grangemouth, following the separation of the Grangemouth petrochemicals business from the INEOS Group in the Grangemouth Divestiture. Historically, the majority of naphtha feedstock produced by the Grangemouth refinery is exported and delivered to other INEOS Group companies as a Chemical Intermediate feedstock. Pursuant to these arrangements, the INEOS Group retains access to the feedstocks that are a key part of the supply chain for the retained business segments, thereby contributing to the long-term viability, security and profitability of our businesses.

Refining Divestiture and Grangemouth Divestiture

In connection with the Refining Divestiture, we disposed of the Refining Business. The Refining Business, which included the refineries at Lavéra, France, and Grangemouth, United Kingdom, was transferred into new joint ventures formed between PetroChina and INEOS Investments. See "The Refining Divestiture."

The refinery at the Lavéra site is (and, prior to the Grangemouth Divestiture, the refinery at the Grangemouth site was) integrated to INEOS-owned and JV petrochemical assets. This integration allows maximization of the value from hydrocarbon flows between refining and petrochemicals, as well as to leverage the site's infrastructure, energy management, shared services and workforce. Upon the consummation of the Refining Divestiture, service and asset- sharing arrangements were executed to govern the ongoing use of the shared infrastructure and services. See "The Refining Divestiture." Similarly, at the Grangemouth site, contracts have been put in place in connection with the Grangemouth Divestiture to ensure that the companies in the INEOS Group retain access to the necessary feedstocks produced by the Refining JV. See "The Grangemouth Divestiture." We do not anticipate any interruption to these services or the provision of feedstocks that flow into our remaining three business segments discussed below.

Contractual Arrangements with the Refining and Entrepreneurial JVs

To ensure that the companies in the INEOS Group retain access to the feedstocks provided by the Refining and Entrepreneurial JVs, we have entered into several contractual arrangements with the Refining and Entrepreneurial JVs and the Infrastructure Entity. Pursuant to these arrangements, the INEOS Group will retain access to the feedstocks that are essential to the retained Business segments, thereby contributing to the long-term viability, security and profitability of our businesses.

Below are several of the key steps that we have taken to facilitate the ongoing relationship between the Refining and Entrepreneurial JVs and the INEOS Group:

- Secure competitive and reliable chemicals feedstock supplies.
 - Naphtha. We have entered into a long-term agreement with the Refining and Entrepreneurial JVs for the continued provision of the naphtha supply that we have historically received from the Refining Business, on substantially similar commercial terms as those that governed the inter-INEOS Group transfer for the supply of naphtha previously.
 - Refining and Chemical Intermediates. The feedstock synergy between the Refining Business and Chemicals Intermediates Business in respect of other feedstock streams has been retained via similar long-term and market-based agreements, on essentially the same commercial terms as the historical internal transfer terms.
 - *BP Agreement*. The INEOS Group will continue to benefit from the North Sea feedstock supply agreement between the Refining and Entrepreneurial JVs.
- Obtain competitive and reliable utilities supplies.
 - Lavéra. At Lavéra, the utilities provision to the separate businesses (including the Refining and Entrepreneurial JVs and the plants retained by the INEOS Group) is largely standalone; therefore, we do not anticipate that the Refining Divestiture will have an impact on utilities supply to our businesses located on that site. We have entered into several agreements with INEOS Manufacturing France SAS to govern situations in which if either party experiences a disruption in its utility supply, the other party would be obliged to provide the necessary supply, subject to the terms of the agreement, until such service is restored.
- Retain access to shared infrastructure on the Lavéra site. In some cases on the integrated site at Lavéra, the site businesses have enjoyed shared access to certain infrastructure assets. We have entered into long-term agreements with the Infrastructure Entity, on essentially the same terms as were available to the businesses historically, to maintain access to these infrastructure assets for us and the Refining and Entrepreneurial JVs.
- Include protective mechanisms in all of the long-term shared infrastructure and utilities agreements to ensure long-term fair access for all parties. To ensure that all parties are able to maintain access to the shared infrastructure and utilities discussed above, the infrastructure and utilities agreements contain protective mechanisms that will prevent either party from being able to interfere with the other party's access to the key shared infrastructure and utilities, thereby leaving one party without access to the required services.
- Maintain the historical synergy value between the Refining and the Chemical Intermediates
 businesses. The post-Refining Divestiture contractual arrangements include a continued long-term
 exchange of key streams between the Refining and Entrepreneurial JVs and the businesses retained
 by the INEOS Group on essentially the same commercial terms as were the case historically.
 Therefore, the INEOS Group will continue to benefit from the historical share of the synergy
 benefit.

Key site shared services have been retained for the benefit of all site businesses. At Lavéra, the Refining and Entrepreneurial JVs host the provision of the shared services, and will make these services available to the businesses retained by the INEOS Group. The site shared services will continue to be provided to all parties on essentially the same terms as was the case historically.

Contractual Arrangements with the Grangemouth petrochemicals business

Contracts have been put in place to ensure that the companies in the INEOS Group retain access to the chemical feedstock (primarily naphtha) produced by the Refining JV at Grangemouth, following the separation of the Grangemouth petrochemicals business from the INEOS Group in the Grangemouth Divestiture. Historically, the majority of naphtha feedstock produced by the Grangemouth refinery is exported and delivered to other INEOS Group companies as a Chemical Intermediate feedstock. Pursuant to these arrangements, the INEOS Group retains access to the feedstocks that are a key part of the supply chain for the retained business segments, thereby contributing to the long-term viability, security and profitability of our businesses.

To maintain the security of supply of feedstocks from the Refining JV to the INEOS Group, while ensuring the Grangemouth petrochemical business assets have access to historical levels of Grangemouth feedstock, the following arrangement is in place between INEOS Europe AG ("IEAG"), a member of the INEOS Group, and INEOS Commercial Services (UK) Limited ("ICSUKL"), one of the entities divested in the Grangemouth Divestiture:

• Naphtha. IEAG has a long-term agreement with the Refining JV for the purchase of all of the refinery naphtha produced at Grangemouth. In order to ensure that ICSUKL has access to historical levels of naphtha, ICSUKL has a contract with IEAG to buy its required quantities of naphtha needed by the Grangemouth G4 cracker. The Grangemouth G4 cracker is scheduled to close by 2016 at which point IEAG will retain the full refinery production volumes produced at Grangemouth.

To retain flexibility on polymer sales, and thus optimisation of value for the INEOS Group businesses, the polymer production at Grangemouth is sold to market through the INEOS Group Limited Risk Distributor companies ("LRDs"). The proceeds of the sales through the LRD network sales are transferred back to ICSUKL less an agreed sales margin.

Contracts have also been put in place between the divested U.K. companies and IEAG for the purchase of ethylene and propylene for IEAG's Belgium polymer plants in Geel, Lillo and Feluy in order to secure their access to raw materials.

Research and Technologies ("R&T")

We consider R&T to be a key element of both the short-term performance and the long-term growth of our business. The majority of our R&T work is performed by INEOS Technologies. The balance is carried out by individual businesses for their own specific purposes.

Our R&T work has three principal objectives:

- minimize production costs with a view to increasing the margins that can be achieved in the manufacture and sale of our products;
- make better products in order to sustain or capture more margin or market share; and
- reduce capital costs to minimize the investments necessary to meet demand.

A substantial portion of our R&T expenditure is dedicated to the continuous improvement of our existing processes, products, assets and operations and is intended to yield returns in less than two years. This R&T work is carried out by a combination of integrated teams based at our facilities and centrally located specialists and research teams in one of our R&T centers. In addition, we carry out longer-term projects targeted at more fundamental improvements, which we typically intend to yield returns within two to five years. We protect our process technologies and products by seeking patents or retaining them as trade secrets.

We believe that the quality of our scientific staff is important to our success. The employees working in our R&T centers have comprehensive expertise in a variety of areas, including catalysis, process development, product and material science, modeling and project management. Our R&T project teams also have commercial expertise. We consistently aim to improve the effectiveness of our R&T efforts by targeting our projects at the most valuable applications and using project management tools to monitor progress. To attract and retain the best-qualified scientists and develop a high level of capability and competence in the key areas of processes, products and operations, we offer our employees challenging development opportunities and a competitive compensation package that is aligned with performance of the relevant business in both the short and long term.

We also draw on external resources to enhance the scope, depth and effectiveness of our internal R&T efforts. We proactively seek mutually beneficial partnerships with third parties, including other petrochemical companies and leading universities.

Facilities

We currently lease the office space for our principal executive offices, which are located in Rolle, Switzerland. We also lease administrative, technical and sales office space in various locations in the countries in which we operate.

Our production network comprises 27 manufacturing facilities in eight countries throughout the world. The following table provides information regarding these facilities:

Country	Location ⁽¹⁾	Business	Principal products manufactured	Capacity ⁽²⁾
Belgium	Doel ⁽³⁾	Phenol	Phenol, acetone	1,105 kta
	Feluy	Oligomers	Linear alpha olefins, poly alpha olefins	435 kta
	Geel	O&P Europe	Polypropylene	290 kta
	Lillo	O&P Europe	Polypropylene, high-density polyethylene	530 kta
	Zwijndrecht	Oxide	Ethylene oxide, ethylene glycol, ethylene oxide derivatives, ethylidene norbornene monomer, Buthyl acetate	1,105 kta
Canada	Joffre	Oligomers	Linear alpha olefins	275 kta
France	Lavéra ⁽⁴⁾	O&P Europe	Ethylene, propylene, butadiene, benzene, high-density polyethylene, polypropylene	1,290 kta
		Oligomers Oxide	Polyisobutylene Ethylene oxide, ethylene oxide derivatives, oxo alcohols	80 kta 610 kta
	Sarralbe	O&P Europe	Polypropylene, high-density polyethylene	270 kta
Germany	Gladbeck	Phenol	Phenol, acetone, alpha methyl styrene	1,105 kta
	Köln	Enterprises	Ammonia, nitric acid ⁽⁵⁾	1,235 kta
		Nitriles	Acrylonitrile and related products	410 kta
		O&P Europe	Ethylene, propylene, butadiene, benzene, low-density polyethylene, linear low-density polyethylene	3,030 kta

Country	Location ⁽¹⁾	Business	Principal products manufactured	Capacity ⁽²⁾
		Oligomers	Isoolefins, isoparaffins, specialties	100 kta
		Oxide	Ethylene oxide and derivatives, ethylene glycol, Propylene oxide, Propylene glycol, oxo alcohols	800 kta
	Marl ⁽⁶⁾	Phenol	Cumene	260 kta
Italy	. Rosignano	O&P Europe	High-density polyethylene	200 kta
Norway		O&P Europe	Low-density polyethylene	150 kta
	Rafnes ⁽⁷⁾	O&P Europe	Ethylene, propylene	340 kta
United Kingdom	. Hull	Oxide	Ethyl acetate	235 kta
	Seal Sands	Nitriles	Acrylonitrile and related products	360 kta
United States	. Battleground	O&P North America	High-density polyethylene, polypropylene	950 kta
	Carson	O&P North America	Polypropylene	230 kta
	Cedar Bayou ⁽⁸⁾	O&P North America	High-density polyethylene	150 kta
	Chocolate Bayou	O&P North America	Ethylene, propylene, butadiene, polypropylene	2,685 kta
	Freeport	Oxide	Gas treating amines	12 kta
	Green Lake	Nitriles	Acrylonitrile and related products	680 kta
	Hobbs	O&P North America	Ethane/propane mix, propane	1,455 kta
	La Porte Lima	Oligomers Nitriles	Poly alpha olefins Acrylonitrile and related products	80 kta 230 kta
	Mobile Plaquemine	Technologies Phenol Oxide	Acrylonitrile catalyst Phenol, acetone Ethanolamines	2 kta 875 kta 175 kta

⁽¹⁾ We own all of the production facilities except where otherwise indicated.

- (5) Nitric acid plant owned by third party, operated by INEOS.
- (6) Plant owned by INEOS Enterprises.
- $(7) \hspace{1cm} \textbf{The business is a 50/50 joint venture with Kerling. Capacities shown are the IGH's share of the activities. } \\$
- (8) A 50/50 joint venture with Chevron Phillips, operated by Chevron Phillips. The capacities shown are the INEOS share of the activities.

⁽²⁾ The unit kta is kilo-tonnes per annum.

⁽³⁾ We own the production assets, but lease the land under a long- term lease that expires in 2040.

⁽⁴⁾ This facility consists of a combination of units fully owned by us and various 50/50 joint ventures with Total Petrochemicals, France. The refining capacity was disposed of on July 1, 2011, in connection with the Refining Divestiture, but we still have access to the capacity through our contracts with the Refining and Entrepreneurial JVs. See "The Refining Divestiture."

Health, Safety, Security and Environment

Overview

Our facilities and operations are subject to a wide range of health, safety, security and environmental ("HSSE") laws and regulations in all of the jurisdictions in which we operate. These requirements govern, among other things, the manufacture, storage, handling, treatment, transportation and disposal of hazardous substances and wastes, wastewater discharges, air emissions (including GHG emissions), noise emissions, operation and closure of landfills, human health and safety, process safety and risk management and the clean-up of contaminated sites. Many of our operations require permits and controls to monitor or prevent pollution. We have incurred, and will continue to incur, substantial ongoing capital and operating expenditures to ensure compliance with current and future HSSE laws, regulations and permits or the more stringent enforcement of such requirements.

Violations of HSSE requirements may result in substantial fines or penalties, the imposition of other civil or criminal sanctions, cleanup costs, claims for personal injury, health or property damages, requirements to install additional pollution control equipment, or restrictions on, or the suspension of, our operating permits or activities. At certain sites where we operate, regulators have alleged or we have otherwise learned that these sites may be in non-compliance with HSSE laws and/or the permits which authorize operations at these sites. Some of these allegations or instances of non-compliance are ongoing, and substantial amounts may need to be spent to attain and/or maintain compliance. In addition, we have in the past paid, and in the future may pay, penalties to resolve such matters. Our businesses and facilities have experienced, and in certain cases, are in the process of investigating or remediating, hazardous materials in the soil and groundwater at locations where we operate and/or adjacent properties and/or natural resources at public and private lands not owned by us. We are also in the process of investigating and remediating contamination at certain sites where our facilities disposed of hazardous wastes. In addition, HSSE laws and regulations can impose various financial responsibility requirements on us, and pursuant to these requirements we may be required to post bonds, create trust funds or provide other assurances that we will be able to remediate contamination at our sites and comply with our decommissioning obligations once our facilities reach the end of their useful lives.

Other HSSE laws and regulations may impose product or raw material use, import or sale restrictions on us or on our customers. For example, it is possible that certain of our products or by-products or the raw materials we use may, in the future, be classified as hazardous or harmful, which could impact our production or demand for our products and, in turn, could materially and adversely affect our business and/or results of operations.

We believe that our operations are nonetheless currently in material compliance with all HSSE laws, regulations and permits. We actively address compliance issues in connection with our operations and properties and we believe that we have systems in place to ensure that environmental costs and liabilities will not have a material adverse impact on us. Nevertheless, estimates of future environmental costs and liabilities are inherently imprecise, and the imposition of unanticipated costs or obligations could have a material adverse effect on our business, financial condition or results of operations in any period in which those costs are incurred.

Major Regulatory Matters and Developments

Climate Change Regulations and Initiatives

EU Emissions Trading Scheme

Our operations in Europe are covered by the European Union Emissions Trading Scheme ("EU ETS"), an EU-wide trading system for industrial GHG emissions. Industrial sites receive or purchase allowances to emit GHGs and must surrender one allowance for each ton of carbon dioxide emitted. Companies which emit less GHGs than their allowances cover are able to sell the excess allowances, whereas those which emit more must buy additional allowances through the EU ETS.

U.S. Clean Air Act and Climate Change Regulations

In the United States, the federal Clean Air Act ("CAA") regulates air emissions from various sources and requires, among other things, monitoring of specified pollutants, including hazardous air pollutants,

stringent air emission limits and technological controls to reduce emissions to air. Strict federal and state controls on ozone, carbon monoxide, benzene, sulphur dioxide, nitrogen oxide and other emitted substances impact our activities and increase our operational costs in the United States.

Growing concern about the sources and impacts of global climate change has led to a number of legislative and administrative measures, both proposed and enacted, to monitor, regulate and limit carbon dioxide and other GHG emissions. For example, we are required to monitor and report to EPA annual GHG emissions from certain of our U.S. facilities. In addition, EPA is moving forward with efforts to regulate GHG emissions under the CAA and other existing legislation as comprehensive climate change legislation has not yet been enacted by the U.S. Congress. For example, EPA has promulgated regulations which subject the GHG emissions of certain newly constructed or modified facilities to pre-construction and operating program requirements. Pursuant to these requirements, newly-constructed or modified facilities with the potential to emit certain quantities of GHGs are required to implement "best available control technology," which include carbon efficiency standards, GHG emission concentration limits, the imposition of specific technology requirements, or other measures. In addition, EPA is in the process of developing "new source performance standards" under section 111 of the CAA. Significant uncertainty exists as to how GHG regulations will in the future impact large stationary sources, such as our facilities in the United States, and what costs or operational changes these regulations may require. We continue to monitor the situation closely.

In addition, EPA has finalized or proposed several rules relating to emissions reporting and emissions reductions, including rules known as the "Boiler MACT", which establish new standards for emissions of hazardous air pollutants from commercial and industrial boilers. Significant capital expenditures could be required for emissions control equipment in order to comply with the Boiler MACT rules by January 2015.

In the United States, stringent controls on nitrogen oxides and ozone emissions, and/or the need to purchase nitrogen oxide emissions credits for certain facilities, impact our operations and, indirectly, the cost of our products. Credit pricing is subject to general economic conditions, but we believe such credits should remain available and affordable. EPA issued revised ozone standards in 2013 that will require states to restrict or prohibit emissions that "significantly contribute" to non-attainment of, or interfere with a state's ability to maintain, the revised ozone standard in other "downwind" states. As a result, emissions permits issued by states and/or the federal government to facilities such as ours could contain stricter limits for nitrogen oxides, including best available control technology, or other operating limitations that could cause us to incur additional compliance and/or capital costs and/or adversely impact our production and our results of operations. For example, in Ontario, Canada, air pollution regulations, enacted pursuant to the Environmental Protection Act, were amended to include benzene on the list of substances subject to Point of Impingement emissions standards.

At the international level, in December 2009 more than 27 nations, including the United States and China, signed the Copenhagen Accord, which includes a non-binding commitment to reduce GHG emissions. The international community is continuing to negotiate a binding treaty that would require reductions in GHG emissions by developed countries. In particular, the UNFCCC negotiations held in Durban at the end of 2011 resulted in an agreement by the parties to the convention to extend the Kyoto Protocol for up to eight years and to develop a global mitigation regime which would take effect by 2020. Although we believe it is likely that GHG emissions will be regulated in the U.S. and other countries (in addition to the EU) in the near future, we cannot yet predict the form such regulation will take (such as a cap-and-trade program, technology mandate, emissions tax or other regulatory mechanism) or, consequently, to estimate any costs that we may be required to incur, for example, to install emissions control equipment, purchase emissions allowances or address other regulatory obligations. Such requirements could also adversely affect our energy supply or the costs (and types) of raw materials we use for fuel. Regulations controlling or limiting GHG emissions could have a material adverse impact on our business, financial condition or results of operations, including by reducing demand for our products.

The Registration, Evaluation, and Authorization of Chemicals ("REACH") Regulation, the Classification, Labeling and Packaging Regulation ("CLP"), the Toxic Substance Control Act ("TSCA") and the Canadian Environmental Protection Act ("CEPA")

The EU regulates chemical products within the EU by imposing on all affected industries the responsibility for ensuring and demonstrating the safe manufacture, use and disposal of chemicals. The REACH Regulation, which came into effect in 2007, requires the registration of all chemicals manufactured and imported into the EU (either alone, in mixtures or in articles) with the new European Chemicals Agency ("ECHA"). The regulation requires formal documentation of the relevant data required for hazard assessments for each substance registered as well as development of risk assessments for their registered uses. Most uses of

high hazard substances, such as carcinogens, will require authorization by the ECHA. REACH requires extensive toxicological data, documentation and risk assessments for many of our chemical products and raw materials. As a corollary to the REACH Regulation, the EU has recently adopted the CLP Regulation to harmonize the EU's system of classifying, labelling and packaging chemical substances with the United Nation's Globally Harmonized System. The Regulation is expected to standardize communication of hazard information of chemicals and to promote regulatory efficiency. It introduces new classification criteria, hazard symbols and labelling phrases, while taking account of elements that are part of the current EU legislation.

In the United States and Canada, our products and raw materials are subject to extensive environmental, health and industrial hygiene regulations, including under TSCA and the CEPA, requiring the registration and safety analysis of the substances contained in them. EPA is undergoing a reassessment of TSCA which may result in additional or more stringent regulatory testing, labelling and notification requirements. The U.S. OSHA has also promulgated a hazard communication regulation intended to harmonize the U.S. system of Material Safety Data sheet hazard information with the UNs globally Harmonized System. The U.S. regulation is currently being phased in with compliance dates running from December 1, 2013 through June 1, 2016.

Such regulations could result in a key raw material, chemical, or other substance being classified or reclassified as having a toxicological or health- related impact on the environment, users of our products, or our employees. Such reclassification of any of our raw materials or products could affect its availability of marketability, result in a ban on its purchase or sale, or require us to incur increased costs to comply with notification, labelling, or handling requirements.

Risk Management—Prevention of Major Accidents and Process Safety

Risks are inherent in the chemical and petrochemical businesses, particularly risks associated with safety, health and the environment, and each of our facilities actively assesses and manages such risks as required by law. Within the European Union, an EU directive on the control of major accident hazards (the "Seveso II Directive"), regulates facilities that present a risk of accidents involving dangerous substances and imposes specific plans and procedures on them, particularly for the storage of such substances. The Directive provides for control measures aimed at preventing and limiting the consequences of major accidents. All of our major production sites are in the top tier of regulation under the Directive due to the quantity of dangerous substances stored at them. As such, we must establish a major accident prevention policy, safety reporting system, safety management system and emergency plan compliant with the requirements of the Directive.

In the United States, all of our manufacturing facilities are subject to EPA's Risk Management Program ("RMP"), which requires facilities that produce, handle, process, distribute or store certain highly hazardous chemicals to develop a risk management plan and program in the event of an accidental release of such chemicals. RMP also requires facilities to assess potential impacts to off-site populations in the event of a credible worst-case release and to document the policies, procedures, equipment and work practices in place to mitigate identified risks. Similar risk management requirements are imposed upon our facilities under the Emergency Planning and Community Right-to-Know Act, which contains chemical emergency response planning, accident release and other reporting and notification requirements applicable to our U.S. manufacturing facilities.

In addition, our U.S. facilities are subject to the OSHA Process Safety Management ("PSM") standard, which requires development of a program to manage workplace risks associated with highly hazardous chemicals. To better manage risks and process safety we pursue certifications within OSHA's Voluntary Protection Program ("VPP"), and in 2010, our Green Lake and Battleground (Houston) sites were certified to Star status, the highest level achievable. In addition, our largest North American site (Chocolate Bayou) achieved Star status in late 2013. Star level means that the site has successfully implemented a safety and health management system and achieved a combined injury and illness rate that is below the industry rate nationwide. The American Petroleum Institute ("API") issued a new recommended practice (API 754) to standardize the reporting of PSM incidents in 2010. The American Fuel and Petrochemical Manufacturers association (formerly known as National Petrochemical and Refining Association) have endorsed this recommended practice, and INEOS' North American operations began contributing to the database in 2011.

Programs employed to manage PSM risks include instrumentation and overpressure relief devices. ISA 84 is an international standard that addresses the application of safety-instrumented systems for process industries. We expect to incur approximately €10 million to €15 million in costs between 2012 and 2015 in meeting this standard. Our pressure relief systems are all designed in accordance with relevant legal (OSHA, ASME, NFPA, PED, ISO), industry (API, DIERS), and internal standards. As these standards and their

interpretation evolve, issues of use and sizing of pressure relief systems are addressed on a priority basis. While the issues at any individual site are not anticipated to be material, the aggregate spend on relief device corrections over the next five year period are expected to be on the order of $\bigcirc 10$ million to $\bigcirc 15$ million.

In addition, all of our businesses are aware that effective safety management is consciously required to address and deal with major accident and process safety risks. We promote personal leadership for the management of these risks and our Business Board of Directors operates a business "Letter of Assurance" process whereby each of the Operations Directors/Site Managers reviews compliance with local regulations and the effectiveness of the safety management system. They then formally inform their Executive Team and Chief Executive in writing about any issues about which they need to be concerned. This process is intended to provide assurance that all businesses are in compliance in all material respects with applicable health, safety and environmental laws in the countries in which they operate.

Environmental Remediation and Closure Liabilities

Many of our sites have an extended history of industrial chemical processing, storage and related activities, and sites with known or suspected contamination exist. We are currently, and from time to time have been or may be, required to investigate and remediate releases of hazardous materials or contamination at or migrating from certain of these sites, as well as properties we formerly owned, leased or operated. We could also be responsible for investigating and cleaning up contamination at off-site locations where our predecessors or we disposed of or arranged for the disposal or treatment of hazardous wastes. Under some environmental laws, liability can be imposed regardless of whether the owner or operator knew of or caused the contamination and regardless of whether the practices that resulted in the contamination were legal at the time they occurred. In connection with contaminated properties, as well as our operations generally, we also could be subject to claims by government authorities, individuals and other third parties seeking damages for alleged personal injury or property damage resulting from hazardous substance contamination or exposure caused by our operations, facilities or products.

Baseline surveys of soil and groundwater conditions were conducted at many of our sites in the EU in connection with obtaining our IPPC permits, and such data was reported to the relevant authorities. In addition, many of our other sites were the subject of intrusive investigations when they were acquired by us or in connection with historical activities or operational changes over the years. The process of investigation and remediation can be lengthy, varies from site to site and is subject to changing legal requirements and developing technologies. We are not currently aware of any additional sites as to which material claims or clean-up obligations exist. The discovery of previously unknown contamination, however, or the imposition of new obligations to investigate or remediate contamination at our facilities, could result in substantial unanticipated costs. We could be required to establish or substantially increase financial reserves for such obligations or liabilities and, if we fail to accurately predict the amount or timing of such costs, the related impact on our business, financial condition or results of operations in any period in which those costs need to be incurred could be material.

Product Stewardship and Innovation

While many of our products have some hazardous properties, some of them require specialized handling procedures due to their acute and chronic toxicity. Our polymer products have widespread end uses in a variety of tightly regulated consumer industries, including in food packaging and medical applications. To manage these risks, our product stewardship team works closely with industry associations, government regulators and others to develop regulations, which are based in science and are commensurate with the magnitude of the risk.

Security and Crisis Management

The U.S. Department of Homeland Security ("DHS") requires compliance by our facilities as defined in the Marine Transportation Security Act ("MTSA"), the Chemical Facilities Anti-Terrorism Standards and U.S. Department of Transportation Hazardous Materials regulations.

Railroad transportation of hazardous chemicals was assessed for each location. Where high-risk chemicals were loaded, stored or shipped, security plans and additional security equipment were required. Negotiations on new legislation proposed in the United States are continuing.

The DHS, the U.S. Federal Emergency Management Administration and individual state emergency management regulators require that all sites hosting emergency response teams train responders to the National Incident Management System ("NIMS") standards. It is required that the emergency response teams and incident management teams have the knowledge, skills and equipment to allow them to work in concert with local, state, and Federal agencies in the manner defined by NIMS. Training is conducted at all sites to meet this requirement. This allows the site responders to join with the governmental groups in cases of widespread emergencies, including pandemics, where multiple agencies and organizations are involved.

HSSE Principles

We remain very strongly committed to excellent HSSE performance and believe we are a top decile performer within the chemicals industry. In 2013, INEOS converted our safety performance monitoring to mirror the U.S. OSHA standard. This enabled a common platform for comparisons and increased the number and types of injury data collected and analyzed. INEOS's OSHA rate for the total workforce was 0.52 injuries per 200,000 hours. We strive to operate throughout the world with a commitment to doing what is needed to protect the environment and to comply with all applicable regulations in the countries in which we operate. Our focus is on prevention of process safety incidents and we have developed internal audit programs (20 HSSE principles) designed to monitor and correct any deviations from acceptable performance.

Our aim is to avoid injuries to the community, employees and contractors. We focus on reducing major plant losses of containment of chemicals with health and safety impact. Core to our HSSE standards is our HSSE policy, which promotes Executive management and individual responsibility, adherence to operating procedures and training and requires our sites to be designed, operated and managed with the goal of preventing major incidents.

Employees

As of December 31, 2013 we had approximately 6,800 employees (measured as full-time equivalents ("FTEs")) in our operations around the world, excluding employees of our joint ventures. Approximately 72% of these employees were located in Europe, approximately 27% were located in North America and 1% was located in the rest of the world.

Historically, we have enjoyed good labour relations and we are committed to maintaining these relationships. Other than management and professional personnel, the majority of our employees are represented by local trade unions and are covered by collective bargaining agreements, including a European Employee Forum agreement under the European Council 94/45/EC, Article 6, which covers all businesses and employees across Europe within INEOS Group and is designed to provide a formal mechanism for management and employee representatives to communicate on significant or potentially significant issues across the INEOS Group's European operations.

Insurance

We carry an all-risk insurance policy for our assets, as well as policies for consequential loss of profits and payments of fixed costs as a consequence of fire, explosion, electrical damage, machinery breakdown, flooding or fuel or power shortages, third-party liability insurance, transport insurance, computer insurance and life insurance for all of our employees. We believe our policies are in accordance with customary industry practices, including deductibles and coverage amounts. Our broker, lead insurers and underwriters monitor fire and explosion risks and routinely inspect all assets. The insurance replacement value of our assets is approximately €19 billion as of December 31, 2013.

Legal proceedings

As is the case with many companies in the chemical industry, we are and may from time to time become a party to claims and lawsuits incidental to the ordinary course of our business. We are not currently involved in any legal or arbitration proceedings that are expected to have a material adverse effect on our financial position and, to our knowledge, no such legal or arbitration proceedings are currently threatened.

Agreements with BP

We have ongoing relationships with BP under various agreements as summarized below.

Reorganization Agreements

In connection with the separation of the certain businesses that INEOS acquired from BP in December 2005, there are certain reorganization arrangements in place with BP. The principal arrangement relates to access to the RMR Pipeline. A significant portion of the annual naphtha supply required by the petrochemical cracker at our Köln, Germany site is transported through the RMR pipeline. BP is entitled to a certain amount of RMR pipeline capacity every year, consistent with its overall 35% interest in the pipeline. We have an arrangement with BP pursuant to which we have a right to use a portion of this capacity, along with associated infrastructure at BPRR ("BP Rotterdam Refinery"), The Netherlands, to enable us to meet an agreed amount of the naphtha requirements of our Köln site. This agreement has an indefinite term.

Commercial Interface Agreements

We have a series of commercial interface agreements with BP which cover, among other things:

- the sale and purchase of hydrocarbons at or between sites where INEOS and BP have a continuing relationship (which agreements generally have initial terms of five to 13 years and automatically renew thereafter unless terminated upon one to three years' notice by either party);
- a supply and trading agreement under which BP provides the INEOS Olefins business with certain supply, trading and optimization services (having evergreen terms, but terminable upon 12 months' notice at the end of a calendar quarter); and
- framework interface agreements covering the provision by INEOS to BP and vice versa of services, utilities and infrastructure rights at certain INEOS sites (both standalone and shared) and in some cases between INEOS' respective sites (generally having initial terms of five to 13 years with termination upon one to four years' notice (although in some cases, the agreements may be terminated upon 30 days' notice by BP)). Following completion of the Refining Divestiture, certain of the services, utilities and complex infrastructure rights to be provided to BP at the Grangemouth site are now provided by the Refining and Entrepreneurial JVs and the Infrastructure Entity, both of which are now outside the INEOS Group.

Related Agreements

In connection with our relationship with BP, we and BP (among others) entered into the agreements summarized below.

The Credit Support Deed

Under the credit support deed, dated August 24, 2005, as subsequently amended, supplemented, varied or restated from time to time, made between BP International Limited, IHL and others (the "Credit Support Deed"), IHL and BP agreed to provide reciprocal credit support for trade obligations under any agreement between such parties or their affiliates. Further, each of BP and IHL has agreed to guarantee the payment obligations (with gross-ups for any required withholding or deduction) of BP or IHL (and their respective affiliates), as the case may be, under any trading agreement between such parties. In addition, our obligations to BP are guaranteed by each of the guarantors that guarantee the obligations under the Existing Indentures and the Senior Secured Term Loans Agreement and that will guarantee the obligations under the Indenture. As of December 31, 2013, the aggregate principal amount of INEOS' net trade obligations to BP was \$161.3 million. This number could increase or decrease significantly because it will vary in accordance with the amount of feedstock and refined products purchased or sold between the parties.

The additional credit support required of INEOS under the Credit Support Deed could be substantial. Any failure to provide such credit support under the Credit Support Deed would constitute a default under the Credit Support Deed. The Credit Support Deed provides that in the event we fail to comply with any provision of the Credit Support Deed, we default on indebtedness of \$250 million owed to third parties (or \$50 million or more owed to BP) when due or we experience certain bankruptcy events (each, a "default"), BP may suspend performance of its obligations under any agreement between us and BP and, if such default is not remedied within specific time period, BP may terminate all such agreements.

The Master Bilateral Netting Deed

Under the master bilateral netting deed, dated August 24, 2005, as subsequently amended, supplemented, varied or restated from time to time, made between certain members of the BP Group, IGH and certain of its subsidiaries (the "Master Bilateral Netting Deed"), the parties agreed that in the event that any of the various trading agreements, reorganization agreements or commercial interface agreements between the parties is automatically terminated or BP is entitled to terminate any such agreement, then BP may terminate all such agreements between the parties that have not otherwise been automatically terminated, netting or setting off any obligations it owes to us against amounts we owe to BP under such contracts.

The Security Assignment

Under the first ranking security assignment, dated August 24, 2005, as subsequently amended, supplemented, varied or restated from time to time, made between INEOS USA LLC, other INEOS entities and BP International Limited (the "Security Assignment"), certain of our subsidiaries have (i) provided guarantees for the payment obligations owed to BP by such subsidiaries under the various trading agreements, reorganization agreements and commercial interface agreements and (ii) such subsidiaries have pledged their interests under such agreements to secure their obligations to BP.

Upon completion of the Refining Divestiture, INEOS Commercial Services UK Limited entered into a further security assignment on substantially similar terms to the Security Assignment described above, in respect of the trading agreements, reorganization agreements and commercial interface agreements novated from INEOS Europe Limited to INEOS Commercial Services UK Limited pursuant to the Refining Divestiture.

Upon completion of the Grangemouth Divestiture, INEOS Sales (UK) Limited entered into a further security assignment on substantially similar terms to the Security Assignment described above, in respect of the trading agreements, reorganization agreements and commercial interface agreements novated from INEOS Commercial Services UK Limited to INEOS Sales (UK) Limited pursuant to the Grangemouth Divestiture.

MANAGEMENT

Executive officers and directors of INEOS AG

INEOS AG, a Swiss corporation, is our ultimate parent undertaking.

The following table sets forth the name, age (as of December 31, 2013) and principal position of each of our directors and officers:

Name	Age	Position
James A. Ratcliffe	61	Chairman
Andrew Currie	58	Member of the Board
John Reece	56	Member of the Board
Jim Dawson	69	Non Executive Director of INEOS Capital

James A. Ratcliffe has been the Chairman of INEOS Capital since 1998. Mr. Ratcliffe, who has over 30 years of experience in the chemical industry, is experienced in managing buyouts of chemical companies. In 1992, he led the successful buyout of Inspec Group plc. In 1998, he left Inspec to lead the acquisition of INEOS plc (now INEOS Oxide) from Inspec. Mr. Ratcliffe started his career with Exxon Chemicals before moving to Courtaulds. He then completed his MBA at London Business School before joining Advent International and then Inspec.

Andrew Currie has been a director of INEOS Capital since 1999. He was previously Managing Director, Laporte Performance Chemicals, having served as a director of the Inspec Group from 1994 until the Laporte acquisition of Inspec in 1998. Mr. Currie has a degree in natural sciences from Cambridge University and spent the first 15 years of his career with BP Chemicals in various technical and business management functions.

John Reece joined INEOS Capital as Finance Director in January 2000. He was previously a partner with PricewaterhouseCoopers, where he advised companies in the chemical industry. Mr. Reece has a degree in economics from Cambridge University and is a Chartered Accountant.

Jim Dawson became a non-executive director of INEOS Capital Limited in 2005. Dr. Dawson has been serving as a consultant to INEOS since 2001. Dr. Dawson served as a director of Shell International Chemicals until 2000. Dr. Dawson has a first degree in chemistry and a doctorate of philosophy from Oxford University.

INEOS Capital Limited and INEOS AG provide operational management services to us.

All of the members of the board of directors and officers of INEOS AG have their business address at Avenue des Uttins 3, 1180 Rolle, Switzerland.

Compensation of Directors and Executive Officers

An aggregate of €0.6 million was paid to our executive officers and directors in their capacity as directors and officers of INEOS Group Holdings S.A. in 2013.

Board Practices

Our board meets on a regular basis to review performance and our business plans. In addition, the board has established policies for the conduct of our business, including delegations of board authority to directors and members of senior management. The board has appointed committees to ensure appropriate oversight of our companies' operations. None of the members of the board of directors has a service contract that provides for benefits upon his termination as a director.

The audit committee meets at least twice a year. The committee is responsible for appointing auditors and reviewing the suitability and effectiveness of internal control systems and the application of corporate policies.

The remuneration committee meets at least once a year. The primary function of the remuneration committee is to determine remuneration and other terms of employment for the directors and senior employees of the company, having due regard for performance. We anticipate that, in setting the remuneration policy, the committee will consider a number of factors, including the salaries and benefits available to senior management in comparable companies and the need to ensure senior management commitment to the continued success of the business by means of incentive schemes.

PRINCIPAL SHAREHOLDERS

As at December 31, 2013, all of the issued share capital of INEOS Group Holdings S.A. was held directly by INEOS Holdings Luxembourg S.A.. The issued voting share capital of INEOS Holdings Luxembourg S.A. is held by INEOS Holdings AG. The remaining non-voting issued share capital is held by Appleby Trust (Jersey) Limited, as trustee of the INEOS Group Share Benefit Trust, by Appleby Nominees (Jersey) Limited and by certain employees, former employees or their family members. INEOS Holdings AG exercises a controlling interest over INEOS Holdings Luxembourg S.A. through its majority interest in the voting share capital. The issued share capital of INEOS Holdings AG is held by INEOS AG. See also "Management" and "Certain Relationships and Related Party Transactions."

The share capital of INEOS AG consists of Ordinary Management Shares and Preferred Shares ("Series A to M Preferred Shares").

The following table sets forth information regarding the ownership of our share capital, as of December 31, 2013, by the following:

- each person or group known by us to be the owner of 5% or more of the share capital of INEOS AG; and
- all directors of INEOS AG.

	Number of Ordinary Management Shares	Number of Preferred Shares	Percentage of Total INEOS AG Share Capital
James Ratcliffe	66,666,033	72,624,709	71.240%
Andrew Currie	12,628,293	14,656,751	14.380%
John Reece	12,628,293	14,656,751	14.380%
TOTAL	91,922,619	101,938,211	100.0%

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Relationship with INEOS AG

Mr JA Ratcliffe, Mr AC Currie and Mr J Reece are shareholders in Ineos AG. Ineos AG provides operational management services to the Group through a management services agreement. Ineos AG management fees of €78.0 million (2012: €74.2 million, 2011: €70.6 million) were charged to the income statement and the Group recovered costs of €0.9 million during the year ended 31 December 2013 (2012: €nil million, 2011: €2.9 million). As at 31 December 2013 amounts owed to Ineos AG were €20.9 million (2012: €3.5 million, 2011: €37.0 million). Amounts due from Ineos Holdings AG, a wholly owned subsidiary of Ineos AG, were €17.1 million (2012: €4.9 million, 2011: €17.8 million).

Relationship with other INEOS subsidiaries

Ineos AG owns and controls a number of operating subsidiaries that are not included in the Ineos Group Holdings S.A. group, including Kerling plc and Ineos Industries Limited.

During the year ended 31 December 2013 the Group has made sales to these subsidiaries of €430.6 million (2012: €16.7 million, 2011: €509.2 million), recovered costs of €37.3 million (2012: €174.2 million, 2011: €19.9 million) and made purchases of €256.9 million (2012: €3.8 million, 2011: €151.2 million). As at 31 December 2013, €293.6 million (2012: €196.2 million, 2011: €13.8 million) was owed by and €88.5 million (2012: €13.8 million, 2011: €23.4 million) was owed to these subsidiaries.

INEOS Bamble AS, a subsidiary of the INEOS Group Holdings S.A., holds a 50.0% interest in Noretyl AS, with the Kerling Group holding the other 50.0% interest in the joint venture. Noretyl AS operates a hydrocarbon cracking plant in Rafnes, Norway, from which the Kerling Group is entitled to obtain approximately 288 kilotonnes of ethylene per year (approximately 50% of the facility's total production) pursuant to a processing agreement between them and INEOS Bamble AS. Pursuant to the agreement, the ethylene is piped directly to Kerling's VCM and PVC plant at Rafnes and shipped to their Stenungsund, Sweden facility.

Following the divestment of the Grangemouth petrochemical business (see "The Grangemouth Divestiture") the Group has put in place a €200 million revolving credit facility to fund the ongoing operations and investments required at the site. This facility matures on June 30, 2020 and is secured on the assets of the Grangemouth petrochemical business. As at December 31, 2013 €20.0 million (2012: €nil million, 2011: €nil million) had been drawn under the facility.

