

INEOS Quattro Holdings Limited

Condensed consolidated interim financial statements as of June 30, 2023

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED INCOME STATEMENT

	Three-Month Period Ended June 30,		
<u> </u>	2023	2022	
	(€ in millio	ons)	
Revenue	3,148.3	5,044.5	
Cost of sales	(2,844.8)	(3,962.7)	
Gross profit	303.5	1,081.8	
Distribution costs	(128.5)	(252.6)	
Administrative expenses	(154.7)	(156.3)	
Operating profit	20.3	672.9	
Share of profit of joint ventures and associated undertakings	8.3	80.3	
Loss on disposal of investments	-	(0.1)	
Profit on disposal of property, plant and equipment	1.7	3.3	
Profit before net finance costs	30.3	756.4	
Finance income	34.2	49.9	
Finance costs before exceptional items	(112.0)	(78.6)	
Exceptional finance costs	-	(4.3)	
Total finance costs	(112.0)	(82.9)	
(Loss)/profit before tax	(47.5)	723.4	
Tax credit/(charge)	14.5	(142.2)	
(Loss)/profit for the period	(33.0)	581.2	
(Loss)/profit attributable to:			
- Owners of the parent	(29.8)	567.2	
- Non-controlling interest	(3.2)	14.0	
_	(33.0)	581.2	

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED INCOME STATEMENT

		Six-Month Period Ended June 30,		
	2023	2022		
	(€ in millio	ons)		
Revenue	6,649.1	9,675.5		
Cost of sales	(5,820.8)	(7,640.6)		
Gross profit	828.3	2,034.9		
Distribution costs	(331.2)	(475.2)		
Administrative expenses	(288.7)	(252.5)		
Operating profit	208.4	1,307.2		
Share of profit of joint ventures and associated undertakings	17.3	169.4		
Loss on disposal of investments	-	(0.1)		
Profit on disposal of property, plant and equipment	1.6	3.4		
Profit before net finance costs	227.3	1,479.9		
Finance income	74.3	70.5		
Finance costs before exceptional items	(218.6)	(151.0)		
Exceptional finance costs	· · · · · -	(4.3)		
Total finance costs	(218.6)	(155.3)		
Profit before tax	83.0	1,395.1		
Tax charge	(9.1)	(270.4)		
Profit for the period	73.9	1,124.7		
Profit attributable to:				
- Owners of the parent	69.0	1,096.8		
- Non-controlling interest	4.9	27.9		
<u> </u>	73.9	1,124.7		