Relationship with the Entrepreneurial (Refining) Business JV and the Refining Business JV

INEOS Investments, a newly formed entity, whose shareholders are the principal shareholders of IGH, holds a 49.9%, a 50.1% and a 50.0% direct interest in the Entrepreneurial (Refining) Business JV, the Refining Business JV and the Infrastructure Entity, respectively. INEOS Investments holds a 25.05% indirect interest in the Infrastructure Entity by virtue of its 50.1% stake in the Refining Business JV. The Refining Business and Entrepreneurial JVs, the Infrastructure Entity and their subsidiaries may be "Affiliates" of Lux I for the purposes of the Indenture because each is owned in part by, and in some cases operated or controlled by, entities controlled by or under common control with the principal shareholders of Lux I, the Senior Facilities Agreement and the Indentures. We transferred certain businesses to the Refining and Entrepreneurial JVs that related to our Refining Business segment and related entrepreneurial activities. See "The Refining Divestiture."

Upon the consummation of the Refining Divestiture, we entered into various contractual agreements with the Refining and Entrepreneurial JVs and the Infrastructure Entity in order to continue the provision by the Refining and Entrepreneurial JVs of various feedstocks and entrepreneurial activities to our business on an ongoing basis. In addition, we entered into agreements with the Infrastructure Entity pursuant to which the Infrastructure Entity provides access to our business of certain shared utilities and infrastructure assets located on the sites. See "The Refining Divestiture."

There may be certain ongoing liabilities on the part of the Group under existing guarantees and indemnities, which may extend to liabilities of the Refining Business. Except as described below, PetroChina is required to procure the release of these guarantees and indemnities and, in the interim, has provided a counter-indemnity in respect of such liabilities.

Certain indemnities relating to losses that may be incurred by BP in connection with the Refining business and third-party claims regarding the refining intellectual property that was provided by INEOS LLC and INEOS European Holdings Limited (which is not part of the joint venture business) to BP under a Master Reorganization Agreement ("MRA") and an Intellectual Property and Information Technology Separation Agreement at the time of the separation of Innovene from BP (prior to the Innovene Acquisition) will remain in place. PetroChina has no obligation to procure the release of the indemnity related to the MRA or provide an indemnity in relation to it.

During the year ended 31 December 2013 the Group has made sales to the Refining joint ventures of €26.8 million (2012: €347.1 million, 2011: €15.9 million), recovered costs of €102.5 million (2012: €6.1 million, 2011: €nil million) and made purchases of €1,511.0 million (2012: €1,648.8 million, 2011: €1,435.0 million). As at 31 December 2013, €8.5 million (2012: €34.1 million, 2011: €17.0 million) was owed by the Refining joint ventures and €5.1 million (2012: €9.9 million, 2011: €74.6 million) was owed to the Refining joint ventures.

Relationship with Styrolution

Styrolution is a joint venture among INEOS Industries Holdings Limited (which owns 50% of Styrolution through its shareholding in Styrolution Holding GmbH), BASF SE (which owns 34.05% of Styrolution through its shareholding in Styrolution Holding GmbH) and BASF Antwerpen N.V. (which owns 15.95% of Styrolution through its shareholding in Styrolution Holding GmbH). INEOS Industries Holdings Limited is a wholly owned subsidiary of INEOS Industries Limited, and INEOS Industries Limited is a wholly owned subsidiary of INEOS AG, thereby making it an affiliate of ours.

Styrolution began operating on October 1, 2011, and is involved in the business of developing, manufacturing, distributing, marketing, selling and commercialization of styrene monomer, polystyrene, acrylonitrile butadiene styrene, styrene-butadiene block copolymers and other styrene-based copolymers, as well as copolymer blends and compounds.

Styrolution has entered into a series of supply agreements with members of the INEOS Group for the purchase of feedstock and other raw material supplies, such as ethylene, benzene, butadiene and acrylonitrile. Each feedstock supply agreement will run for an initial five-year term from October 1, 2011, and will be automatically extended for an indefinite term at the end of the initial term unless terminated by either party by giving notice at least 24 months in advance. Following the expiry of the initial term and automatic extension (if any), each party may terminate the relevant agreement by giving notice 24 months in advance, provided that the relevant member of the INEOS Group may not exercise its right to terminate to the extent that, and so long as, there is no reasonably obtainable alternative source of supply of the relevant products. Purchase volumes levels are set forth in the agreements, and unit prices are determined by market price indicators, such as the U.S. Gulf Coast net transaction price and CMAI spot price.

During the year ended 31 December 2013 the Group has made sales to the Styrolution joint venture of €19.6 million (2012: €34.7 million, 2011: €73.8 million), recovered costs of €15.6 million (2012: €19.7 million, 2011: €4.9 million) and made purchases of €10.1 million (2012: €105.3 million, 2011: €nil million). As at 31 December 2013, €32.7 million (2012: €32.2 million, 2011: €6.0 million) was owed by the Styrolution joint venture and €nil million (2012: €1.2 million, 2011: €nil million) was owed to the Styrolution joint venture.

DESCRIPTION OF CERTAIN INDEBTEDNESS

The following summary of certain provisions of the documents listed below governing certain of our indebtedness does not purport to be complete and is subject to, and qualified in its entirety by reference to, the underlying documents.

Senior Secured Term Loans

Overview

On April 27, 2012, we entered into a credit agreement (the "Senior Secured Term Loan Agreement"), as amended and restated as of May 8, 2013, among INEOS US Finance LLC and INEOS Finance PLC as borrowers, each of the guarantors named therein and Barclays Bank PLC as administrative agent and security agent.

The Group had original borrowings under a senior facilities agreement (the "Senior Secured Term Loans") which consisted of Term Loans comprising of \$375 million of short-dated term loans (the "Short-Dated Dollar Term Loans"), €00 million of term loans (the "Long-Dated Euro Term Loans") and \$2.0 billion of term loans (the "Long-Dated Dollar Term Loans"). In May 2013 the Group completed the re-pricing and up-sizing of the Senior Secured Term Loan facility. The up-sizing comprised \$640 million and €350 million five-year add-on term loans. The Senior Secured Term Loans outstanding at December 31, 2013 before issue costs were €,987.5 million, of which €30.3 million is due within one year. The total amounts outstanding on the Short-Dated Dollar Term Loans were €36.7 million, Long-Dated Euro Term Loans were €38.6 million and Long-Dated Dollar Term Loans were €1,882.2 million.

In February 2014 the Group entered into an Amendment Agreement in order to, among other things, (i) decrease the interest rates applicable to the Long-Dated Term Loans under the Senior Secured Term Loans Agreement (the "Repricing") and (ii) make other amendments to the Senior Secured Term Loans Agreement in line with the evolving needs of the Group.

The Senior Secured Term Loans are to be repaid in quarterly installments, in aggregate annual amounts equal to 1% of the original principal amount of the Senior Secured Term Loans. The respective balances of the Long-Dated Euro Term Loans and Long-Dated Dollar Term Loans are payable, subject to certain exceptions, on the date that is six years after the original Issue Date. The balances of the Short-Dated Dollar Term Loans are payable, subject to certain exceptions, in May 2015. The Long-Dated Euro Term Loans and the Long-Dated Dollar Term Loans mature in May 2018.

For additional information about the Senior Secured Term Loans, please see Note 19 "Borrowings" to the financial statements of the Group as of and for the year ended December 31, 2013 included elsewhere in this annual report.

Interest and Fees

As at December 31, 2013 the Applicable Margin for the Long-Dated Euro Term Loans is 3.25%, the Short-Dated Dollar Term Loans is 2.00% and the Long-Dated Dollar Term Loans is 3.00%.

The Long-Dated Euro Term Loans currently bear interest at a rate per annum equal to EURIBOR (subject to a floor of 1.00% per annum) plus the Applicable Margin specified below for such loan, and the Short-Dated Dollar Term Loans and Long-Dated Dollar Term Loans bear interest a rate per annum equal to, at the option of US Finco, LIBOR divided by 100% minus the LIBOR Reserve Percentage (as defined in the Senior Secured Term Loans Agreement) (subject to a floor of 1.00% per annum, except in the case of the Short-Dated Dollar Term Loans) plus the Applicable Margin specified below for such loan or the Alternate Base Rate (subject to a floor of 2.00% per annum, except in the case of the Short-Dated Dollar Term Loans) plus the Applicable Margin specified below for such loan.

The Applicable Margin is currently:

• in the case of the Long-Dated Euro Term Loans, if (x) the ratio of consolidated total net debt to consolidated EBITDA exceeds 3.75:1.00, 3.25% *per annum* or (y) otherwise, 3.00% *per annum*;

- in the case of the Short-Dated Dollar Term Loans bearing interest at a rate determined by reference to LIBOR, 2.00% *per annum*;
- in the case of the Short-Dated Dollar Term Loans bearing interest at a rate determined by reference to the Alternate Base Rate, 1.00% *per annum*;
- in the case of the Long-Dated Dollar Term Loans bearing interest at a rate determined by reference to LIBOR (together with the Euro Term Loans, and the Short-Dated Dollar Term Loans bearing interest by reference to LIBOR, the "LIBOR Loans"), if (x) the ratio of consolidated total net debt to consolidated EBITDA exceeds 3.75:1.00, 3.00% *per annum*, or (y) otherwise, 2.75% *per annum*; and
- in the case of the Long-Dated Dollar Term Loans bearing interest at a rate determined by reference to the Alternate Base Rate (together with the Short-Dated Dollar Term Loans bearing interest by reference to the Alternate Base Rate, "ABR Loans"), if (x) the ratio of consolidated total net debt to consolidated EBITDA exceeds 3.75:1.00, 2.00% per annum or (y) otherwise, 1.75% per annum.

Following the Amendment Agreement in February 2014, the Long-Dated Euro Term Loans bear interest at a rate per annum equal to LIBOR (subject to a floor of 1.00% per annum) plus the Applicable Margin specified below for such loan, and the Long-Dated Dollar Term Loans bear interest a rate per annum equal to, at the option of US Finco, LIBOR divided by 100% minus the LIBOR Reserve Percentage (as defined in the Senior Secured Term Loans Agreement) (subject to a floor of 1.00% per annum) plus the Applicable Margin specified below for such loan or the Alternate Base Rate (subject to a floor of 2.00% per annum) plus the Applicable Margin specified below for such loan.

Following the Amendment Agreement in February 2014, the Applicable Margin for the Term Loans are:

- in the case of the Long-Dated Euro Term Loans, 3.00% *per annum*;
- in the case of the Long-Dated Dollar Term Loans bearing interest at a rate determined by reference to LIBOR (together with the Long-Dated Euro Term Loans, and the Short-Dated Dollar Term Loans bearing interest by reference to LIBOR, the "LIBOR Loans"), 2.75% *per annum* for the Long-Dated Dollar Term Loans; and 2.00% *per annum* for the Short-Dated Dollar Term loans; and
- in the case of the Long-Dated Dollar Term Loans bearing interest at a rate determined by reference to the Alternate Base Rate (together with the Short-Dated Dollar Term Loans bearing interest by reference to the Alternate Base Rate, "ABR Loans"), 1.75% *per annum*; and 1.00% *per annum* for the Short-Dated Dollar Term loans.

The Alternate Base Rate is a rate per annum determined as the highest of (a) the administrative agent's prime rate, (b) the Federal Funds rate plus 0.50% and (c) LIBOR for an interest period of one month (after giving effect to the applicable LIBOR floor) plus 1.00%.

Overdue amounts owing under the Senior Secured Term Loans Agreement bear interest (a) in the case of overdue principal, at the interest rate that would otherwise be applicable plus 2% per annum and (b) in the case of other overdue amounts, at the interest rate that would apply to ABR Loans plus 2% per annum.

Security and Guarantees

The Senior Secured Term Loans share the same security package as the 2020 Senior Secured Notes, the 2019 Senior Secured Notes, certain hedging liabilities and certain cash management liabilities.

The obligations under the Senior Secured Term Loans are jointly and severally guaranteed on a senior basis by IGH and the Guarantors. The obligations under the Senior Secured Term Loans are secured by the same collateral securing the 2019 Senior Secured Notes and the 2020 Senior Secured Notes, including, subject to certain exceptions, substantially all of the assets of IGH and the Guarantors. Such security includes first priority security interests over the collateral that secures the Notes on a second priority basis (i.e., the IHL Pledged Shares and the Proceeds Loans).

No later than 150 days after the end of each financial year, commencing with the financial year ending on December 31, 2012 (or such longer period as the administrative agent may agree to), (i) the Consolidated EBITDA (as defined in the Senior Secured Term Loans Agreement) of the guarantors of the Senior Secured Term Loans must exceed 85% of the Consolidated EBITDA of the Financial Group (defined in the Senior Secured Term Loans Agreement as IGH, Lux I and the Restricted Subsidiaries (as defined in the Senior Secured Term Loans Agreement) of Lux I) and (ii) the total assets of the guarantors of the Senior Secured Term Loans must exceed 85% of the consolidated total assets of the Financial Group, in each case subject to certain exceptions.

Covenants

Subject to certain agreed exceptions, the Senior Secured Term Loans Agreement contains negative covenants substantially similar to the negative covenants applicable to the 2020 Senior Secured Notes, including covenants restricting the ability of Lux I, the Borrowers and the other restricted subsidiaries of Lux I to:

- incur or guarantee additional indebtedness and issue certain preferred stock;
- layer debt;
- make restricted payments, including dividends or other distributions;
- prepay or redeem subordinated debt or equity;
- make certain investments;
- create or incur certain liens;
- transfer, lease or sell certain assets;
- enter into arrangements that impose restrictions on the ability of restricted subsidiaries to pay dividends or make other payments to Lux I;
- engage in certain transactions with affiliates;
- · designate unrestricted subsidiaries;
- consolidate, merge or transfer all or substantially all assets;
- impair the security interests for the benefit of the Term Loan lenders; and
- amend certain documents.

IGH, Lux I and the Borrowers are also subject to more stringent restrictions upon their activities (for example, in relation to the ownership of assets and the liabilities that they may incur).

The Senior Secured Term Loans Agreement also contains customary affirmative covenants, including covenants relating to:

- the provision of financial statements and certain other information and notices;
- inspections;
- maintenance of certain insurance:
- payment of taxes;
- preservation of existence and consolidated corporate franchises;
- compliance with laws (including environmental laws);

- certain ERISA and pension matters;
- maintenance of certain properties;
- · changes in fiscal years and fiscal quarters;
- · additional guarantors and security;
- use of proceeds;
- further assurances;
- use commercially reasonable efforts to maintain certain ratings;
- auditors, books and records;
- maintenance of cash in bank accounts subject to security interests; and
- certain other covenants, including a covenant relating to the Intercreditor Deed (as defined below) and additional intercreditor agreements.

The Senior Secured Term Loan Agreement does not contain any financial maintenance covenants.

Repayment

The Senior Secured Term Loans made under the Senior Secured Term Loans Agreement are to be repaid in equal quarterly installments, in aggregate annual amounts equal to 1% of the original principal amount of the Senior Secured Term Loans (subject to adjustment as set forth below). The respective balances of the Long-Dated Euro Term Loans and Long-Dated Dollar Term Loans are payable, subject to certain exceptions, on May 4, 2018. The balances of the Short-Dated Dollar Term Loans are payable, subject to certain exceptions, on May 4, 2015. The balance of any additional Senior Secured Term Loans outstanding are payable on the New Term Loan Maturity Date (as defined in the Senior Secured Term Loans Agreement). No amounts repaid by the Borrowers in respect of the Senior Secured Term Loans may be reborrowed.

Prepayments

Mandatory prepayments of the Senior Secured Term Loans are required in an amount equal to:

- starting with the financial year ending on December 31, 2012, 50% (reduced to 25% when the ratio of consolidated total net debt to consolidated EBITDA is less than or equal to 3.75 to 1.00 but greater than 3.25 to 1.00 and 0% when the ratio of consolidated total net debt to consolidated EBITDA is less than or equal to 3.25 to 1.00) of annual excess cash flow (subject to certain adjustments). For the financial year ended December 31, 2012, the annual excess cash flow with any applicable adjustments was reduced by a certain percentage to reflect the number of days that elapsed from May 4, 2012 to and including December 31, 2012;
- 100% of the net cash proceeds from certain sales or other dispositions of material assets outside the ordinary course of business (subject to reinvestment rights and pro rata repayment of certain other senior debt); and
- 100% of the net cash proceeds from any issuance or incurrence of debt, other than debt permitted under the Senior Secured Term Loans Agreement.

All mandatory prepayments of the Senior Secured Term Loans will be made without premium or penalty (except for reimbursement of breakage and redeployment costs in the case of LIBOR Loans) and will be applied first to the next four scheduled amortization installments in direct order of maturity and thereafter ratably to the remaining scheduled amortization installments of principal of the Senior Secured Term Loans.

Voluntary prepayments of the Senior Secured Term Loans are permitted without premium or penalty (except as set forth below and except for reimbursement of breakage and redeployment costs in the case of

LIBOR Loans) and will be applied to the remaining scheduled amortization installments of principal of the Term Loans as directed by the Borrowers. A 1% prepayment premium will be applicable to voluntary prepayments of the Senior Secured Term Loans prior to the six-month anniversary of the effective date of the Amendment Agreement, in each case if the Senior Secured Term Loans are repaid as a result of (a) an amendment of the Senior Secured Term Loans Agreement that lowers the effective interest rate (such premium to be payable to the non-consenting lenders on account of their Senior Secured Term Loans that are mandatorily assigned pursuant to "yank-a-bank" provisions) or (b) the incurrence of *pari passu* debt secured by senior or *pari passu* liens on the collateral securing the Senior Secured Term Loans or any long term bank debt with lower effective interest rates.

Events of Default

The Senior Secured Term Loans Agreement sets out certain events of default, the occurrence of which would allow the lenders to accelerate all outstanding loans, including, among other events and subject in certain cases to agree to grace periods, thresholds and other qualifications:

- non-payment of amounts due under the Senior Secured Term Loans or under the other Senior Finance Documents (as defined in the Senior Secured Term Loans);
- breach of covenants;
- inaccuracy of representations and warranties in any material respect;
- cross defaults and certain judgment defaults;
- invalidity or unlawfulness of the Senior Secured Term Loans Agreement and other Senior Finance Documents;
- certain bankruptcy and insolvency events;
- the occurrence of certain ERISA-related events;
- the occurrence of a change of control; and
- certain breaches of the Intercreditor Deed and the Credit Support Deed (as defined in the Intercreditor Deed) and related documents.

Miscellaneous

The Senior Secured Term Loans Agreement permits the Borrowers to request the establishment of one or more additional tranches of term loans (the "New Term Loans") in principal amounts of not less than \$50,000,000 individually, subject to certain conditions specified in the Senior Secured Term Loans Agreement. During the first two years after May 4, 2012, in the event that we borrow New Term Loans, the interest rate on the original Senior Secured Term Loans may be subject to upward adjustment such that, in the case of Long-Dated Dollar Term Loans and Long-Dated Euro Term Loans, the yield will be adjusted to equal the yield on the New Term Loans less 50 basis points and in the case of such adjustment the yield on the Short-Dated Dollar Term Loans will be adjusted upward to preserve the pricing differential from the other Senior Secured Term Loans as of May 4, 2012.

The Senior Secured Term Loans Agreement permits the Borrowers to request extensions of the final maturity of all or a portion of the Senior Secured Term Loans (in principal amounts of not less than \$50,000,000) and, in that connection, there may be an increase in the interest rates and/or fees payable with respect to the extended Senior Secured Term Loans. Such extensions shall be subject to certain conditions described in the Senior Secured Term Loans.

The Senior Secured Term Loans Agreement contains customary "yank-a- bank" provisions allowing the Borrowers to replace a non-consenting lender in connection with (1) amendments and waivers requiring the consent of all lenders or all affected lenders so long as the required lenders have consented to such amendments or waivers and (2) requests by leaders for compensation for increased costs, taxes and similar items.

The Senior Secured Term Loans Agreement contains customary loan buyback provisions, which permits the Borrowers to purchase Senior Secured Term Loans from lenders pursuant to a Dutch auction, subject to certain conditions, including a requirement that the loans purchased are automatically and permanently cancelled.

The Senior Secured Term Loans Agreement include parameters in relation to the issue of further senior secured debt (including under incremental facilities), second secured debt and high yield debt.

The Senior Secured Term Loans Agreement is governed by New York law.

Senior Secured Notes due 2020

Overview

On May 4, 2012, INEOS Finance plc issued \$775,000,000 aggregate principal amount $7^{1}/2\%$ Senior Secured Notes due 2020 (the "2020 Senior Secured Notes") under an indenture dated May 4, 2012, as amended, among INEOS Finance plc, each of the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee (the "2020 Senior Secured Notes Trustee"), principal paying agent and transfer agent, The Bank of New York Mellon, as U.S. paying agent and transfer agent, the Bank of New York Mellon (Luxembourg) S.A., as registrar, Luxembourg paying agent and Luxembourg transfer agent and Barclays Bank PLC, as security trustee.

Ranking

The 2020 Senior Secured Notes are the general senior secured obligations of INEOS Finance plc and rank equally in right of payment with its existing and future indebtedness that is not expressly subordinated to the 2020 Senior Secured Notes (including, without limitation, the Senior Secured Term Loans and the 2019 Senior Secured Notes), are guaranteed on a senior secured basis by the 2020 Senior Secured Notes Guarantors (as defined below), rank effectively senior to all existing and future indebtedness of INEOS Finance plc that is unsecured or secured by liens ranking behind the liens securing the 2020 Senior Secured Notes to the extent of the value of the collateral and rank senior in right of payment to all existing and future obligations of INEOS Finance plc subordinated in right of payment to the 2020 Senior Secured Notes, including its guarantee of obligations under the Existing IGH Notes and the Notes. In addition, the 2020 Senior Secured Notes are effectively subordinated in right of payment to all existing and future indebtedness and other liabilities, including trade payables and letters of credit issued by, Lux I's non-guarantor subsidiaries.

Interest Rates, Payment Dates and Maturity

The 2020 Senior Secured Notes bear interest at a rate of $7^{1}/_{2}$ % per annum. Interest on the 2020 Senior Secured Notes is payable semi-annually in arrears on May 1 and November 1 of each year, beginning November 1, 2012. The 2020 Senior Secured Notes will mature on May 1, 2020.

Guarantees

The 2020 Senior Secured Notes are jointly and severally guaranteed on a senior secured basis by IGH and the Guarantors (other than INEOS Finance plc, which is the issuer of the 2020 Senior Secured Notes) (the "2020 Senior Secured Notes Guarantors").

The guarantee of each 2020 Senior Secured Notes Guarantor is its general senior secured obligation and (i) ranks equally in right of payment with all existing and future indebtedness of such 2020 Senior Secured Notes Guarantor that is not expressly subordinated in right of payment to such guarantee, including with respect to the guarantee of the 2020 Senior Secured Notes by each 2020 Senior Secured Notes Guarantor, indebtedness under the Senior Secured Term Loans and the 2019 Senior Secured Notes and, with respect to the guarantee of the 2020 Senior Secured Notes by IGH, the Existing IGH Notes and the Notes, (ii) ranks effectively senior to all existing and future indebtedness of such 2020 Senior Secured Notes Guarantor that is unsecured or secured by liens ranking behind the liens securing the 2020 Senior Secured Notes to the extent of the value of the collateral, (iii) ranks senior in right of payment to all existing and future indebtedness of such 2020 Senior Secured Notes Guarantor that is expressly subordinated in right of payment to such guarantee, including the guarantees of the Existing IGH Notes and the Notes (but not, in the case of IGH, its obligations under the Existing IGH Notes and the Notes) and (iv) is effectively subordinated to any existing and future indebtedness and other obligations of

such 2020 Senior Secured Notes Guarantor that are secured by liens senior to the liens securing such guarantee, or secured by property and assets that do not secure such guarantee, to the extent of the value of the property and assets securing such indebtedness and other liabilities, including the BP Creditor Liabilities secured on a first priority basis by the BP Receivables. In the event of a bankruptcy or insolvency, each such secured lender of each 2020 Senior Secured Notes Guarantor will have a prior secured claim to any collateral of such 2020 Senior Secured Notes Guarantor securing the debt owed to them.

Security

The 2020 Senior Secured Notes and the related guarantees are secured by first priority liens (subject to certain exceptions) on the same assets that secure the obligations under the Senior Secured Term Loans, the 2019 Senior Secured Notes, certain hedging liabilities and certain cash management liabilities.

Optional Redemption and Change of Control

At any time prior to May 1, 2015, INEOS Finance plc may redeem all or part of the 2020 Senior Secured Notes at a redemption price equal to 100% of the principal amount of the 2020 Senior Secured Notes redeemed plus the greater of (1) 1.0% of the principal amount of such note; and (2) the excess of (a) the present value at such redemption date of such 2020 Senior Secured Note at May 1, 2015, plus all required interest payments that would otherwise be due to be paid on such 2020 Senior Secured Note during the period between the redemption date and May 1, 2015, excluding accrued but unpaid interest, computed using a discount rate equal to the treasury rate at such redemption date plus 50 basis points, over (b) the principal amount of such 2020 Senior Secured Note.

The 2020 Senior Secured Notes are subject to redemption at any time on or after May 1, 2015, at the option of INEOS Finance plc, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning on May 1 of the year indicated below:

	2020 Senior Secured Notes Redemption
Year	Redemption Price
2015	
2016	
2017	
2018 and thereafter	

together with certain additional amounts, if applicable, and accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

At any time on or prior to May 1, 2015, INEOS Finance plc or any Parent Holdco (as defined in the 2020 Senior Secured Notes Indenture), at its option, may redeem up to 35% of the aggregate principal amount of each of the 2020 Senior Secured Notes and any additional 2020 Senior Secured Notes issued under the 2020 Senior Secured Notes Indenture (the "Additional 2020 Senior Secured Notes") with the net cash proceeds of certain public equity offerings at 107.500% of the aggregate principal amount of the 2020 Senior Secured Notes originally issued and the initial aggregate principal amounts of any Additional 2020 Senior Secured Notes, in each case, plus certain additional amounts, if applicable, and accrued and unpaid interest, if any, to the redemption date, if at least 65% of the sum of the originally issued aggregate principal amount of the 2020 Senior Secured Notes and any Additional 2020 Senior Secured Notes remains outstanding.

Upon the occurrence of certain change of control events, each holder of 2020 Senior Secured Notes may require INEOS Finance plc to repurchase all or a portion of its 2020 Senior Secured Notes at a purchase price equal to 101% of the principal amount of such 2020 Senior Secured Notes, plus accrued and unpaid interest to, but not including, the date of purchase.

If INEOS Finance plc sells assets under certain circumstances, it is required to make an offer to purchase the 2020 Senior Secured Notes at 100% of the principal amount of the 2020 Senior Secured Notes, plus accrued and unpaid interest to, but not including, the date of purchase, with the excess proceeds from the sale of the assets.

In addition, in the event that INEOS Finance plc becomes obligated to pay Additional Amounts (as defined in the 2020 Senior Secured Notes Indenture) to holders of the 2020 Senior Secured Notes as a result of changes affecting withholding taxes applicable to payments on the 2020 Senior Secured Notes, it may redeem the 2020 Senior Secured Notes in whole but not in part at any time at 100% of the principal amount of the 2020 Senior Secured Notes plus accrued and unpaid interest to the redemption date.

Covenants

The 2020 Senior Secured Notes Indenture contains covenants that, among other things, limit the ability of our subsidiaries to:

- incur or guarantee additional indebtedness and issue certain preferred stock;
- · layer debt;
- make restricted payments, including dividends or other distributions;
- prepay or redeem subordinated debt or equity;
- make certain investments;
- create or permit to exist certain liens;
- transfer, lease or sell certain assets;
- enter into arrangements that impose restrictions on the ability of our subsidiaries to pay dividends or make other payments to Lux I;
- engage in certain transactions with affiliates;
- engage in prohibited activities (solely with respect to INEOS Finance plc and IGH);
- consolidate, merge or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis;
- impair the security interests for the benefit of the holders of the 2020 Senior Secured Notes; and
- amend certain documents.

These covenants are subject to a number of important limitations and exceptions. Currently, all of IGH's subsidiaries are restricted subsidiaries, as defined in the 2020 Senior Secured Notes Indenture.

Events of Default

The 2020 Senior Secured Notes Indenture contains customary events of default, including, among others, the non-payment of principal or interest on the 2020 Senior Secured Notes, certain failures to perform or observe any other obligation under the 2020 Senior Secured Notes Indenture or security documents, the failure to pay certain indebtedness or judgments and the bankruptcy or insolvency of IHL or any Significant Restricted Subsidiary (as defined in the 2020 Senior Secured Notes Indenture). The occurrence of any of the events of default would permit or require the acceleration of all obligations outstanding under the 2020 Senior Secured Notes.

Senior Secured Notes due 2019

Overview

On February 10, 2012, INEOS Finance plc issued €500,000,000 aggregate principal amount of Floating Rate Senior Secured Notes due 2019 (the "2019 Senior Secured Euro Floating Rate Notes") and \$1,000,000,000 8³/₈% Senior Secured Notes due 2019 (the "2019 Senior Secured Dollar Fixed Rate Notes" and, together with the 2019 Senior Secured Euro Floating Rate Notes, the "2019 Senior Secured Notes") under an indenture dated

February 10, 2012, as amended, among INEOS Finance plc, each of the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee (the "2019 Senior Secured Notes Trustee"), principal paying agent and transfer agent, The Bank of New York Mellon, as U.S. paying agent and transfer agent, the Bank of New York Mellon (Luxembourg) S.A., as registrar, Luxembourg paying agent and Luxembourg transfer agent and Barclays Bank PLC, as security trustee. As of December 31, 2013, there were €500,000,000 aggregate principal amount of 2019 Senior Secured Euro Floating Rate Notes and \$1,000,000,000 aggregate principal amount of 2019 Senior Secured Dollar Fixed Rate Notes issued and outstanding.

Ranking

The 2019 Senior Secured Notes are the general senior secured obligations of INEOS Finance plc and rank equally in right of payment with INEOS Finance plc's existing and future indebtedness that is not subordinated to the 2019 Senior Secured Notes (including, without limitation, the 2020 Senior Secured Notes and the Senior Secured Term Loans), are guaranteed on a senior secured basis by the 2019 Senior Secured Notes Guarantors (as defined below), rank effectively senior to all existing and future indebtedness of INEOS Finance plc that is unsecured or secured by liens ranking behind the liens securing the 2019 Senior Secured Notes to the extent of the value of the collateral and rank senior in right of payment to all existing and future obligations of INEOS Finance plc subordinated in right of payment to the 2019 Senior Secured Notes, including INEOS Finance plc's guarantee of obligations under the Existing IGH Notes and the Notes. In addition, the 2019 Senior Secured Notes are effectively subordinated in right of payment to all existing and future indebtedness and other liabilities of INEOS Finance plc's non- guarantor subsidiaries.

Interest Rates, Payment Dates and Maturity

The 2019 Senior Secured Euro Floating Rate Notes bear interest at a rate per annum, reset quarterly, equal to the sum of (i) the greater of (x) three- month EURIBOR and (y) 1.25% per annum plus (ii) 6.0%. Interest on the 2019 Senior Secured Euro Floating Rate Notes is payable quarterly in arrears on February 15, May 15, August 15 and November 15 of each year, beginning May 15, 2012. The 2019 Senior Secured Dollar Fixed Rate Notes bear interest at a rate of $8^3/_8$ % per annum. Interest on the 2019 Senior Secured Dollar Fixed Rate Notes is payable semi-annually in arrears on February 15 and August 15 of each year, beginning August 15, 2012. The 2019 Senior Secured Notes will mature on February 15, 2019.

Guarantees

The 2019 Senior Secured Notes are jointly and severally guaranteed on a senior secured basis by IGH and the Guarantors (other than INEOS Finance plc, which is the issuer of the 2019 Senior Secured Notes) (the "2019 Senior Secured Notes Guarantors").

The guarantee of each 2019 Senior Secured Notes Guarantor is its general senior secured obligation and (i) ranks equally in right of payment with all existing and future indebtedness of such 2019 Senior Secured Notes Guarantor that is not subordinated in right of payment to such guarantee, including with respect to the guarantee of the 2019 Senior Secured Notes by each 2019 Senior Secured Notes Guarantor, indebtedness under the Senior Secured Term Loans, the 2020 Senior Secured Notes and, with respect to the guarantee of the 2019 Senior Secured Notes by IGH, the Existing IGH Notes and the Notes, (ii) ranks effectively senior to all existing and future indebtedness of such 2019 Senior Secured Notes Guarantor that is unsecured or secured by liens ranking behind the liens securing the 2020 Senior Secured Notes to the extent of the value of the collateral, (iii) ranks senior in right of payment to all existing and future indebtedness of such 2019 Senior Secured Notes Guarantor that is subordinated in right of payment to such guarantee, including the guarantees of the Existing IGH Notes and the Notes (but not, in the case of IGH, its obligations under the Existing IGH Notes and the Notes) and (iv) is effectively subordinated to any existing and future indebtedness and other liabilities of such 2019 Senior Secured Notes Guarantor that are secured by liens senior to the liens securing such guarantee, or secured by property and assets that do not secure such guarantee, to the extent of the value of the property and assets securing such indebtedness and other liabilities, including the BP Creditor Liabilities secured on a first priority basis by the BP Receivables.

Security

The 2019 Senior Secured Notes and the related guarantees are secured by first ranking liens (subject to certain exceptions) on the same assets that secure the obligations under the Senior Secured Term Loans, the 2020 Senior Secured Notes, certain hedging liabilities and certain cash management liabilities.

Optional Redemption and Change of Control

At any time prior to February 15, 2015, INEOS Finance plc may redeem all or part of the 2019 Senior Secured Euro Floating Rate Notes at a redemption price equal to 100% of the principal amount of the 2019 Senior Secured Euro Floating Rate Notes redeemed plus the greater of (1) 1.0% of the principal amount of such note; and (2) the excess of (a) the present value at such redemption date of such 2019 Senior Secured Euro Floating Rate Note at February 15, 2015, plus all required interest payments that would otherwise be due to be paid on such 2019 Senior Secured Euro Floating Rate Note during the period between the redemption date and February 15, 2015, excluding accrued but unpaid interest, computed using a discount rate equal to the bund rate at such redemption date plus 50 basis points and assuming that the rate of interest on the 2019 Senior Secured Euro Floating Rate Notes for the period from the redemption date through February 15, 2015, will equal the rate of interest on the 2019 Senior Secured Euro Floating Rate Notes in effect on the date which the applicable notice of redemption is given, over (b) the principal amount of such 2019 Senior Secured Euro Floating Rate Note.

At any time prior to February 15, 2015, INEOS Finance plc may redeem all or part of the 2019 Senior Secured Dollar Fixed Rate Notes at a redemption price equal to 100% of the principal amount of the 2019 Senior Secured Dollar Fixed Rate Notes redeemed plus the greater of (1) 1.0% of the principal amount of such note; and (2) the excess of (a) the present value at such redemption date of the redemption price of such Dollar Fixed Rate Note at February 15, 2015, plus all required interest payments that would otherwise be due to be paid on such 2019 Senior Secured Dollar Fixed Rate Note during the period between the redemption date and February 15, 2015, excluding accrued but unpaid interest, computed using a discount rate equal to the treasury rate at such redemption date plus 50 basis points, over (b) the principal amount of such 2019 Senior Secured Dollar Fixed Rate Note.

The 2019 Senior Secured Euro Floating Rate Notes are subject to redemption at any time on or after February 15, 2015, at the option of INEOS Finance plc, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning on February 15 of the year indicated below:

Year	2019 Senior Secured Euro Floating Rate Notes Redemption Price
2015	102.000%
2016	101.000%
2017 and thereafter	100.000%

together with certain additional amounts, if applicable, and accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

The 2019 Senior Secured Dollar Fixed Rate Notes are subject to redemption at any time on or after February 15, 2015, at the option of INEOS Finance plc, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning on February 15 of the year indicated below:

	2019 Senior
	Secured Dollar
	Fixed Rate
	Notes
	Redemption Price
Year	Price
2015	106.281%
2016	104.188%
2017	102.094%
2018 and thereafter	100.000%

2010 0

together with certain additional amounts, if applicable, and accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

At any time on or prior to February 15, 2015, INEOS Finance plc may redeem up to 35% of the aggregate principal amount of each of the 2019 Senior Secured Dollar Fixed Rate Notes and any additional 2019 Senior Secured Dollar Fixed Rate Notes issued under the 2019 Senior Secured Notes Indenture (the "Additional 2019 Senior Secured Dollar Fixed Rate Notes") with the net cash proceeds of certain public equity offerings at 108.375% of the principal amount of the 2019 Senior Secured Dollar Fixed Rate Notes originally issued and the initial aggregate principal amounts of any Additional 2019 Senior Secured Dollar Fixed Rate Notes, in each case, plus certain additional amounts, if applicable, and accrued and unpaid interest, if any, to the redemption date, if at least 65% of the sum of the originally issued aggregate principal amount of the 2019 Senior Secured Dollar Fixed Rate Notes remains outstanding.

Upon the occurrence of certain change of control events, each holder of 2019 Senior Secured Notes may require INEOS Finance plc to repurchase all or a portion of its 2019 Senior Secured Notes at a purchase price equal to 101% of the principal amount of the 2019 Senior Secured Notes, plus accrued and unpaid interest to, but not including, the date of purchase.

If INEOS Finance plc sells assets under certain circumstances, INEOS Finance plc is required to make an offer to purchase the 2019 Senior Secured Notes at 100% of the principal amount of the 2019 Senior Secured Notes, plus accrued interest to, but not including, the date of purchase, with the excess proceeds from the sale of the assets.

In addition, in the event that INEOS Finance plc becomes obligated to pay additional amounts (as defined in the 2019 Senior Secured Notes Indenture) to holders of the 2019 Senior Secured Notes as a result of changes affecting withholding taxes applicable to payments on the 2019 Senior Secured Notes, INEOS Finance plc may redeem the 2019 Senior Secured Notes in whole but not in part at any time at 100% of the principal amount of the 2019 Senior Secured Notes plus accrued and unpaid interest to the redemption date.

Covenants

The 2019 Senior Secured Notes Indenture contains covenants that, among other things, limit the ability of our subsidiaries to:

- incur or guarantee additional indebtedness and issue certain preferred stock;
- layer debt;
- make restricted payments, including dividends or other distributions;
- prepay or redeem subordinated debt or equity;
- make certain investments;
- · create or permit to exist certain liens;
- transfer, lease or sell certain assets;
- enter into arrangements that impose restrictions on the ability of our subsidiaries to pay dividends or make other payments to Lux I;
- engage in certain transactions with affiliates;
- engage in prohibited activities (solely with respect to INEOS Finance plc and IGH);
- consolidate, merge or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis;
- impair the security interests for the benefit of the holders of the 2019 Senior Secured Notes; and
- amend certain documents.

These covenants are subject to a number of important limitations and exceptions. Currently, all of IGH's subsidiaries are restricted subsidiaries, as defined in the 2019 Senior Secured Notes Indenture.

Events of Default

The 2019 Senior Secured Notes Indenture contains customary events of default, including, among others, the non-payment of principal or interest on the 2019 Senior Secured Notes, certain failures to perform or observe any other obligation under the 2019 Senior Secured Notes Indenture or security documents, the failure to pay certain indebtedness or judgments and the bankruptcy or insolvency of IHL or any Significant Restricted Subsidiary (as defined in the 2019 Senior Secured Notes Indenture). The occurrence of any of the events of default would permit or require the acceleration of all obligations outstanding under the 2019 Senior Secured Notes.

IGH Notes due 2018

Overview

On May 2, 2013, INEOS Group Holdings S.A. issued €500,000,000 aggregate principal amount of 6½% Senior Notes due 2018 (the "2018 IGH Euro Notes") and \$678,000,000 6½% Senior Notes due 2018 (the "2018 IGH Dollar Notes" and together with the 2018 IGH Euro Notes, the "2018 IGH Notes") under an indenture dated May14, 2013, as amended, among INEOS Group Holdings S.A., each of the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee (the "2018 IGH Notes Trustee"), collateral agent, registrar and principal paying agent and the Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent and Luxembourg transfer agent. As of December 31, 2013, there were €500,000,000 aggregate principal amount of 2018 IGH Euro Notes and \$678,000,000 aggregate principal amount of 2018 IGH Dollar Notes issued and outstanding.

Ranking

The 2018 IGH Notes are the general unsubordinated obligations of IGH and rank equally with IGH's existing and future senior indebtedness, including the Notes, rank senior to all of the IGH's existing and future subordinated indebtedness and are effectively subordinated to all of its existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness, unless such assets also secure the 2018 IGH Notes on an equal and ratable basis. In addition, the 2018 IGH Notes are effectively subordinated to all existing and future indebtedness and other liabilities of the IGH's non-guarantor subsidiaries.

Interest Rates, Payment Dates and Maturity

The 2018 IGH Euro Notes bear interest at a rate of $6^{1}/_{2}$ % per annum. The 2018 IGH Dollar Notes bear interest at a rate of $6^{1}/_{8}$ % per annum. Interest on the 2018 IGH Notes is payable semi-annually in arrears on February 15 and August 15, beginning February 15, 2014. The 2018 IGH Notes will mature on August 15, 2018.

Guarantees

The 2018 IGH Notes are jointly and severally guaranteed on an unsecured senior subordinated basis by the Guarantors (collectively, the "2018 IGH Note Guarantors").

The guarantees by the 2018 IGH Note Guarantors are their senior subordinated obligations and rank behind all of the existing and future senior indebtedness (including any second secured liabilities) of the 2018 IGH Note Guarantors, which includes the subsidiary guarantees under our 2020 Senior Secured Notes, our 2019 Senior Secured Notes and the Senior Secured Term Loans, rank equally with the existing and future senior subordinated indebtedness of the 2018 IGH Note Guarantors (including the guarantees of the Notes), rank senior to all of the existing and future subordinated indebtedness of the 2018 IGH Note Guarantors other than indebtedness of the IGH Note Guarantors that is secured by liens on the assets of the 2018 IGH Note Guarantors, and are effectively subordinated to all of the existing and future secured indebtedness of the 2018 IGH Note Guarantors to the extent of the value of the assets securing such indebtedness.

Security

The 2018 IGH Notes are currently secured by a second ranking assignment over the 2016 IGH Notes Proceeds Loans and the 2018 IGH Notes Proceeds Loans and a second ranking share charge over 100% of the shares of IHL. Upon issuance of the Notes and the New IGH Notes Proceeds Loan, the 2018 IGH Notes will also be secured by a second ranking assignment over the New IGH Notes Proceeds Loan. This security ranks behind the security granted over these assets which secures certain senior indebtedness, including indebtedness under the 2020 Senior Secured Notes, the 2019 Senior Secured Notes and the Senior Secured Term Loans and (ii) upon issuance of the Notes, will rank *pari passu* with the security that will be granted over these assets to secure the Notes.

Optional Redemption and Change of Control

The 2018 IGH Notes are subject to redemption at any time, at the option of IGH, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12- month period beginning on May 15 of the year indicated below:

	2018	2018
	IGH Euro Notes	IGH Dollar Notes
Year	Redemption Price	Redemption Price
2015	103.250%	103.063%
2016	101.625%	101.531%
2017 and thereafter	100.000%	100.000%

Upon the occurrence of certain change of control events, each holder of 2018 IGH Notes may require IGH to repurchase all or a portion of its 2018 IGH Notes at a purchase price equal to 101% of the principal amount of the 2018 IGH Notes, plus accrued interest to, but not including, the date of purchase.

If IGH sells assets under certain circumstances, IGH is required to make an offer to purchase the 2018 IGH Notes at 100% of the principal amount of the 2018 IGH Notes, plus accrued interest to, but not including, the date of purchase, with the excess proceeds from the sale of the assets.

In addition, in the event that IGH becomes obligated to pay Additional Amounts (as defined in the 2018 IGH Notes Indenture) to holders of the 2018 IGH Notes as a result of changes affecting withholding taxes applicable to payments on the 2018 IGH Notes, IGH may redeem the 2018 IGH Notes in whole but not in part at any time at 100% of the principal amount of the 2018 IGH Notes plus accrued interest to the redemption date.

Covenants

The 2018 IGH Notes Indenture contains covenants that, among other things, limit our ability and the ability of our subsidiaries to:

- incur additional indebtedness;
- make restricted payments, including dividends or other distributions;
- create certain liens;
- sell assets:
- in the case of our restricted subsidiaries, enter into arrangements that restrict dividends or other payments to us;
- in the case of our restricted subsidiaries, guarantee or secure debt;
- engage in transactions with affiliates;
- create unrestricted subsidiaries; and
- consolidate, merge or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis.

These covenants are subject to important exceptions and qualifications. Currently, all of IGH's subsidiaries are restricted subsidiaries, as defined in the 2018 IGH Notes Indenture.

Events of Default

The 2018 IGH Notes Indenture contains customary events of default, including, among others, the non-payment of principal or interest on the 2018 IGH Notes, certain failures to perform or observe any other obligation under the 2018 IGH Notes Indenture or security documents, the failure to pay certain indebtedness or judgments and the bankruptcy or insolvency of IGH or any Significant Restricted Subsidiary (as defined in the 2018 IGH Notes Indenture). The occurrence of any of the events of default would permit or require the acceleration of all obligations outstanding under the 2018 IGH Notes.

IGH Notes due 2016

Overview

On February 7, 2006, INEOS Group Holdings plc (now INEOS Group Holdings Limited) issued €1,750,000,000 aggregate principal amount of $7^{7}/_{8}$ % Senior Notes due 2016 (the "2016 IGH Euro Notes") and \$750,000,000 $8^{1}/_{2}$ % Senior Notes due 2016 (the "2016 IGH Dollar Notes" and together with the 2016 IGH Euro Notes, the "2016 IGH Notes") under an indenture dated February 7, 2006, as amended, among INEOS Group Holdings plc (now INEOS Group Holdings Limited), each of the guarantors named therein, The Bank of New York Mellon, London Branch, as trustee (the "2016 IGH Notes Trustee"), collateral agent, registrar and principal paying agent and the Bank of New York Mellon (Luxembourg) S.A., as Luxembourg paying agent and Luxembourg transfer agent. On January 31, 2011, IGH replaced INEOS Group Holdings plc (now INEOS Group Holdings Limited) as the issuer of the 2016 IGH Notes. On May 15, 2013, we redeemed all of the outstanding 2016 IGH Dollar Notes and €500,000,000 aggregate principal amount of the 2016 IGH Euro Notes. As of December 31, 2013, there were €1,032,130,000 aggregate principal amount of 2016 IGH Euro Notes issued and outstanding.

In February 2014 we redeemed all of the outstanding 2016 IGH Euro Notes.

Ranking

The 2016 IGH Notes are the general unsubordinated obligations of IGH and rank equally with the IGH's existing and future senior indebtedness, including the Notes and the 2018 IGH Notes, rank senior to all of the IGH's existing and future subordinated indebtedness and are effectively subordinated to all of its existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness, unless such assets also secure the 2016 IGH Notes on an equal and ratable basis. In addition, the 2016 IGH Notes are effectively subordinated to all existing and future indebtedness and other liabilities of the IGH's non-guarantor subsidiaries.

Interest Rates, Payment Dates and Maturity

The 2016 IGH Euro Notes bear interest at a rate of $7^{7}/_{8}$ % per annum. Interest on the 2016 IGH Notes is payable semi-annually in arrears on February 15 and August 15, beginning August 15, 2006. The 2016 IGH Notes will mature on February 15, 2016.

Guarantees

The 2016 IGH Notes are jointly and severally guaranteed on an unsecured senior subordinated basis by the Guarantors (collectively, the "2016 IGH Note Guarantors").

The guarantees by the 2016 IGH Note Guarantors are their senior subordinated obligations and rank behind all of the existing and future senior indebtedness (including any second secured liabilities) of the 2016 IGH Note Guarantors, which includes the subsidiary guarantees under our 2020 Senior Secured Notes, our 2019 Senior Secured Notes and the Senior Secured Term Loans, rank equally with the existing and future senior subordinated indebtedness of the 2016 IGH Note Guarantors (including the guarantees of the 2018 IGH Note and the Notes), rank senior to all of the existing and future subordinated indebtedness of the 2016 IGH Note Guarantors other than indebtedness of the 2016 IGH Note Guarantors that is secured by liens on the assets of the 2016 IGH Note Guarantors, and are effectively subordinated to all of the existing and future secured

indebtedness of the 2016 IGH Note Guarantors to the extent of the value of the assets securing such indebtedness.

Security

The 2016 IGH Notes are currently secured by a second ranking assignment over the 2016 IGH Notes Proceeds Loans and the 2018 IGH Notes Proceeds Loans and a second ranking share charge over 100% of the shares of IHL. This security ranks behind the security granted over these assets which secures certain senior indebtedness, including indebtedness under the 2020 Senior Secured Notes, the 2019 Senior Secured Notes and the Senior Secured Term Loans and ranks *pari passu* with the security granted over these assets to secure the 2018 IGH Notes.

Optional Redemption and Change of Control

The 2016 IGH Notes are subject to redemption at any time, at the option of IGH, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12- month period beginning on February 15 of the year indicated below:

2016

	IGH Euro Notes Redemption
Year	Price
2013	101.313%
2014 and thereafter	100.000%

Upon the occurrence of certain change of control events, each holder of 2016 IGH Notes may require IGH to repurchase all or a portion of its 2016 IGH Notes at a purchase price equal to 101% of the principal amount of the 2016 IGH Notes, plus accrued interest to, but not including, the date of purchase.

If IGH sells assets under certain circumstances, IGH is required to make an offer to purchase the 2016 IGH Notes at 100% of the principal amount of the 2016 IGH Notes, plus accrued interest to, but not including, the date of purchase, with the excess proceeds from the sale of the assets.

In addition, in the event that IGH becomes obligated to pay Additional Amounts (as defined in the 2016 IGH Notes Indenture) to holders of the 2016 IGH Notes as a result of changes affecting withholding taxes applicable to payments on the 2016 IGH Notes, IGH may redeem the 2016 IGH Notes in whole but not in part at any time at 100% of the principal amount of the 2016 IGH Notes plus accrued interest to the redemption date.

Covenants

The 2016 IGH Notes Indenture contains covenants that, among other things, limit our ability and the ability of our subsidiaries to:

- incur additional indebtedness;
- make restricted payments, including dividends or other distributions;
- create certain liens:
- sell assets;
- in the case of our restricted subsidiaries, enter into arrangements that restrict dividends or other payments to us;
- in the case of our restricted subsidiaries, guarantee or secure debt;
- engage in transactions with affiliates;
- create unrestricted subsidiaries; and

 consolidate, merge or transfer all or substantially all of our assets and the assets of our subsidiaries on a consolidated basis.

These covenants are subject to important exceptions and qualifications. Currently, all of IGH's subsidiaries are restricted subsidiaries, as defined in the 2016 IGH Notes Indenture.

Events of Default

The 2016 IGH Notes Indenture contains customary events of default, including, among others, the non-payment of principal or interest on the 2016 IGH Notes, certain failures to perform or observe any other obligation under the 2016 IGH Notes Indenture or security documents, the failure to pay certain indebtedness or judgments and the bankruptcy or insolvency of IGH or any Significant Restricted Subsidiary (as defined in the 2016 IGH Notes Indenture). The occurrence of any of the events of default would permit or require the acceleration of all obligations outstanding under the 2016 IGH Notes.

Letter of Credit Facility

On May 4, 2012, INEOS Treasury (UK) Limited (the "LC Borrower"), a wholly owned subsidiary of INEOS Investment Holdings (Germany) Limited, entered into an on-demand letter of credit facility (the "LC Facility") with Barclays Bank PLC (the "Issuing Bank"), under which the LC Borrower may request (on its own behalf or on behalf of other Group companies) the Issuing Bank to issue letters of credit, guarantees, performance bonds and indemnities (or any other instrument in a form agreed by the Issuing Bank) ("LC Utilizations"), the outstanding aggregate base currency amount of which is not more than €250 million. Under the terms of the LC Facility, the LC Borrower undertakes to provide cash collateral in an amount at least equal to the aggregate of 100% of the maximum actual and/or contingent liability of the Issuing Bank under each outstanding LC Utilization (or 105%, to the extent cash cover is provided in a currency other than the currency of an LC Utilization) standing to the credit of an account or certain accounts of the LC Borrower which are subject to a lien in favor of the Issuing Bank.

Securitization Program

In July 2006, IHL and certain of the other Group companies (such other companies being the "Sellers") entered into a five-year €1,500.0 million receivables securitization (as amended, supplemented, varied, novated, extended or replaced from time to time, the "Securitization Program"). The margins on amounts drawn and the commitment fee on amounts undrawn under the Securitization Program have been amended from time to time, most recently on December 12, 2013. The overall facility amount has also been amended from time to time, most recently to €1,000.0 million pursuant to an amendment deed dated December 12, 2013. In 2013, the scheduled termination date for the facility was extended to December 31, 2016. The Securitization Program complies with the terms for a Permitted Receivables Securitization as defined in the Senior Secured Term Loans Agreement.

Under the Securitization Program, the trade receivables originated by the Sellers (other than those receivables that are specifically identified as "excluded receivables") are sold to a bankruptcy-remote special purpose vehicle incorporated under the laws of the Republic of Ireland, INEOS Finance (Ireland) Limited (the "SPV"). The SPV finances these purchases from borrowings, primarily funded through asset-backed commercial paper ("ABCP") conduits. The cost of funding for the ABCP conduits reflects the rating of the pooled financial assets in which they invest, thus allowing the Securitization Program to benefit from financing costs that are not linked to the group's corporate rating.

The Securitization Program is restricted to receivables denominated in U.S. dollars, euro or sterling that are sold to the SPV at face value less a small discount to reflect the carry cost until settlement. In some jurisdictions, the sale of the receivables requires the involvement of an intermediate purchaser in order to comply with local securities and banking regulations. The SPV acquires title, on a non-recourse basis, to new receivables as the liability arises and settles its purchases with the Sellers on a twice-monthly basis. Between settlement dates, the Sellers have the use of the cash received from customers which has been paid into segregated bank accounts, either in the name of the SPV or held on trust for the SPV. Responsibility for the administration of the receivables, including adherence to established credit and collection policies, remains with the Sellers, with IHL acting on their behalf in its capacity as master servicer.

The twice-monthly settlement period is tied to the term of the loans advanced to the SPV by the lenders against the security of the outstanding receivables. The lenders' advance rate is adjusted each month to reflect

the actual performance of the receivables portfolio and standard Rating Agency methodology for calculating loss and dilution reserves and other potential shortfalls is applied. The balance of the SPV's funding requirements is provided by IHL through a subordinated loan facility.

Intercreditor Deed

Unless the context otherwise requires, terms defined below in this description of the Intercreditor Deed apply only to this section.

Overview

Lux I and certain of its subsidiaries (including IHL and INEOS Finance plc) (together, the "Obligors"), the Parent (as the issuer of the 2016 IGH Notes, 2018 IGH Notes and the Notes) and INEOS Holdings Luxembourg S.A. (together, and collectively with certain other entities referred to in the Intercreditor Deed, the "Subordinated Creditors"), certain affiliates of BP plc (the "BP Creditors"), and certain INEOS intra-group creditors (the "Intra-Group Creditors") are subject to an intercreditor deed dated May 12, 2010 (as amended and restated by a first amendment deed dated December 23, 2010, as further amended by a second amendment deed dated February 18, 2011, as further supplemented by a third amendment deed dated February 6, 2012, as further amended and restated by a fourth amendment deed dated May 4, 2012, as further amended and restated by a fifth amendment deed dated May 8, 2013 and as will be further amended and/or restated on or before the Issue Date) (the "Intercreditor Deed") entered into with the lenders under the Senior Secured Term Loans Agreement (the "Senior Lenders"), Barclays Bank PLC as senior facility agent (the "Senior Facility Agent") for the Senior Lenders and as senior security agent (the "Senior Security Agent") for itself, the Senior Lenders, the institutions named therein as hedge counterparties or cash management banks, the holders of the 2019 Senior Secured Notes, the holders of the 2020 Senior Secured Notes and any other permitted senior secured Notes issued from time to time (the "Additional Senior Secured Notes"), the trustee under the 2016 IGH Notes Indenture (the "2016 IGH Notes Trustee"), the trustee under the 2018 IGH Notes Indenture (the "2018 IGH Notes Trustee"), the trustee under the 2019 Senior Secured Notes Indenture (the "2019 Notes Senior Secured Trustee"), the trustee with respect to the 2020 Senior Secured Notes (the "2020 Senior Secured Notes Trustee") and BP International Limited (the "BP Collateral Agent").

The Intercreditor Deed sets out, by way of agreement between the parties to it, among other things, provisions relating to:

- the relative ranking of certain liabilities of the Obligors;
- the relative ranking of certain security granted by the Obligors and the Parent;
- when payments can be made in respect of certain liabilities of the Obligors and the Parent;
- when enforcement action can be taken in respect of those liabilities;
- the terms pursuant to which certain of those liabilities will be subordinated upon the occurrence of certain insolvency events;
- turnover provisions; and
- when security and guarantees may be released to permit an enforcement sale.

The following description is a summary of certain provisions contained in the Intercreditor Deed. It does not restate the Intercreditor Deed in its entirety and we urge you to read that document because it, and not the discussion that follows, will regulate and govern, among other things, certain of the rights of the holders of the Notes, the holders of the 2018 IGH Notes, the holders of the 2019 Senior Secured Notes, the holders of the 2020 Senior Secured Notes, the 2018 IGH Notes Trustee, the 2016 IGH Notes Trustee, the 2019 Senior Secured Notes Trustee and the Trustee.

Ranking and Priority

The Intercreditor Deed provides that, subject to the provisions in respect of permitted payments (summarized below), the liabilities of the Obligors in respect of the Senior Secured Term Loans, the 2016 IGH Notes, the 2018 IGH Notes, the 2019 Senior Secured Notes, the 2020 Senior Secured Notes, the Notes and certain other liabilities rank, in summary, in the following order and are postponed and subordinated to any prior ranking liabilities of the Obligors as follows:

- first, each of the following, pari passu among themselves: (i) the liabilities of the Obligors under the Senior Secured Term Loans Agreement and under any other Additional Senior Finance Documents (as defined in the Intercreditor Deed), the liabilities of any Obligor party to certain hedging agreements and cash management arrangements, the liabilities of INEOS Finance plc and the guarantors under the 2015 Senior Secured Notes Indenture, the liabilities of INEOS Finance plc and the guarantors under the 2019 Senior Secured Notes Indenture, the liabilities of INEOS Finance plc and the guarantors under the 2020 Notes Indenture and any Additional Senior Secured Notes (together, the "Senior Liabilities"), (ii) fees, costs and expenses of, and amounts incurred by or payable to, the 2016 IGH Notes Trustee, the 2018 IGH Notes Trustee or the Trustee (the "High Yield Note Trustee Amounts"), (iii) fees, costs and expenses incurred by or payable to the Senior Facility Agent or any agent appointed to act as security trustee, facility agent or other similar representative for or with respect to any Additional Senior Finance Parties (as defined in the Intercreditor Deed) or any agents appointed to act as security agent and security trustee on behalf of more than one class of holders of the 2016 IGH Notes, the 2018 IGH Notes, the Notes or any other High Yield Notes or fees, costs and expenses incurred by any Second Secured Representative (as defined in the Intercreditor Deed) (other than in respect of any Second Secured Liabilities (as defined in the Intercreditor Deed)) in the form of notes issued pursuant to one or more indentures) ("Agency Amounts"), (iv) fees, costs and expenses of, and amounts incurred by or payable to, the 2020 Senior Secured Notes Trustee, the 2019 Senior Secured Notes Trustee and the trustee of any Additional Senior Secured Notes (the "Additional Senior Secured Notes Trustee") (collectively, the "Senior Secured Notes Trustees") (the "Senior Secured Note Trustee Amounts"), and (v) fees, costs and expenses of, and amounts incurred by or payable to any Second Secured Note Trustee (the "Second Secured Note Trustee Amounts");
- second, any Second Secured Liabilities;
- third, the liabilities of the Obligors in relation to the 2016 IGH Notes, the 2018 IGH Notes and the Notes (other than in respect of High Yield Note Trustee Amounts) and the liabilities owed by IHL or Lux I (to the extent it is a borrower of a High Yield Proceeds Loan (as defined in the Intercreditor Deed)) to the Parent or any other permitted lenders (such other lenders, together with Parent, the "High Yield Proceeds Lenders") under any loan of the proceeds of the 2016 IGH Notes, the 2018 IGH Notes and the Notes or any other High Yield Notes, (together, the "Subordinated High Yield Liabilities");
- fourth, (i) the liabilities of the Obligors to the Subordinated Creditors (other than in respect of any High Yield Proceeds Loan or any loan of the proceeds of any funds made available under any documents pursuant to or in connection with which any Second Secured Liabilities arise (the "Second Secured Documents") to IHL or Lux I (each, a "Second Secured Proceeds Loan")), (ii) any liabilities owed by IHL, the Parent, or any other High Yield Note Issuer (as defined in the Intercreditor Deed) or any Additional Second Secured Borrower (as defined in the Intercreditor Deed) to any Subordinated Creditor under certain investor documents, (iii) any other money or liabilities due, owing or payable by any Obligor to the Parent, or any other High Yield Note Issuer or any Additional Second Secured Borrower or any parent holding company of the Parent which has acceded to the Intercreditor Deed (other than in respect of any High Yield Proceeds Loan or any Second Secured Proceeds Loan) (the liabilities referred to in paragraphs (i) to (iii) being, together, the "Subordinated Liabilities"), and (iv) any liabilities of the Obligors to the Intra-Group

Creditors in such capacity (other than liabilities under the 2019 Senior Secured Notes Proceeds Loans or certain other loans of the proceeds of any Senior Liabilities to IHL or any Restricted Subsidiary of the Bottom Swiss Subsidiary (as defined in the Intercreditor Deed) (collectively, the "Senior Proceeds Loans")) (the "Intra- Group Liabilities").

The Intercreditor Deed does not purport to rank any of the Subordinated Liabilities or Intra-Group Liabilities as between themselves. The Intercreditor Deed also provides that, subject to the provisions in respect of permitted payments, the Subordinated Liabilities are postponed and subordinated until the Senior Liabilities, liabilities of the Obligors and the Parent to the holders of the 2016 IGH Notes, the 2018 IGH Notes or the Notes and 2016 IGH Notes Trustee, the 2018 IGH Notes Trustee or the Notes Trustee (the "High Yield Liabilities") and the Second Secured Liabilities have been discharged in full.

The parties to the Intercreditor Deed agree in the Intercreditor Deed that the liens and other security provided by the Parent and the Obligors (including the Issuer) rank in the following order:

- first, the security provided in respect of the Senior Liabilities other than any security granted in respect of the BP Receivables;
- second, any security provided separately in respect of the Second Secured Liabilities, if any; and
- third, the security provided in respect of the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture, the Indenture and the 2016 IGH Notes, 2018 IGH Notes and the Notes.

Under the Intercreditor Deed, all proceeds from enforcement of security to which the Intercreditor Deed applies are required to be applied in accordance with the terms of the Intercreditor Deed, summarized below under "—Application of Proceeds." Certain security granted by members of the Group (being, for the purposes of the Intercreditor Deed, Lux I and its subsidiaries), for example certain liens granted by the Obligors, such as BP's first-priority lien over the BP Receivables, are not governed by the Intercreditor Deed.

Permitted Payments

The Intercreditor Deed permits, *inter alia*, payments to be made by the Obligors, each Additional Senior Secured Borrower (as defined in the Intercreditor Deed), and the Parent and each other High Yield Note Issuer to the Senior Lenders under the Senior Secured Term Loans Agreement, the holders of the 2019 Senior Secured Notes and the 2019 Senior Secured Notes Trustee, the holders of the 2020 Senior Secured Notes and the 2020 Senior Secured Notes Trustee, (subject to certain restrictions) certain hedge counterparties, certain cash management banks and to lenders under any Additional Senior Finance Documents and holders of any Additional Senior Secured Notes Trustees with respect thereto and does not in any way limit or restrict any payment due to be made by any Obligor to BP plc or any of its subsidiaries under or in connection with certain agreements between the Obligors and BP plc and certain of its subsidiaries or otherwise in the ordinary course of business. The Intercreditor Deed also permits payments to be made without further consents being obtained:

- by the Obligors in respect of any Second Secured Liabilities (x) to the extent that the payment is (i) a payment of scheduled interest (or default interest), (ii) a payment under any customary tax gross-up, tax indemnity, illegality or increased costs provision, currency indemnity or indemnity in respect of costs and expenses contained in the Second Secured Documents, or (iii) any consent fee payment customary for the amendment of the Second Secured Documents, in each case so long as such payment is then due and not prohibited by any payment blockage described below, and (y) for so long as such payment is not prohibited by any payment blockage described below, any Obligor may (i) on or after the original maturity date of the Second Secured Liabilities; and (ii) at any time in connection with any provision of the Second Secured Documents specifying a mandatory repayment, offer to purchase or redemption which is either permitted or, if not permitted, provided that consent is obtained from the Majority Senior Lenders, each relevant Additional Senior Facilities Representative and each relevant Senior Secured Notes Trustee (as applicable), pay the principal amount due or any other amount payable by it with respect to the Second Secured Liabilities;
- by the Obligors to the 2016 IGH Notes Trustee, 2018 IGH Notes Trustee or the Trustee or holders
 of the 2016 IGH Notes or the 2018 IGH Notes or the Notes and any other High Yield Notes or
 High Yield Note Trustee pursuant to the guarantees to the extent that the payment is (i) a payment

of scheduled interest (or default interest), (ii) a payment under any tax gross-up, tax indemnity or increased costs provisions, provided such provisions are in customary form, or (iii) a consent fee payment customary for the amendment of the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture or the Indenture and certain other documents entered into in connection with the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture or any other High Yield Documents, in each case so long as such payment is then due and not prohibited by any payment blockage as described below (except that payments in respect of High Yield Note Trustee Amounts may always be made);

- by IHL or Lux I as borrowers under any High Yield Proceeds Loan to the Parent or any other High Yield Proceeds Lenders in respect of cash interest on any High Yield Proceeds Loan to enable the Parent or any other High Yield Note Issuer to make a payment of scheduled interest and default interest in respect of the 2016 IGH Notes, 2018 IGH Notes or the Notes or any additional High Yield Notes (as defined in the Intercreditor Deed) (the "Additional High Yield Notes", together with the 2016 IGH Notes, 2018 IGH Notes and the Notes, the "High Yield Notes"), which payment must fall due within five (5) days of the date of payment of the corresponding interest by IHL or Lux I to the applicable High Yield Note Issuer, and certain other payments by IHL or Lux I to the Parent or any other High Yield Proceeds Lender in respect of sums due under any High Yield Notes (as applicable) and related documents permitted by the Intercreditor Deed, so long as any such payment is not prohibited by any payment blockage as described below (except that payments in respect of High Yield Note Trustee Amounts may always be made); and
- by the Obligors in respect of Intra-Group Liabilities if (i) at the time of the payment no Enforcement Action (as defined below) has occurred and is continuing in respect of the Senior Liabilities or any Second Secured Liabilities, (ii) prior to the date on which all Senior Liabilities have been unconditionally discharged in full (the "Senior Discharge Date"), the consent of the "Instructing Group" (as defined in the Intercreditor Deed) to the relevant payment is obtained or (iii) on or after the Senior Discharge Date but prior to the date on which all Second Secured Liabilities have been unconditionally discharged in full (the "Second Secured Discharge Date"), the consent of the Majority Second Secured Creditors (as defined in the Intercreditor Deed) is obtained.

Prior to the later of the Senior Discharge Date and the Second Secured Discharge Date, no Obligor, Additional Second Secured Borrower or High Yield Note Issuer or any of their subsidiaries may make any payments in respect of the Subordinated Liabilities unless, prior to the Senior Discharge Date, where the relevant action is prohibited under the Senior Secured Term Loans Agreement, the Additional Senior Finance Documents or the Senior Secured Note Documents, the prior consent of the Majority Senior Lenders (as defined in the Intercreditor Deed), each security trustee, facility agent or other similar representative with respect to the creditors under each Additional Senior Finance Document (the "Additional Senior Facilities Representative"), each Senior Secured Notes Trustee (as applicable and relevant) is obtained and, following the Senior Discharge Date but prior to the Second Secured Discharge Date, where the relevant action is prohibited under any Second Secured Document, of the Majority Second Secured Creditors is obtained.

As defined in the Intercreditor Deed, the term "Instructing Group" means the senior creditors under the Intercreditor Deed whose senior credit participations at the relevant time constitute the simple majority in aggregate principal amount of the total senior credit participations at the relevant time.

Payment Blockage

Prior to the Senior Discharge Date, if any Obligor fails to pay on the due date or within any applicable grace period any amount payable under the Senior Finance Documents (including relevant Hedging Agreements and Cash Management Arrangements), any Additional Senior Finance Document, the 2019 Senior Secured Notes Indenture or the 2019 Senior Secured Notes Indenture or the 2020 Senior Secured Notes Indenture or the 2020 Senior Secured Notes (the "Additional Senior Secured Notes Indenture") or any Additional Senior Secured Notes (all such senior secured Notes and indentures, collectively, the "Senior Secured Notes And Notes Indentures") (other than an amount not constituting principal, interest or fees not in excess of €1,000,000 (or its equivalent in any other currency)), the Obligors may not make payments in respect of the Second Secured Liabilities while that failure is continuing. Permitted payments in respect of the Second Secured Liabilities may be resumed when such payment default is cured or waived.

Prior to the Senior Discharge Date, if there is any other default that occurs and is continuing under the Senior Secured Term Loans Agreement, any Additional Senior Finance Documents, any Senior Secured Notes And Notes Indentures, the Senior Facility Agent (on the instructions of the Majority Senior Lenders (as defined in the Intercreditor Deed)), or the relevant Additional Senior Facilities Representative, any Senior Secured Notes Trustee (as applicable) may issue a written stop notice (a "Second Secured Stop Notice") to each note trustee, security trustee, facility agent or other similar representative with respect to any holders of interests representing Second Secured Liabilities (the "Second Secured Creditors") (each, a "Second Secured Representative") and notify IHL. From the date of the issue of such notice, the Obligors may not make payments in respect of the Second Secured Liabilities for a period of 179 days (the "Second Secured Stop Period"), subject to certain exceptions described below.

Prior to the Senior Discharge Date, from the date of issue of a Second Secured Stop Notice for the duration of the Second Secured Stop Period, no payments may be made that would otherwise be permitted by the Intercreditor Deed in respect of the Second Secured Liabilities unless:

- the event in respect of which the Second Secured Stop Notice was issued has been cured or waived in writing by (if the default has occurred and is (or immediately prior to the waiver was) continuing at such time with respect to the Senior Secured Term Loans Agreement) the Senior Facility Agent and (if the default is (or immediately prior to the waiver was) continuing with respect to any Additional Senior Finance Documents) the relevant Additional Senior Facilities Representative, (if the default is (or immediately prior to the waiver was) continuing with respect to the 2019 Senior Secured Notes) the 2019 Senior Secured Notes Trustee, (if the default is (or immediately prior to the waiver was) continuing with respect to the 2020 Senior Secured Notes) the 2020 Senior Secured Notes Trustee and (if the default is (or immediately prior to the waiver was) continuing with respect to any Additional Senior Secured Notes), the Additional Senior Secured Notes Trustee relating thereto or has ceased to exist;
- (if at any time of cancellation or consent, a default is continuing under the Senior Secured Term Loans Agreement) the Senior Facility Agent and, (if at the time of cancellation or consent, a default is continuing under any Additional Senior Finance Documents) the relevant Additional Senior Facilities Representative, (if at the time of cancellation or consent, a default is continuing under the 2019 Senior Secured Notes) the 2019 Senior Secured Notes Trustee, and (if at the time of cancellation or consent, a default is continuing under the 2020 Senior Secured Notes) the 2020 Senior Secured Notes Trustee cancels the Second Secured Stop Notice or consents to such payment; or
- if applicable, any Second Secured Standstill Period (as defined below) in effect at the time the Second Secured Stop Notice was issued has expired and the relevant event of default to which the Second Secured Standstill Period relates has not been cured or waived.

No Second Secured Stop Notice may be served by the Senior Facility Agent, any Additional Senior Facilities Representative or any Senior Secured Notes Trustee in reliance on a particular payment blockage event more than 75 days after the Senior Facility Agent, any Additional Senior Facilities Representative, or any Senior Secured Notes Trustee (as applicable) receives notice in writing specifying the occurrence constituting that payment blockage event. Not more than one Second Secured Stop Notice may be served with respect to the same event or set of circumstances. No Second Secured Stop Notice in relation to a payment blockage event may be served unless (i) 365 days have elapsed since the delivery of any previous Second Secured Stop Notice in relation to a payment blockage event and (ii) all scheduled payments of interest on the Second Secured Liabilities that have become due as a result of any previous Second Secured Stop Notice have been paid in full in cash.

Any failure to make a payment due in respect of the Second Secured Liabilities as a result of the issue of a Second Secured Stop Notice will not prevent the occurrence of an event of default under the Second Secured Documents as a consequence of such non-payment or the commencement of an Enforcement Action (defined below) otherwise permitted by the Intercreditor Deed.

If any Obligor fails to pay on the due date or within any applicable grace period any amount payable under the Senior Finance Documents (including relevant Hedging Agreements and Cash Management Arrangements), any Additional Senior Finance Document, any Senior Secured Notes And Notes Indentures or any Second Secured Document (other than an amount not constituting principal, interest or fees not in excess of €1,000,000 (or its equivalent in any other currency)), the Obligors may not make payments (except if such

payment is in the form of Permitted High Yield Note Junior Securities (as defined in the Intercreditor Deed) or comprises High Yield Note Trustee Amounts) in respect of the Subordinated High Yield Liabilities while that failure is continuing. Such payments in respect of any High Yield Notes may be resumed to the extent permitted under the Intercreditor Deed when such payment default is cured or waived.

Prior to the later of the Senior Discharge Date and the Second Secured Discharge Date, if there is any other default that occurs and is continuing under the Senior Secured Term Loans Agreement, any Additional Senior Finance Document, any Senior Secured Notes And Notes Indentures or, following the Senior Discharge Date, under any Second Secured Document, the Senior Facility Agent (on the instructions of the Majority Senior Lenders) or the relevant Additional Senior Facilities Representative, any Senior Secured Trustee or the relevant Second Secured Representative (as applicable) may issue a payment blockage notice (a "Stop Notice") to the 2016 IGH Notes Trustee, the 2018 Notes Trustee, the Trustee and other High Yield Note Trustees and notify each High Yield Representative (as defined in the Intercreditor Deed). From the date of the issue of such notice, the Obligors may not make any payments (except if such payment comprises High Yield Note Trustee Amounts) in respect of the Subordinated High Yield Liabilities or any High Yield Proceeds Loan for a period of 179 days (the "High Yield Stop Period"), subject to certain exceptions described below.

Prior to the later of the Senior Discharge Date and the Second Secured Discharge Date, from the date of issue of a Stop Notice for the duration of the High Yield Stop Period, blocked payments may not be made unless:

- the event in respect of which the Stop Notice was issued has been cured or, prior to the Senior Discharge Date, waived in writing (if the default is (or immediately prior to the waiver was) continuing with respect to the Senior Secured Term Loans Agreement) by the Senior Facility Agent and (if the default is (or immediately prior to the relevant waiver was) continuing with respect to any Additional Senior Finance Documents) the relevant Additional Senior Facilities Representative, (if the default is (or immediately prior to the waiver was) continuing with respect to the 2019 Senior Secured Notes Trustee, (if the default is continuing with respect to the 2020 Senior Secured Notes) the 2020 Senior Secured Notes Trustee and (if the default is (or immediately prior to the waiver was) continuing with respect to any Additional Senior Secured Notes), the relevant Senior Secured Notes Trustee or, following the Senior Discharge Date and prior to the Second Secured Discharge Date, waived in writing by the relevant Second Secured Representative or has ceased to exist;
- prior to the Senior Discharge Date, (if at the time of cancellation or consent, a default is continuing under the Senior Facilities) the Senior Facility Agent and (if at the time of cancellation or consent, a default is continuing under any Additional Senior Finance Documents) the relevant Additional Senior Facilities Representative, (if at the time of cancellation or consent, a default is continuing under the 2019 Senior Secured Notes) the 2019 Senior Secured Notes Trustee, (if at the time of cancellation or consent, a default is continuing under the 2020 Senior Secured Notes) the 2020 Senior Secured Notes Trustee and (if at the time of cancellation or consent, a default is continuing under any Additional Senior Secured Notes) the relevant Senior Secured Notes Trustee cancels the Stop Notice or consents to such payment;
- prior to the Senior Discharge Date, the Senior Liabilities have been repaid in full and all the commitments of the Senior Creditors (as defined in the Intercreditor Deed) cancelled or following the Senior Discharge Date the Second Secured Liabilities have been repaid in full; or
- if applicable, any High Yield Standstill Period (as defined below) in effect at the time the payment Stop Notice was issued has expired and the relevant event of default to which the High Yield Standstill Period relates has not been cured or waived.

No Stop Notice may be served by the Senior Facility Agent, an Additional Senior Facilities Representative or any Senior Secured Notes Trustee or a Second Secured Representative (as applicable) in reliance on a particular payment blockage event more than 75 days after the Senior Facility Agent, each Additional Senior Facilities Representative, a Senior Secured Notes Trustee or a Second Secured Representative receives notice in writing specifying the occurrence constituting that payment blockage event. Not more than one Stop Notice may be served by the Senior Facility Agent, each Senior Secured Notes Trustee or each Second Secured Representative (as applicable) with respect to the same event or set of circumstances. No Stop Notice in relation to a payment blockage event may be served unless (i) 365 days have elapsed since the delivery of any

previous Stop Notice in relation to a payment blockage event, and (ii) all scheduled payments of interest on any High Yield Notes that have become due as a result of any previous Stop Notice have been paid in full in cash.

Any failure to make a payment due under the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture, the Indenture or the indenture for any Additional High Yield Notes (the "Additional High Yield Notes Indenture", together with the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture and the Indenture, the "High Yield Notes Indentures")) or the guarantees of any High Yield Notes as a result of the foregoing will not prevent the occurrence of an event of default under the 2016 IGH Notes, the 2018 IGH Notes, the Notes or any other High Yield Notes as a consequence of such non-payment or the commencement of an Enforcement Action otherwise permitted by the Intercreditor Deed.

Entitlement to Enforce

The Intercreditor Deed provides that the Senior Security Agent will (subject to certain exceptions) enforce the senior security only at the direction of the Instructing Group. Subject to certain exceptions in relation to the Second Secured Security (as defined in the Intercreditor Deed), prior to the Senior Discharge Date, the Second Secured Creditors may only take Enforcement Action with respect to the guarantees or security granted pursuant to the Intercreditor Deed in respect of the Second Secured Liabilities or any Second Secured Proceeds Loan if:

- the prior written consent of the Instructing Group is obtained;
- the Senior Creditors have taken certain Enforcement Action in which case the Second Secured Creditors may take the same Enforcement Action against the same Obligor;
- the Second Secured Creditors have become entitled to do so as a result of the expiry of any Second Secured Standstill Period unless on the expiry of the Second Secured Standstill Period the relevant default to which the Second Secured Standstill Period relates has been waived or cured; or
- certain insolvency events have occurred and are continuing, provided that any such insolvency
 event is not the result of actions of a Second Secured Creditor prohibited under the Intercreditor
 Deed and provided Enforcement Action may only be taken against the entity in respect of which
 the insolvency event has occurred.

Prior to the Senior Discharge Date and the Second Secured Discharge Date, the holders of any High Yield Notes and the 2016 IGH Notes Trustee, the 2018 IGH Notes Trustee, the Trustee or the trustee under any Additional High Yield Notes (the "Additional High Yield Notes Trustee", together with the 2016 IGH Notes Trustee, the 2018 IGH Notes Trustee and the Trustee, the "High Yield Notes Trustees") and any lender under any High Yield Proceeds Loan (together, the "High Yield Creditors") may only take Enforcement Action with respect to the guarantees and security granted in respect of any High Yield Notes or the High Yield Proceeds Loan if:

- the prior written consent of (prior to the Senior Discharge Date) the Instructing Group and (prior to the Second Secured Discharge Date) the Majority Second Secured Creditors (as defined in the Intercreditor Deed) is obtained;
- the Senior Creditors and/or any Second Secured Creditors have taken Enforcement Action against
 an Obligor in which case the High Yield Creditors may take Enforcement Action against the same
 Obligor but may not take any other Enforcement Action until the Senior Discharge Date and any
 Second Secured Discharge Date shall have occurred except after expiry of a High Yield Standstill
 Period;
- the High Yield Creditors, as applicable, have become entitled to do so as a result of the expiry of any High Yield Standstill Period unless on the expiry of the High Yield Standstill Period the relevant default to which the High Yield Standstill Period relates has been waived or cured; or
- if certain insolvency events have occurred and are continuing, provided that any such insolvency event is not the result of actions of a High Yield Creditors prohibited under the Intercreditor Deed and provided Enforcement Action may only be taken against the entity in respect of which the insolvency event has occurred.

A "Second Secured Standstill Period" is defined in the Intercreditor Deed to mean a period of 179 days after written notice has been given by the Majority Second Secured Creditors (as defined in the Intercreditor Deed) to the Senior Facility Agent, each Additional Senior Facilities Representative and each Senior Secured Notes Trustee that an event of default has occurred as a result of any failure to pay any amount of the Second Secured Liabilities when due and payable and is continuing, and specifying that a Second Secured Standstill Period is to commence.

A "High Yield Standstill Period" is defined in the Intercreditor Deed to mean a period of 179 days after written notice has been given by any High Yield Notes Trustee to the Senior Facility Agent, each Additional Senior Facilities Representative, any Senior Secured Notes Trustee and each Second Secured Representative that an event of default under any High Yield Notes has occurred and is continuing, and specifying that a High Yield Standstill Period is to commence.