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Three-Month Ended Jun	
	2023	2022
	(€ in millio	ons)
(Loss)/profit for the period	(33.0)	581.2
Other comprehensive (expense)/income:		
Items that will not be reclassified to profit or loss:	(0.2)	74.0
Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as	(0.3)	74.8
FVTOCI	1.7	-
Items that may subsequently be recycled to profit and loss:		
Foreign exchange translation differences of subsidiaries	(68.8)	33.3
Other comprehensive (expense)/income for the period net of tax	(67.4)	108.1
Total comprehensive (expense)/income for the period	(100.4)	689.3
Total comprehensive (expense)/income attributable to:		
- Owners of the parent	(95.3)	671.0
- Non-controlling interest	(5.1)	18.3
Total comprehensive (expense)/income for the period	(100.4)	689.3
	Six-Month P Ended June	Poriod
		e 30,
-	2023	
_		e 30, 2022
Profit for the period	2023	e 30, 2022
Other comprehensive (expense)/income:	2023 (€ in millio	e 30, 2022 ons)
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss:	2023 (€ in millio 73.9	e 30, 2022 ons) 1,124.7
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax	2023 (€ in millio	e 30, 2022 ons)
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as	2023 (€ in millio 73.9	e 30, 2022 ons) 1,124.7
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI	2023 (€ in millio 73.9	e 30, 2022 ons) 1,124.7
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as	2023 (€ in millio 73.9	e 30, 2022 ons) 1,124.7
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss:	2023 (€ in millio 73.9 25.4 2.0	e 30, 2022 ons) 1,124.7 118.8
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss: Foreign exchange translation differences of subsidiaries	2023 (€ in millio 73.9 25.4 2.0 (133.0)	e 30, 2022 ons) 1,124.7 118.8 - 53.7
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss: Foreign exchange translation differences of subsidiaries Other comprehensive (expense)/income for the period net of tax Total comprehensive (expense)/income for the period	2023 (€ in millio 73.9 25.4 2.0 (133.0) (105.6)	e 30, 2022 ons) 1,124.7 118.8 - 53.7 172.5
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss: Foreign exchange translation differences of subsidiaries Other comprehensive (expense)/income for the period net of tax Total comprehensive (expense)/income for the period	2023 (€ in millio 73.9 25.4 2.0 (133.0) (105.6) (31.7)	e 30, 2022 ons) 1,124.7 118.8 - 53.7 172.5 1,297.2
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss: Foreign exchange translation differences of subsidiaries Other comprehensive (expense)/income for the period net of tax Total comprehensive (expense)/income attributable to: Owners of the parent	2023 (€ in millio 73.9 25.4 2.0 (133.0) (105.6) (31.7)	e 30, 2022 ons) 1,124.7 118.8 - 53.7 172.5 1,297.2
Other comprehensive (expense)/income: Items that will not be reclassified to profit or loss: Remeasurement of post-employment benefit obligations, net of tax Fair value gain on investments in equity instruments designated as FVTOCI Items that may subsequently be recycled to profit and loss: Foreign exchange translation differences of subsidiaries Other comprehensive (expense)/income for the period net of tax Total comprehensive (expense)/income attributable to:	2023 (€ in millio 73.9 25.4 2.0 (133.0) (105.6) (31.7)	e 30, 2022 ons) 1,124.7 118.8 - 53.7 172.5 1,297.2

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED BALANCE SHEET

	June 30, 2023	December 31, 2022
_	(€ in mi	
Non-current assets		
Property, plant and equipment	4,597.2	4,722.8
Intangible assets	2,054.3	2,187.1
Investments in equity-accounted investees	1,660.7	1,800.6
Other investments	9.6	9.8
Other financial assets	2.2	2.2
Other receivables	150.7	152.7
Employee benefits	30.4	27.7
Deferred tax assets	132.8	150.2
Total non-current assets	8,637.9	9,053.1
Current assets		
Inventories	1,289.4	1,473.6
Trade and other receivables	1,646.0	2,360.9
Tax receivables for current tax	121.0	79.2
Other financial assets	258.3	244.5
Cash and cash equivalents	2,139.1	1,530.1
Total current assets	5,453.8	5,688.3
Total assets.	14,091.7	14,741.4
	2.,0>21.	
Equity Share capital	0.3	0.3
Merger reserve	(4,526.9)	(4,526.9)
Retained earnings	8,029.1	8,961.0
Other reserves	43.9	148.1
Equity attributable to owners of the parent	3,546.4	4,582.5
	69.6	4,362.3 66.1
Non-controlling interest	3,616.0	4,648.6
Total equity	3,010.0	4,040.0
Non-current liabilities	7 101 7	6 226 5
Interest-bearing loans and borrowings	7,101.7 225.0	6,336.5 224.3
Trade and other payables	150.4	142.5
Employee benefits	144.4	189.5
Provisions	151.8	154.6
Deferred tax liabilities	310.6	400.3
Total non-current liabilities	8,083.9	7,447.7
Current liabilities	0,00217	7,117.77
Interest-bearing loans and borrowings	6.2	4.5
Lease liabilities	65.2	65.0
Trade and other payables	2,034.7	2,301.0
Tax liabilities for current tax	239.1	194.7
Other financial liabilities	16.9	46.2
Provisions	29.7	33.7
Total current liabilities	2,391.8	2,645.1
Total liabilities	10,475.7	10,092.8
Total equity and liabilities	14,091.7	14,741.4
10tal equity and nabilities	17,071.7	17,/71,7