An "Enforcement Action" is defined in the Intercreditor Deed to mean:

- (a) the acceleration of any liabilities or any declaration that any liabilities are prematurely due and payable or the making of demand for payment of any liabilities after such liabilities have been made payable on demand;
- (b) the designation by a hedge counterparty of an early termination date under any hedging agreement or the making of a demand by a hedge counterparty for payment of all or any amount which would become payable in connection with the occurrence of an early termination date;
- (c) the making of any demand against any Obligor in relation to any guarantee in respect of any liabilities which are due and payable but unpaid or exercising any right to require the Group to acquire any liability (including exercising any put or call option against any member of the Group for the redemption or purchase of any liability);
- (d) the enforcement of any Security Document (as defined in the Intercreditor Deed) or any other security interest granted by any Obligor, any Additional Second Secured Borrower, the Parent or any other High Yield Note Issuer (including taking any action to crystallize any floating charge forming part of any Security Document);
- (e) the exercise of any right of set-off against any Obligor in respect of any liabilities due and payable but unpaid (excluding, for the avoidance of doubt, any netting under any hedging agreements or any set-off under any cash management arrangements);
- (f) the suing for, commencing or joining of any legal or arbitration proceedings against any Obligor to recover any liabilities; or
- (g) the petitioning, applying or voting for, or the taking of any steps (including the appointment of any liquidator, receiver, administrator or similar officer) which could reasonably be expected to lead to an insolvency event in relation to any Obligor,

provided that the following shall not constitute Enforcement Action:

- (i) the taking of any action falling within paragraph (f) above necessary to preserve the validity and existence of claims, including the registration of such claims before any court or governmental authority;
- (ii) to the extent entitled by law, the taking of any actions against any creditor (or any agent, trustee or receiver acting on behalf of such creditor) to challenge the basis on which any sale or disposal is to take place pursuant to powers granted to such persons under any security documentation:
- (iii) bringing legal proceedings against any person in connection with any securities violation or common law fraud or to restrain any actual or putative breach of the Finance Documents (as defined in the Intercreditor Deed) or for specific performance with no claim for damages; or

(iv) demand being made for payment of any of the liabilities as a result of it being unlawful for any Senior Creditor, Second Secured Creditor (other than any Second Secured Proceeds Lender) or High Yield Creditor (other than any High Yield Proceeds Lender) to perform any obligation under the Finance Documents,

unless in the case of any of the actions listed above in paragraphs (i)—(iv) above, such action will result in an insolvency event.

The Intercreditor Deed also contains enforcement provisions in relation to hedge counterparties, Intra-Group Liabilities, Senior Proceeds Loans and Subordinated Liabilities.

Subordination

Upon the occurrence of an insolvency event in relation to an Obligor, claims against that Obligor:

- in respect of any Second Secured Liabilities will be subordinate in right of payment to the claims against that Obligor in respect of Senior Liabilities;
- in respect of the Subordinated High Yield Liabilities will be subordinate in right of payment to the claims against that Obligor in respect of Senior Liabilities and Second Secured Liabilities; and
- in respect of Intra-Group Liabilities and Subordinated Liabilities will be subordinate in right of payment to the claims against that Obligor in respect of Senior Liabilities, Second Secured Liabilities and liabilities with respect to the Subordinated High Yield Liabilities.

Upon the occurrence of an insolvency event in relation to an Additional Second Secured Borrower or a High Yield Note Issuer claims against that High Yield Note Issuer or Additional Second Secured Borrower in respect of the Subordinated Liabilities will be subordinate in right of payment to the claims against that High Yield Note Issuer or Additional Second Secured Borrower in respect of Senior Liabilities, Senior Secured Liabilities and High Yield Liabilities (as applicable).

Turnover

Except to the extent prohibited by law and subject to certain exceptions, if at any time on or before the Senior Discharge Date and the Second Secured Discharge Date, any High Yield Creditor or any High Yield Note Issuer:

- receives or recovers any payment or distribution of, or on account of or in relation to, any of the Subordinated High Yield Liabilities which is not a permitted payment under the Intercreditor Deed;
- receives or recovers any amount by way of set-off in respect of any of the Subordinated High Yield Liabilities owed to them which does not give effect to a permitted payment under the Intercreditor Deed;
- receives or recovers proceeds pursuant to any Enforcement Action in respect of the Subordinated High Yield Liabilities except in accordance with the Intercreditor Deed or receives or recovers proceeds pursuant to any Enforcement Action in respect of the collateral for any High Yield Notes (as applicable);
- receives any payment or distribution of any kind whatsoever in relation to the purchase or acquisition of any High Yield Liabilities by any member of the Group;
- receives any distribution in cash or in kind in respect of any liability owed by IHL or the other
 Obligors in respect of the Subordinated High Yield Liabilities which is made as a result of the
 occurrence of an insolvency event of any Obligor; or
- receives or recovers any payment or distribution in respect of the High Yield Liabilities as a result
 of any High Yield Note Issuer receiving or recovering an amount in contravention of the
 Intercreditor Deed,

that High Yield Creditor or High Yield Note Issuer, as the case may be, will notify the Senior Security Agent and (following the Senior Discharge Date and prior to the Second Secured Discharge Date) each Second Secured Representative and hold that amount in a separate account on trust for (prior to the later of the Senior Discharge Date) the Senior Security Agent or (following the Senior Discharge Date prior to the Second Secured Discharge Date) each Second Secured Representative and promptly pay that amount (prior to the Senior Discharge Date) to the Senior Security Agent or (following the Senior Discharge Date prior to the Second Secured Discharge Date) a Second Secured Representative or (after deducting from the amount received or recovered the costs and expenses (if any) actually incurred by it in recovering such amount) to be held in trust by such person for application in accordance with the order of priority under the Intercreditor Deed as described below in "Application of Proceeds." The foregoing provision does not, however, apply to any amounts received or recovered by any High Yield Notes Trustee that have been distributed by it to the holders of any High Yield Notes as applicable, if at the time it distributed such payment it had no actual knowledge that such payment was so prohibited.

The Intercreditor Deed also contains a turnover provision in relation to the Second Secured Liabilities, Intra-Group Liabilities and Subordinated Liabilities as well as certain amounts received by the Obligors generally.

Application of Proceeds

Subject to rights of creditors mandatorily preferred by law applying to companies generally, amounts received by the Senior Security Agent, a Second Secured Representative or trustee or representative under any High Yield Notes Indenture, any hedge counterparty or any cash management bank representing (i) the proceeds of enforcement of any security, (ii) recoveries under any guarantee contained in the Finance Documents and (iii) all amounts paid pursuant to the Intercreditor Deed (but excluding in each case all recoveries under any BP Credit Document (as defined in the Intercreditor Deed)) will be applied in the following order of priority:

- in discharging any sums owing to the Senior Security Agent or any additional agent appointed by the Senior Security Agent, any High Yield Note Trustee Amounts, any Agency Amounts, any Senior Secured Note Trustee Amounts and any Second Secured Note Trustee Amounts, on a pari passu basis;
- in payment of all costs and expenses incurred by or on behalf of the Senior Creditors in connection with the enforcement of their security;
- in payment to the Senior Facility Agent (for itself and the Senior Lenders) to discharge the liabilities in respect of the Senior Secured Term Loans Agreement, to hedging counterparties to discharge the liabilities owed to them, to cash management banks to discharge the liabilities owed to them, to the 2020 Senior Secured Notes Trustee for application towards the discharge of the liabilities under the 2020 Senior Secured Notes Indenture, the 2020 Senior Secured Notes and related documents, to the 2019 Senior Secured Notes Trustee for application towards the discharge of the liabilities under the 2019 Senior Secured Notes Indenture and the 2019 Senior Secured Notes and related documents, to any Additional Senior Secured Notes Trustee for application towards the discharge of the liabilities under the Additional Senior Secured Notes Indenture relating thereto, the applicable Additional Senior Secured Notes and related documents and each Additional Senior Facilities Representative (for itself and the creditors under such Additional Senior Lender Liabilities (as defined in the Intercreditor Deed) owing under the Additional Senior Finance Documents, on a *pro rata* basis;
- in payment to each Second Secured Representative on behalf of the Second Secured Creditors which it represents for application towards the discharge of any Second Secured Liabilities, on a *pro rata* basis;
- in payment to the 2016 IGH Notes Trustee for application towards the discharge of the liabilities in respect of the 2016 IGH Notes Indenture and the 2016 IGH Notes, to the 2018 IGH Notes Trustee for application towards the discharge of the liabilities in respect of the 2018 IGH Notes Indenture and the 2018 IGH Notes, to the Trustee on application towards the discharge of the liabilities in respect of the Indenture and the Notes and to any Additional High Yield Notes Trustee for application towards the discharge of the liabilities in respect of the applicable Additional High Yield Notes Indenture and the applicable Additional High Yield Notes, on a *pro rata* basis;

- if none of the Obligors is under any further actual or contingent liability under any Senior Finance Document, Senior Secured Note Document (as defined in the Intercreditor Deed), Second Secured Document, under any High Yield Notes Indenture and related documents, in payment to any person to whom the Senior Security Agent, Second Secured Representative or the trustee or representative under any High Yield Notes Indenture is obliged to pay in priority to any Obligor; and
- the balance, if any, in payment to the relevant Obligor.

Release of the Guarantees and the Security

The Intercreditor Deed provides that, subject to certain provisions in relation to BP Receivables and any consents required from the Majority Senior Lenders and each Senior Secured Notes Trustee in certain circumstances being obtained, the Senior Security Agent is authorized to (i) release any security created by the security documents over the relevant asset, and (ii) (if the relevant asset comprises all of the shares in the capital of a member of the Group (as defined in the Intercreditor Deed)) to release that member of the Group and any of its direct or indirect subsidiaries from all past, present and future liabilities (both actual and contingent) and/or its obligations in its capacity as a guarantor, issuer or borrower of the whole or any part of its liabilities in respect of the Senior Secured Term Loans Agreement, any Senior Secured Notes, Second Secured Documents, any High Yield Notes and certain other liabilities and to release any security granted by that member of the Group or any of its direct or indirect subsidiaries over any asset under any security document if:

- in connection with any permitted Enforcement Action, the Senior Security Agent or any receiver or administrator sells or otherwise disposes of (or proposes to sell or otherwise dispose of) any asset under any security document; or
- following a default under the Senior Secured Term Loans Agreement, any Additional Senior
 Finance Document, the 2019 Senior Secured Notes Indenture, the 2020 Senior Secured Notes
 Indenture or any Additional Senior Secured Notes Indenture (collectively, such indentures, the
 "Senior Secured Notes Indentures"), a member of the Group sells or otherwise disposes of (or
 proposes to sell or otherwise dispose of) any asset at the request or direction of the Senior Security
 Agent.

Notwithstanding the preceding paragraph, in the case of any release of the guarantees or security for the Second Secured Liabilities or for any High Yield Notes, the Second Secured Creditors and the High Yield Creditors will only be obliged to release and authorize the release set out above in respect of any Obligor or other person which has granted security or provided a guarantee to the Second Secured Creditors or the High Yield Creditors:

- in the case of the Second Secured Liabilities and any security in respect thereof, if the Majority Second Secured Creditors (as defined in the Intercreditor Deed) have approved the release; or
- in the case of guarantees and security for the 2016 IGH Notes and the 2016 IGH Notes Indenture, the 2018 IGH Notes and the 2018 IGH Notes Indenture, the Notes and the Indenture or any Additional High Yield Notes and Additional High Yield Notes Indenture, if the trustee or other representative under any High Yield Notes Indenture, as applicable, confirms to the Senior Security Agent that the holders of the 2016 IGH Notes, the 2018 IGH Notes, the Notes or any Additional High Yield Notes which it represents have approved the release; or
- if the shares or assets of an Obligor (or the shares of any direct or indirect holding company of such Obligor) are sold or otherwise disposed of pursuant to Enforcement Action taken by the Senior Security Agent (or any receiver or administrator) or at the request or direction of the Senior Security Agent, and the sale or disposal is completed in accordance with applicable law and for a consideration all or substantially all of which is in the form of cash or certain cash equivalents and:
 - (1) in the case of a sale or disposal of shares of an Obligor (or the shares of any direct or indirect holding company of such Obligor) (but only to the extent that any guarantees and security for the 2016 IGH Notes and the 2016 IGH Notes Indenture, the 2018 IGH Notes and the 2018 IGH Notes Indenture, the Notes and the Indenture or any Additional High Yield Notes or Additional High Yield Notes Indenture are to be released), concurrently with the completion of such sale or disposal, the indebtedness

of the relevant members of the Group being disposed of to (x) the Senior Creditors, (y) the Second Secured Creditors and (z) the lenders of all Subordinated Debt (as defined in the Intercreditor Deed) and Public Debt (as defined in the 2016 IGH Notes Indenture, 2018 IGH Notes Indenture and the Indenture) that is *pari passu* Debt (as defined in the Intercreditor Deed) are discharged or released (and not assumed by the relevant purchaser or any affiliate thereof); *provided*, *however*, that performance bonds and similar instruments will not be required to be so discharged or released; and

if applicable, in the case of a sale or disposal of assets other than shares in an Obligor as provided above, concurrently with the completion of such sale or disposal the prior ranking security in favor of the Senior Creditors over such assets is released,

and, in the case of paragraphs (1) and (2) above, either (x) the sale or disposal is made pursuant to a Public Auction (as defined below) or (y) an internationally recognized investment bank or an internationally recognized accounting firm selected by the Senior Security Agent has delivered in respect of the sale or disposal an opinion to (in the case of a sale by or at the request of the Senior Security Agent (or any receiver or administrator)) the trustee or representative under any High Yield Notes Indenture and each Second Secured Representative that the amount received in connection with such sale is fair from a financial point of view taking into account all relevant circumstances including the method of enforcement; *provided* that the liability of such investment bank or accounting firm in giving such opinion may be limited to the amount of its fees in respect of such engagement.

A "Public Auction" is defined in the Intercreditor Deed to mean an auction in which more than one bidder participates or is invited to participate conducted with the advice of an internationally recognized investment bank and in which if the sale is undertaken by or at the request of the Senior Security Agent (or any receiver or administrator), pursuant to an enforcement requested by (a) the Instructing Group, in which case the Second Secured Creditors and the High Yield Creditors will have a right to participate in such auction and (b) the Second Secured Creditors, in which case the High Yield Creditors will have a right to participate in such auction.

The Intercreditor Deed also provides that, subject to any consents required from the Majority High Yield Creditors being obtained, the Senior Security Agent, any High Yield Notes Trustee and the applicable Second Secured Representative are authorized to release any security created by the security documents over (i) any assets disposed of in a manner permitted pursuant to the terms of the Senior Secured Term Loans, any Additional Senior Secured Term Loans, any Senior Secured Notes Indenture and the Second Secured Documents; or (ii) any receivables disposed of pursuant to the Securitization Program in a manner permitted pursuant to the terms of the Senior Secured Term Loans, any Additional Senior Secured Term Loans, the 2019 Senior Secured Notes Indenture and any Additional Senior Secured Notes Indenture and the Second Secured Documents with effect from whichever is the earlier of (1) the date such receivable is disposed of or (2) the date such receivable is offered for disposal or, if not in existence when offered for disposal, the date it subsequently comes into existence.

The Intercreditor Deed further provides that, if it is necessary to do so in order to give effect to certain provisions of the Intercreditor Deed providing that in connection with any refinancing, restructuring, replacement, extension, supplement, increase or incurrence of additional Senior Liabilities and any Second Secured Liabilities such indebtedness shall be secured in priority to the Subordinated High Yield Liabilities, each High Yield Notes Trustee or other representative shall release any security interest which has been granted to it *provided* that such release occurs on the date of such refinancing, restructuring, replacement, extension, supplement, increase or incurrence and a new security interest is granted to the High Yield Notes Trustee or other representative immediately upon the grant of security interests in respect of such refinancing, restructuring, replacement, extension, supplement, increase or incurrence.

Option to Purchase Debt under the Senior Secured Term Loans Agreement and the 2020 Notes Indenture

If the Senior Creditors under the Senior Secured Term Loans Agreement, any Senior Secured Notes Indenture or any Additional Senior Finance Document have taken any Enforcement Action, any High Yield Notes Trustee may, at the direction of the requisite percentage of the holders of the 2016 IGH Notes under the 2016 IGH Notes Indenture, the requisite percentage of the holders of the 2018 IGH Notes under the 2018 IGH Notes Indenture, a majority of the holders of the Notes under the Indenture or the requisite percentage of the

holders of any Additional High Yield Notes under any Additional High Yield Notes Indenture, as applicable, within 60 days after commencement of that Enforcement Action, on giving not less than 14 days' written notice to the Senior Facility Agent, each Additional Senior Facilities Representative, the 2019 Senior Secured Notes Trustee, the 2020 Senior Secured Notes Trustee, any Additional Senior Secured Notes Trustee and each Second Secured Representative, and subject to satisfying certain conditions, purchase all but not part of the debt under the Senior Secured Term Loans, any Additional Senior Secured Term Loans, the 2019 Senior Secured Notes Indenture, the 2020 Senior Secured Notes Indenture, any Additional Senior Secured Notes Indenture, Hedging Agreements, Cash Management Arrangements and Second Secured Documents (i) in the case of the Senior Secured Term Loans, any Additional Senior Secured Term Loans, at a price equal to the principal amount of such debt and accrued and unpaid interest and fees and expenses, (ii) in the case of any Senior Secured Notes, at a price equal to the principal amount of such debt and accrued and unpaid interest, any prepayment fees and other fees and expenses and (iii) in the case of any Second Secured Documents, at a price equal to the principal amount of such debt and accrued and unpaid interest, any prepayment fees and other fees and expenses. The Intercreditor Deed also provides for the price to be paid in relation to Hedging Agreements and Cash Management Arrangements. Upon such purchase, the purchasers will assume the rights and obligations of the lenders under the Senior Secured Term Loans, including hedging arrangements, and the rights and obligations of the holders of any Senior Secured Notes and any Second Secured Documents.

Amendment

The terms of the Intercreditor Deed may only be amended or waived with the written agreement of each of the Senior Facility Agent, each Additional Senior Facilities Representative, any High Yield Notes Trustee (including the Trustee), any Second Secured Representative, any Senior Secured Notes Trustee and IHL unless (i) any amendments are made to cure defects, resolve ambiguities or reflect changes of a minor, technical or administrative nature, which may be made by the Senior Security Agent and IHL, (ii) any amendments are made to meet the requirements of any person proposing to act as a senior secured note trustee or high yield note trustee which are customary for persons acting in such capacity, which amendments may be made by the Senior Security Agent and IHL, (iii) any amendments which only affect the rights and obligations of one party or class of parties and are not adverse to the rights of the other parties or class of parties, which may be made by only IHL and the party or class of parties affected thereby, or (iv) any amendments are made to give effect to the appointment of an Additional Senior Facilities Representative in respect of the Additional Senior Finance Parties or a Second Secured Representative in respect of the Second Secured Creditors, which amendments may be made by the Senior Security Agent and IHL. Subject to (i) and (ii) in the previous sentence, no amendment or waiver of the Intercreditor Deed may impose new or additional obligations on any party to the Intercreditor Deed or affect the rights or obligations of the Senior Facility Agent, any Senior Secured Notes Trustee, the Senior Security Agent or the trustee or representative under the 2016 IGH Notes Indenture, the 2018 IGH Notes Indenture, the Indenture or any Additional High Yield Notes Trustee, or certain other persons in each case without their prior written consent. Notwithstanding the foregoing, no amendment or waiver of the Intercreditor Deed which would adversely affect any rights or obligations expressed to be rights or obligations of, or concerning any provision which is expressly for the benefit of, the BP Collateral Agent or the BP Creditors can be made without the prior written consent of the BP Creditors. In addition, no amendment or waiver which would result in IHL no longer being in compliance with the Credit Support Deed may be made without the prior written consent of the BP Creditors.

The terms of the Intercreditor Deed will be amended and restated, amongst other things, to facilitate the transfer of certain loans and commitments by lenders who do not consent to the terms of the amendments or who do consent but otherwise wish to resign as lenders and subsequently wish to re-assume all or part of their previous (or additional) loans and commitments. The amendment will be effected in reliance on the permission summarized at (i) in the paragraph above.

The Senior Security Agent may amend the terms of, waive any of the requirements of, or grant consents under, any of the Senior Security Documents (as defined in the Intercreditor Deed) acting on the instructions of the Senior Facility Agent and (where such consent is required under any Additional Senior Finance Document) of each relevant Additional Senior Facilities Representative and (where such consent is required under any Senior Secured Notes Indenture or related documents) of any Senior Secured Notes Trustee. Any such amendment, waiver or consent will be deemed to be an amendment, waiver or consent of any equivalent Security Document (as defined in the Intercreditor Deed) granted in favor of the Second Secured Creditors or the 2016 IGH Notes Trustee and the holders of the 2016 IGH Notes or the 2018 IGH Notes Trustee and the holders of the Notes or any Additional High Yield Notes Trustee and the holders of any Additional High Yield Notes but only to the same extent and to no greater extent than the amendment, waiver or consent in relation to the relevant Senior Security Document. Any such

amendment, waiver or consent will also be binding on the hedge counterparties save to the extent that in respect of such amendment, waiver or consent the hedge counterparties are treated in a manner which is different to the other Senior Creditors in which event the consent of the hedge counterparties shall also be required. No such amendment, waiver or consent will (without prejudice to any other provision of the Intercreditor Deed) release any security granted to the Second Secured Creditors or the 2016 IGH Notes Trustee or the 2018 IGH Notes or holders of the Notes or the 2016 IGH Notes Indenture and the 2016 IGH Notes or the 2018 IGH Notes Indenture or the Indenture of the Notes such Additional High Yield Notes Trustee and such Additional High Yield Notes.

Notwithstanding the above, any High Yield Notes Trustee each Second Secured Representative, any Senior Secured Notes Trustee, the Senior Facility Agent, each Additional Senior Facilities Representative and the Senior Security Agent are authorized to enter into such agreement or agreements with, among others, the Obligors and each High Yield Notes Issuer, whether by way of supplement, amendment or restatement of the Intercreditor Deed or by a separate deed, as may be necessary to give effect to the provisions under the Intercreditor Deed relating to, among others, a permitted refinancing of the Senior Liabilities, the Second Secured Liabilities or the liabilities in respect of the 2016 IGH Notes, 2018 IGH Notes or the Notes.

Unless expressly stated otherwise in the Intercreditor Deed, the provisions of the Intercreditor Deed override anything in any of the finance documents including the Indenture, to the contrary.

The Intercreditor Deed is governed by English law.

GLOSSARY OF SELECTED TERMS

Term	Definition
Acetone	Byproduct of the production of phenol. Is used in the production of methylmethacrylate, polymethylmethacrylate, acrylate and Bisphenol A and acetone-based solvents.
Acetonitrile	Co-produced in the manufacture of acrylonitrile and is largely used in solvents.
Acrylic acid	Produced from propylene and used in manufacturing absorbent polymers, coatings and adhesives/sealants.
Acrylonitrile	A commodity used in a wide variety of consumer applications. Used in the production of acrylic fiber, acrylonitrile butadiene styrene and styrene acrylonitrile. Is manufactured from propylene, ammonia and air with the use of a catalyst.
	A tough thermoplastic that has a variety of consumer appliance and automotive component uses. Made from acrylonitrile, butadiene and styrene.
Additive	An ingredient added to a chemical reaction, usually in polymerization reactions, to impart additional performance properties on the resulting product.
Alpha olefins (AO)	See "Linear alpha olefins" and "Poly alpha olefins."
	Used in the manufacture of acrylonitrile, although its largest end use is in the manufacture of fertilizers. Made from nitrogen and hydrogen with the use of a catalyst.
Aromatics	Hydrocarbons that are in a ring formation instead of a linear formation. The major products comprising this group are: benzene, toluene, mixed xylenes, ortho-xylene and para-xylene.
	Barrel of crude oil, 159 liters by volume.
Benzene	A building block for styrene and is also used to make cumene and nylon. Mainly produced from refinery processes or as a co-product of steam cracker operations.
Bisphenol A	An intermediate product produced from acetone and phenol used to produce polycarbonate and epoxy-resins.
	The separation of benzene, toluene and xylenes by fractionation. A gas, one of the co-products of the steam cracking process and is used primarily in the production of polymers, principally synthetic rubbers, such as styrene butadiene rubber, which is used to manufacture tires and other rubber products.
Catalyst	An ingredient added to facilitate a chemical reaction, but which does not itself get consumed during the reaction process.
Comonomer	An additional monomer used in a polymerization reaction to offer additional
Copolymer	properties to a polymer. A polymer created by the polymerization of one or more additional monomers (comonomers) to offer additional properties to the resulting polymer.
Cracker	
Cracking	The conversion of large hydrocarbon molecules into smaller ones. Carried out either at high temperatures (thermal cracking), or with the aid of a catalyst and high pressure (catalytic cracking and hydrocracking). The cracking process enables greater quantities of saturated hydrocarbons suitable for gasoline and other light hydrocarbon fractions to be recovered from crude oil.
Cumene	
Ethanolamine	
Ethylbenzene	An intermediate made from benzene and ethylene and used to make styrene. Virtually all worldwide ethylbenzene production is consumed in the manufacture of styrene.
Ethylene	A flammable gas obtained in a process called steam cracking. Itself has no consumer applications, but is the basic feedstock for a large number of

	industrial uses, including the manufacture of polyethylene. Is a key building block for polyethylene, polystyrene, ethylene oxide and other derivatives. An industrial chemical, primarily used in the manufacture of polyesters and antifreeze/coolants. Produced from ethylene oxide. A commodity monomer used as a building block for the manufacture of a wide range of products and intermediates in the chemical industry. Mainly used to produce ethylene glycol and industrial detergents. The products derived from ethylene oxide have many familiar applications and coolants for auto engines, polyester fibers and film. Manufactured from ethylene and oxygen. Ethylene propylene diene monomer Made from a combination of ethylene, propylene and another monomer containing two double bonds. Key end use applications after further processing and reaction, are for roofing materials and automotive seals. Ethylidene norbornene (ENB) monomerMade by reacting butadiene with dicyclopenta
Feedstocks	Crude oil and other hydrocarbons used as basic materials in a refining or manufacturing process.
	Means the blend of crude oil supplied to Cruden Bay, Aberdeenshire, via the Forties Pipeline System.
	The pipeline that carries crude oil from a variety of oil fields in the North Sea to the mainland.
Fractionator	Splits gas into its components ethane, propane, butane and other natural gas liquids.
Gas	Includes methane, ethane, butane and propane.
	Used as solvents in paints, inks and cleaning fluids and are derivatives of
•	ethylene oxide. A type of polyethylene and is a relatively tough thermoplastic. Most
riigii delisity polyediyicile	common household use is container plastics. Also commonly used for
II 1	molding, pipe and thin film applications.
	Polymers that are created by the polymerization of a single monomer.
	All compounds that consist of hydrogen and carbon. These include crude oil, natural gas, gas, olefins and their derivatives.
	Manufactured as a co-product of acrylonitrile. Is an extremely hazardous gas used mainly to produce polymers, coatings and nylon, and for chemicals used in gold extraction.
kta	
Linear alpha olefins (LAO)	Hydrocarbons in a straight chain formation which have physical characteristics and commercial uses that vary according to the length of the hydrocarbon chain. Are co-monomers for certain types of polyethylene. They also have applications as surfactant intermediates, base oil for synthetic lubricants and drilling fluids. They are made from ethylene.
Linear low-density polyethylene	A type of polyethylene and has basic properties similar to low-density polyethylene. Low-density polyethylene and linear low-density polyethylene are to a certain extent substitutes. The most significant end use for linear low-density polyethylene is film.
Liquefied petroleum gas (LPG)	A mixture of gases, usually propane and butane, used as fuel in heating appliances and vehicles and also as a petrochemical feedstock.
Low-density polyethylene (LDPE)	The first type of polyethylene invented. Its most common household use is
	Produced from acetone and is used to manufacture polymethylmethacrylate
	resins.
	Feedstock material for the manufacture of polymers and derivative products.
Mothballed	Describes a facility that is not used for production but is maintained so that
Naphtha	production may be resumed quickly. A refinery product that is used as a gasoline component, but also serves as feedstock for petrochemical plants.
Natural gas liquids	Generally comprise a mixture of ethane, propane, butanes and smaller amounts of other lighter hydrocarbons.
Nitriles	Used to describe acrylonitrile, its co-products and other products produced from ammonia feedstock.
NPS	The NATO pipeline system (NPS) is 11,500 km of pipeline linking 13 NATO countries to enable delivery of fuel and lubricants to military storage locations.

Olefins	Including ethylene and propylene, are the key building blocks of the
Olefins cracker	petrochemical industry and produce a large range of derivative products. Breaks down naphtha or other gas feedstocks into olefins, principally
Organoleptic products	ethylene and propylene. Impart no taste or odor to the contents of the container and include caps and closures made from polyethylene.
Oxo-alcohols	A feedstock for intermediates which are used in many soft plastic products and solvent applications. They are largely produced from propylene feedstock.
Ppm	
	Produced from cumene, and is used in the production of Bisphenol A, as
Poly alpha olefins (PAO)	well as phenolic resins and capralactam. Made by polymerizing, or merging, several linear alpha olefins together and are used in a large number of automotive and industrial applications (mainly as synthetic lubricants). Polycarbonate An engineering thermoplastic polymer which, due to its superior optical qualities, structural strength and
Polyethylene	weight, has a wide range of uses, including CDs and DVDs, optic-fibers, optical lenses, structural parts in cars and trucks and housings for electrical household appliances and office equipment. The world's most used thermoplastic (including high-density polyethylene, low-density polyethylene and linear low-density polyethylene). Manufactured by the polymerization of ethylene and co- monomers. Used primarily to produce films for packaging, agricultural applications, molded
Polyethylene terephthalate (PET)	products, pipes and coatings. Made by the combination of ethylene glycol and terephthalic acid. Typical end uses include films for packaging and fibers.
Polyisobutylene	A synthetic polymer available in a wide variety of viscosities for use in a broad range of industrial applications, including lubricants, sealants, cling
	film, cables and adhesives.
Polymer	A chemical compound usually made up of a large number of identical
Polymethylmethacrylate resins	components linked together into long molecular chains. Used in a wide range of architectural and industrial applications, ranging from point of sale retail displays to glazing and decorative light panels, and compounds for molding and extrusion.
Polypropylene	The world's second most widely used thermoplastic after polyethylene. It is manufactured by the polymerization of propylene. It is used mainly for molding, filaments, fibers and films and is the most significant
	thermoplastic material used in molded containers and automotive
Polyvinyl chloride (PVC)	applications. The world's third most widely used thermoplastic after polyethylene and polypropylene. It is produced by the polymerization of the vinyl chloride
	monomer. It is used mainly in the construction industry in the form of pipes and insulation on electric cables.
Propane	A gaseous hydrocarbon in its natural state but can be easily liquefied. Its major end uses are as a fuel and as a feedstock for petrochemicals.
Propylene	A flammable gas which is largely derived either as a co-product of the
	refinery fluid catalytic cracker process used to make gasoline or as a co-product of the steam cracking process used to make ethylene. Has virtually no independent end use, but is an important input for a significant number of industrial products, and is the main feedstock used to make polypropylene and acrylonitrile.
Propylene glycols	An industrial chemical, mainly used to produce polyester, paints and coatings, airplane de-icers, antifreeze and industrial coolants, made from
Propylene oxide	propylene oxide. Used in manufacture of polyurethane foams and to make propylene glycols.
Pygas	Primarily made from propylene feedstock. A by-product of olefins production from steam crackers and is used by refineries as a liquid gasoline blending component.
Solvents	Used to dissolve solids and keep them in liquid form.
	The Société du Pipeline Méditerranée Rhône pipeline system in France.
	La Société du Pipeline Sud-Européen: south European pipeline system connecting refineries and petrochemicals facilities along the route from Fos

EXTRACTED FINANCIAL STATEMENTS OF INEOS GROUP HOLDINGS S.A.

The following information has been extracted from the full IFRS statutory financial statements of INEOS Group Holdings S.A. for the years ended December 31, 2013, 2012 and 2011 dated March 28, 2014. The following information does not constitute full IFRS statutory financial statements. The extracted information includes the items listed below in the index. The company balance sheet, company notes and certain other notes have not been extracted for the purposes of this Annual Report. Copies of the full IFRS statutory financial statements can be obtained from the Luxembourg Registry of Trade and Commerce.

INDEX TO EXTRACTED FINANCIAL STATEMENTS

	Page
INEOS GROUP HOLDINGS S.A.	
Auditors' Report to the members of INEOS Group Holdings S.A	F-2
Consolidated Income Statement for the years ended December 31, 2013, 2012 and 2011	F-4
Consolidated Statement of Comprehensive Income for the years ended December 31, 2013, 2012 and 2011.	F-5
Consolidated Balance Sheets as at December 31, 2013, 2012 and 2011	F-6
Consolidated Statement of Changes in Equity for the years ended 31 December 2013, 2012 and 2011	F-7
Consolidated Statement of Cash Flows for the years ended December 31, 2013, 2012 and 2011	F-10
Notes to the Consolidated Financial Statements for the year ended 31 December 2013	F-11

AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

To the Shareholders of

INEOS Group Holdings S.A.

Report on the consolidated financial statements

We have audited the accompanying consolidated financial statements of Ineos Group Holdings S.A. and its subsidiaries, which comprise the consolidated balance sheet as at 31 December 2013, and the consolidated income statement, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and a summary of significant accounting policies and other explanatory information.

Board of Directors' responsibility for the consolidated financial statements

The Board of Directors is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union, and for such internal control as the Board of Directors determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Responsibility of the "Réviseur d'entreprises agréé"

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing as adopted for Luxembourg by the "Commission de Surveillance du Secteur Financier". Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the judgment of the "Réviseur d'entreprises agréé" including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the "Réviseur d'entreprises agréé" considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, these consolidated financial statements give a true and fair view of the consolidated financial position of Ineos Group Holdings S.A. and its subsidiaries as of 31 December 2013, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Report on other legal and regulatory requirements

The management report, which is the responsibility of the Board of Directors, is consistent with the consolidated financial statements.

PricewaterhouseCoopers, Société coopérative Represented by Luxembourg, 28 March 2014

Philippe Piérard

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2013

	Note			
		2013	2012	2011
			€m	
Revenue	2	16,622.7	18,188.2	17,586.4
Cost of sales before exceptional items		(15,027.3)	(16,714.7)	(15,844.5)
Exceptional impairment charge	4	-	(518.4)	-
Total cost of sales		(15,027.3)	(17,233.1)	(15,844.5)
Gross profit		1,595.4	955.1	1,741.9
Distribution costs		(222.2)	(228.4)	(240.6)
Administrative expenses before exceptional items		(274.1)	(219.8)	(241.3)
Exceptional administrative expenses	4	(25.9)	(14.6)	(35.8)
Total administrative expenses		(300.0)	(234.4)	(277.1)
Total expenses		(522.2)	(462.8)	(517.7)
Operating profit	5	1,073.2	492.3	1,224.2
Share of loss of associates and jointly controlled entities using				
the equity accounting method		(49.8)	(14.7)	(67.8)
Profit on disposal of fixed assets		0.1	-	3.5
Loss on disposal of businesses	3	(248.1)		(2.1)
Profit before net finance costs	_	775.4	477.6	1,157.8
Total finance income	8	115.7	151.6	83.5
Finance costs before exceptional item	8	(591.3)	(746.2)	(771.2)
Exceptional finance cost	4	(121.1)		
Total finance costs		(712.4)	(746.2)	(771.2)
Net finance costs	_	(596.7)	(594.6)	(687.7)
Profit/(loss) before tax from continuing operations		178.7	(117.0)	470.1
Tax charge	9	(312.9)	(158.5)	(234.4)
$(Loss)/profit\ for\ the\ year\ from\ continuing\ operations\$		(134.2)	(275.5)	235.7
(Loss)/profit from discontinued operations, net of tax	3		(11.0)	140.7
(Loss)/profit for the year		(134.2)	(286.5)	376.4

The notes on pages F-11 to F-86 are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2013

Note	•		
	2013	2012	2011
		€m	
(Loss)/profit for the year	(134.2)	(286.5)	376.4
Other comprehensive (loss)/income:			
Items that will not be recycled to profit or loss:			
Remeasurements of post employment benefit obligations	(33.0)	(130.3)	(14.5)
	(33.0)	(130.3)	(14.5)
Items that may subsequently be recycled to profit or loss:			
Foreign exchange translation differences net of tax	(79.4)	(21.1)	(59.3)
Net gain/(loss) on hedge of net investment in foreign operations net of			
tax	75.5	27.4	(18.4)
	(3.9)	6.3	(77.7)
Other comprehensive loss for the year net of tax	(36.9)	(124.0)	(92.2)
Total comprehensive (loss)/income for the year	(171.1)	(410.5)	284.2

The notes on pages F-11 to F-86 are an integral part of these consolidated financial statements.

CONSOLIDATED BALANCE SHEET AS AT 31 DECEMBER 2013

	Note	2013	2012	2011
Non-current assets			€m	
Property, plant and equipment	10	3,151.2	3,093.8	3,566.3
Intangible assets	11	623.6	673.2	695.6
Investments in equity-accounted investees	12.a	374.6	423.2	432.3
Other investments	13	181.4	175.9	166.7
Other financial assets	14	52.3	51.0	47.5
Other receivables	18	101.9	164.8	19.5
Deferred tax assets	16	288.2	507.4	391.5
		4,773.2	5,089.3	5,319.4
Current assets				
Inventories	17	1,319.8	1,392.2	1,329.6
Trade and other receivables	18	1,913.4	1,908.7	2,056.5
Other financial assets	14	0.4	0.5	-
Cash and cash equivalents	28	1,130.0	1,235.4	582.4
		4,363.6	4,536.8	3,968.5
Total assets		9,136.8	9,626.1	9,287.9
Equity attributable to owners of the parent				
Share capital	23	0.9	0.9	0.9
Share premium		779.4	779.4	779.4
Other reserves		(1,464.1)	(1,427.2)	(1,303.2)
Retained earnings		(279.3)	(111.1)	200.4
Total shareholders' deficit		(963.1)	(758.0)	(322.5)
Total equity		(963.1)	(758.0)	(322.5)
Non-current liabilities				
Interest-bearing loans and borrowings	19	7,207.4	7,272.2	6,284.1
Trade and other payables	20	95.8	120.3	85.2
Employee benefits	21	635.0	702.5	581.3
Provisions	22	19.9	19.4	25.9
Deferred tax liabilities	16	162.9	170.8	207.2
		8,121.0	8,285.2	7,183.7
Current liabilities				
Interest-bearing loans and borrowings	19	32.1	16.7	309.2
Trade and other payables	20	1,798.4	1,909.0	1,953.9
Tax payable		137.2	157.4	136.8
Other financial liabilities	15	0.3	0.3	12.7
Provisions	22	10.9	15.5	14.1
		1,978.9	2,098.9	2,426.7
Total liabilities		10,099.9	10,384.1	9,610.4
Total equity and liabilities		9,136.8	9,626.1	9,287.9

These financial statements were approved by the board of directors on 28 March 2014 and were signed on its behalf by:

Natalina Arena Florence Bardot

Director Director

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2013

_	Share capital	Share premium	Other reserves	Retained earnings	Total Sharehold- ers' deficit	Total equity
			€	m		
Balance at 1 January 2011	0.9	779.4	(1,211.0)	(162.2)	(592.9)	(592.9)
Profit for the year	-	-	-	376.4	376.4	376.4
Other comprehensive income:						
Foreign exchange translation						
differences	-	-	(59.3)	-	(59.3)	(59.3)
Net loss on hedge of net						
investment in foreign operations	-	-	(18.4)	-	(18.4)	(18.4)
Remeasurements of post						
employment benefit obligations	-	-	(14.5)	-	(14.5)	(14.5)
Transactions with owners,						
recorded directly in equity:						
Dividend	-	-	-	(13.8)	(13.8)	(13.8)
Balance at 31 December 2011	0.9	779.4	(1,303.2)	200.4	(322.5)	(322.5)
Loss for the year	-	-	-	(286.5)	(286.5)	(286.5)
Other comprehensive income:						
Foreign exchange translation						
differences	-	-	(21.1)	-	(21.1)	(21.1)
Net gain on hedge of net						
investment in foreign operations	-	-	27.4	-	27.4	27.4
Remeasurements of post						
employment benefit obligations	-	-	(130.3)	-	(130.3)	(130.3)
Transactions with owners,						
recorded directly in equity:						
Dividend				(25.0)	(25.0)	(25.0)
Balance at 31 December 2012	0.9	779.4	(1,427.2)	(111.1)	(758.0)	(758.0)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

_	Share capital	Share premium	Other reserves	Retained earnings	Total Sharehold- ers' deficit	Total equity
			€m			
Balance at 1 January 2013	0.9	779.4	(1,427.2)	(111.1)	(758.0)	(758.0)
Loss for the year	-	-	-	(134.2)	(134.2)	(134.2)
Other comprehensive income:						
Foreign exchange translation						
differences	-	-	(79.4)	-	(79.4)	(79.4)
Net gain on hedge of net						
investment in foreign operations	-	-	75.5	-	75.5	75.5
Remeasurements of post						
employment benefit obligations	-	-	(33.0)	-	(33.0)	(33.0)
Transactions with owners,						
recorded directly in equity:						
Dividend	-			(34.0)	(34.0)	(34.0)
Balance at 31 December 2013	0.9	779.4	(1,464.1)	(279.3)	(963.1)	(963.1)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

Analysis of other reserves

	Translation reserve	Fair value reserve	Actuarial losses	Merger reserve	Total other reserves
Balance at 1 January 2011	(135.9)	22.9	(297.3)	(800.7)	(1,211.0)
Foreign exchange translation differences	(59.3)	-	-	-	(59.3)
Net loss on hedge of net investment in	, ,				,
foreign operations	(18.4)	-	-	_	(18.4)
Remeasurements of post employment	, ,				` /
benefit obligations			(14.5)	_	(14.5)
Balance at 31 December 2011	(213.6)	22.9	(311.8)	(800.7)	(1,303.2)
Foreign exchange translation differences	(21.1)	-	-	-	(21.1)
Net gain on hedge of net investment in					
foreign operations	27.4	-	-	-	27.4
Remeasurements of post employment					
benefit obligations			(130.3)		(130.3)
Balance at 31 December 2012	(207.3)	22.9	(442.1)	(800.7)	(1,427.2)
Foreign exchange translation differences	(79.4)	-	-	-	(79.4)
Net gain on hedge of net investment in					
foreign operations	75.5	-	-	-	75.5
Remeasurements of post employment					
benefit obligations			(33.0)		(33.0)
Balance at 31 December 2013	(211.2)	22.9	(475.1)	(800.7)	(1,464.1)

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2013

	Note	2013	2012	2011
			€m	
Cash flows from operating activities				
(Loss)/profit for the year		(134.2)	(286.5)	376.4
Adjustments for:				
Depreciation and impairment	10	400.1	997.8	492.1
Amortisation	11	12.3	12.1	11.8
Net finance costs	4,8	596.7	594.6	687.7
Share of losses/(profits) of equity-accounted investees		49.8	14.7	67.8
Loss/(profit) on sale of property, plant and equipment		(0.1)	0.7	(3.5)
Loss/(profit) on disposal of businesses	3	248.1	11.0	(74.2)
Tax charge	9	312.9	158.5	259.4
Decrease/(increase) in trade and other receivables		3.4	61.9	(353.8)
(Increase)/decrease in inventories Decrease in trade and other payables		(78.1)	(85.4)	55.6
* *		(74.3)	(8.1)	(208.1)
Decrease in provisions and employee benefits		(19.1)	(112.1)	(12.0)
Tax paid		(319.9)	(229.3)	(134.9)
Net cash from operating activities		997.6	1,129.9	1,164.3
Cash flows from investing activities Proceeds from sale of property, plant and equipment		0.1		3.8
Proceeds from sales of investments		1.2	-	11.2
Interest and other finance income received		2.5	3.8	5.8
Dividends received		5.5	5.4	5.4
Disposal of businesses, net of cash disposed of	3	<i>3.3</i>	(0.2)	664.1
Acquisition of intangible assets	3	(1.9)	(0.2)	-
Acquisition of property, plant and equipment		(540.6)	(461.1)	(396.2)
Acquisition of other investments		(1.6)	(0.2)	-
Net cash (used)/generated in investing activities		(534.8)	(452.5)	294.1
Cash flows from financing activities		(00 110)	(10210)	
Securitisation Facility		-	(194.5)	(68.4)
Revolving Credit Facility		-	(293.0)	(43.7)
Proceeds from new Senior Secured Notes		1,017.5	1,847.0	· -
Proceeds from new Senior Secured Term Loans		838.5	2,291.1	-
Proceeds from Other Loans		14.3	-	-
Redemption of Senior Facilities Agreement		-	(2,863.5)	-
Redemption of Senior Secured Notes		(735.1)	-	-
Redemption of Senior Notes		(1,017.1)	-	-
Issue costs paid		(18.9)	(91.7)	(10.7)
Interest paid		(565.3)	(672.7)	(654.8)
Repayment of loans		(30.8)	(17.9)	(686.0)
Dividends paid	24	(34.0)	(25.0)	(13.8)
Capital element of finance lease payment		(1.9)	(1.8)	(1.0)
Net cash used in financing activities		(532.8)	(22.0)	(1,478.4)
Net (decrease)/increase in cash and cash equivalents	28	(70.0)	655.4	(20.0)
Cash and cash equivalents at 1 January	28	1,235.4	582.4	599.2
Effect of exchange rate fluctuations on cash held		(35.4)	(2.4)	3.2
Cash and cash equivalents at 31 December	28	1,130.0	1,235.4	582.4

1. ACCOUNTING POLICIES

Overview

Ineos Group Holdings S.A. (the "Company") is a company incorporated and domiciled in the form of a société anonyme under the laws of the Grand-Duchy of Luxembourg, having its registered office at 58, rue Charles Martel, L-2134 Luxembourg, Grand-Duchy of Luxembourg. The nature of the operations and principal activities of the Company and its subsidiaries are the manufacture and sale of a range of chemicals and refined products used in a variety of applications.