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Share capital	Share premium reserve	Merger reserve	Retained earnings	Other reserves	Equity attributable to owners of the Company	Non- controlling interest	Total equity
				(€' i.	n millions))		
Balance at December 31, 2022	0.3	-	(4,526.9)	8,961.0	148.1	4,582.5	66.1	4,648.6
Profit for the period Other comprehensive (expense)/income:	-	-	-	69.0	-	69.0	4.9	73.9
Remeasurement of post-employment benefit obligations, net of tax	-	-	-	-	24.1	24.1	1.3	25.4
Fair value gain on investments in equity instruments designated as FVTOCI	-	-	-	-	2.0	2.0	-	2.0
Foreign exchange translation differences of subsidiaries					(130.3)	(130.3)	(2.7)	(133.0)
Total other comprehensive expense					(104.2)	(104.2)	(1.4)	(105.6)
Transactions with owners, recorded directly in equity:								
Dividends				(1,000.9)		(1,000.9)		(1,000.9)
Transactions with owners, recorded directly in equity				(1,000.9)		(1,000.9)		(1,000.9)
Balance at June 30, 2023	0.3		(4,526.9)	8,029.1	43.9	3,546.4	69.6	3,616.0

	Share capital	Share premium reserve	Merger reserve	Retained earnings	Other reserves	Equity attributable to owners of the Company	Non- controlling interest	Total equity
				(€ 1	n millions,	,		
Balance at December 31, 2021	0.3	-	(4,526.9)	7,551.5	213.5	3,238.4	74.2	3,312.6
Profit for the period	-	-	-	1,096.8	-	1,096.8	27.9	1,124.7
Other comprehensive income: Remeasurement of post-employment benefit obligations, net of tax Foreign exchange translation differences of subsidiaries	- <u>-</u>		- 		113.9 53.5	113.9 53.5	4.9	118.8 53.7
Total other comprehensive income Transactions with owners, recorded directly in equity:		<u>-</u>		-	167.4	167.4	5.1	172.5
Adjustment arising from change in non- controlling interest (1)	-	-	-	10.3	-	10.3	12.2	22.5
Dividends				(521.0)		(521.0)	(27.4)	(548.4)
Transactions with owners, recorded directly in equity				(510.7)		(510.7)	(15.2)	(525.9)
Balance at June 30, 2022	0.3		(4,526.9)	8,137.6	380.9	3,991.9	92.0	4,083.9

 $^{^{(1)}}$ On April 22, 2022, the Group sold 13.8% of its shareholding in INEOS Styrolution India Limited to the non-controlling interest for consideration of &22.5 million (\$25.1 million). The Group's shareholding reduced from 75.0% to 61.2% as a result with control being retained.