Basis of accounting

The Group financial statements consolidate those of the Company and its subsidiaries (together referred to as the "Group") and equity account the Group's interest in associates and jointly controlled entities.

The Group financial statements have been prepared and approved by the directors in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union in response to the IAS regulation (EC 1606/2002) effective as of December 31, 2013 and have been approved on March 28, 2014.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these Group financial statements.

Measurement convention

The financial statements are prepared on the historical cost basis except that derivative financial instruments and financial instruments classified as fair value through the profit or loss are stated at their fair value and non-current assets and disposal groups held for sale are stated at the lower of previous carrying amount and fair value less costs to sell.

Functional and presentation currency

These Group financial statements are presented in euro, which is the functional currency of the majority of operations. The Group's primary products are sold in an international commodities market which is priced and invoiced primarily in euros.

All financial information presented in euro has been rounded to the nearest €0.1 million.

Changes in accounting policies

The Group has applied the following accounting standards for the first time in 2013 with effect from 1 January 2013 (with material prior period comparative information restated, to the extent required and as explained below):

- IAS 1 Financial Statement Presentation Presentation of Items of Other Comprehensive Income (OCI) Assets (mandatory for year commencing on or after 1 July 2012).
 - The amendments to IAS 1 change the grouping of items presented in OCI. Items that could be reclassified (or 'recycled') to profit or loss at a future point in time would be presented separately from items that will never be reclassified. The Group have amended the presentation of the OCI to reflect the amendments.
- IFRS 13 Fair Value Measurement (mandatory for year commencing on or after 1 January 2013). IFRS 13 establishes a single source of guidance under IFRS for all fair value measurements. IFRS 13 does not change when an entity is required to use fair value, but rather provides guidance on how to measure fair value under IFRS when fair value is required or permitted. The Group does not have any non-financial assets that are held at fair value so the application of the standard has had no effect on the financial statements.

• Amendments to IAS 19 'Defined Benefit Plans' (mandatory for year commencing on or after 1 January 2013).

The amendments require the recognition of changes in the net defined benefit liability/ (asset) including immediate recognition of defined benefit cost, disaggregation of defined benefit cost into components, recognition of remeasurements in other comprehensive income, plan amendments, curtailments and settlements (eliminating the 'corridor approach' permitted by the existing IAS 19). The impact of the applying the amendments to the Standard are described in Note 21.

• Amendments to IFRS 7 'Disclosures – Offsetting Financial Assets and Financial Liabilities' (mandatory for year commencing on or after 1 January 2013).

The amendments to IFRS 7 require disclosures that will allow financial statement users to evaluate the effect or potential effect of netting arrangements, including rights of off-set associated with an entity's recognised financial assets and recognised financial liabilities, on the entity's financial position. The Group does not have any netting arrangements so the application of the standard has had no effect on the financial statements.

- The IASB issued 'Annual Improvements 2009-2011 cycle', a collection of amendments to IFRSs, in response to issues addressed during the 2009–2011 cycle (mandatory for year commencing on or after 1 January 2013). A summary of these amendments is given below:
 - IAS 1 Presentation of Financial Statement provides clarification regarding the presentation of comparative information when an entity changes accounting policies, or makes retrospective restatements or reclassifications.
 - IAS 16 Property Plant and Equipment' provides clarification that items such as spare part, stand-by equipment and servicing equipment qualify as property, plant & equipment when they meet the definition of property, plant and equipment; otherwise they are classified as inventory.
 - IAS 32 *Financial Instruments: Presentation* provides clarification that the tax effect of a distribution to holders of equity instruments should be accounted for in accordance with IAS 12 Income Taxes.

Basis of consolidation

Subsidiaries

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that are currently exercisable or convertible are taken into account. The financial statements of subsidiaries are included in the Group financial statements from the date that control commences until the date that control ceases.

Inter-company transactions, balances, income and expenses on transactions between group companies are eliminated. Profits and losses resulting from inter-company transactions that are recognised in assets are also eliminated.

Special purpose entities ("SPE")

An SPE is consolidated if, based on an evaluation of the substance of its relationship with the Group and the SPE's risks and rewards, the Group concludes that it controls the SPE.

The Group has established an SPE, Ineos Finance Ireland Limited, for a debt securitisation programme. The Group does not have any direct or indirect shareholdings in this SPE. Ineos Finance Ireland Limited is controlled by the Group as it was established under terms that impose strict limitations on the decision-making powers of the SPE's management that result in the Group receiving the majority of the benefits related to the SPE's operations and net assets, being exposed to the majority of risks arising from the SPE's activities, and retaining the majority of the residual or ownership risks related to the SPE and its assets. Ineos Finance Ireland Limited is therefore regarded as an SPE and has been consolidated in these financial statements.

Associates and jointly controlled entities (equity accounted investees)

Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of another entity.

Jointly controlled entities are those entities over whose activities the Group has joint control, established by contractual agreement and requiring the venturers' unanimous consent for strategic financial and operating decisions.

Associates and jointly controlled entities are accounted for using the equity method (equity accounted investees) and are initially recognised at cost.

The Group's investment in associates and jointly controlled entities includes goodwill identified on acquisition, net of any accumulated impairment losses.

The Group financial statements include the Group's share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence or joint control commences until the date that significant influence or joint control ceases. When the Group's share of losses exceeds its interest in an equity accounted investee, the Group's carrying amount is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of an investee.

Foreign exchange

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the consolidated income statement except for differences arising on the retranslation of a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognised in other comprehensive income. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign exchange are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are retranslated to the functional currency at foreign exchange rates ruling at the dates the fair value was determined.

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated to the Group's presentational currency, euros, at foreign exchange rates ruling at the reporting date. The revenues and expenses of foreign operations are translated at exchange rates prevailing at the dates of the transactions. The Group applies an average rate for the year where this rate approximates to the foreign exchange rates ruling at the dates of the transactions. Exchange differences arising from this translation of foreign operations are taken directly to the translation reserve. They are recycled into the consolidated income statement upon disposal.

Exchange differences arising from a monetary item receivable from or payable to a foreign operation, the settlement of which is neither planned nor likely in the foreseeable future, are considered to form part of a net investment in a foreign operation and are recognised directly in equity in the translation reserve. Foreign exchange differences arising on the retranslation of a borrowing designated as a hedge of a net investment in a foreign operation are recognised directly in equity, in the translation reserve, to the extent that the hedge is effective. When the hedged part of a net investment is disposed

of, the associated cumulative amount in equity is transferred to profit or loss as an adjustment to the profit or loss on disposal.

Classification of financial instruments issued by the Group

Financial instruments issued by the Group are treated as equity only to the extent that they meet the following two conditions:

- (a) they include no contractual obligations upon the Group to deliver cash or other financial assets or to exchange financial assets or financial liabilities with another party under conditions that are potentially unfavourable to the Group; and
- (b) where the instrument will or may be settled in the company's own equity instruments, it is either a non-derivative that includes no obligation to deliver a variable number of the company's own equity instruments or is a derivative that will be settled by the company's exchanging a fixed amount of cash or other financial assets for a fixed number of its own equity instruments.

To the extent that this definition is not met, the proceeds of issue are classified as a financial liability. Where the instrument so classified takes the legal form of the company's own shares, the amounts presented in these financial statements for called up share capital and share premium account exclude amounts in relation to those shares.

Non-derivative financial instruments

Non-derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings, and trade and other payables.

Trade and other receivables

Trade and other receivables are recognised initially at fair value plus transaction costs that are directly attributable to the acquisition or issue. Subsequent to initial recognition they are measured at amortised cost using the effective interest method, less any impairment losses.

Trade and other payables

Trade and other payables are recognised initially at fair value less transaction costs that are directly attributable to the acquisition or issue. Subsequent to initial recognition they are measured at amortised cost using the effective interest method.

Investments in debt and equity securities

Investments in loans and receivables are stated at amortised cost less impairment.

Other investments in debt and equity securities held by the Group are classified as being available-for-sale and are stated at fair value, with any resultant gain or loss being recognised in other comprehensive income (in a fair value reserve), except for impairment losses and, in the case of monetary items such as debt securities, foreign exchange gains and losses. When these investments are derecognised, the cumulative gain or loss previously recognised directly in equity is recognised in profit or loss. Where these investments are interest-bearing, interest calculated using the effective interest method is recognised in profit or loss. Where no reliable measurement of fair value is available, available-for-sale investments are stated at historic acquisition cost (see Note 14).

Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose only of the statement of cash flows.

Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method.

Debt restructuring

The Group derecognises financial liabilities in accordance with the provisions in IAS 39. When debt is modified, the Group analyses the modifications from both a quantitative and qualitative perspective to determine if the modifications are substantial and meet the IFRS requirements for derecognition, in which case the debt is treated as extinguished. All fees paid in connection with a debt extinguishment are expensed immediately. When a modification is accounted for as a non-substantial modification, associated fees incurred are deferred as an adjustment to the carrying value of the liability and amortised using the effective interest method.

Derivative financial instruments and hedging

Derivative financial instruments

Derivative financial instruments are initially recognised at fair value. The gain or loss on subsequent remeasurement to fair value is recognised immediately in the consolidated income statement as finance income or expense. Where derivatives qualify for hedge accounting, recognition of any resultant gain or loss depends on the nature of the item being hedged (see below).

Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a recognised asset or liability, or a highly probable forecast transaction, the effective part of any gain or loss on the derivative financial instrument is recognised directly in the hedging reserve. Any ineffective portion of the hedge is recognised immediately in the consolidated income statement as finance income or expense.

When the forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability, the associated cumulative gain or loss is removed from the hedging reserve and is included in the initial carrying amount of the non-financial asset or liability.

If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains and losses that were recognised directly in equity are reclassified into profit or loss in the same period or periods during which the asset acquired or liability assumed affects profit or loss, e.g. when interest income or expense is recognised.

For cash flow hedges, other than those covered by the preceding two policy statements, the associated cumulative gain or loss is removed from equity and included in the consolidated income statement as an adjustment to revenue and cost of sales in the same period or periods during which the hedged forecast transaction affects revenue and cost of sales in the consolidated income statement.

When a hedging instrument expires or is sold, terminated or exercised, or the Group revokes designation of the hedge relationship but the hedged forecast transaction is still expected to occur, the cumulative gain or loss at that point remains in equity and is recognised in accordance with the above policy when the transaction occurs. If the hedged transaction is no longer expected to take place, the cumulative unrealised gain or loss recognised in equity is recognised in the consolidated income statement immediately.

Hedge of net investment in foreign operation

The Group applies hedge accounting to foreign exchange differences arising on the retranslation of a foreign currency loan where the loan is designated as a hedge of a net investment in a foreign operation in accordance with IAS 21 and IAS 39.

Exchange differences arising on retranslation of foreign currency loans designated as a net investment hedge are taken directly to equity via the consolidated statement of comprehensive income. Gains and losses accumulated in the translation reserve will be recycled to the statement of comprehensive income when the foreign operation is sold.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. Cost may include the cost of materials, labour and other costs directly attributable to bringing the assets to a working condition for their intended use. Cost may also include the cost of dismantling and removing items and restoring the site on which they are located.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

Leases in which the Group assumes substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. Where land and buildings are held under leases the accounting treatment of the land is considered separately from that of the buildings. Leased assets acquired by way of finance lease are stated at an amount equal to the lower of their fair value and the present value of the minimum lease payments at inception of the lease, less accumulated depreciation and less accumulated impairment losses. The assets are depreciated over the shorter of their useful life or asset lease term. Lease payments are accounted for as described below.

Depreciation is charged to the consolidated income statement on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Depreciation commences from the date an asset is brought into service. Land and assets in the course of construction are not depreciated. The estimated useful lives are as follows:

Buildings 10 - 40 years
 Plant and equipment and fixtures and fittings 3 - 40 years

Depreciation methods, useful lives and residual values are reviewed at each reporting date.

The carrying values of property, plant and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable. Where an indicator of impairment exists, the Group makes an estimate of the recoverable amount, which is the higher of the asset's fair value less cost to sell and value in use. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Assets are derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on de-recognition of the asset (calculated as the difference between the net disposal proceeds and the carrying value of the asset) is included in the consolidated income statement in the period in which the item is derecognised.

Business combinations, goodwill and intangible assets

All business combinations are accounted for by applying the purchase method. Goodwill represents amounts arising on acquisition of subsidiaries, associates and jointly controlled entities. In respect of business acquisitions that have occurred since 1 January 2007, goodwill represents the difference between the cost of the acquisition and the net fair value of the identifiable assets, liabilities and contingent liabilities acquired. For any acquisitions occurring on or after 1 January 2009, all transaction costs are expensed as incurred.

Goodwill is stated at cost less any accumulated impairment losses. Goodwill is allocated to groups of cash-generating units and is not amortised but is tested annually for impairment. At Ineos, cash generating units are predominately business units. In respect of equity accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment in the investee.

Negative goodwill arising on an acquisition is recognised immediately in the consolidated income statement.

Intangible assets

Intangible assets that are acquired by the Group are stated at cost less accumulated amortisation and accumulated impairment losses. These intangible assets principally comprise intellectual property rights, customer relationships, non-compete agreements and license fees.

Intangible assets acquired separately from a business are carried initially at cost. The initial cost is the aggregate amount paid and the fair value of other consideration given to acquire the assets. An intangible asset acquired as part of a business combination is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights and its fair value can be measured reliably.

Amortisation

Amortisation is charged to the consolidated income statement on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Intangible assets with an indefinite useful life and goodwill are systematically tested for impairment at each reporting date. Other intangible assets are amortised from the date they are available for use. The estimated useful lives are as follows:

Customer relationships 3 years
 Intellectual property rights 10 – 15 years
 Non-compete agreements life of the agreement
 Licenses up to 15 years

These intangible assets are tested for impairment at the end of the reporting period if events or changes in circumstances indicate that the carrying value may not be recoverable. Useful lives are examined on an annual basis and adjustments, where applicable, are made on a prospective basis.

Research and development

Expenditure on research activities is recognised in the consolidated income statement as an expense as incurred.

Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group intends to and has the technical ability and sufficient resources to complete development, future economic benefits are probable and if the Group can measure reliably the expenditure attributable to the intangible asset during its development. Development activities involve a plan or design for the production of new or substantially improved products or processes. The expenditure capitalised includes the cost of materials, direct labour and an appropriate proportion of overheads. Where regulatory and other uncertainties are such that the criteria are not met, the expenditure is recognised in the income statement. Other development expenditure is recognised in the income statement as an expense as incurred. Capitalised development expenditure is stated at cost less accumulated amortisation and less accumulated impairment losses.

Impairment excluding inventories and deferred tax assets

The carrying amounts of the Group's assets are assessed at the end of the reporting period to determine whether there is any indication of impairment. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset. If any such indication exists, the asset's recoverable amount is estimated.

For goodwill and other intangible assets that have an indefinite useful life and intangible assets that are not yet available for use, the recoverable amount is estimated at the end of the reporting period.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the consolidated income statement.

Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the unit on a pro rata basis. A cash generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in equity and there is objective evidence that the asset is impaired, the cumulative loss that had been recognised directly in equity is recognised in profit or loss even though the financial asset has not been derecognised. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

Calculation of recoverable amount

The recoverable amount of the Group's receivables is calculated as the present value of estimated future cash flows, discounted at the original effective interest rate (i.e. the effective interest rate computed at initial recognition of these financial assets). Receivables are not discounted where their duration is less than one year or where the effect of discounting is not material.

The recoverable amount of other assets is the greater of their fair values less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversals of impairment

An impairment loss in respect of a held-to-maturity security or receivable carried at amortised cost is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised.

An impairment loss in respect of an investment in an equity instrument classified as available for sale is not reversed through profit or loss. If the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed through profit or loss.

An impairment loss in respect of goodwill is not reversed.

In respect of other assets, an impairment loss is reversed when there is an indication that the impairment loss may no longer exist and there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Inventories

Inventories are stated at the lower of average cost and net realisable value. Cost includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of overheads based on normal operating capacity. Provision is made for obsolete, slow-moving or defective items where appropriate.

Items owned by the Group that are held on consignment at another entity's premises are included as part of the Group's inventory.

Commodities

Contracts that are entered into and continue to be held for the purpose of receipt or delivery of non-financial items in accordance with the company's expected purchase, sale or usage requirements (own-use contracts) are not accounted for as derivative financial instruments, but rather as executory contracts.

Employee benefits

The Group operates a number of defined contribution plans and funded and unfunded defined benefit pension schemes. The Group also provides unfunded early retirement benefits, long service awards and an incentive plan for certain employees.

The Group provides health care insurance to eligible retired employees and their dependants, primarily in the United States.

Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which the Group pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expense in the consolidated income statement as incurred.

Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit pension plans and other post employment benefits is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets (at bid price) are deducted. The liability discount rate is the yield at the reporting date on AA credit rated bonds denominated in the currency of, and that have maturity dates approximating to the terms of, the Group's obligations. The calculation is performed by a qualified actuary using the projected unit credit method.

When the benefits of a plan are amended or curtailed, the portion of the increased or decreased benefit relating to past service by employees is recognised as an expense immediately in the consolidated income statement.

All actuarial gains and losses as at 1 January 2007, the date of transition to IFRSs, were recognised. In respect of actuarial gains and losses that arise subsequent to 1 January 2007, the Group recognises them in the period they occur directly in equity through the statement of comprehensive income.

Where the calculation results in a benefit to the Group, the asset recognised is limited to the present value of any future refunds from the plan or reductions in future contributions to the plan.

The pension scheme surplus (to the extent that it is recoverable) or deficit is recognised in full.

The movement in the scheme surplus/deficit is split between:

- cost of sales and administrative expenses,
- net finance costs and,
- in net expense recognised directly in equity, the remeasurements of post employment benefit obligations.

Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Incentive plan

Certain employees of the Group are eligible to participate in an incentive plan (the Plan) operated by Ineos Holdings Luxembourg S.A., the parent of Ineos Group Holdings S.A. in Luxembourg. Ineos Holdings Luxembourg S.A. issues "Business Tracker Shares" in relation to each of the businesses operated by Ineos Holdings Luxembourg S.A. and its subsidiaries, including those businesses within the Ineos Group Holdings S.A. group. These Business Tracker Shares entitle the holder of the share to appreciation in market value (rather than the totality of the market value) of the relevant business compared with the market value at the date of acquisition of the relevant share. Determination of market values, and any discretionary adjustments, is made by a committee (the Special Committee) of Ineos AG.

The Plan is considered to be in the nature of a Share-based Payment arrangement within the scope of IFRS 2. The Ineos Group Holdings S.A. group neither receives nor makes any payments and incurs no liabilities in respect of its employees' participation in the Plan. Under IFRS 2 the Group recognises any deemed cost of the arrangement in accordance with the requirements applicable to equity-settled share-based payment transactions, with a corresponding increase in equity as a contribution from the parent. Participating employees purchase Business Tracker Shares from the Trust which administers the Plan at a price which is related to the approximate market value of the relevant Business Unit. Accordingly the Directors believe that the net fair value of the benefit at the date of grant after taking account of the payment for the shares is not significant and no cost has been recognised in these financial statements.

Provisions

A provision is recognised in the consolidated balance sheet when the Group has a present legal or constructive obligation as a result of a past event, that can be reliably measured and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability.

Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

Revenue

Revenue represents the invoiced value of products sold or services provided to third parties net of sales discounts, value added taxes and duties. Revenue is recognised when the significant risks and rewards of ownership have passed to the buyer and it can be reliably measured.

The pricing for products sold is determined by market prices (market contracts and arrangements) or is linked by a formula to published raw material prices plus an agreed additional amount (formula contracts). Revenue arising from the sale of goods is recognised when the goods are either dispatched or delivered depending on the relevant delivery terms and the point at which risks and rewards have been transferred to the buyer when the prices are determinable and when collectability is considered probable.

Services provided to third parties include administrative and operational services provided to other chemical companies with units on our sites and services under tolling arrangements. Under tolling arrangements, customers pay for or provide raw materials to be converted into a certain specified product, for which the Group charges a toll fee. The Group only recognises the toll fee as revenue earned under such arrangements upon shipment of the converted product to the customer as this is the point at which risks and rewards have been transferred to the buyer. For all other services, revenue is recognised upon completion of the service provided.

Government grants

Government grants are shown in the consolidated balance sheet as deferred income. This income is amortised on a straight line basis over the same period as the tangible fixed asset to which it relates or the life of the related project.

Expenses

Operating lease payments

Payments made under operating leases are recognised in the consolidated income statement on a straight-line basis over the term of the lease. Lease incentives received are recognised in the consolidated income statement as an integral part of the total lease expense.

Finance lease payments

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Finance income and expenses

Interest income and interest payable is recognised in the consolidated income statement as it accrues, using the effective interest method. Dividend income is recognised in the consolidated income statement on the date the entity's right to receive payments is established. Foreign exchange gains and losses are reported on a gross basis.

Finance costs comprise interest payable, finance charges on finance leases, unwinding of the discount on provisions, net fair value losses derivatives and foreign exchange losses that are recognised in the consolidated income statement (see foreign exchange accounting policy). Finance income comprise interest receivable on funds invested and from related party loans, interest on the defined benefit plan assets, net fair value gain on derivatives and foreign exchange gains.

Taxation

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in the consolidated income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination; and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

Segmental analysis

The Group determines its operating segments in a manner consistent with the internal reporting provided to the chief operating decision-makers. The chief operating decision-makers are responsible for allocating resources and assessing performance of the operating segments. The chief operating decision-makers are the members of the Executive Committee of the ultimate parent undertaking, Ineos AG. The members of this committee are the previous company board members and the information presented is unchanged from prior year and therefore there is no change to the segment information presented.

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components and for which discrete financial information is available. An operating segment's operating results are reviewed regularly by the chief operating decision-makers to make decisions about resources to be allocated to the segment and assess its performance.

The Group's primary format for segment reporting is based on business segments. The business segments are determined based on the Group's management and internal reporting structure and the aggregation criteria set out in IFRS 8.

Segment results that are reported to the chief operating decision-makers include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

Segment capital expenditure is the total payments made during the period to acquire property, plant and equipment and intangible assets other than as acquired through business combinations.

Emission trading scheme

The Group participates in the EU Emissions Trading Scheme. The Scheme encourages companies to reduce carbon emissions by offering financial incentives if they achieve their annual reduction targets. If a company reduces emissions beyond their target then the surplus may be traded in the form of emissions permits.

The incentive money due from the EU Emissions Trading Scheme is recognised in the consolidated income statement once the reduction targets have been met. The emissions permits allocated under the Scheme are at nil cost. The Group recognises the revenue from such permits upon their sale to third parties.

The Kyoto Protocol sets legally binding targets for cutting emissions and provides for three international "flexible mechanisms" to be used by developed countries in cost effectively meeting their greenhouse gas emissions targets, one of which is the Clean Development Mechanism ("CDM"). This permits industrialised countries to meet part of their commitments through projects in developing countries. The CDM programme provides incentives for the project participants in the form of Certified Emissions Reductions ("CERs"). It is the trading of these CERs that provides the market incentive to reduce emissions. The Group is involved in a number of CDM projects. CERs produced from these projects are recorded at nil cost. CERs purchased from third parties are recognised within stock on the basis of purchased cost. The Group recognises the revenue from sale of CERs upon their sale to third parties.

The Group recognises a provision for emissions produced. The provision is measured at the carrying amount of the emission rights held (nil if granted, otherwise at cost) or, in the case of a shortfall, at the current fair value of the emission rights needed.

Exceptional items

The presentation of the Group's results separately identifies the effect of profits and losses on the disposal of businesses, the impairment of non-current assets, the cost of restructuring acquired businesses and the impact of one off events such as legal settlements as exceptional items. Results excluding disposals, impairments, restructuring costs and one off items are used by management and are presented in order to provide readers with a clear and consistent presentation of the underlying operating performance of the Group's ongoing business.

Accounting standards not applied

The following IFRSs relevant to the Group have been endorsed by the EU were available for early application but have not been applied by the Group in these financial statements. The impact of their adoption is currently being assessed and is not expected to have a material effect on the financial statements unless otherwise indicated:

- Amendments to IAS 36 Recoverable Amount Disclosures for Non-Financial Assets
 (mandatory for year commencing on or after 1 January 2014).
 Following the introduction of IFRS 13 Fair Value Measurements, amendments in the
 explanations about the measurement of the recoverable amount of an impaired asset have
 been issued. This amendment is limited to non-financial assets and relates to disclosure
 requirement.
- Amendments to IAS 39 Novation of Derivatives and Continuation of Hedge Accounting
 (mandatory for year commencing on or after 1 January 2014).
 This amendment to IAS 39 makes it clear that there is no need to discontinue hedge
 accounting if a hedging derivative is novated to central counterparty provided certain
 criteria are met.
- Amendments to IAS 32 'Offsetting Financial Assets and Financial Liabilities' (mandatory for year commencing on or after 1 January 2014).
 The amendments to IAS 32 clarify certain aspects because of diversity in application of the

requirements to IAS 32 clarify certain aspects because of diversity in application of the requirements on offsetting including the meaning of 'currently has a legally enforceable right of off-set, the application of simultaneous realization and settlement, the offsetting of collateral amounts and the unit of account for applying the offsetting requirements.

• IFRS 10 Consolidated Financial Statements and IAS 27 (2011) Separate Financial Statements (mandatory for year commencing on or after 1 January 2014).

IFRS 10 replaces the portion of IAS 27 "Consolidated and Separate Financial Statements" that addresses the accounting for consolidated financial statements. It also includes the issues raised in SIC-12 Consolidation – Special Purpose Entities. IFRS 10 establishes a single control model that applies to all entities including special purpose entities. The changes introduced by IFRS 10 will require management to exercise significant judgment to determine which entities are controlled, and therefore, are required to be consolidated by a parent. As a consequence of the new IFRS 10 "Consolidated Financial Statements" and IFRS 12 "Disclosure of Interests in Other Entities", what remains of IAS 27 is limited to accounting for subsidiaries, jointly controlled entities, and associates in separate financial statements. The Group is yet to assess IFRS 10's full impact, but the new standard has the potential to have a material impact on the accounting for the Group's investments.

- IFRS 11 Joint Arrangements and Amendments to IAS 28 (2008) Investments in Associates and Joint Ventures (mandatory for year commencing on or after 1 January 2014).

 IFRS 11 replaces IAS 31 "Interests in Joint Ventures" and SIC-13 "Jointly controlled Entities Non-monetary Contributions by Venturers". IFRS 11 removes the option to account for jointly controlled entities (JCEs) using proportionate consolidation. Instead, JCEs that meet the definition of a joint venture must be accounted for using the equity method.
- IFRS 12 *Disclosure of Interests in Other Entities* (mandatory for year commencing on or after 1 January 2014).
 - IFRS 12 includes all of the disclosures that were previously in IAS 27 related to consolidated financial statements, as well as all of the disclosures that were previously included in IAS 31 and IAS 28. These disclosures relate to an entity's interests in subsidiaries, joint arrangements, associates and structured entities. A number of new disclosures are also required.

2. OPERATING SEGMENTS

The determination of the Group's operating segments is based on the business units for which information is reported to the Group's Chief Operating Decision Maker. The Group has three reportable segments, as described below.

The Group's Olefins and Polymers business units produce olefins and related products and a broad range of polymers. The Group's olefins businesses are focused on ethylene and propylene, which are the two largest volume olefins globally and are key building blocks for polymers. These olefins are primarily used as feedstock for the Group's polymers business. In addition, the Group sells olefins to third party customers for a variety of industrial and consumer applications, including plastics, rubber and fibre.

- O&P North America segment In North America, the group's Olefins and Polymers business comprises five sites including major facilities in Chocolate Bayou, Texas, and Battleground, Texas.
- O&P Europe segment In Europe, the Group owns and operates two major cracker complexes, one that is integrated with a joint venture refinery in Lavéra, France and one in Köln, Germany. Each of these sites includes polymers and derivatives units. The O&P Europe segment is managed as two regional businesses which are consolidated for reporting. Before its divestment on October 1, 2013 the Group also owned and operated a major cracker complex in Grangemouth, United Kingdom which was also integrated with a joint venture refinery (see Note 3).
- Chemical Intermediates This reportable segment is the aggregation, in compliance with IFRS 8, of a number of different business units with similar economic and other characteristics. Chemical Intermediates are high-value added chemical products used as key components in a variety of consumer and industrial products. The Group's chemical intermediates businesses are exposed to similar key commodities, namely oil and gas. They produce a range of products including phenol, alpha olefins, solvents, industrial chemicals and nitriles. The Chemical Intermediates processes are similar in that they are all capital intensive and based upon processing and mixing chemical raw materials to produce chemical products for the next stage along the value chain. The Chemical Intermediates products are distributed on a business-to-business basis across the world. This is performed using similar conventional methods of pipeline, truck, rail or ship container depending on the customer location and size of the order. The Chemical Intermediates customer base is similar in that the customers are generally manufacturers of consumer and industrial products in developed markets and mature industrial economies. The accounting policies of all of the reportable segments are as described in Note 1.

Information regarding the operations of each reportable segment is included in the following tables. Performance is measured based on earnings before interest, tax, depreciation and amortisation and exceptional items, measured under IFRS ("Segment EBITDA"). Segment EBITDA is used to measure performance as management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries. Inter-segment pricing is determined on an arm's length basis. Information regarding segments reviewed by management includes management accounts comprising the profit or loss, cash flows and other financial and non-financial information used to manage the business.

Adjustments in the following tables comprise the following items:

- Elimination of inter-segmental transactions and balances; and
- The group's share of profit/(loss) in respect of the Refining joint venture.

Segment information - 2013

		Reportab				
	O&P North America	O&P Europe	Chemical Inter- mediates	Total of reportable segments	Adjust- ments	Amounts in financial statements
			€m			
Reportable segment revenue	3,551.2	7,437.5	8,146.2	19,134.9	(2,512.2)	16,622.7
Reportable segment EBITDA	913.6	86.5	511.4	1,511.5		1,511.5
Depreciation of property, plant and equipment and intangible assets	(84.4)	(103.3)	(220.0)	(407.7)	(4.7)	(412.4)
to impairment and financing)	-	-	(25.9)	(25.9)	-	(25.9)
associates and jointly controlled entities Profit on disposal of fixed	-	2.4	0.3	2.7	(52.5)	(49.8)
assets	0.1	-	-	0.1	-	0.1
Loss on disposal of businesses						` ′
Net finance costs						
Profit before tax from continuin	ng operations.					178.7
Payments for capital expenditure	241.5	162.3	136.8	540.6		540.6

Major items in the adjustments column include:

- Reportable segment revenues: the elimination of inter-segmental revenues: 2013: €2,512.2 million (2012: €2,510.9 million, 2011: €3,303.5 million).
- Share of profit/(loss) of associates and jointly control entities: Refining joint venture: 2013: €(51.1) million (2012: €(17.4) million, 2011: €(70.7) million).

Payments for capital expenditure in respect of Refining were €nil million (2012: €nil million, 2011: €54.8 million).

Segment information - 2012

		Reportabl				
	O&P North America	O&P Europe	Chemical Inter- mediates	Total of report- able segments	Adjust- ments	Amounts in financial statements
			€m			
Reportable segment revenue	3,443.1	7,889.0	9,367.0	20,699.1	(2,510.9)	18,188.2
Reportable segment EBITDA	706.0	122.2	688.6	1,516.8	_	1,516.8
LDITUA	700.0	122.2		1,510.0		1,510.0
Depreciation of property, plant and equipment and intangible assets	(82.2)	(176.1)	(215.8)	(474.1)	(17.4)	(491.5)
Impairment of property, plant and equipment and intangible assets	-	(518.4)	-	(518.4)	-	(518.4)
(excluding items relating to impairment and financing)	-	(12.0)	(2.6)	(14.6)	-	(14.6)
associates and jointly controlled entities	-	1.8	0.9	2.7	(17.4)	(14.7)
Net finance costs						(594.6)
Profit before tax from continuing	ng operations.					
Payments for capital expenditure	141.7	122.4	197.0	461.1		461.1

$Segment\ information-2011$

		Reportabl				
	O&P North America	O&P Europe	Chemical Inter- mediates	Total of report- able segments	Adjust- ments	Amounts in financial statements
			€m			
Reportable segment						
revenue	3,591.2	7,523.3	9,775.4	20,889.9	(3,303.5)	17,586.4
Reportable segment						
EBITDA	477.6	358.3	877.6	1,713.5		1,713.5
Depreciation and impairment of property, plant and equipment and		4.00			44.0	
intangible assets Exceptional items (excluding items relating to impairment and	(72.7)	(163.6)	(211.2)	(447.5)	(6.0)	(453.5)
financing) Share of profit/(loss) of associates and jointly	-	(7.4)	(21.8)	(29.2)	(6.6)	(35.8)
controlled entities Profit on disposal of fixed	-	3.2	1.5	4.7	(72.5)	(67.8)
assets	-	-	3.5	3.5	-	3.5
Profit/(loss) on disposal of businesses	-	-	(2.1)	(2.1)	-	(2.1) (687.7)
Profit before tax from continuing						
Dormonto for ait-l						
Payments for capital expenditure	52.8	113.0	175.6	341.4		341.4

On July 1, 2011 the Group disposed of its Refining business to a new joint venture between Petro China and INEOS Investments (Jersey) Limited, a related party and as such the Refining segment has been treated as a discontinued operation and not included in the analysis of segmental results from continuing operations (see Note 3b).

Geographic segments

<u>-</u>	Revenues		
	2013	2012	2011
Geographical information by location of customers:		€m	
Europe	10,561.6	11,634.6	10,911.8
Americas	4,524.9	4,789.5	5,360.2
Rest of World	1,536.2	1,764.1	1,314.4
Total	16,622.7	18,188.2	17,586.4
Geographical information by location from which the Group			
derives revenue:			
Europe	11,509.5	12,826.8	11,575.3
Americas	4,886.7	5,128.4	5,779.0
Rest of World	226.5	233.0	232.1
Total	16,622.7	18,188.2	17,586.4

In presenting information on the basis of geographic analysis of segments, segment revenue is based on the geographical location of customers and geographical locations from which the Group derives revenues.

Revenues from external customers for each product and service or each group of similar products and services and a geographic analysis of segment assets are not presented as the necessary information is not available and the Directors are of the opinion that the cost to develop it would be excessive.

3. DISPOSALS

2013 disposals

On October 1, 2013, the Group completed the Grangemouth divestiture which comprised the disposal of its Grangemouth petrochemicals operations, including the assets and pension and other liabilities, to a newly created subsidiary of INEOS Holdings AG, our indirect parent company, resulting in a loss on disposal of €248.1 million. The Grangemouth divestiture was implemented due to concerns that the operations carried out by INEOS Commercial Services UK Limited and INEOS Chemicals Grangemouth Limited at the Grangemouth site had been loss-making for the previous four years, primarily due to a high fixed-costs base at the Grangemouth site and a decline in suitable feedstock supplies and the need to implement a survival plan for the business in order to improve its cost base and to enable it to invest in new infrastructure to allow the site to import gas from the U.S. by 2016.

As part of this plan, the Group has also made available to INEOS Commercial Services UK Limited a €200 million revolving credit facility to fund the ongoing operations and investments required by the Grangemouth business. The revolving credit facility is guaranteed by INEOS Chemicals Grangemouth Limited and secured by the assets of both INEOS Commercial Services UK Limited and INEOS Chemicals Grangemouth Limited. As of December 31, 2013, €20 million has been drawn on the revolving credit facility by INEOS Commercial Services UK Limited.

3. DISPOSALS (Continued)

(a) Effect of the aggregated disposals on individual assets and liabilities

	2013
	€m
Property, plant and equipment	84.7
Inventories	126.5
Trade and other receivables	213.8
Employee benefits (see Note 21)	(103.2)
Deferred tax asset on employee benefits	18.1
Trade and other payables	(267.2)
Deferred tax asset	179.8
Provisions	(4.4)
Net assets disposed of	248.1
Proceeds	
Loss on disposal of business	248.1

(b) Results of Grangemouth business

An analysis of the results of the Grangemouth business operations is set out below.

	Year ended December 31, 2013*	Year ended December 31, 2012
		€m
Revenue	822.6	1,102.7
Cost of sales before exceptional items	(826.2)	(1,187.5)
Exceptional impairment charge		(518.4)
Gross loss	(3.6)	(603.2)
Distribution costs	(5.5)	(8.4)
Administrative expenses before exceptional items	(5.4)	(7.4)
Exceptional administrative expenses	-	(11.0)
Operating loss	(14.5)	(630.0)
Other financial data:		
Operating profit	(14.5)	(630.0)
Depreciation, amortization and impairment.	(0.8)	586.7
Exceptional administrative expenses		11.0
EBITDA before exceptionals	(15.3)	(32.3)

^{* =} Relates to the results for the nine month period ended September 30, 2013 as divestiture occurred on October 1, 2013.

3. DISPOSALS (Continued)

2012 disposals

During 2012 a further adjustment was made to the Refining business disposal following a working capital settlement adjustment which resulted in an additional loss on disposal from discontinued operations of \bigcirc 1.0 million (see Note 3(b) – 2011 disposals).

2011 disposals

Refining business

On July 1, 2011 the group disposed of the Refining business to a new joint venture between PetroChina and INEOS Investments (Jersey) Limited ('IIJL'), a related party. IIJL is held under common control by our controlling shareholders. The consideration received by the Group for the disposal consisted of cash consideration of \$1.015 billion received from PetroChina for a 50% interest in the business and an investment in non-voting ordinary shares in IIJL for the other 50% interest in the business. The Group effectively retains an economic interest in the Refining business by virtue of its investment in IIJL. The results of the Refining business are now reported against the share of (loss)/profit of associates and jointly controlled entities using the equity accounting method by virtue of this interest.

For so long as any of the Senior Secured Term Loans or Senior Notes due 2016 remain outstanding, the non-voting ordinary shares in IIJL will have the right to receive an amount equal to all amounts received by IIJL (net of its administrative expenses) in respect of its investments, including its equity interest, in the disposed Refining business. In addition IIJL shall be obliged to distribute to the Group, subject to applicable legal requirements, in the form of dividends or as a return of capital, all amounts received by it in respect of such investments, less such administrative expenses. For so long as any of the Senior Secured Term Loans and Senior Notes due 2016 are outstanding, the non-voting ordinary shares will be entitled to receive all returns of capital, including upon a merger, sale or similar transaction involving, or a winding up or liquidation of, IIJL. Once the Senior Secured Term Loans or Senior Notes due 2016 have been redeemed or repaid, on a return of capital or on a winding up of IIJL the holders of the ordinary shares shall be entitled to, in priority to any payment to holders of any other class of shares, \$1.015 billion of the total capital returned to the voting shareholders.

(a) Effect of the aggregated disposals on individual assets and liabilities

	2011
	€m
Goodwill	278.3
Property, plant and equipment	756.2
Inventories	899.1
Other financial assets	55.4
Trade and other receivables	762.1
Employee benefits	(107.4)
Deferred tax asset on employee benefits	31.3
Trade and other payables	(1,642.1)
Deferred tax liability	(5.1)
Provisions	(22.5)
Net assets disposed of	1,005.3
Costs of disposal	27.9
Deferred consideration	3.6
Cash proceeds	685.9
Non-voting ordinary shares in IIJL	420.0
Profit on disposal of business	76.3

The non-voting ordinary shares in IIJL were fair valued at €420 million. This reflects the net present value of the future cash flows expected to be realised by the group for the ownership of these non-voting shares and takes into account the loss in control of the Refining trade and assets.

3. DISPOSALS (Continued)

(b) Results of discontinued operations

An analysis of the results of the Refining business operations is set out below.

	Year				
_	Er	Ended December 31,			
<u>-</u>	2013 2012				
		(€ in millions)			
Revenue	-	-	6,261.8		
Expenses.	-		(6,172.4)		
Profit before tax of discontinued operations	-	-	89.4		
(Loss)/profit on disposal of business	-	(11.0)	76.3		
Tax charge	-		(25.0)		
(Loss)/profit for the year from discontinued operations	-	(11.0)	140.7		

(c) Cash flows from discontinued operations

		Year		
_	Ended December 31,			
_	2013	2012	2011	
		(€in millions)		
Operating cash flows	-	-	13.7	
Investing cash flows	-	-	(54.8)	
Financing cash flows	-	-	-	
Total cash flows	-		(41.1)	

Other disposals

During 2011 the Group disposed of its Glebe Mines business and a further adjustment was made to the Films business disposals which resulted in a net loss on disposal of 2.1 million.

4. EXCEPTIONAL ITEMS

	2013	2012	2011
		€m	
Exceptional cost of sales:			
Property, plant and equipment impairment charge		(518.4)	
Exceptional administrative expenses:			
Restructuring of corporate headquarters	(6.5)	(0.8)	(32.6)
Restructuring of Innovene operations	-	-	(1.2)
Restructuring of O&P Europe operations	-	(12.0)	-
Plant closure costs	(19.4)	(1.8)	(2.0)
Total exceptional administrative expenses	(25.9)	(14.6)	(35.8)
Exceptional finance costs	(121.1)		

Exceptional cost of sales

The Group has recognised an exceptional impairment charge of €18.4 million for the year ended December 31, 2012 in relation to property, plant and equipment of the O&P Europe business located at the Grangemouth, Scotland site. The recent trading performance of the O&P Europe business has been relatively poor in the midst of a weak macro economic environment in Europe. Industry sentiment has remained cautious in Europe with continued economic and political uncertainties. As a consequence operating rates have remained constrained and the overall market sentiment has been weak. A strategic review of the business was implemented to assess the performance of the portfolio of assets and production sites across the business. The review highlighted the relatively weak performance expected for the assets located at the Grangemouth site over the next few years and the need to recognise an impairment loss as a result. The impairment loss was based on a value in use calculation. The business valuation was negatively impacted by lower than expected cash flows within the current business plan, reflecting the challenging economic and competitive conditions expected in the near term for the site. The Grangemouth business was divested from the Group on October 1, 2013 (see Note 3).

Exceptional administrative expenses

The Group relocated its corporate headquarters to Switzerland which has resulted in exceptional costs of €6.5 million (2012: €0.8 million, 2011: €32.6 million) being incurred in relation to employee relocation costs and legal and professional fees.

In recognition of a significant number of strategic projects to be implemented in the O&P Europe business in the next few years, the business was reorganised in to separate regional businesses during 2012, each with their own management team, to provide clear management focus at a regional level. The reorganisation resulted in some restructuring costs of €12.0 million in 2012. The costs largely relate to severance and relocation costs, together with the write off of some critical spares inventories.

During 2013 the Group closed its vinyl acetate monomer facility in Saltend, Hull, United Kingdom. The costs incurred represents losses on onerous contracts, decommissioning and demolition costs, severance and general closure costs. In 2012 the Group closed its polyisobutylene plant in Whiting, Indiana. The costs incurred represents severance and general closure costs of the plant. In 2011 the Group closed the previously mothballed cumene plant in Port Arthur, Texas. The costs incurred primarily relate to demolition expenses.

The Innovene business was acquired in 2005 and the Group has subsequently undertaken a restructuring programme which is focused on the operations at the main sites in the business at Lavéra, Köln and Chocolate Bayou. The restructuring costs charged in 2011 largely relate to severance and early retirement costs.

Exceptional finance costs

During May 2013 the Group successfully completed the re-pricing and up-sizing of its Senior Secured Term Loan facility and issued fixed rate Senior Notes due 2018. The re-pricing led to a reduction in the margins on the Group's existing Senior Secured Term Loans. In addition, the proceeds

4. EXCEPTIONAL ITEMS (Continued)

were used to repay the Group's existing Senior Secured Notes due 2015, to pay transaction fees and expenses and to refinance all of its outstanding U.S. dollar-denominated Senior Notes due 2016 and redeem \$600 million aggregate principal amount of its outstanding euro-denominated Senior Notes due 2016 pursuant to a partial redemption.

The Group has assessed that the re-pricing of the Senior Secured Term Loan facility represents a substantial modification and results in the extinguishment of the existing debt. As a result, the existing debt has been derecognised and the modified debt recognised at fair value which is equal to cost (see Note 19). As a result of the substantial modification of the Senior Secured Term Loan facility in May 2013, the unamortised issue costs at this date of €34.9 million were written off as an exceptional finance cost.

Following the redemption of the Senior Secured Notes due 2015 and the partial redemption of the Senior Notes due 2016, the Group has recognised a charge of \bigcirc 16.0 million as an exceptional finance cost in respect of the write-off of the associated unamortised debt issue costs.

The May 2013 refinancing resulted in the payment of call premia of €70.2 million, which has been charged in the year as an exceptional finance cost. The call premia were paid on the early redemption of the Senior Secured Notes due 2015 and the Senior Notes due 2016, together with the re-pricing of the Senior Secured Term Loans.

5. OPERATING PROFIT

Included in operating profit are the following:

	2013	2012	2011
		€m	
Exceptional restructuring costs – included in			
administrative expenses	25.9	14.6	35.8
Research and development expensed as incurred	2.2	12.6	44.7
Amortisation of other intangible assets	12.3	12.1	11.8
(Gain)/loss on disposal of property, plant and equipment	-	0.7	-
Amortisation of government grants	(6.2)	(6.5)	(6.8)
Depreciation and impairment of property, plant and			
equipment:			
Owned assets	393.5	989.2	435.5
Finance leased assets	6.6	8.6	6.2
Operating lease rental charges:			
Plant, machinery and equipment	55.5	46.2	48.7
Other	27.7	10.9	5.7

Depreciation charged on owned assets in respect of the discontinued Refining business for the year ended December 31, 2013 was €nil million (2012: €nil million, 2011: €0.4 million).

5. **OPERATING PROFIT (Continued)**

Auditors' remuneration:

	2013	2012	2011
		€m	
Audit of these financial statements	0.6	0.7	0.7
Amounts receivable by auditors and their associates in			
respect of:			
Audit of financial statements of subsidiaries pursuant to			
legislation	2.9	2.4	2.2
Other services relating to taxation	1.3	2.1	4.8
Services relating to corporate finance transactions	0.3	0.2	1.3
All other services	0.9	0.6	1.1
	6.0	6.0	10.1

6. STAFF NUMBERS AND COSTS

The monthly average number of persons employed by the Group (including the Grangemouth divestiture and Refining business up to the date of disposal) during the year, analysed by category, was as follows:

	Number of employees			
	2013	2012	2011	
Operations	5,384	5,290	5,780	
Administration	1,385	1,382	1,857	
Research and development	310	353	305	
	7,079	7,025	7,942	

The aggregate payroll costs of these persons were as follows:

	2013	2012	2011
		€m	
Wages and salaries	532.8	517.0	537.5
Social security costs	94.7	90.6	93.2
Expenses related to defined contribution pension plans	5.9	14.7	34.4
Expenses related to defined benefit pension plans	48.0	38.0	42.0
	681.4	660.3	707.1

7. DIRECTORS' REMUNERATION

	2013	2012	2011
		€m	
Salaries and other short term benefits	0.6	0.7	0.6

8. FINANCE INCOME AND COSTS

Recognised in profit or loss

	2013	2012	2011
		€m	
Finance income			
Interest income on bank balances	1.8	2.2	1.6
Other interest receivable	20.6	16.3	16.2
Total interest income on financial assets not at fair value			
through profit or loss	22.4	18.5	17.8
Exchange movements.	55.3	85.6	12.6
Net fair value gain on derivatives	-	0.2	-
Interest income on the defined benefit plan assets	32.5	41.9	47.7
Dividend income	5.5	5.4	5.4
Total finance income	115.7	151.6	83.5
Finance costs			
Interest payable on senior notes	319.2	353.6	225.5
Interest payable on bank loans and overdrafts	138.7	174.2	319.4
Interest payable on securitisation	18.5	22.3	40.8
Amortisation of issue costs	20.7	54.5	33.5
Interest payable on finance leases	0.6	0.8	-
Bank consent fees	-	-	35.7
Other finance charges	22.0	11.9	29.8
Exchange movements	16.5	79.5	-
Net fair value loss/(gain) on derivatives	0.2	(12.7)	16.3
Interest on employee benefit liabilities	54.9	62.1	70.2
Total finance costs	591.3	746.2	771.2
Net finance costs	475.6	594.6	687.7

Net gains and losses on financial instruments are included in Note 25.b.

9. TAX CHARGE

Taxation recognised in the consolidated income statem	itemen	income st	lidated	conse	the	in	recognised	Taxation
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Taxation recognised in the consolidated income statement	2013	2012	2011
		€m	
Current tax expense			
Current year	296.3	257.9	205.6
Adjustments in respect of prior years	4.2	(8.1)	(25.0)
Current tax expense	300.5	249.8	180.6
Deferred tax expense			
Origination and reversal of temporary differences	(20.2)	(138.5)	40.7
Adjustments in respect of prior years	32.6	47.2	13.1
Deferred tax charge/(credit) (see Note 16)	12.4	(91.3)	53.8
Total tax charge	312.9	158.5	234.4
Reconciliation of effective tax rate	2013 178.7	2012 €m (117.0)	2011 470.1
Profit/(loss) before taxation	178.7	(117.0)	470.1
Tax on above using the Luxembourg corporation tax rate			
of 29.2% (2012: 28.8%, 2011: 28.8%)	52.2	(33.7)	135.4
Non-deductible expenses/tax exempt revenues	65.0	13.6	17.0
Disposal of businesses	-	-	0.2
Double taxation relief	(1.5)	(1.8)	-
Effect of tax rates in foreign jurisdictions	159.0	145.3	108.9
Deferred tax not recognised	1.4	-	-
Utilisation of tax losses brought forward	-	(4.0)	(15.2)
Adjustments in respect of prior years	36.8	39.1	(11.9)
Total tax charge	312.9	158.5	234.4

Taxation recognised in other comprehensive income

		2013			2012			2011		
	Gross	Tax	Net	Gross	Tax	Net	Gross	Tax	Net	
					€m					
Foreign exchange translation differences Net gain/(loss) on hedge of net investment in foreign	(79.4)	-	(79.4)	(21.1)	-	(21.1)	(59.3)	-	(59.3)	
operations Remeasurements of post employment benefit	75.5	-	75.5	27.4	-	27.4	(18.4)	-	(18.4)	
obligations	(32.0)	(1.0)	(33.0)	(191.3)	61.0	(130.3)	(20.9)	6.4	(14.5)	
Total	(35.9)	(1.0)	(36.9)	(185.0)	61.0	(124.0)	(98.6)	6.4	(92.2)	

10. PROPERTY, PLANT AND EQUIPMENT

Cost Comments Comments <th< th=""><th>10. PROPERTY, PLANT AND EQUIPM</th><th>Land and buildings</th><th>Plant & equipment Fixtures and fittings</th><th>Under construction</th><th>Total</th></th<>	10. PROPERTY, PLANT AND EQUIPM	Land and buildings	Plant & equipment Fixtures and fittings	Under construction	Total
Disposal of business (11.7) (1,077.2) (14.91) (1,288.8) Additions 13.9 151.2 274.3 439.4 Disposals (2.2) (2.91) - (31.3) Transfers 1.4 148.0 (148.1) 1.3 Reclassifications - (12.2) - (12.2) Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6.367.1 293.0 7,041.0 Additions 3.1 229.7 288.1 520.9 Disposals (0.2) (73.8) - (74.0) Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.47.3 Disposal of businesses (1.7) (809.0) (158.2) (968.9 Additions 18.3 284.5 310.7 6	Cost		€m		
Additions 13.9 15.12 274.3 439.4 Disposals (2.2) (29.1) - (31.3) Trunsfers 1.4 148.0 (148.1) 1.3 Reclassifications - (12.2) - (12.2) Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6.367.1 293.0 7,041.0 Additions 3.1 229.7 288.1 520.9 Disposals 0.02 (73.8) - (74.0) Trunsfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (0.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7,477.3 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Disposal of businesses (1.7) (809.0) - (106.2) Transfers 7.1 313.5 (37.5) 3.1	Balance at 1 January 2011	377.1	7,198.6	314.5	7,890.2
Disposals (2.2) (2.91) (31.3) Transfers 1.4 148.0 (148.1) 1.3 Reclassifications - (12.2) - (12.2) Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6.367.1 293.0 7.041.0 Additions 3.1 229.7 288.1 520.9 Disposals (0.2) (73.8) - (74.0) Transfers 8.4 134.8 135.0 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.47.3 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Additions 18.3 284.5 310.1 613.5 Disposal of businesses (1.7) (106.0) - (106.2) Transfers 7.1 313.5 317.5 3.1	Disposal of business	(11.7)	(1,077.2)	(149.1)	(1,238.0)
Transfers 1.4 148.0 (148.1) 1.3 Reclassifications - (12.2) - (12.8) Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6.367.1 293.0 7.041.0 Additions 3.1 229.7 288.1 520.9 Disposals (0.2) (73.8) (15.0) (8.2) Effect of movements in foreign exchange (1.5) (1.51) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.47.3 Balance at 31 December 2012 390.7 (6.642.7 443.9 7.47.3 Additions 18.3 284.5 310.7 613.5 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Additions 18.3 284.5 310.7 613.5 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Additions 3.1 161.0 16	Additions	13.9	151.2	274.3	439.4
Reclassifications - (12.2) 1.4 (8.2) Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6,367.1 293.0 7,041.0 Additions 3.1 229.7 28.81 520.9 Disposals 0.02 (73.8) - (74.0) Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6,642.7 443.9 7,477.3 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Additions 18.3 284.5 310.7 61.5 Disposal of businesses (1.7) (809.0) (158.2) 968.9 Additions 18.3 284.5 310.7 31 Lifect of movements in foreign exchange (7.8) (158.1) (16.0) - (106.2) Tansfers 1.1 4	Disposals	(2.2)	(29.1)	-	(31.3)
Effect of movements in foreign exchange 2.4 (12.2) 1.4 (8.4) Balance at 31 December 2011 380.9 6,367.1 293.0 7,041.0 Additions 3.1 229.7 288.1 520.9 Disposals (0.2) (73.8) - (74.0) Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 66.42.7 443.9 7,477.3 Disposal of businesses (1.7) (809.0) (158.2) (968.9) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Tamsfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (118.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment 406	Transfers	1.4	148.0	(148.1)	1.3
Balance at 31 December 2011 380.9 6,367.1 293.0 7,041.0 Additions 3.1 229.7 288.1 520.9 Disposals 0.02 (73.8) - 70.0 Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6,642.7 443.9 7,477.3 Disposal of businesses (1.7) (809.0) (158.2) (96.8) Additions 18.3 284.5 310.7 613.5 Disposal of businesses (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6836.9 Accumulated depreciation and impairment 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) <td>Reclassifications</td> <td>-</td> <td>(12.2)</td> <td>-</td> <td>(12.2)</td>	Reclassifications	-	(12.2)	-	(12.2)
Additions 3.1 229.7 288.1 520.9 Disposals 0.02 73.8 - (74.0) Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.47.3 Disposal of businesses (1.7) (80.90) (158.2) (968.9) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (118.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment 2 1.8 (480.0) - (481.8) Desposal of businesses (1.8) (480.0) - (481.8) 1.2 1.2 1.3 1.2	Effect of movements in foreign exchange	2.4	(12.2)	1.4	(8.4)
Disposals (0.2) (73.8) - (74.0) Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.477.3 Disposal of businesses (1.7) (809.0) (158.2) (96.8) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation dange 48.8 (18.0) 16.0 (181.9) Balance at 31 December 2013 440.6 4,616.6 262.9 6,836.9 Accumulated depreciation dange for 18. (1.8) (480.0) - 4,61.9 Disposal of businesses	Balance at 31 December 2011	380.9	6,367.1	293.0	7,041.0
Transfers 8.4 134.8 (135.0) 8.2 Effect of movements in foreign exchange (1.5) (15.1) (2.2) (18.8) Balance at 31 December 2012 390.7 6.642.7 443.9 7.477.3 Disposal of businesses (1.7) (809.0) (18.82) (968.9) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment 142.3 3,345.6 - 3,487.9 Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation danger for the year 18.6 454.5 - 473.1	Additions	3.1	229.7	288.1	520.9
Effect of movements in foreign exchange (1.5) (15.1) (2.2) (1.8) Balance at 31 December 2012 390.7 6,642.7 443.9 7,477.3 Disposal of businesses (17) (809.0) (158.2) (968.9) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 26.9 6,836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Disposal of businesses (1.8) (480.0) - (481.8) Disposal of businesses (1.8) (480.0) - (473.1 Exceptional depreciation charge for the year - 1.9.0 - 19.0	Disposals	(0.2)	(73.8)	-	(74.0)
Balance at 31 December 2012 390.7 6.642.7 443.9 7,477.3 Disposal of businesses (1.7) (809.0) (158.2) (968.9) Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment Balance at 31 December 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year 1.8 454.5 - 473.1 Exceptional depreciation charge for the year 1.2 (3.7) - (3.7) Disposals (1.3) (29.7) - (3.10)	Transfers	8.4	134.8	(135.0)	8.2
Disposal of businesses	Effect of movements in foreign exchange	(1.5)	(15.1)	(2.2)	(18.8)
Additions 18.3 284.5 310.7 613.5 Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011	Balance at 31 December 2012	390.7	6,642.7	443.9	7,477.3
Disposals (0.2) (106.0) - (106.2) Transfers 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment 8 480.0) - (481.8) Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 13. Exceptional depreciation charge for the year - (3.7) - (3.7) Exceptional depreciation charge for the year - (3.7) - (3.7) Disposals (1.3) (29.7) - (3.10) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011	Disposal of businesses	(1.7)	(809.0)	(158.2)	(968.9)
Transfers. 7.1 313.5 (317.5) 3.1 Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013. 406.4 6.167.6 262.9 6.836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - 0.3(7) - (37.0) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 <	Additions	18.3	284.5	310.7	613.5
Effect of movements in foreign exchange (7.8) (158.1) (16.0) (181.9) Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4	Disposals	(0.2)	(106.0)	-	(106.2)
Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (3.10) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals	Transfers	7.1	313.5	(317.5)	3.1
Balance at 31 December 2013 406.4 6,167.6 262.9 6,836.9 Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals	Effect of movements in foreign exchange	(7.8)	(158.1)	(16.0)	(181.9)
Accumulated depreciation and impairment Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (3.10) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of mo			6,167.6	262.9	6,836.9
Balance at 1 January 2011 142.3 3,345.6 - 3,487.9 Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5)					
Disposal of businesses (1.8) (480.0) - (481.8) Depreciation charge for the year 18.6 454.5 - 473.1 Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3.315.4 - 3.474.7 Depreciation charge for the year 15.8 463.6 - 49.9 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6		142.3	3,345.6	-	3,487.9
Depreciation charge for the year	•	(1.8)	(480.0)	-	
Exceptional depreciation charge for the year - 19.0 - 19.0 Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year - 7.4	-	18.6	454.5	-	473.1
Transfers 0.2 1.1 - 1.3 Reclassifications - (3.7) - (3.7) Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year - 7.4 - 3.92.7 Exceptional depreciation charge for the year - 7.4		_	19.0	-	19.0
Disposals (1.3) (29.7) - (31.0) Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange <td< td=""><td></td><td>0.2</td><td>1.1</td><td>-</td><td>1.3</td></td<>		0.2	1.1	-	1.3
Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December	Reclassifications	-	(3.7)	-	(3.7)
Effect of movements in foreign exchange 1.3 8.6 - 9.9 Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December	Disposals	(1.3)	(29.7)	-	(31.0)
Balance at 31 December 2011 159.3 3,315.4 - 3,474.7 Depreciation charge for the year 15.8 463.6 - 479.4 Exceptional impairment charge for the year - 404.0 114.4 518.4 Transfers 3.4 4.4 - 7.8 Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value	-	1.3	8.6	-	9.9
Exceptional impairment charge for the year		159.3	3,315.4		3,474.7
Exceptional impairment charge for the year	Depreciation charge for the year	15.8	463.6	-	479.4
Disposals - (73.3) - (73.3) Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8		_	404.0	114.4	518.4
Effect of movements in foreign exchange (1.0) (22.5) - (23.5) Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8	Transfers	3.4	4.4	-	7.8
Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8	Disposals	-	(73.3)	-	(73.3)
Balance at 31 December 2012 177.5 4,091.6 114.4 4,383.5 Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8	Effect of movements in foreign exchange	(1.0)	(22.5)	-	(23.5)
Disposal of businesses (1.6) (768.2) (114.4) (884.2) Depreciation charge for the year 15.5 377.2 - 392.7 Exceptional depreciation charge for the year - 7.4 - 7.4 Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8			4,091.6	114.4	
Depreciation charge for the year	Disposal of businesses	(1.6)	(768.2)	(114.4)	
Exceptional depreciation charge for the year	-		377.2	-	
Transfers 8.5 (7.4) - 1.1 Disposals (0.2) (106.0) - (106.2) Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8		_	7.4	-	7.4
Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8		8.5	(7.4)	-	1.1
Effect of movements in foreign exchange (3.4) (105.2) - (108.6) Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8	Disposals	(0.2)	(106.0)	-	(106.2)
Balance at 31 December 2013 196.3 3,489.4 - 3,685.7 Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8	•			-	
Net book value At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8					
At 31 December 2011 221.6 3,051.7 293.0 3,566.3 At 31 December 2012 213.2 2,551.1 329.5 3,093.8			,		
At 31 December 2012		221.6	3,051.7	293.0	3,566.3
		213.2	2,551.1	329.5	3,093.8
	At 31 December 2013		2,678.2	262.9	

10. PROPERTY, PLANT AND EQUIPMENT (Continued)

The exceptional depreciation charge of €7.4 million for the year ended December 31, 2013 reflects the closure of the vinyls acetate monomer plant at Salt End, Hull, United Kingdom.

The exceptional impairment charge of €18.4 million for the year ended December 31, 2012 reflects the impairment of the property, plant and equipment assets at the Grangemouth, Scotland site.

The exceptional depreciation charge of €19.0 million for the year ended December 31, 2011 reflects the closure of the previously mothballed cumene plant in Port Arthur, Texas.

Leased plant and machinery

Included in the above are assets held under hire purchase and finance leases with a net book value of €16.8 million (2012: €25.5 million, 2011: €33.2 million). The leased equipment secured lease obligations (see Note 19).

Property, plant and equipment under construction

During 2013, the construction of an ethylene tank terminal in Antwerp, Belgium as well as an expansion of an olefins furnace at our Chocolate Bayou site in the USA were all completed and transferred to other classes of property, plant and equipment.

Additions to assets under constructions during 2013 included expenditure on the Mont Belvieu to Stratton Ridge pipeline connections and lateral lines to our Chocolate Bayou site, USA which will provide purity ethane to the site, engineering work on an ethylene oxide/glycol unit at Battleground, USA and a polyethylene unit expansion also at the Battleground, USA site.

During 2012, the maintenance turnaround at our olefins unit in Chocolate Bayou, USA and our new EOA reactor and upgrade of the EO reactor at our Lavera site in France were all completed and transferred to other classes of property, plant and equipment.

Additions to assets under constructions during 2012 included further expenditure on the construction of an ethylene tank terminal in Antwerp, Belgium as well as scheduled turnarounds at our plant in Köln, Germany and an expansion of an olefins furnace at our Chocolate Bayou site in the USA.

During 2011, construction work at Grangemouth on the overhaul of the G4, Butadiene, GTU Benzene and Hydrofiner units was completed and the assets were transferred to other classes of property, plant and equipment.

Additions to assets under constructions during 2011 included further expenditure on the construction of an ethylene tank terminal in Antwerp, Belgium as well as an expansion of a furnace, boiler safety work and expenditure on a cooling tower in Chocolate Bayou, USA and scheduled turnarounds at our Nitriles plant in Seal Sands, England, at our C3 unit in Chocolate Bayou, USA and on a cracker and PE units in Köln, Germany.

11. INTANGIBLE ASSETS

	Intellectual property rights	Customer relationships	Other	Goodwill	Total
Cost			€m		
Balance at 1 January 2011	140.4	2.9	9.6	913.8	1,066.7
Disposal of businesses	-	-	-	(278.3)	(278.3)
Additions	6.9	1.4	0.5	-	8.8
Reclassifications	(1.7)	-	(0.3)	-	(2.0)
Effect of movements in foreign exchange	2.7			(12.4)	(9.7)
Balance at 31 December 2011	148.3	4.3	9.8	623.1	785.5
Transfers	(9.5)	(0.5)	9.7	-	(0.3)
Additions	-	-	1.1	-	1.1
Effect of movements in foreign exchange	(1.4)		(0.3)	(11.0)	(12.7)
Balance at 31 December 2012	137.4	3.8	20.3	612.1	773.6
Transfers	-	-	(4.0)	-	(4.0)
Additions	-	-	1.9	-	1.9
Disposals	-	-	(1.0)	-	(1.0)
Adjustments	-	-	-	(19.7)	(19.7)
Effect of movements in foreign exchange	(3.0)	<u> </u>	1.3	(21.2)	(22.9)
Balance at 31 December 2013	134.4	3.8	18.5	571.2	727.9
Accumulated amortisation and					
impairment					
Balance at 1 January 2011	54.4	2.5	7.1	8.9	72.9
Amortisation for the year	11.3	0.2	0.3	-	11.8
Effect of movements in foreign exchange	1.4		0.5	3.3	5.2
Balance at 31 December 2011	67.1	2.7	7.9	12.2	89.9
Transfers	(1.9)	-	1.9	-	-
Amortisation for the year	11.7	0.2	0.2	-	12.1
Effect of movements in foreign exchange	(0.8)		(0.2)	(0.6)	(1.6)
Balance at 31 December 2012	76.1	2.9	9.8	11.6	100.4
Transfers	-	-	(2.0)	-	(2.0)
Amortisation for the year	11.4	0.2	0.7	-	12.3
Disposals	-	-	(1.0)	-	(1.0)
Effect of movements in foreign exchange	(1.6)		(0.3)	(3.5)	(5.4)
Balance at 31 December 2013	85.9	3.1	7.2	8.1	104.3
Net book value					
At 31 December 2011	81.2	1.6	1.9	610.9	695.6
At 31 December 2012	61.3	0.9	10.5	600.5	673.2
At 31 December 2013	48.5	0.7	11.3	563.1	623.6

Other intangible assets include non-compete agreements, licence fees and environmental certificates.

Amortisation charge

The amortisation charge is recognised in administrative expenses in the consolidated income statement.

11. INTANGIBLE ASSETS (Continued)

Impairment

Goodwill has been allocated to cash generating units (CGU) or groups of cash generating units as follows:

	2013	2012	2011
		€m	
O&P Europe	246.2	265.9	265.9
O&P North America	236.4	254.1	264.5
Refining	-	-	-
Chemical Intermediates	80.5	80.5	80.5
Total	563.1	600.5	610.9

On July 1, 2011 the group disposed of the Refining segment to a new joint venture between PetroChina and INEOS Investments (Jersey) Limited ('IIJL'), a related party. IIJL is held under common control by our controlling shareholders. The consideration received by the Group for the disposal consisted of cash consideration of \$1.015 billion received from PetroChina for a 50% interest in the business and an investment in non-voting ordinary shares in IIJL for the other 50% interest in the business. The goodwill relating to the Refining segment was disposed of as part of the sale (see Note 3).

For the other segments the recoverable amount is based on the value in use of each operating segment before aggregation based on the latest board approved five year plan. The forecasts are based on current performance and management's assumptions regarding the future development of individual parameters including raw material prices and profit margins, utilising available market pricing forecasts. Future assumptions regarding market demand are based on external macroeconomic sources and specific data relevant to the petrochemical industry and management's knowledge of the local markets in which it operates.

The cash flows after the plan period are based on an average of each of the years in the five year plan to take account of the cyclical nature of the industry extrapolated using long term growth rates as set out in the table below.

No impairment charge has been recorded in these financial statements as a result of the annual impairment test.

The key assumptions underlying the value in use calculation are shown below:

	2013	2012	2011
Period on which management approved forecasts are			
based	5 years	5 years	5 years
Discount rate	10.5%	11.5%	11.0%
Growth rate	3.0%	3.0%	3.0%

A terminal value is calculated based on the average cash flows over the five year forecasting period assuming compound growth of 3% and is discounted over the expected lives of the assets.

The discount rate is based upon the pre-tax weighted average cost of capital of the group as at each respective period end.

The growth rate used includes inflationary growth across our various markets.

11. INTANGIBLE ASSETS (Continued)

Sensitivity of recoverable amounts

The following table presents, for each CGU the change in the discount rate for the tests as of December 31, 2013 that would be required in order for the recoverable amount to equal carrying value.

	Applied rate	Change in discount rate in order for the recoverable amount to be equal to carrying value	Required rate
		%	
O&P Europe	10.5	0.5	11.0
O&P North America	10.5	44.0	54.5
Chemical Intermediates:			
Nitriles	10.5	2.9	13.4
Oxide	10.5	3.1	13.6
Phenol	10.5	11.8	22.3
Oligomers	10.5	10.7	21.2
Enterprises	10.5	38.8	49.3
Technologies	10.5	26.0	36.5

The following table presents, for each CGU the change in the growth rate for the tests as of December 31, 2013 that would be required in order for the recoverable amount to equal carrying value. For all operating segments except O&P Europe, O&P North America, Enterprises and Technologies there would need to be negative growth in order for an impairment to be recognised. For O&P Europe a growth rate of less than 1.9% would result in an impairment. For the O&P North America, Enterprises and Technologies segment growth sensitivity is not relevant as a €nil terminal value would not result in impairment.

	Applied rate	Change in growth rate in order for the recoverable amount to be equal to carrying value	Required rate
		%	
O&P Europe	3.0	(1.1)	1.9
O&P North America	3.0	n/a	n/a
Chemical Intermediates:			
Nitriles	3.0	(6.1)	(3.1)
Oxide	3.0	(6.3)	(3.3)
Phenol	3.0	(41.4)	(38.4)
Oligomers	3.0	(33.1)	(30.1)
Enterprises	3.0	n/a	n/a
Technologies	3.0	n/a	n/a

12. INVESTMENTS

12.a Investments In Equity-Accounted Investees

	Joint ventures	Associated undertakings	Total
		€m	
At 1 January 2011	105.6	-	105.6
Share of losses retained	(71.2)	-	(71.2)
Additions	420.0	-	420.0
Loan repayment	(12.8)	-	(12.8)
Dividends received	(0.7)	-	(0.7)
Disposals	(8.5)	-	(8.5)
Exchange adjustments	(0.1)		(0.1)
At 31 December 2011	432.3	-	432.3
Share of losses retained	(14.7)	-	(14.7)
Dividends received	(0.8)	-	(0.8)
Exchange adjustments	6.4		6.4
At 31 December 2012	423.2	-	423.2
Share of losses retained	(49.8)	-	(49.8)
Dividends received	(0.7)	-	(0.7)
Exchange adjustments	1.9		1.9
At 31 December 2013	374.6		374.6

Joint ventures

On July 1, 2011 the group disposed of the Refining business to a new joint venture between PetroChina and INEOS Investments (Jersey) Limited ('IIJL'), a related party. IIJL is held under common control by our controlling shareholders. The consideration received by the Group for the disposal consisted of cash consideration of \$1.015 billion received from PetroChina for a 50% interest in the business and an investment in non-voting ordinary shares in IIJL for the other 50% interest in the business. The non-voting ordinary shares in IIJL were fair valued at €420 million. This reflects the net present value of the future cash flows expected to be realised by the group for the ownership of these non-voting shares and takes into account the loss in control of the refining trade and assets.

The Group effectively retains an economic interest in the Refining business by virtue of its investment in IIJL. The results of the Refining business are now reported against the share of (loss)/profit of associates and jointly controlled entities using the equity accounting method by virtue of this interest thus it is treated as a joint venture.

The Group has a loan investment with Noretyl AS. At December 31, 2013 the balance was €20.2 million (2012: €2.5 million, 2011: €17.7 million).

12. INVESTMENTS (Continued)

Details of investments in joint ventures are set out below:

Company	Class of shares held	Place of business and country of incorporation	Percentage held	Principal activities
PetroIneos Refining Limited	Ordinary	Lavéra, France Grangemouth, Scotland	50.1%	Refining
PetroIneos Trading Limited	Ordinary	Lavéra, France Grangemouth, Scotland	49.9%	Refining
Ineos Infrastructure		Grangemouth,		
(Grangemouth) Limited	Ordinary	Scotland	75%	Refining
Appryl SNC	Ordinary	Lavéra, France	50%	Chemicals
Naphthachimie SNC	Ordinary	Lavéra, France	50%	Chemicals
Oxochimie SA	Ordinary	Lavéra, France	50%	Chemicals
Noretyl AS	Ordinary	Rafnes, Norway	50%	Chemicals

Summary aggregated financial information for equity accounted joint ventures – 50 per cent of the balances:

	2013	2012	2011
		€m	
Current assets	1,358.8	1,493.1	995.4
Long-term assets	1,629.7	1,125.3	1,015.0
Current liabilities	(1,740.2)	(1,704.7)	(1,118.5)
Long-term liabilities	(215.7)	(135.0)	(114.0)
Revenue	11,505.4	7,969.6	3,365.3
Expenses	(11,572.5)	(7,982.1)	(3,435.4)

Associated undertakings

The Group retains interests in associated undertakings in the Bio and Healthcare businesses. All of the associated undertakings have December year ends.

Details of the associated undertakings are set out below:

Company	Class of shares held	Place of business and country of incorporation	Percentage held	Principal activities
Ineos Bio Limited	Ordinary	UK	20%	Chemicals
Ineos Bio US LLC	Ordinary	USA	20%	Chemicals
Ineos Healthcare Limited	Ordinary	UK	20%	Healthcare

The Group has not recognised its share of profits or losses relating to the Ineos Bio or Healthcare businesses of €8.7 million loss (2012: €0.1 million profit, 2011: €5.9 million loss) and €0.5 million loss (2012: €0.2 million loss, 2011: €0.2 million loss) respectively since the Group has no obligation in respect of these profits or losses. The net cumulative loss not recorded is €25.2 million. The Group has recognised these investments at their fair value on the date of reorganisation of these businesses, estimated by the Group to be €nil.

12. INVESTMENTS (Continued)

Summary aggregated financial information for equity accounted associated undertakings – share of the balances:

_	2013	2012	2011
		€m	
Total assets	28.2	5.6	19.3
Total liabilities	(47.5)	(16.8)	(3.6)
Income	-	-	-
Expenses	(9.2)	(0.1)	(6.1)

12.b Investments in Subsidiary Undertakings

The directors consider that to give full particulars of all subsidiary undertakings would lead to a statement of excessive length.

The directors believe the carrying value of the investments is supported by the underlying net assets of the subsidiaries.

The following information relates to the principal subsidiary undertakings of the Company.

12. INVESTMENTS (Continued)

Commons	Country of incorporation and operation	Percentage holding	Principal activity
Company Lnace Lycembourg LS A *		100%	
Ineos Luxembourg I S.A.*	U		Holding company
Ineos Luxembourg II S.A.	•	100% 100%	Holding Company
Ineos Group AG			Holding Company
Ineos Holdings Limited	C	100%	Holding Company
Ineos European Holdings Limited		100%	Holding Company
Ineos US Finance LLC		100%	Finance
Ineos Finance Plc		100%	Finance
Ineos Treasury (UK) Limited	_	100%	Finance
Ineos Europe AG		100%	Chemicals
Ineos Oxide Limited	U	100%	Chemicals
Ineos NV	C	100%	Chemicals
Ineos Belgium NV	C	100%	Chemicals
Ineos Phenol Belgium NV	•	100%	Chemicals
Ineos Italia Srl	•	100%	Chemicals
Ineos Phenol GmbH	Germany	100%	Chemicals
Ineos Fluor Limited	England	100%	Chemicals
IFJ Korea Limited	Korea	100%	Chemicals
Ineos Fluor Americas LLC	US	100%	Chemicals
Ineos Silicas Limited	England	100%	Chemicals
Ineos Americas LLC	US	100%	Chemicals
Ineos Manufacturing Deutschland GmbH	Germany	100%	Chemicals
Ineos Köln GmbH	Germany	100%	Chemicals
Ineos France SAS	France	100%	Chemicals
Ineos Sales (UK) Limited	England	100%	Chemicals
Ineos Manufacturing Belgium NV	Belgium	100%	Chemicals
Ineos Feluy SPRL	Belgium	100%	Chemicals
Ineos Sales Belgium NV	~	100%	Chemicals
Ineos Sales Italia s.r.l.	Italy	100%	Chemicals
Ineos Chemicals Lavera SAS	France	100%	Chemicals
Ineos Polymers Sarralbe SAS	France	100%	Chemicals
Ineos Manufacturing Italia s.p.a.		100%	Chemicals
Ineos USA LLC		100%	Chemicals
Ineos Polymers Inc	US	100%	Chemicals
Ineos Canada Company		100%	Chemicals
Ineos Canada Partnership		100%	Chemicals
Ineos Compounds UK Limited		100%	Chemicals
Ineos Bamble AS	_	100%	Chemicals
Ineos Nitriles (UK) Limited	2	100%	Chemicals
Ineos Manufacturing (Hull) Limited		100%	Chemicals
Ineos Technologies (Vinyls) Limited	_	100%	Chemicals
* Held directly by the Company	25	10070	Chemicalo

^{*} Held directly by the Company

13. OTHER INVESTMENTS

	2013	2012	2011
		€m	
At 1 January	175.9	166.7	152.2
Interest receivable	13.0	12.7	12.0
Exchange adjustments	(7.5)	(3.5)	2.5
At 31 December	181.4	175.9	166.7

The Group has a non-voting preferred partnership interest in Ineos Investments Partnership, an entity held under common control by the Group's ultimate shareholders, which owns 40% of the share capital of the PQ Corporation, a silicas business incorporated in the USA. The interest was transferred from Ineos Investments LLP to Ineos Investments Partnership during 2012.

14. OTHER FINANCIAL ASSETS

	2013	2012	2011
		€m	
Non-current			
Interest rate cap financial instrument	3.3	3.5	-
Available for sale financial assets (see below and Note			
25.a)	49.0	47.5	47.5
	52.3	51.0	47.5
Current			
Derivative commodity contracts designated as fair value			
through profit or loss (see Note 25.a)	0.4	0.5	

Interest rate cap financial instrument

During 2012 the Group entered into two interest rate caps to hedge the variable interest rate exposures on the €500.0 million Floating Rate Senior Secured Notes due 2019. The interest rate caps have a strike price of 1.25% per annum, which is in line with the EURIBOR floor on the Floating Rate Notes of 1.25% per annum. These derivative instruments expire in May 2015.

Available for sale financial assets

Available for sale financial assets relate to a 13.9% investment in Geosud, a company registered in France whose principal activity is the provision of underground storage facilities for liquid hydrocarbons in Southern France, a 16.7% investment in Aethylen Rohrleitungs Gesellschaft ('ARG') mbH and Co. KG, a company registered in Germany whose principal activity is the transportation of ethylene via pipelines in Northern Europe and other investments.

During 2011 we disposed of our 19.9% investment in Geosel Manosque, our 10% investment in Seminole Pipeline Company and our 4.08% investment in Exeltium SAS.

The investment in Geosel Manosque was valued at its aggregate acquisition cost of €3.0 million in 2008. As a result of a partial demerger of the business into Geosel Manosque and Geosud in 2009 further information became available that allowed the valuation of these investments in 2009 to be revised to an estimated fair value for Geosel Manosque (€26.0 million) and Geosud (€19.8 million). The fair value of the Geosud investment remains at €19.8 million in 2013.

The investment in ARG mbH and Co. KG and other investments have been classified as available for sale financial assets and recorded at their acquisition cost. These investment comprise of shares in private limited companies. The carrying amount of these financial instruments was €9.2 million at December 31, 2013 following an increase in other investments of €1.5 million during the year. These shares are not listed and there is no active market. A reliable determination of fair value would only be practicable if there were equity sales transactions on which fair values could be based. A disposal of these investments is not currently anticipated.

15. OTHER FINANCIAL LIABILITIES

	2013	2012	2011
Current		€m	
Derivative commodity contracts designated as fair value			
through profit or loss (see Note 25.a)	0.3	0.3	12.7

16. DEFERRED TAX ASSETS AND LIABILITIES

Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

		2013	
	Assets	Liabilities	Total
		€m	
Property, plant and equipment	-	310.1	310.1
Employee benefits	(186.0)	-	(186.0)
Tax value of loss carry-forwards	(155.0)	-	(155.0
Other	(94.4)		(94.4)
Tax (assets)/liabilities	(435.4)	310.1	(125.3)
Set off of tax	147.2	(147.2)	
Net tax (assets)/liabilities	(288.2)	162.9	(125.3)
		2012	
	Assets	Liabilities	Total
		€m	
Property, plant and equipment	-	172.5	172.5
Employee benefits	(209.4)	-	(209.4)
Tax value of loss carry-forwards	(207.9)	-	(207.9)
Other	(91.8)		(91.8)
Tax (assets)/liabilities	(509.1)	172.5	(336.6)
Set off of tax	1.7	(1.7)	
Net tax (assets)/liabilities	(507.4)	170.8	(336.6)
		2011	
	Assets	Liabilities	Total
		 m	
Property, plant and equipment	_	282.5	282.5
Employee benefits	(173.4)	-	(173.4)
Tax value of loss carry-forwards	(223.8)	-	(223.8)
Other	(69.6)	-	(69.6)
Tax (assets)/liabilities	(466.8)	282.5	(184.3)
Set off of tax	75.3	(75.3)	-
Net tax (assets)/liabilities	(391.5)	207.2	(184.3)
1.00 00.2 (0.0000), 110011110001111100011111111111111			

16. DEFERRED TAX ASSETS AND LIABILITIES (Continued)

Movement in deferred tax

	Property, plant and equipment	Employee benefits	Tax value of loss carry- forward utilised	Other	Total
			€m		
At 1 January 2011	221.6	(207.8)	(251.4)	(45.2)	(282.8)
Recognised in profit or loss	70.9	9.5	27.6	(29.3)	78.7
Recognised in other comprehensive					
income	-	(6.4)	-	-	(6.4)
Included in businesses disposed of	(10.0)	31.3		4.9	26.2
At 31 December 2011	282.5	(173.4)	(223.8)	(69.6)	(184.3)
Recognised in profit or loss	(110.0)	25.0	15.9	(22.2)	(91.3)
Recognised in other comprehensive					
income	-	(61.0)			(61.0)
At 31 December 2012	172.5	(209.4)	(207.9)	(91.8)	(336.6)
Recognised in profit or loss	(2.2)	4.3	12.9	(2.6)	12.4
Included in businesses disposed of	139.8	18.1	40.0	-	197.9
Recognised in other comprehensive					
income		1.0			1.0
At 31 December 2013	310.1	(186.0)	(155.0)	(94.4)	(125.3)

Deferred tax assets are recognised to the extent that the realisation of the related tax benefit through future taxable profits is probable based on an assessment of expected future profits modelled against the gross tax losses available over a period of 5 years. The Group did not recognise gross deductible temporary differences of €158.0 million (2012: €129.0 million, 2011: €190.0 million).

The Group has not provided deferred tax in relation to temporary differences on its overseas subsidiaries or joint ventures as the Group can control the timing and realisation of these temporary differences, and it is probable that no material unprovided tax liability would arise.

Deferred tax recognised in profit or loss in respect of the discontinued Refining business for the year ended December 31, 2013 was €nil million (2012: €nil million, 2011: €24.9 million).

17. INVENTORIES

	2013	2012	2011
		€m	
Raw materials and consumables	451.7	497.4	461.2
Work in progress	28.4	28.4	32.0
Finished goods	839.7	866.4	836.4
	1,319.8	1,392.2	1,329.6

Raw materials, consumables and changes in finished goods and work in progress recognised as cost of sales in the year amounted to €4,869.8 million (2012: €5,923.4 million, 2011: €3,060.4 million). The net write-down of inventories to net realisable value amounted to €4.5 million (2012: €0.1 million, 2011: €5.0 million) after the reversal of previous write downs of €2.0 million (2012: €0.1 million, 2011: €5.1 million).

18. TRADE AND OTHER RECEIVABLES

	2013	2012	2011
		€m	
Current			
Trade receivables	1,277.9	1,402.2	1,524.3
Amounts due from related parties	335.3	167.8	245.9
Other receivables	236.9	298.9	232.0
Prepayments	63.3	39.8	54.3
	1,913.4	1,908.7	2,056.5
Non-current			
Amounts due from related parties	75.4	142.0	-
Other receivables	4.8	5.5	9.3
Prepayments	21.7	17.3	10.2
	101.9	164.8	19.5

Credit quality of financial assets and impairment losses

The ageing of trade and other receivables at the end of the reporting period was:

Amounts due from

_	Trade receivables		Amounts due from related parties		Other receivables	
<u>-</u>	Gross	Impairment Gross	Gross	Gross Impairment	Gross	Impairment
<u>-</u>	2013	2013	2013	2013	2013	2013
	€n					
Not past due	1,251.3	(11.2)	410.7	-	230.7	(5.0)
Past due 0-30 days	30.1	(0.9)	-	-	0.1	-
Past due 31-90 days	1.4	-	-	-	0.2	-
More than 90 days	13.2	(6.0)	-	<u> </u>	15.7	
_	1,296.0	(18.1)	410.7		246.7	(5.0)

	Trade i	receivables		ts due from d parties	Other 1	receivables
_	Gross	Impairment	Gross	Impairment	Gross	Impairment
<u>-</u>	2012	2012	2012	2012	2012	2012
				€m		
Not past due	1,354.6	(17.0)	309.8	-	306.8	(3.0)
Past due 0-30 days	46.2	-	-	-	0.3	-
Past due 31-90 days	6.9	(0.3)	-	-	-	-
More than 90 days	19.9	(8.1)	-		0.3	
	1,427.6	(25.4)	309.8		307.4	(3.0)

_	Trade 1	receivables		ts due from ed parties	Other 1	receivables
_	Gross	Impairment	Gross	Impairment	Gross	Impairment
<u>-</u>	2011	2011	2011	2011	2011	2011
				€m		
Not past due	1,443.1	(14.3)	245.9	-	240.4	-
Past due 0-30 days	47.4	-	-	-	0.1	-
Past due 31-90 days	-	-	-	-	0.5	-
More than 90 days	61.4	(13.3)	-	<u> </u>	0.3	
_	1,551.9	(27.6)	245.9		241.3	

18. TRADE AND OTHER RECEIVABLES (Continued)

The accounts receivable not yet due after impairment losses as of the end of the reporting period are deemed to be collectible on the basis of established credit management processes such as regular analyses of the credit worthiness of our customers and external credit checks where appropriate for new customers (see Note 25.c). At December 31, 2011, 2012 and 2013 there were no significant trade, related party or other receivable balances not past due that were subsequently impaired.

Due to the global activities and diversified customer structure of the Group, there is no significant concentration of credit risk (2012: nil, 2011: nil).

During 2011, 2012 and 2013 there were no significant trade, related party or other receivable balances that were subject to renegotiation of terms. Credit enhancements are held in respect of trade and other receivables in the form of €75.9 million (2012: €392.0 million, 2011: €56.1 million) of assets pledged as security against amounts owed to the Group of which €.5 million (2012: €2.6 million, 2011: €nil million) is in respect of amounts falling overdue.

Trade receivable balances totalling €1,061.7 million (2012: €1,156.1 million, 2011: €1,284.1 million) have been pledged as security against amounts drawn down under the Receivables Securitisation Facility, described in Note 19, totalling €483.3 million (2012: €492.0 million, 2011: €689.2 million). In accordance with IAS 39 'Financial Instruments: Recognition and Measurement' the trade receivable balances pledged as security do not qualify for derecognition and are included within the trade receivable balances above.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2013	2012	2011
		€m	
Balance at 1 January	25.4	27.6	34.0
Impairment loss released	(7.3)	(2.2)	(6.4)
Balance at 31 December	18.1	25.4	27.6

The allowance account for trade receivables is used to record impairment losses unless the Group is satisfied that no recovery of the amount owing is possible; at that point the amounts considered irrecoverable are written off against the trade receivables directly.

During the year the Group has not experienced a significant deterioration in the quality of receivable balances due to the current economic conditions.

There were allowances of \circlearrowleft .0 million made against amounts due from other receivables during the year (2012: \circlearrowleft .0 million, 2011: \circlearrowleft million).

There were no allowances made against amounts due from related partied during the years ended December 31, 2013, 2012 and 2011.

19. INTEREST-BEARING LOANS AND BORROWINGS

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate and foreign currency risk, see Note 25.f.

interest rate and foreign currency risk, see Note 25.f.			
	2013	2012	2011
Non-current liabilities		€m	
Senior Facilities Agreement	-	-	2,832.5
Senior Secured Term Loans	2,951.2	2,225.1	-
Senior Secured Notes due 2015	-	721.3	725.3
Senior Secured Notes due 2019	1,198.0	1,225.3	-
Senior Secured Notes due 2020	551.9	575.6	-
Senior Notes due 2016	1,025.9	2,026.2	2,031.1
Senior Notes due 2018	983.2	-	-
Securitisation Facility	481.8	490.0	685.1
Finance lease liabilities	2.0	7.6	9.0
Other loans	13.4	1.1	1.1
	7,207.4	7,272.2	6,284.1
	2013	2012	2011
Current liabilities		€m	
		QII	
Current portion of borrowings under Senior Secured Term Loans	28.5	14.7	
Current portion of borrowings under Senior Facilities	26.3	14.7	-
Agreement	_	_	307.4
Other loans	0.9	_	507.4
Current portion of finance lease liabilities	2.7	2.0	1.8
Current portion of inflance lease habilities	32.1	16.7	309.2
	32.1	10.7	307.2
Gross debt and issue costs			
	Gross loans		Net loans
	and borrowings	Issue costs	and borrowings
	2013	2013	2013
		€m	
Senior Secured Term Loans	2,987.5	(7.8)	2,979.7
Senior Secured Notes due 2019	1,223.8	(25.8)	1,198.0
Senior Secured Notes due 2020	560.9	(9.0)	551.9
Senior Notes due 2016.	1,032.1	(6.2)	1,025.9
Senior Notes due 2018	990.8	(7.6)	983.2
Securitisation Facility	483.3	(1.5)	481.8
Other	19.0	-	19.0
Total	7,297.4	(57.9)	7,239.5
			

	Gross loans and borrowings	Issue costs	Net loans and borrowings
	2012	2012	2012
		€m	
Senior Secured Term Loans	2,278.9	(39.1)	2,239.8
Senior Secured Notes due 2015	731.1	(9.8)	721.3
Senior Secured Notes due 2019	1,256.2	(30.9)	1,225.3
Senior Secured Notes due 2020	586.1	(10.5)	575.6
Senior Notes due 2016	2,044.5	(18.3)	2,026.2
Securitisation Facility	492.0	(2.0)	490.0
Other	10.7		10.7
Total	7,399.5	(110.6)	7,288.9

	Gross loans and borrowings	Issue costs	Net loans and borrowings
	2011	2011	2011
		€m	
Senior Facilities Agreement	3,170.0	(30.1)	3,139.9
Senior Secured Notes due 2015	740.3	(15.0)	725.3
Senior Notes due 2016	2,055.4	(24.3)	2,031.1
Securitisation Facility	689.2	(4.1)	685.1
Other	11.9		11.9
Total	6,666.8	(73.5)	6,593.3

Terms and debt repayment schedule	Currency	Nominal interest rate	Year of maturity
		LIBOR / EURIBOR plus	
Senior Secured Term Loans	\$/€	2.00%-3.25%	2015-2018
Senior Secured Notes	\$/€	7.50%-8.375%	2019-2020
Floating Rate Senior Secured Notes	€	EURIBOR plus 6.0%	2019
Senior Notes	\$/€	6.125%-7.875%	2016-2018
Securitisation Facility	\$/ € £	Variable	2016
Other	€¥	3.75 - 9.0%	2014-2018

Senior Secured Term Loans

The Company had original borrowings under a senior facilities agreement (the "Senior Secured Term Loans") which consisted of Term Loans comprising of \$375 million of short-dated term loans (the "Short-Dated Dollar Term Loans"), €500 million of term loans (the "Euro Term Loans") and \$2.0 billion of term loans (the "Dollar Term Loans"). In May 2013 the Group completed the re-pricing and up-sizing of the Senior Secured Term Loan facility. The refinancing comprised of a \$640 million and a €350 million, five-year add-on term loans. The Senior Secured Term Loans outstanding at December 31, 2013 before issue costs were €,987.5 million (2012: €2,278.9 million), of which €0.3 million (2012: €3.0 million) is due within one year. The total amounts outstanding on the Short-Dated Dollar Term Loans were €66.7 million (2012: €81.5 million), Euro Term Loans were €38.6 million (2012: €496.2 million) and Dollar Term Loans were €1,882.2 million (2012: €1,501.2 million).

The Group has assessed that the re-pricing of the Senior Secured Term Loan facility represents a substantial modification and results in the extinguishment of the existing debt. As a result, the existing debt has been derecognised and the modified debt recognised at fair value which is equal to cost.

The Term Loans are to be repaid in equal quarterly instalments, in aggregate annual amounts equal to 1% of the original principal amount of the Term Loans. The respective balances of the Euro Term Loans and Dollar Term Loans are payable, subject to certain exceptions, on the date that is nine years after the original Issue Date. The balances of the Short-Dated Dollar Term Loans are payable, subject to certain exceptions, on the date that is three years after the original Issue Date. The Short-Dated Dollar Term Loans mature in May 2015. The Euro Term Loans and the Dollar Term Loans mature in May 2018.

The outstanding Euro Term Loans bear interest at a rate per annum equal to EURIBOR (subject to a floor of 1.00% per annum) plus the Applicable Margin and the outstanding Short-Dated Dollar Term Loans and Dollar Term Loans will bear interest a rate per annum equal to LIBOR (subject to a floor of 1.00% per annum) plus the Applicable Margin. The floor was reduced from 1.25% to 1.00% in May 2013.

As at December 31, 2013 the Applicable Margin for the Euro Term Loans is 3.25%, the Short-Dated Dollar Term Loans is 2.00% and the Dollar Term Loans is 3.00%. The Applicable Margins were reduced as a result of the re-pricing in May 2013. In February 2014 the Applicable Margins were reduced to 3.00% for the Euro Term Loans and 2.75% for the Dollar Term Loans.

The Senior Secured Term Loans rank pari passu with the Senior Secured Notes due 2019 and the Senior Secured Notes due 2020 and are structurally senior to the Senior Notes due 2016 and Senior Notes due 2018. The notes are guaranteed by INEOS Group Holdings S.A., INEOS Holdings Limited and certain of their subsidiaries on a senior secured basis. The Term Loans and the guarantees are secured by first ranking liens on the same assets (subject to certain exceptions) that secure INEOS Holdings Limited's obligations under the senior secured notes.

The Term Loans have numerous customary operating and financial incurrence covenants including covenants relating to, among other things, limitations on indebtedness, ability to give guarantees, creation of security interests, making acquisitions and investments, disposing of assets and paying dividends. The Term Loans have no financial maintenance covenants.

Senior Facilities Agreement

The Company had borrowings under a facilities agreement (the "Senior Facilities Agreement") which consisted of Term Loans ("Term Loan A", "Term Loan B", "Term Loan C" and "Term Loan D"), and a revolving credit facility (the "Revolving Credit Facility"). Term Loan A, Term Loan B, Term Loan C, Term Loan D and the Revolving Credit Facility are now fully repaid. In February 2012 the Group issued \$1,000 million Senior Secured Notes due 2019 and €00 million Floating Rate Notes due 2019. The net proceeds from the notes were used to repay all of the Term Loan B and a proportion of Term Loan C. In May 2012 the Group issued \$775 million Senior Secured Notes due 2020 and a new Senior Secured Term Loan totalling \$3,025 million. The net proceeds from the notes and the term loan were used to repay all of the outstanding Term Loan C, Term Loan D and Revolving Credit Facility indebtedness under the Senior Facilities Agreement, including the associated PIK interest.

The Term Loans outstanding at December 31, 2011 were €2,875.5 million. The total amounts outstanding on Term Loan A were €1il million, Term Loan B were €1,062.9 million, Term Loan C were €1,162.6 million and Term Loan D were €50.0 million. The Revolving Credit Facility outstanding at December 31, 2011 before issue costs was €294.5 million.

Following the redemption of the Senior Facilities Agreement debt issue costs of €18.1 million were charged to the profit and loss account during the year ended December 31, 2012.

Senior Secured Notes due 2015

In May 2013 the Senior Secured Notes due 2015 were fully redeemed from the proceeds of the additional Term Loans. The Senior Secured Notes due 2015 were listed on the Luxembourg Stock Exchange and comprised of €300.0 million (2012 and 2011: €300.0 million) Senior Secured Notes due 2015 (the "Secured Euro Notes") and \$570.0 million (2012 and 2011: \$570.0 million) Senior Secured Notes due 2015 (the "Secured Dollar Notes"). The Senior Secured Notes due 2015 beared interest at 9.25% per annum for the Secured Euro Notes and 9.0% for the Secured Dollar Notes, payable semi-annually in arrears on May 15 and November 15 of each year.

Following the redemption of the Senior Secured Notes due 2015, the Group has recognised a charge of €3.1 million as an exceptional finance cost in respect of the write-off of the associated unamortised debt issue costs (see Note 4). The debt issue costs at December 31, 2012 and December 31, 2011 were €9.8 million and €15.0 million respectively.

Senior Secured Notes due 2019

The Senior Secured Notes due 2019 are listed on the Luxembourg Stock Exchange and comprise €500.0 million (2012: €500.0 million and 2011: €nil million) Floating Rate Senior Secured Notes due 2019 (the "2019 Euro Floating Rate Notes") and \$1,000.0 million (2012: \$1,000.0 million and 2011: €nil million) Senior Secured Notes due 2019 (the "2019 Dollar Fixed Rate Notes"). The 2019 Euro Floating Rate Notes bear interest at a rate per annum, reset quarterly, equal to the sum of (i) the greater of (x) three-month EURIBOR and (y) 1.25% per annum plus (ii) 6.0%. Interest on the 2019 Euro Floating Rate Notes is payable quarterly in arrears on February 15, May 15, August 15 and November 15 of each year, beginning May 15, 2012. The 2019 Dollar Fixed Rate Notes bear interest at a rate of 8.375% per annum. Interest on the 2019 Dollar Fixed Rate Notes is payable semi-annually in arrears on February 15 and August 15 of each year, beginning August 15, 2012. Unless previously redeemed as noted below, the Senior Secured Notes will be redeemed by the Group at their principal amount on February 15, 2019.

The 2019 Euro Floating Rate Notes will be subject to redemption at any time on or after February 15, 2015, at the option of the 2019 Notes Issuer, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning on February 15 of the year indicated below:

Year	2019 Euro Floating Rate Notes Redemption Price
2015	102.000%
2016	101.000%
2017 and thereafter	100.000%

The 2019 Dollar Fixed Rate Notes will be subject to redemption at any time on or after February 15, 2015, at the option of the 2019 Notes Issuer, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning on February 15 of the year indicated below:

Year	2019 Dollar Fixed Rate Notes Redemption Price
2015	106.281%
2016	104.188%
2017	102.094%
2018 and thereafter	100.000%

In each case, the redemption premium will be in addition to accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

The Senior Secured Notes due 2019 rank pari passu with the Senior Secured Term Loans are structurally senior to the Senior Notes due 2016 and the Senior Notes due 2018. The notes are guaranteed by INEOS Group Holdings S.A., INEOS Holdings Limited and certain of their subsidiaries on a senior secured basis. The notes and the guarantees are secured by first ranking liens on the same assets (subject to certain exceptions) that secure INEOS Holdings Limited's obligations under the senior secured credit facility.

The Indenture contains a number of operating and financial covenants including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Senior Secured Notes due 2019 are stated net of debt issue costs of €5.8 million (2012: €0.9 million and 2011: €nil million). These costs are allocated to the profit and loss account over the term of the Senior Secured Notes due 2019 in accordance with IAS 39 – Financial Instruments: Recognition and Measurement.

Senior Secured Notes due 2020

The Senior Secured Notes due 2020 are listed on the Luxembourg Stock Exchange and comprise of \$775.0 million (2012: \$775.0 million and 2011: fail million) Senior Secured Notes. The Senior Secured Notes due 2020 bear interest at 7.5% per annum, payable semi-annually in arrears on May 1 and November 1 of each year. Unless previously redeemed as noted below, the Senior Secured Notes due 2020 will be redeemed by the Group at their principal amount on May 1, 2020.

The Senior Secured Notes due 2020 will be subject to redemption at any time on or after May 1, 2015, at the option of the Issuer, in whole or in part, on not less than 30 nor more than 60 days' prior notice at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the 12-month period beginning May 1 of the year indicated below:

Year	2020 Dollar Fixed Rate Notes Redemption Price
2015	105.625%
2016	103.750%
2017	101.875%
2018 and thereafter	100.000%

In each case, the redemption premium will be in addition to accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

The Senior Secured Notes due 2020 rank pari passu with the Senior Secured Term Loans and the Senior Secured Notes due 2019 and are structurally senior to the Senior Notes due 2016 and Senior Notes due 2018. The notes are guaranteed by INEOS Group Holdings S.A., INEOS Holdings Limited and certain of their subsidiaries on a senior secured basis. The notes and the guarantees are secured by first ranking liens on the same assets (subject to certain exceptions) that secure INEOS Holdings Limited's obligations under the senior secured term loans.

The Indenture contains a number of operating and financial covenants including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Senior Secured Notes due 2020 are stated net of debt issue costs of €0.0 million (2012: €10.5 million and 2011: €nil million). These costs are allocated to the profit and loss account over the term of the Senior Secured Notes due 2020 in accordance with IAS 39 – Financial Instruments: Recognition and Measurement.

Senior Notes due 2016

The Group used the proceeds from the Senior Notes due 2018 to refinance all of its outstanding U.S. dollar-denominated Senior Notes due 2016 on May 15, 2013 and redeem €00.0 million aggregate principal amount of its outstanding euro-denominated Senior Notes due 2016 pursuant to a partial redemption (redemption date of June 5, 2013). The Senior Notes due 2016 are listed on the Luxembourg Stock Exchange and comprise €1,032.1 million (2012 and 2011: €1,532.1 million) Senior Notes due 2016 (the "Euro Notes") and \$\sin \text{lmillion} \text{ million} \text{ Senior Notes due 2016 (the "Dollar Notes") following the May 2013 refinancing. The Senior Notes due 2016 bear interest at 7.875% per annum for the Euro Notes payable semi-annually in arrears on 15 February and 15 August of each year. The remaining Senior Notes due 2016 were redeemed by the Group at their principal amount on February 19, 2014.

The Senior Notes due 2016 are secured by junior pledges of all of the shares of Ineos Group Holdings S.A.. The Senior Notes due 2016 are guaranteed by Ineos Group Holdings S.A. and its material operating subsidiaries on an unsecured senior subordinated basis. Such guarantees only become due 179 days after an event of default on the Senior Notes has occurred or earlier under certain circumstances.

The Indenture contains a number of operating and financial covenants including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

Following the partial redemption of the Senior Notes due 2016 the Group has recognised a charge of €7.9 million as an exceptional finance cost in respect of the write-off of the associated

unamortised debt issue costs (see Note 4). The remaining Senior Notes due 2016 are stated net of debt issue costs of €6.2 million (2012: €18.3 million, 2011: €24.3 million). These costs are allocated to the profit and loss account over the term of the Senior Notes in accordance with IAS 39 – Financial Instruments: Recognition and Measurement.

Senior Notes due 2018

The Senior Notes due 2018 are listed on the Luxembourg Stock Exchange and comprise €500.0 million Senior Notes due 2018 (the "Euro Notes") and \$678.0 million Senior Notes due 2018 (the "Dollar Notes"). The Senior Notes due 2018 bear interest at 6.50% per annum for the Euro Notes and 6.125% for the Dollar Notes, payable semi-annually in arrears on 15 February and 15 August of each year. Unless previously redeemed as noted below, the Senior Notes due 2018 will be redeemed by the Group at their principal amount on 15 August 2018.

The Senior Notes due 2018 are subject to redemption at the option of the Group, in whole or in part, at the following redemption prices (expressed as percentages of the principal amount), if redeemed during the 12-month period beginning 15 February of the years indicated below:

Year		Dollar Notes redemption price
2015	103.250%	103.063%
2016	101.625%	101.531%
2017 and thereafter	100.000%	100.000%

In each case, the redemption premium will be in addition to accrued and unpaid interest, if any, to the redemption date (subject to the rights of holders of record on relevant record dates to receive interest due on an interest payment date).

The Senior Notes due 2018 are secured by junior pledges of all of the shares of INEOS Holdings Limited. The Senior Notes due 2018 are guaranteed by INEOS Holdings Limited and its material operating subsidiaries on an unsecured senior subordinated basis. Such guarantees only become due 179 days after an event of default on the Senior Notes due 2018 has occurred or earlier under certain circumstances.

The Indenture contains a number of operating and financial covenants including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Senior Notes due 2018 are stated net of debt issue costs of €7.6 million. These costs are allocated to the profit and loss account over the term of the Senior Notes due 2018 in accordance with IAS 39 – Financial Instruments: Recognition and Measurement.

Receivables Securitisation Facility

The Company has entered into a €1,000 million receivables securitisation facilities agreement ("Receivables Securitisation Facility") which matures in December 2016. The total amount outstanding at December 31, 2013 was €483.3 million (2012: €492.0 million, 2011: €689.2 million).

The Receivables Securitisation Facility is stated net of debt issue costs of \triangleleft .5 million (2012: \triangleleft .0 million, 2011: \triangleleft .1 million).

Finance lease liabilities

Finance lease liabilities are payable as follows:

	Minimum lease payments	<u>Interest</u> 2013	Principal
		€m	
Less than one year	2.9	(0.2)	2.7
Between one and five years	1.4	(0.5)	0.9
More than five years	7.4	(6.3)	1.1
	11.7	(7.0)	4.7
	Minimum lease payments	Interest	Principal
		2012	
		€m	
Less than one year	2.8	(0.2)	2.6
Between one and five years	6.1	(5.9)	0.2
More than five years	11.2	(4.4)	6.8
	20.1	(10.5)	9.6
	Minimum lease payments	Interest 2011	Principal
		€m	
Less than one year	2.6	(0.2)	2.4
Between one and five years	7.6	(6.8)	0.8
More than five years	12.5	(4.9)	7.6
	22.7	(11.9)	10.8
20. TRADE AND OTHER PAYABLES			
	2013	2012 €m	2011
Current	2013		2011
Current Trade payables	2013 564.7		2011 659.2
		€m	
Trade payables	564.7	€m 719.6	659.2
Trade payables Amounts due to related parties	564.7 193.8	€m 719.6 168.0	659.2 211.9
Trade payables	564.7 193.8 523.0	719.6 168.0 328.2	659.2 211.9 393.3
Trade payables	564.7 193.8 523.0 10.1	719.6 168.0 328.2 32.5	659.2 211.9 393.3 33.2
Trade payables	564.7 193.8 523.0 10.1 506.8	719.6 168.0 328.2 32.5 660.7	659.2 211.9 393.3 33.2 656.3
Trade payables	564.7 193.8 523.0 10.1 506.8	719.6 168.0 328.2 32.5 660.7	659.2 211.9 393.3 33.2 656.3
Trade payables	564.7 193.8 523.0 10.1 506.8	719.6 168.0 328.2 32.5 660.7	659.2 211.9 393.3 33.2 656.3 1,953.9

95.8

120.3

21. EMPLOYEE BENEFITS

IAS 19 Revised

There has been a change in accounting policy in the current year to account for IAS 19 revised. The closing prior year balances in the primary statements have not been restated to account for this as the cumulative restatement is not deemed to have a material impact on the financial statements; however the prior year disclosures in this note have been amended to ensure all years comply with IAS 19 Revised.

Pension plans

The Group operates a number of pension plans throughout the world, devised in accordance with local conditions and practices. The plans are generally of the defined benefit type and are funded by payments to separately administered funds or insurance companies. The principal funded plans are in the United Kingdom, North America, Belgium, Norway and Switzerland.

The Group also operates a number of unfunded defined benefit pension schemes in Germany and France.

The most recent full valuations of the significant defined benefit plans were carried out as follows:

Plan	Country	Valuation date
All Plans	United Kingdom	31 December 2010
All Plans	North America	1 January 2013
All Plans	Belgium	31 December 2013
Borealis	Norway	31 December 2013
All plans	France	31 December 2013
All Plans	Germany	31 December 2013
All Plans	Switzerland	31 December 2013

These valuations have been updated where appropriate to December 31, 2013 by independent qualified actuaries.

The Group's pension schemes have been disclosed on a geographical basis as those schemes in the United Kingdom, North America and Other European. Other European principally includes the Group's pension plans in Germany, Belgium, Norway and France.

The UK defined benefit pension plans were historically final salary in nature, with a normal retirement age of 60. The majority of the UK plans are either closed to new entrants, or frozen to future accrual. The plans operate under trust law and are managed and administered by Trustees in accordance with the terms of each plan's Trust Deed and Rules and relevant legislation. The contributions paid to the UK plans are set every three years based on a funding agreement between the company and Trustee after taking actuarial advice.

The North American pension arrangements consist of two funded plans, both closed to new entrants and future accrual. Both plans were final salary defined benefit in nature, and the plans' liabilities are valued regularly in line with US statutory funding requirements. Around 90% of both plans' assets are invested in bonds instruments, to closely match the profile of each plans' liabilities.

The Other European pension arrangements are primarily final salary in nature, the majority of which remain open to new entrants. The Norwegian and Swiss benefits are insured, the Belgian plan assets are held in trust, and the remaining schemes are unfunded with associated provisions held on the Group's balance sheet.

Pension plan assumptions

The principal actuarial assumptions (expressed as weighted averages or ranges) at the year end were as follows:

	United Kingdom		No	rth Amer	ica	Other European			
- -	2013	2012	2011	2013	2012	2011	2013	2012	2011
_					%				
Major assumptions									
Rate of general increase in									
salaries	3.4	3.0	4.1	3.5	3.5	3.5	2.5-5.0	2.7-5.0	2.7-5.0
Rate of increase to pensions									
in payment	3.1-5.0	2.8-5.0	2.9	0.0	0.0	0.0	0.0-2.0	0.0-2.0	0.7-2.0
Discount rate for scheme									
liabilities	4.5	4.7	5.0	4.5	4.0	4.5	2.3-3.3	3.0-4.0	2.5-5.8
Inflation	3.4	3.0	3.1	2.5	2.5	2.5	1.5-2.0	1.8-2.0	2.0-2.3

The assumptions relating to longevity underlying the pension liabilities at the reporting date are based on standard actuarial mortality tables and include an allowance for future improvements in longevity. The assumptions are equivalent to expecting a 65-year old to live for a number of years as follows:

	Un	ited Kingd	om	North America		Other European			
_	2013 years	2012 years	2011 years	2013 years	2012 years	2011 years	2013 years	2012 years	2011 years
Longevity at age 65									
for current	23.5-	20.0-	19.9-	19.6-	18.1-	18.1 -	18.7-	18.1-	18.0-
pensioners	25.3	23.7	23.1	21.3	19.5	19.5	27.0	24.0	23.5

The following table presents the sensitivity of the defined benefit obligation to each significant actuarial assumption:

	United Kingdom	North America	Other European
		2013	
		%	
Major assumptions			
Discount rate: 1.0% decrease	24.6	13.4	20.2
Rate of inflation: 0.5% increase ¹	8.2	0.1	6.2
1 year increase in longevity for a member currently aged 65	2.3	0.4	2.1

^{1.} The sensitivity to the inflation assumption change includes corresponding changes to the future salary increase and future pension increase assumptions where these assumptions are set to be linked to the inflation assumption

Post-retirement health care plans

The Group also operates a number of post retirement healthcare plans in the United States, which provide employees with other post-employment benefits in respect of health care. The plans are unfunded and the liability in respect of these benefits is included in provisions. The liability is assessed by qualified independent actuaries under the projected unit method, assuming the following rates:

_	2013	2012	2011	_
Rates		%		
Liability discount rate	4.0	4.0	4.5	
Long-term healthcare trend rate	5.0	5.0	5.0	

History of plans

The history of the plans for the current and prior periods is as follows:

Consolidated balance sheet

	2013	2012	2011
		€m	
Present value of the defined benefit obligation in respect			
of pension plans	1,186.4	1,531.1	1,254.8
Present value of obligations in respect of post retirement			
health care plan	14.8	15.9	20.6
Fair value of plan assets	(566.2)	(854.8)	(713.4)
Deficit	635.0	692.2	562.0

The Group's net liability in respect of defined benefit obligations is as follows:

	2013	2012	2011
		€m	
Obligations in respect of pension plans			
United Kingdom	45.7	122.7	133.1
North America	19.3	18.5	44.0
Other European	555.2	535.1	364.3
	620.2	676.3	541.4
Obligations in respect of post-retirement health care plans	14.8	15.9	20.6
Recognised liability for defined benefit obligations	635.0	692.2	562.0

The Group expects to contribute approximately €28.6 million to its funded defined benefit plans in the next financial year. This excludes direct company benefit payments and payments in relation to unfunded defined benefit plan schemes.

Expense recognised in the consolidated income statement

Year ended 31 December 2013	United Kingdom	North America	Other European	Post retirement health care plans	Total
			€m		
Current service cost	14.5	1.0	31.5	0.6	47.6
Settlement gains	-	-	(1.9)	-	(1.9)
Cost of termination benefits	-	-	2.2	-	2.2
Interest cost on DBO	24.1	9.0	21.2	0.6	54.9
Interest income on assets	(20.2)	(8.4)	(3.9)	-	(32.5)
_	18.4	1.6	49.1	1.2	70.3

Year ended 31 December 2012 (as restated)	United Kingdom	North America	Other European	Post retirement health care plans	Total
			€m		
Current service cost	19.1	10.0	20.4	0.6	50.1
Past service cost	(1.9)	(0.6)	0.1	0.1	(2.3)
Settlement gains	-	(1.0)	-	-	(1.0)
Cost of termination benefits	-	-	0.4	-	0.4
Interest cost on DBO	29.9	8.8	22.9	0.7	62.3
Interest income on assets	(23.9)	(7.9)	(4.6)	-	(36.4)
_	23.2	9.3	39.2	1.4	73.1

Year ended 31 December 2011 (as restated)	United Kingdom	North America	Other European	Post retirement health care plans	Total
			€m		
Current service cost	25.7	8.9	22.9	2.1	59.6
Past service cost	-	0.2	1.2	(43.0)	(41.6)
Interest cost on DBO	36.0	8.6	23.3	2.5	70.4
Interest income on assets	(28.1)	(6.9)	(5.0)	-	(40.0)
_	33.6	10.8	42.4	(38.4)	48.4

The expense is recognised in the following line items in the consolidated income statement:

	2013	2012	2011
		€m	
Cost of sales and administrative expenses	47.9	47.2	18.0
Finance income	(32.5)	(36.4)	(40.0)
Finance cost	54.9	62.3	70.4
	70.3	73.1	48.4

Pension plans

As at 31 December 2013	United Kingdom	North America	Other European	Total
		€	n	
Present value of funded obligations	284.5	219.8	190.8	695.1
Present value of unfunded obligations	-	-	491.3	491.3
_	284.5	219.8	682.1	1,186.4
Fair value of plan assets	(238.8)	(200.5)	(126.9)	(566.2)
	45.7	19.3	555.2	620.2

As at 31 December 2012 (as restated)	United Kingdom	North America	Other European	Total
		€	m	
Present value of funded obligations	631.5	242.2	189.4	1,063.1
Present value of unfunded obligations	-	-	468.0	468.0
	631.5	242.2	657.4	1,531.1
Fair value of plan assets	(508.8)	(223.7)	(122.3)	(854.8)
	122.7	18.5	535.1	676.3

As at 31 December 2011 (as restated)	United Kingdom	North America	Other European	Total
		€	n	
Present value of funded obligations	583.7	203.5	155.6	942.8
Present value of unfunded obligations	-	-	312.0	312.0
_	583.7	203.5	467.6	1,254.8
Fair value of plan assets	(450.6)	(159.5)	(103.3)	(713.4)
_	133.1	44.0	364.3	541.4

Included within the Other European deficits are amounts relating to unfunded German plans of €341.6 million (2012: €309.1 million, 2011: €185.7 million).

Movements in present value of defined benefit obligation:

Navements in present value of defined benefit	United Kingdom	North America	Other European	Total
		€	i m	
At 1 January 2011 (as restated)	787.9	170.6	499.0	1,457.5
Current service cost	25.7	8.9	22.9	57.5
Past service cost		0.2	1.2	1.4
Interest cost on DBO	36.0	8.6	23.3	67.9
Member contributions	1.8	-	-	1.8
Actuarial loss (gain) - experience	(23.4)	2.3	17.4	(3.7)
Actuarial loss (gain) – demographic assumptions	4.0	(1.0)	0.1	3.1
Actuarial loss (gain) – financial assumptions	(9.0)	16.1	(23.1)	(16.0)
Disbursements from plan assets	(12.2)	(6.5)	(4.2)	(22.9)
Disbursements paid directly by the employer		(0.5)	(17.7)	(18.5)
Disposals	(232.3)	-	(51.1)	(283.4)
Exchange	5.5	4.8	(0.2)	10.1
At 31 December 2011 (as restated)	583.7	203.5	467.6	1,254.8
Current service cost	19.1	10.0	20.4	49.5
Past service cost	(1.9)	(0.6)	0.1	(2.4)
Interest cost on DBO	29.9	8.8	22.9	61.6
Member contributions	1.3	-	-	1.3
Actuarial loss (gain) - experience	(0.1)	2.3	9.5	11.7
Actuarial loss (gain) – demographic assumptions		-	-	7.1
Actuarial loss (gain) – financial assumptions		34.3	166.6	204.4
Disbursements from plan assets		(6.6)	(3.9)	(33.3)
Disbursements paid directly by the employer		(0.6)	(15.6)	(16.2)
Settlements		(3.5)	-	(3.5)
Termination benefits		-	0.4	0.4
Reclassifications		-	(12.5)	(12.5)
Exchange	11.7	(5.4)	1.9	8.2
At 31 December 2012 (as restated)		242.2	657.4	1,531.1
Current service cost	14.5	1.0	31.5	47.0
Interest cost on DBO	24.1	9.0	21.2	54.3
Member contributions	0.9	-	-	0.9
Actuarial loss (gain) - experience	(1.3)	(0.4)	(0.1)	(1.8)
Actuarial loss (gain) – demographic assumptions		1.0	1.8	22.8
Actuarial loss (gain) – financial assumptions		(14.4)	(6.6)	55.9
Disbursements from plan assets		(8.1)	(8.7)	(29.6)
Disbursements paid directly by the employer		(0.7)	(17.6)	(19.1)
Settlements		-	(20.5)	(20.5)
Termination benefits		_	2.2	2.2
Disposals		_	 -	(456.5)
Reclassifications		_	24.8	24.8
Exchange		(9.8)	(3.3)	(25.1)
At 31 December 2013	-	219.8	682.1	1,186.4
		-17.0	OUM+I	1,100.7

Movements in fair value of plan assets:

-	United Kingdom	North America	Other European	Total
		€	ìm	
At 1 January 2011 (as restated)	585.1	129.3	103.2	817.6
Interest income on plan assets	28.1	6.9	5.0	40.0
Return on plan assets greater /(less) than discount rate	(20.9)	4.7	(7.3)	(23.5)
Employer contributions	40.0	21.7	24.5	86.2
Member contributions	1.8	-	-	1.8
Disbursements	(12.5)	(7.0)	(21.9)	(41.4)
Disposals	(176.0)	-	-	(176.0)
Exchange	4.9	3.9	(0.1)	8.7
At 31 December 2011 (as restated)	450.5	159.5	103.4	713.4
Interest income on plan assets	23.9	7.9	4.6	36.4
Return on plan assets greater /(less) than discount rate	9.6	17.3	10.3	37.2
Employer contributions	37.4	53.8	21.8	113.0
Member contributions	1.3	-	-	1.3
Disbursements	(22.8)	(7.2)	(19.5)	(49.5)
Settlements	-	(2.5)	-	(2.5)
Exchange	8.8	(5.1)	1.8	5.5
At 31 December 2012 (as restated)	508.7	223.7	122.4	854.8
Interest income on plan assets	20.2	8.4	3.9	32.5
Return on plan assets greater /(less) than discount rate	54.5	(17.5)	7.7	44.7
Employer contributions	31.0	3.7	27.5	62.2
Member contributions	0.9	-	-	0.9
Disbursements	(13.6)	(8.8)	(26.3)	(48.7)
Settlements	-	-	(18.6)	(18.6)
Disposals	(353.3)	-	-	(353.3)
Reclassifications	-	-	13.4	13.4
Exchange	(9.8)	(9.1)	(2.7)	(21.6)
At 31 December 2013	238.6	200.4	127.3	566.3

The overall expected rate of return is calculated by weighting the individual rates in accordance with the anticipated balance in the plan's investment portfolio.

The fair value of the plan assets and the return on those assets were as follows:

At 31 December 2013	United Kingdom	North America	Other European	Total
		€	ìm	
Equities	119.9	19.9	55.3	195.1
Corporate bonds	93.5	178.2	26.2	297.9
Property	7.8	-	7.6	15.4
Other	17.4	2.3	38.2	57.9
Total plan assets	238.6	200.4	127.3	566.3

At 31 December 2012 (as restated)	United Kingdom	North America	Other European	Total
	€m			
Equities	328.3	23.0	49.4	400.7
Corporate bonds	100.8	200.7	26.1	327.6
Property	31.7	-	7.7	39.4
Other	47.9	-	39.2	87.1
Total plan assets	508.7	223.7	122.4	854.8

At 31 December 2011 (as restated)	United Kingdom	North America	Other European	Total
		€	ìm	
Equities	292.1	57.7	42.9	392.7
Corporate bonds	124.3	94.4	22.9	241.6
Property	7.1	7.4	2.4	16.9
Other	27.0	-	35.2	62.2
Total plan assets	450.5	159.5	103.4	713.4

There are no plans which hold investments in the Group's own financial instruments, or hold assets or property which are used by the Group.

Post-retirement health care plans

Reconciliation of present value of scheme liabilities:

	2013	2012	2011
		€m	
At 1 January	15.9	20.6	57.8
Current service cost	0.6	0.6	2.1
Interest cost on DBO	0.6	0.7	2.5
Actuarial gain - experience	(0.2)	(1.9)	(0.9)
Actuarial gain – demographic assumptions	(0.2)	-	(3.5)
Actuarial (gain)/loss – financial assumptions	(0.9)	0.8	8.0
Disbursements directly paid by the employer	(0.4)	(0.2)	(0.5)
Past service cost	-	0.1	(43.0)
Reclassifications	-	(4.5)	-
Exchange adjustments	(0.6)	(0.3)	(1.9)
At 31 December	14.8	15.9	20.6

The post-retirement healthcare plans do not hold any assets.

The following table presents the sensitivity of the defined benefit obligation to each significant actuarial assumption:

_	2013
	%
Major assumptions	
Discount rate: 1.0% decrease	12.4
Rate of inflation: 0.5% increase	0.0
1 year increase in longevity for a member currently aged 65	1.3

22. PROVISIONS

22. I KOVISIONS				
	Severance and			
	restructuring costs	Remediation	Other	Total
		€m		
At 1 January 2013	19.6	9.5	5.8	34.9
Reclassifications	-	-	8.8	8.8
Business disposals	(4.4)	-	-	(4.4)
(Credited)/charged to the consolidated income				
statement	(1.3)	(0.4)	8.5	6.8
Discount unwinding	-	-	0.3	0.3
Utilised in the year	(2.5)	(0.3)	(8.8)	(11.6)
Exchange adjustments	0.1	(0.1)	(4.0)	(4.0)
At 31 December 2013	11.5	8.7	10.6	30.8
Non – current	13.3	8.0	4.6	25.9
Current	4.4	2.5	7.2	14.1
Balance at 31 December 2011	17.7	10.5	11.8	40.0
Non – current	13.9	3.2	2.3	19.4
Current		6.3	3.5	15.5
Balance at 31 December 2012	19.6	9.5	5.8	34.9
Non – current	11.0	2.8	6.1	19.9
Current	0.5	5.9	4.5	10.9
Balance at 31 December 2013	11.5	8.7	10.6	30.8

Severance and restructuring costs

As described in Note 4, the Group has implemented a restructuring programme of the Innovene and other acquired businesses. The restructuring costs largely relate to severance and early retirement costs and the programme is expected to continue for another 2 years. In addition the Group implemented a reorganisation of the O&P Europe business in to three separate regional businesses during 2012. The restructuring costs largely relate to severance and relocation costs. Following the Grangemouth divestiture €4.4 million of severance and restructuring cost provisions were disposed from the Group.

Remediation costs

The Group has provided for the cost of remediation works where there is a legal or constructive obligation for such work to be carried out. The provision was established to meet the clean-up costs of contaminated soil and groundwater, the removal of potentially hazardous substances and rectification work required to ensure compliance with license to operate obligations. These costs relate mainly to the Group's production facilities at the Saltend, Runcorn, Warrington, Köln, Lavéra, Chocolate Bayou, Green Lake, Lima and Texas City sites. The provision only covers items of specific work for which a reasonable estimate can be determined. The required work is expected to be completed within the next three year period. The interest rate used to determine the obligation in the balance sheet at December 31, 2013 was 6.0% (2012: 7.0%, 2011: 8.0%). By their nature the amounts and timing of any outflows in respect of remediation costs are difficult to predict.

Other provisions

Other provisions include a number of provisions for onerous contracts, other loss making contracts and commercial disputes.

23. SHARE CAPITAL

	2013	2012	2011
Fully paid		€m	
924,803 (2012: 924,803, 2011: 924,803) Ordinary shares			
of €l each	0.9	0.9	0.9

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company.

24. DIVIDENDS

The following dividends were recognised during the year:

	2013	2012	2011
		€m	
Dividend paid	34.0	25.0	13.8

25. FINANCIAL INSTRUMENTS

25.a Fair value of financial instruments

Investments in debt and equity securities

The fair value of other investments shown as loans and receivables is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date.

Available for sale financial assets are accounted for at fair value based on the present value of future cash flows where such information is readily available based on the present value of future cash flows estimated from financial information made available during the year as a result of a recent transaction in the investment. However, as explained in Note 14, the Group's available for sale financial assets include certain equity interests which are not quoted and for which there is no active market. In these circumstances, in the absence of reliable information, the Group considers that a reliable determination of fair value is not practicable and such investments are recorded at their acquisition cost. The fair value has therefore been presented as the equivalent to the carrying value at the reporting date.

Trade and other receivables

The carrying amount of trade and other receivables generally approximates to fair value due to their short maturities. Where settlement is not due in the short term and where the effect is material, fair value is estimated as the present value of future cash flows discounted at the market rate of interest at the reporting date.

Trade and other payables

The carrying amount of trade and other payables generally approximates to fair value due to their short maturities. Where settlement is not due in the short term and where the effect is material, fair value is estimated as the present value of future cash flows discounted at the market rate of interest at the reporting date.

Cash and cash equivalents

The fair value of cash and cash equivalents is estimated as its carrying amount where the cash is repayable on demand. Where it is not repayable on demand then the fair value is estimated at the present value of future cash flows, discounted at the market rate of interest at the reporting date.

Interest-bearing borrowings

The fair value of the Senior Secured Term Loans, Senior Secured Notes and Senior Notes, which after initial recognition is determined for disclosure purposes only are based on the market yields derived from quotes obtained at the year end from leading financial institutions (categorised as Level 1). During 2012, the Group repaid the Senior Facilities Agreement in full. In previous years, the fair value of Senior Facilities Agreement, which after initial recognition was determined for disclosure purposes only, was calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. Market discount rates applied ranged from 5% to 10% for 2011(categorised as Level 3). The fair value of Securitisation facilities is the same as the carrying value. The fair value of finance leases is determined by reference to market rates for similar lease agreements.

Derivative financial instruments

The fair value of interest rate swaps and commodity contracts are based on market or broker quotes.

Fair values

The fair values for each class of financial assets and financial liabilities together with their carrying amounts shown in the consolidated balance sheet are as follows:

	Carrying amount 2	Fair value		Fair value	Carrying amount 20	Fair value
			•	ì m		
Financial assets held for trading at						
fair value through profit or loss:		0.4		0.7		
Derivative commodity contracts		0.4	0.5	0.5	-	-
Interest rate swaps	3.3	3.3	3.5	3.5		
	3.7	3.7	4.0	4.0		
Available for sale equity investments:						
Carried at fair value	19.8	19.8	19.8	19.8	19.8	19.8
Carried at cost	29.2	29.2	27.7	27.7	27.7	27.7
Total available for sale equity						
investments	49.0	49.0	47.5	47.5	47.5	47.5
Loans and receivables carried at						
amortised cost:						
Trade receivables	1,277.9	1,277.9	1,402.2	1,402.2	1,524.3	1,524.3
Amounts due from related parties	410.7	410.7	309.8	309.8	245.9	245.9
Other receivables	241.7	241.7	304.4	304.4	241.3	241.3
Other investments	181.4	181.4	175.9	175.9	166.7	166.0
Loans and receivables	2,111.7	2,111.7	2,192.3	2,192.3	2,178.2	2,177.5
Cash and cash equivalents	1,130.0	1,130.0	1,235.4	1,235.4	582.4	582.4
•	3,241.7	3,241.7	3,427.7	3,427.7	2,760.6	2,759.9
Total financial assets	3,294.4	3,294.4	3,479.2	3,479.2	2,808.1	2,807.4

	Carrying		Carrying		Carrying		
	amount	Fair value	amount	Fair value	amount	Fair value	
	2	013	20	012	2	011	
			*	€m			
Financial liabilities held for trading at fair value through profit and loss:							
Derivative commodity contracts	0.3	0.3	0.3	0.3	12.7	12.7	
Financial liabilities carried at amortised cost:							
Senior Secured Term Loans	2,979.7	3,001.3	2,239.8	2,881.4	-	-	
Senior Facilities Agreement	-	-	-	-	3,139.9	3,139.9	
Senior Secured Notes	1,749.9	1,944.4	2,522.2	3,339.2	725.3	725.3	
Senior Notes	2,009.1	2,034.2	2,026.2	2,192.8	2,031.1	1,549.8	
Securitisation Facility	481.8	483.3	490.0	490.0	685.1	685.1	
Other bank loans	14.3	14.3	1.1	1.1	1.1	1.1	
Finance lease liabilities	4.7	4.7	9.6	9.6	10.8	10.8	
Trade payables	564.7	564.7	719.6	719.6	659.2	659.2	
Amounts due to related parties	193.8	193.8	168.0	168.0	216.1	216.1	
Other payables	611.6	611.6	445.9	445.9	459.7	459.7	
	8,609.6	8,852.3	8,622.4	10,247.6	7,928.3	7,447.0	
Total financial liabilities	8,609.9	8,852.6	8,622.7	10,247.9	7,941.0	7,459.7	

The table below analyses financial instruments carried at fair value, by valuation method. The different levels, determined in accordance with IFRS 13 "Fair Value Measurement", have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

			Level				Level			L	evel	
	Fair Value	_1_	2	3	Fair Value	_1_	2	3	Fair Value	_1		3
		2	013			2	012			2	011	
						€	m					
Financial assets held for trading at fair value through profit or loss:												
Derivative commodity												
contracts	0.4	-	0.4	-	0.5	-	0.5	-	-	-	-	-
Interest rate swaps	3.3	-	3.3	-	3.5	-	3.5	-	-	-	-	-
Available for sale equity investments carried at fair												
value	19.8	-	-	19.8	19.8	-	-	19.8	19.8	-	-	19.8
Financial liabilities held for trading at fair value through profit and loss:												
Derivative commodity												
contracts	(0.3)	_	(0.3)	-	(0.3)	-	(0.3)		(12.7)	-	(12.7)	-
Total financial assets and liabilities held at fair value	23.2		3.4	19.8	23.5		3.7	19.8	7.1		(12.7)	19.8

There have been no transfers from Level 2 to Level 1 in 2013 (2012 and 2011: no transfers from Level 2 to Level 1).

There have been no other movements in financial assets and liabilities held at fair value based on a level 3 valuation technique so a reconciliation table has not been presented.

25.b Net gains and losses from financial instruments

Net gains and losses from financial instruments comprise the results of valuations, the amortisation of discounts, the recognition and derecognition of impairment losses, results from the translation of foreign currencies, interest, dividends and all effects on profit or loss of financial instruments.

Net gains from receivables and loans relate primarily to recognition and derecognition of impairment losses, results from the translation of foreign currencies and interest income.

Net losses from financial liabilities measured at amortised cost relate primarily to amortisation of discounts, results from the translation of foreign currencies, interest expense and other financing related expenses.

The item 'financial instruments at fair value through profit or loss' comprise valuation gains and losses, and only includes gains and losses from instruments which are not designated as hedging instruments as defined by IAS 39.

No gains or losses on items measured at fair value have been recognised in the income statement in respect of fair values determined based on a level 3 valuation technique using non-observable inputs. Gains totalling €nil million (2012: €nil million, 2011: €nil million) on available for sale equity investments have been recognised in the Statement of Comprehensive Income for the year ended December 31, 2013 based on a level 3 valuation technique using non-observable inputs.

_	Loa	ns and receiva	bles	Available	for sale financ	ial assets
_	2013	2012	2011	2013	2012	2011
				€m		
Interest income	22.4	18.5	17.8	-	-	-
Dividend income	-	-	-	5.5	5.4	5.4
Foreign exchange gains/(losses)	49.7	59.9	18.8			
Net result	72.1	78.4	36.6	5.5	5.4	5.4
Carrying value at 31 December	3,241.7	3,427.7	2,760.6	49.0	47.5	47.5

	Liabilities measured at amortised cost			through profit or loss		
	2013	2012	2011	2013	2012	2011
			•	€m		
Interest cost	(499.0)	(605.4)	(619.5)	-	-	-
Other finance cost	(141.8)	(11.9)	(65.5)	-	-	-
Net fair value gains/(losses) on						
derivatives	-	-	-	(0.2)	12.9	(16.3)
Foreign exchange gains/(losses)	(57.3)	(53.8)	(6.2)			
Net result	(698.1)	(671.1)	(691.2)	(0.2)	12.9	(16.3)
Carrying value at 31 December	(8,609.6)	(8,622.4)	(7,928.3)	3.4	3.7	(12.7)

Financial instruments at fair value

25.c Credit risk

Financial risk management

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers, deposits with financial institutions and derivatives.

Group Treasury policy and objectives in relation to credit risk is to minimize the likelihood that the Group will experience financial loss due to counterparty failure and to ensure that in the event of a single loss, the failure of any single counterparty would not materially impact the financial wellbeing of the Group.

Trade and other receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the demographics of the Group's customer base, including the default risk of the industry and country in which customers operate, as these factors may have an influence on credit risk. Management considers that there is no geographical concentration of credit risk. The Group has established a credit policy under which each new customer is analysed individually for creditworthiness before the Group's standard payment and delivery terms and conditions are offered or are adjusted accordingly. The Group's review includes external ratings, when available, and in some cases bank references. Purchase limits are established for each customer, which represent the maximum open amount without requiring approval. Customers that fail to meet the Group's benchmark creditworthiness may transact with the Group only on a prepayment basis.

Investments, cash and cash equivalent

Surplus cash investments are only made with banks with which the Group has a relationship. Occasionally deposits are made with banking counterparties that provide financing arrangements, reducing the credit exposure of the Group.

Guarantees

The Group's policy is to provide financial guarantees only to wholly-owned subsidiaries. At December 31, 2013 no guarantees were outstanding (2012: none, 2011:none).

Exposure to credit risk

The carrying amount of financial assets represents the maximum credit exposure. Therefore, the maximum exposure to credit risk at the reporting date was the carrying amount of financial assets. Further details on the Group's exposure to credit risk are given in Note 18.

25.d Liquidity risk

Financial risk management

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group. The Group's exposure to liquidity risk is limited by the fact that it operates with significant cash resources, and it maintains the most appropriate mix of short, medium and long-term borrowings from the Group's lenders.

The Group is reliant on committed funding from a variety of sources at Group and subsidiary company level to meet the anticipated needs of the Group for the period covered by the Group's budget.

The Group forecasts on a regular basis the expected cash flows that will occur on a weekly and monthly basis. This information is used in conjunction with the weekly reporting of actual cash balances at bank in order to calculate the level of funding that will be required in the short and medium term. On a monthly basis the level of headroom on existing facilities is reported and forecast forward until the end of the financial period.

In addition, the Group maintains various lines of credits in the form of Senior Notes, Senior Secured Notes, Senior Secured Term Loans, Securitisation and Other Loans. (See Note 19 – "Interest-Bearing Loans and Borrowings" for more information).

The maturity profile of the Group's undrawn committed facilities at December 31, 2013, 2012, and 2011 was as follows:

	2013 Undrawn facilities	2012 Undrawn facilities	2011 Undrawn facilities
		€m	
In one year	-	-	-
In more than one year, but not more than two years	-	-	297.8
In more than two years, but not more than five years	-	-	-
In more than five years			
			297.8

The undrawn committed facilities are in respect of unused committed Revolving Credit Facilities under the Senior Facilities Agreement. Subsequent to the repayment of Senior Facilities Agreement in 2012 the unused committed amount at December 31, 2011 was €297.8 million.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the effect of netting agreements:

_	2013							
_	Carrying amount	Contractual cash flows	1 year or less	1 to<2 years	2 to<5 years	5 years and over		
			€m					
Non-derivative financial liabilities								
Senior Secured Term Loans	2,979.7	(3,473.6)	(148.2)	(404.5)	(2,920.9)	-		
Senior Secured Notes	1,749.9	(2,550.3)	(104.9)	(139.7)	(418.2)	(1,887.5)		
Senior Notes	2,009.1	(2,484.0)	(89.0)	(143.8)	(2,251.2)	-		
Securitisation Facility	481.8	(518.4)	(11.7)	(11.7)	(495.0)	-		
Other loans	14.3	(15.7)	(1.4)	(4.0)	(10.3)	-		
Finance lease liabilities	4.7	(11.7)	(2.9)	(0.1)	(1.3)	(7.4)		
Trade payables	564.7	(564.7)	(564.7)	-	-	-		
Amounts due to related parties	193.8	(193.8)	(193.8)	-	-	-		
Other payables	611.6	(611.6)	(610.8)	(0.8)	-	-		
Derivative financial liabilities								
Commodity contracts	0.3	(0.3)	(0.3)			<u> </u>		
_	8,609.9	(10,424.1)	(1,727.7)	(704.6)	(6,096.9)	(1,894.9)		

_	2012								
_	Carrying amount	Contractual cash flows	1 year or less	1 to<2 years	2 to<5 years	5 years and over			
			€m						
Non-derivative financial liabilities									
Senior Secured Term Loans	2,239.8	(3,007.0)	(176.7)	(163.8)	(726.9)	(1,939.6)			
Senior Secured Notes	2,522.2	(5,723.6)	(213.0)	(213.0)	(3,237.5)	(2.060.1)			
Senior Notes	2,026.2	(2,565.0)	(166.5)	(166.5)	(2,232.0)	-			
Securitisation Facility	490.0	(509.8)	(17.8)	(492.0)	-	-			
Other loans	1.1	(1.1)	-	-	(1.1)	-			
Finance lease liabilities	9.6	(22.7)	(2.6)	(2.6)	(5.0)	(12.5)			
Trade payables	719.6	(719.6)	(719.6)	-	-	-			
Amounts due to related parties	168.0	(168.0)	(168.0)	-	-	-			
Other payables	445.9	(445.9)	(445.9)	-	-	-			
Derivative financial liabilities									
Commodity contracts	0.3	(0.3)	(0.3)						
•	8,622.7	(13,163.0)	(1,910.4)	(1,037.9)	(6,202.5)	(4,012.2)			

_	2011						
_	Carrying amount	Contractual cash flows	1 year or less	1 to<2 years	2 to<5 years	5 years and over	
			€m				
Non-derivative financial liabilities							
Senior Facilities Agreement	3,139.9	(3,890.0)	(307.6)	(1,621.9)	(1,960.5)	-	
Senior Secured Notes	725.3	(970.6)	(68.5)	(68.3)	(833.8)	-	
Senior Notes	2,031.1	(2,746.3)	(167.5)	(167.4)	(2,411.4)	-	
Securitisation Facility	685.1	(759.4)	(23.8)	(23.7)	(711.9)	-	
Other loans	1.1	(1.1)	-	-	(1.1)	-	
Finance lease liabilities	10.8	(22.7)	(2.6)	(2.6)	(5.0)	(12.5)	
Trade payables	659.2	(659.2)	(659.2)	-	-	-	
Amounts due to related parties	216.1	(216.1)	(216.1)	-	-	-	
Other payables	459.7	(459.7)	(459.7)	-	-	-	
Derivative financial liabilities							
Commodity contracts	12.7	(12.7)	(12.7)				
	7,941.0	(9,737.8)	(1,917.7)	(1,883.9)	(5,923.7)	(12.5)	

25.e Net investment and cash flow hedges

The Group does not have derivative commodity contracts that qualify as cash flow hedges at December 31, 2013.

The Group entered into two interest rate caps to hedge the variable interest rate exposures on the €500.0 million Floating Rate Senior Secured Notes. These derivative instruments expire in May 2015 and do not qualify as hedging instruments under IAS 39.

The Group has US\$ and Sterling financial liabilities in respect of the Senior Secured Term Loans, Senior Secured Notes and Securitisation Facility that are designated net investment hedges of US\$ and Sterling operations in accordance with the requirements of IAS 21 "The effects of changes in Foreign Exchange Rates". The US\$ and Sterling net investment hedges had a carrying value and fair value as follows:

	Carrying		Carrying		Carrying	
	amounts 2013	Fair value 2013	amounts 2012	Fair value 2012	amounts 2011	Fair value 2011
			€	ìm		
US Dollars	(4,066.9)	(4,237.4)	(1,963.5)	(2,565.4)	(1,047.6)	(1,047.6)
Sterling	(12.7)	(12.7)	(13.5)	(13.5)	(19.7)	(19.7)
	(4,079.6)	(4,250.1)	(1,977.0)	(2,578.9)	(1,067.3)	(1,067.3)

For the year ended December 31, 2013 gains totalling €75.5 million were taken directly to reserves and reported in the Statement of Comprehensive Income for the year then ended (2012: gains €27.4 million, 2011: losses €18.4 million). There was no ineffectiveness recognised in the income statement for the year ended December 31, 2013 (2012: €nil, 2011: €nil).

25.f Market risk

Financial risk management

Market risk reflects the possibility that changes in market prices, such as crude oil, feedstock refined products, chemicals or currency exchange rates or changes in interest rates will adversely affect the value of the Group's assets, liabilities or expected future cash flows. The Group holds interest rate caps and commodity contracts in order to manage market risk. The use of derivative instruments is confined to specialist teams that have the appropriate skills, experience, supervision, control and reporting systems.

Market risk - Foreign currency risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the U.S. Dollar and Sterling.

Foreign exchange risk arises from net investments in foreign operations, future commercial transactions, and recognised assets and liabilities.

The Group applies hedge accounting to foreign currency differences arising on the retranslation of a financial liability designated as a hedge of a net investment in a foreign operation. When the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, foreign exchange gains and losses arising from such a monetary item is considered to form part of a net investment in a foreign operation and changes in the fair value are recognised directly within equity.

A substantial portion of the Group's revenue is generated in, or linked to, the U.S. dollar and the euro. In the refining business the prices of finished products and of the underlying raw materials are primarily denominated in U.S. dollars, while the costs are largely denominated in euros and sterling. In the European petrochemical business, product prices, certain feedstock costs and most other costs are denominated in euro and sterling. In the U.S. petrochemical and specialty chemicals businesses, product prices, raw materials costs and most other costs are primarily denominated in U.S. dollars.

The Group generally does not enter into foreign currency exchange instruments to hedge foreign currency transaction exposure, although the Group has done so in the past and may do so in the future.

The Group benefits from natural hedging, to the extent that currencies in which net cash flows are generated from the Group's operations, are matched against long-term indebtedness.

The foreign currency exposure where the Group's financial assets/(liabilities) are not denominated in the functional currency of the operating unit involved is shown below. Foreign exchange differences on retranslation of these assets and liabilities are taken to the income statement/ other comprehensive income of the Group.

	2013	2012	2011
		€m	
Euros	(7.9)	3.7	271.1
US Dollars	(4,204.8)	(2,557.6)	(1,239.5)
Sterling	31.4	5.6	(14.3)
Other	1.8	1.1	1.1
	(4,179.5)	(2,547.2)	(981.6)

Sensitivity analysis

A ten percent weakening of the following currencies at December 31, would have increased/ (decreased) equity and profit or (loss) by the amounts shown below. This calculation assumes that the change occurred at the reporting date and had been applied to risk exposures existing at that date.

This analysis assumes that all other variables, in particular other exchange rates and interest rates, remain constant. The analysis is performed on the same basis for the comparative period.

<u>-</u>	Equity			-	Profit or loss		
<u>-</u>	2013	2012	2011	2013	2012	2011	
			€	n			
Euros	-	248.4	127.2	0.8	6.4	(29.0)	
US Dollars	406.7	247.0	125.2	13.8	8.7	(1.3)	
Sterling	-	1.4	2.0	(3.1)	(1.4)	(0.5)	
Other	(0.3)	_		(0.2)		(0.1)	

A ten percent strengthening of the above currencies against the euro at December 31, would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

Market risk – Interest rate risk

Profile

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

Carrying amount – asset / (liability)	2013	2012	2011
		€m	
Fixed rate instruments			
Financial assets	392.6	223.4	214.2
Financial liabilities	(3,289.0)	(4,059.2)	(2,768.3)
	(2,896.4)	(3,835.8)	(2,554.1)
Variable rate instruments			
Financial assets	1,130.0	1,235.4	582.4
Financial liabilities	(3,950.5)	(3,229.7)	(3,825.0)
	(2,820.5)	(1,994.3)	(3,242.6)

Sensitivity analysis

A change of 1% in interest rates at the reporting date would have increased/(decreased) equity and profit or loss by the amounts shown below. This calculation assumes that the change occurred at the reporting date and had been applied to risk exposures existing at that date.

This analysis assumes that all other variables, in particular foreign currency rates, remain constant and considers the effect of financial instruments with variable interest rates, financial instrument at fair value through profit or loss or available for sale with fixed interest rates and the fixed rate element of interest rate caps. The analysis is performed on the same basis for 2013, 2012 and 2011.

	2013	2012	2011
		€m	
Profit or loss			
Profit/(loss) on increase in interest rates by 1%	(28.2)	(19.9)	(32.8)

A 1% change in the opposite direction of the above interest rates at December 31, would have had the equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remain constant.

Market risk - Commodity price risk

This section discusses the Group's exposure to the commodity contracts which are not covered under the own use exemption and are recognised as derivative instruments.

The Group is exposed to commodity price risk through fluctuations in raw material prices and sales of products. The raw material exposures result primarily from the price of crude oil and base chemicals linked to the price of crude. The sales price exposures are primarily related to petrochemicals where prices are in general linked to the market price of crude oil.

The Group enters into contracts to supply or acquire physical volumes of commodities at future dates during the normal course of business that may be considered derivative contracts. Where such contracts exist and are in respect of the normal purchase or sale of products to fulfil the Group's requirements, the own use exemption from derivative accounting is applied.

The Group manages commodity price exposures through trading refined products and chemical feedstock and using commodity swaps, options and futures as a means of managing price and timing risks. In 2013 there are no significant instruments entered by the Group to manage such risk (2012: nil, 2011: nil).

The Group operates within procedures and policies designed to ensure that risks, including those relating to the default of counterparties, are minimised.

Market risk - Equity price risk

The Group's exposure to equity price risk arises from its investment in equity securities which are classified as available for sale financial assets and are shown on the consolidated balance sheet as other financial assets. Available for sale financial assets are accounted for at fair value based on the present value of future cash flows where such information is readily available. However, as explained in Note 14, the Group's available for sale financial assets include certain equity interests which are not quoted and for which there is no active market. In these circumstances, in the absence of reliable information, the Group considers that a reliable determination of fair value is not practicable and such investments are recorded at their acquisition cost. The fair value has therefore been presented as the equivalent to the carrying value at the reporting date. The remainder of available for sale financial assets are valued at fair value based on the present value of future cash flows estimated from financial information made available during the year as a result of a recent transaction in the investment.

For the available for sale investments carried at fair value a 10 percent increase and decrease in transaction prices at the reporting date would have decreased and increased the loss for the year by €4.9 million (2012: €4.8 million, 2011: €4.8 million). Management consider that a change of 10 percent gives an appropriate benchmark to assess the risks that the Group is expected to be exposed to. This calculation assumes that the change occurred at the reporting date and had been applied to risk exposures existing at that date. This analysis assumes that all other variables, in particular foreign currency rates, remain constant.

25.g Capital management

The Group's objectives for managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

The Group defines its capital employed of €5,146.4 million (2012: €5,295.5 million, 2011: €5,688.4 million) as shareholders' equity of €(963.1) million (2012: €(758.0) million, 2011: €(322.5) million) and net debt (net of debt issue costs) of €6,109.5 million (2012: €6,053.5 million, 2011: €6,010.9 million).

The principal sources of debt available to the Group at December 31, 2013 include the Senior Secured Term Loans, Senior Secured Notes due 2019, Senior Secured Notes due 2020, Senior Notes due 2016, Senior Notes due 2018 and Receivables Securitisation Facility and are described in Note 19 along with the key operating and financial covenants that apply to these facilities.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, issue new shares, raise new debt or sell assets to reduce debt. The ability of the Group to pay dividends and provide appropriate facilities to the Group is restricted by the terms of principal financing agreements to which members of the Group are party.

26. OPERATING LEASES

Non-cancellable operating lease rentals are payable as follows:

	2013	2012	2011
		€m	
Less than one year	56.3	24.9	61.4
Between one and five years	104.2	69.1	140.2
More than five years	186.9	193.6	121.6
	347.4	287.6	323.2

The Group has certain operating lease arrangements in respect of manufacturing facilities and combined heat and power plants where the Group has the option to acquire at fair value or depreciated cost to the lessor in certain circumstances either during the life of the lease or at the end of the lease term.

27. CAPITAL COMMITMENTS

Outstanding capital expenditure authorised by the Board and for which contracts had been placed as at December 31, 2013 by the Group amounted to approximately €105.2 million (2012: €166.6 million, 2011: €26.9 million).

28. RECONCILIATION OF NET CASH FLOW TO MOVEMENT IN NET DEBT

		-	2013	2012	2011
(Decrease)/increase in cash and cash equi	ivalents in the			€m	
vear			(70.0)	655.4	(20.0)
Cash (inflow)/outflow from change in de		•••••	(85.4)	(767.4)	799.1
Change in net debt resulting from cash flo	U	-	(155.4)	(112.0)	779.1
Finance leases disposed of with subsidiar			1.0	-	-
Other net non-cash transactions	•		151.1	32.3	(12.1)
Movement in net debt in year		······	(3.3)	(79.7)	767.0
Ž		•	·		
				Other Non	
				Cash	31 Dec
	1 Jan 2013	Cash Flow	Disposals	Changes	2013
			€m		
Cash at bank and in hand	1,235.4	(70.0)		(35.4)	1,130.0
Debt due within one year	(23.0)	-	-	(8.2)	(31.2)
Debt due after more than one year	(7,366.9)	(87.3)	-	192.7	(7,261.5)
Finance leases	(9.6)	1.9	1.0	2.0	(4.7)
	(7,399.5)	(85.4)	1.0	186.5	(7,297.4)
Net debt	(6,164.1)	(155.4)	1.0	151.1	(6,167.4)
				Other Non	
		~	.	Cash	31 Dec
	1 Jan 2012	Cash Flow	Disposals	Changes	2012
	500.4	655.4	€m	(2.4)	1 225 4
Cash at bank and in hand	582.4	655.4		2.2	1,235.4
Debt due often many than one year	(318.2) (6,337.8)	293.0	-	33.1	(23.0)
Debt due after more than one year Finance leases	(10.8)	(1,062.2) 1.8	-		(7,366.9) (9.6)
rmance leases	(6,666.8)	(767.4)		(0.6)	(7,399.5)
N. 4. J. 1.4	(6,084.4)	(112.0)		32.3	(6,164.1)
Net debt	(0,004.4)	(112.0)		34.3	(0,104.1)

28. RECONCILIATION OF NET CASH FLOW TO MOVEMENT IN NET DEBT (Continued)

	1 Jan 2011	Cash Flow	Disposals	Other Non Cash Changes	31 Dec 2011
			€m		
Cash at bank and in hand	599.2	(20.0)	-	3.2	582.4
Debt due within one year	(401.5)	43.7		39.6	(318.2)
Debt due after more than one year	(7,041.3)	754.4	-	(50.9)	(6,337.8)
Finance leases	(7.8)	1.0	-	(4.0)	(10.8)
	(7,450.6)	799.1	-	(15.3)	(6,666.8)
Net debt	(6,851.4)	779.1	-	(12.1)	(6,084.4)

29. RELATED PARTIES

Identity of related parties with which the Group has transacted

Related parties comprise:

- Parent entities and their subsidiaries not included within the Ineos Group Holdings S.A. group;
- Entities controlled by the shareholders of Ineos AG, the ultimate parent company of Ineos Group Holdings S.A.;
- Key management personnel; and
- Joint ventures

Mr JA Ratcliffe, Mr AC Currie and Mr J Reece are shareholders in Ineos AG. Ineos AG provides operational management services to the Group through a management services agreement. Ineos AG management fees of €78.0 million (2012: €74.2 million, 2011: €70.6 million) were charged to the income statement and the Group recovered costs of €0.9 million during the year ended December 31, 2013 (2012: €nil million, 2011: €2.9 million). As at December 31, 2013 amounts owed to Ineos AG were €20.9 million (2012: €3.5 million, 2011: €7.0 million). Amounts due from Ineos Holdings AG, a wholly owned subsidiary of Ineos AG, were €17.1 million (2012: €4.9 million, 2011: €17.8 million).

Ineos AG owns and controls a number of operating subsidiaries that are not included in the Ineos Group Holdings S.A. group, including Kerling plc, Ineos Industries Limited and the Grangemouth petrochemical subsidiaries which were divested during the year (see Note 3). During the year ended December 31, 2013 the Group has made sales to these subsidiaries of €430.6 million (2012: €16.7 million, 2011: €09.2 million), recovered costs of €37.3 million (2012: €174.2 million, 2011: €19.9 million) and made purchases of €256.9 million (2012: €33.8 million, 2011: €151.2 million). As at December 31, 2013, €293.6 million (2012: €196.2 million, 2011: €23.4 million) was owed to these subsidiaries.

Following the divestment of the Grangemouth petrochemical business (see Note 3) the Group has put in place a €200 million revolving credit facility to fund the ongoing operations and investments required at the site. This facility matures on June 30, 2020 and is secured on the assets of the Grangemouth petrochemical business. As at December 31, 2013 €20.0 million (2012: €nil million, 2011: €nil million) had been drawn under the facility.

There were a number of transactions with joint ventures, all of which arose in the normal course of business.

The Refining joint ventures are between PetroChina and INEOS Investments (Jersey) Limited, a related party. During the year ended December 31, 2013 the Group has made sales to the Refining joint ventures of €26.8 million (2012: €347.1 million, 2011: €315.9 million), recovered costs of €102.5 million (2012: €6.1 million, 2011: €111 million) and made purchases of €1,511.0 million (2012: €1,648.8 million, 2011: €1,435.0 million). As at December 31, 2013, €8.5 million (2012: €34.1 million, 2011: €17.0 million) was owed by the Refining joint ventures and €5.1 million (2012: €9.9 million, 2011: €74.6 million) was owed to the Refining joint ventures.

29. RELATED PARTIES (Continued)

Styrolution is a joint venture between INEOS Industries Holdings Limited and BASF. During the year ended December 31, 2013 the Group has made sales to the Styrolution joint venture of €19.6 million (2012: €34.7 million, 2011: €73.8 million), recovered costs of €15.6 million (2012: €19.7 million, 2011: €4.9 million) and made purchases of €10.1 million (2012: €105.3 million, 2011: €nil million). As at December 31, 2013, €32.7 million (2012: €32.2 million, 2011: €6.0 million) was owed by the Styrolution joint venture and €nil million (2012: €1.2 million, 2011: €nil million) was owed to the Styrolution joint venture.

During the year ended December 31, 2013 the Group has made sales to other joint ventures of €0.1 million (2012: €iil million, 2011: €49.1 million), recovered costs of €2.8 million (2012: €13.5 million, 2011: €7.7 million) and made purchases of €13.3 million (2012: €79.7 million, 2011: €34.5 million). As at December 31, 2013, €34.4 million (2012: €45.6 million, 2011: €30.5 million) was owed by other joint ventures and €29.6 million (2012: €3.4 million, 2011: €1.0 million) was owed to other joint ventures.

Compensation to key management personnel (including directors)

The Group defines key management as the directors of the Company. Details of Directors' remuneration are given in Note 7.

30. ULTIMATE PARENT UNDERTAKING AND CONTROLLING PARTY

The immediate parent undertaking is Ineos Holdings Luxembourg S.A.. The ultimate parent undertaking at December 31, 2013 was Ineos AG, a company registered in Switzerland. The ultimate controlling party is Mr JA Ratcliffe, director and majority shareholder of the ultimate parent undertaking.

31. SUBSEQUENT EVENTS

In February 2014 the Group issued \$590 million and €600 million of Senior Notes due 2019. The proceeds of the refinancing were used to redeem the Senior Notes due 2016.

32. ACCOUNTING ESTIMATES AND JUDGEMENTS

The Group prepares its consolidated financial statements in accordance with IFRSs, which require management to make judgements, estimates and assumptions which affect the application of the accounting policies, and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. The estimates and assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates change and in any future periods.

The following areas are considered to involve a significant degree of judgement or estimation:

Fair value measurement on business combination

The amount of goodwill initially recognised as a result of a business combination is dependent on the allocation of the purchase price to the fair value of the identifiable assets and liabilities acquired. The determination of the fair value of the acquired assets and liabilities is to a considerable extent based upon management's judgement, and estimates and assumptions made.

Allocation of the purchase price affects the results of the Group as intangible assets are amortised over their estimated useful lives, whereas goodwill, is not amortised. This could lead to differing amortisation charges based on the allocation to indefinite and finite lived intangible assets.

On acquisition of a business, the identifiable intangible assets may include customer contracts, customer relationships and preferential supply contracts. The fair value of these assets is determined by discounting estimated future net cash flows generated by the asset. The use of different estimates and assumptions for the expectations of future cash flows and the discount rate would change the valuation of these intangible assets.

The carrying amount of intangibles is disclosed in Note 11.

32. ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

Taxation

Management is required to estimate the tax payable in each of the jurisdictions in which the Group operates. This involves estimating the actual current tax charge or credit together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which may be included on the consolidated balance sheet of the Group. Management have performed an assessment as to the extent to which future taxable profits will allow the deferred asset to be recovered. The calculation of the Group's total tax charge necessarily involves a significant degree of estimation in respect of certain items whose tax treatment cannot be finally determined until resolution has been reached with the relevant tax authority, or, as appropriate, through a formal legal process.

The Group has, from time to time, contingent tax liabilities arising from trading and corporate transactions in the countries in which it operates. After appropriate consideration, management makes provision for these liabilities based on the probable level of economic loss that may be incurred and which is reliably measurable.

The breadth of the Group's structure with operations in many geographic locations makes the use of estimates and assumptions more challenging. The resolution of issues is not always within the control of the Group and can be reliant upon the efficiency of the legal processes in the relevant jurisdictions in which the Group operates, and as a result, issues can, and often do take many years to resolve.

Details of amounts recognised with regard to taxation are disclosed in Notes 9 and 16.

Post-retirement benefits

The Group operates a number of defined benefit post employment schemes. Under IAS 19 Revised Employee Benefits, management is required to estimate the present value of the future defined benefit obligation of each of the defined benefit schemes. The costs and year end obligations under defined benefit schemes are determined using actuarial valuations. The actuarial valuations involve making numerous assumptions, including:

- Future rate of increase in salaries;
- Inflation rate projections;
- Discount rate for scheme liabilities; and
- Expected rates of return on the scheme assets.

Details of post-retirement benefits are set out in Note 21.

Provisions

Provisions are recognised for the cost of remediation works where there is a legal or constructive obligation for such work to be carried out. Where the estimated obligation arises upon initial recognition of the related asset, the corresponding debit is treated as part of the cost of the related asset and depreciated over its estimated useful life.

Other provisions are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances, which can be subject to change.

Estimates of the amounts of provisions recognised are based on current legal and constructive requirements, technology and price levels. Because actual outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes.

In relation to remediation costs, the estimated interest rate used in discounting the cash flows is reviewed at least annually. The interest rate used to determine the obligation in the balance sheet at December 31, 2013 was 6% (2012: 7%, 2011: 8%).

The nature and amount of provisions included within the financial statements are detailed in Note 22.

32. ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

Impairment reviews

IFRSs require management to test for impairment of goodwill and other intangible assets with indefinite lives, on an annual basis, and of tangible and intangible assets with finite lives if events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

An impairment test requires an assessment as to whether the carrying value of assets can be supported by its recoverable amount. Management calculates the recoverable amount based on the net present value of the future cash flows derived from the relevant assets, using cash flow projections which have been discounted at an appropriate discount rate.

In calculating the net present value of the future cash flows, certain assumptions and estimates are required to be made in respect of highly uncertain matters, including management's expectations of:

- Growth rates of various revenue streams;
- Long term growth rates;
- Future margins;
- The selection of an appropriately risk adjusted discount rate; and
- The determination of terminal values.

Changing the assumptions selected by management, in particular the discount rate used in the present value calculation, could significantly affect the Group's impairment evaluation and results.

The Group has property, plant and equipment with a carrying value of €3,151.2 million (2012: €3,093.8 million, 2011: €3,566.3 million) as disclosed in Note 10 and intangible assets with a carrying value of €623.6 million (2012: €673.2 million, 2011: €695.6 million) as disclosed in Note 11. All of these assets are assessed annually for impairment as described above.

For the purpose of impairment testing (when required), to assess whether any impairment exists, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in the planned use of buildings, plant or equipment, or closure of facilities, the presence or absence of competition, lower than expected asset utilisation from events such as unplanned outages, strikes and hurricanes, technical obsolescence or lower than anticipated sales of products with capitalised intellectual property rights could result in shortened useful lives or impairment. Changes in the discount rates used could also lead to impairments.

Further details on the impairment review performed on the goodwill and intangible assets are provided in Note 11, including sensitivity analysis in relation to key assumptions.

Segment aggregation

IFRS 8 "Operating Segments" permits two or more operating segments to be aggregated into one for disclosure purposes when individual segments have characteristics so similar that they can be expected to have essentially the same future prospects. Management apply this judgement when aggregating the businesses within the Chemical Intermediates segment. In doing so they take into account that the businesses all have similar economic characteristics, similar products, services and types of customer and similar past cyclical financial performance.