INEOS QUATTRO HOLDINGS LIMITED CONSOLIDATED STATEMENT OF CASH FLOWS

Six-Month Period Ended June 30,

	Ended Jun	ie su,
<u> </u>	2023	2022
	(€ in milli	ons)
Cash flows from operating activities		
Profit for the period	73.9	1,124.7
Adjustments for:		
Depreciation and impairment	305.7	263.4
Amortization	62.3	64.1
Net finance costs	144.3	84.8
Share of profit of joint ventures and associated undertakings	(17.3)	(169.4)
Loss on disposal of investments	-	0.1
Profit on disposal of property, plant and equipment	(1.6)	(3.4)
Tax charge	9.1	270.4
Decrease/(increase) in trade and other receivables	193.7	(212.6)
Decrease/(increase) in inventories	163.2	(219.1)
Decrease in trade and other payables	(192.1)	(73.5)
Decrease in provisions and employee benefits	(22.6)	(32.1)
Tax paid	(75.8)	(162.3)
Net cash from operating activities	642.8	935.1
Cash flows from investing activities		_
Interest and other finance income received	14.2	2.6
Repayment of loans made to related parties	4.6	2.7
Dividends received from joint ventures	91.7	282.6
Dividends received from other investments	- · · · · · · · · · · · · · · · · · · ·	0.8
Proceeds from disposal of property, plant and equipment	1.8	7.1
Acquisition of intangible assets	(8.5)	(25.3)
Acquisition of property, plant and equipment	(209.0)	(332.4)
Net cash from investing activities	(105.2)	(61.9)
	(103.2)	(01.9)
Cash flows from financing activities	846.6	212.9
Proceeds from external borrowings	(10.4)	(403.2)
Debt issue costs	(16.5)	(403.2) (0.1)
Interest paid and other finance items	(194.6)	(113.9)
Capital element of lease payments	(38.7)	(43.1)
Dividends paid attributable to the owners of the Company	(500.0)	(521.0)
Dividends paid to non-controlling interest	(300.0)	(34.9)
Proceeds from partial sale of subsidiary to non-controlling		(34.7)
interest	_	22.5
	96.1	(880.8)
Net cash from/(used) in financing activities	86.4	
Net increase/(decrease) in cash and cash equivalents	624.0	(7.6)
Cash and cash equivalents at January 1	1,530.1	1,291.3
Effect of exchange rate fluctuations on cash held	(15.0)	30.7
Cash and cash equivalents at June 30	2,139.1	1,314.4

1. BASIS OF PREPARATION

The condensed consolidated interim financial statements include INEOS Quattro Holdings Limited and all its subsidiaries (together referred to as the "Group"). Intra-group transactions and balances have been eliminated on consolidation. The financial and operating results for any period less than a year are not necessarily indicative of the results that may be expected for a full year. The Group does not experience any significant seasonality in its operating results.

These condensed consolidated interim financial statements have been prepared on the historical cost basis, except for certain assets and liabilities that have been measured at fair value, principally derivative financial instruments and the assets and liabilities of the Group's defined benefit pension schemes measured at fair value and using the projected unit credit method, respectively.

These condensed consolidated interim financial statements are presented in euro, which is the functional currency of the majority of operations of the Group and is consistent with the audited financial statements for the year ended December 31, 2022.

The significant judgements and key sources of estimation uncertainty applicable to the preparation of the condensed consolidated interim financial statements are the same as those described within the Group's audited financial statements for the year ended December 31, 2022. In each case, judgements have been applied consistently and estimates made using a consistent methodology, with inputs and assumptions updated to reflect the Group's latest forecasts and prevailing market conditions at the balance sheet date as appropriate.

The accompanying condensed consolidated interim financial statements of the Group are unaudited.

Whilst there is still uncertainty due to the disruption on the energy market resulting from the conflict in Ukraine, the Directors have undertaken a rigorous assessment of the potential impact on demand for the Group's products and services and the impact on margins for the next 12 months and the Directors do not expect a material impact on the Group's ability to operate as a going concern.

The Group meets its day to day working capital requirements through its cash generation from Group operations. The Group held cash balances of $\[\in \]$ 2,139.1 million at June 30, 2023 and interest-bearing loans and borrowings (net of debt issue costs) of $\[\in \]$ 7,107.9 million at June 30, 2023. The Directors have considered the Group's projected future cash flows and working capital requirements and are confident that the Company has sufficient cashflows to meet its working capital requirements for the next twelve months from the date of this report. In particular, the Directors have stress tested the forecasts through taking account of reasonable possible changes in trading performance on the impact on EBITDA, cash flow and debt. The stress tests show that the Group will still have sufficient cash flow to meet all of its obligations as they fall due within the next 12 months from the date of this report.

On the basis of this assessment together with net assets of $\[mathebox{\ensuremath{\mathfrak{E}}}\]$ 3,616.0 million as at June 30, 2023 and the Group's ability to meet working capital requirements through its external financing facilities, along with access to cash generated by its subsidiaries, the Directors have concluded that the Group can operate within its current facilities without the need to obtain new ones for a period of at least 12 months from the date of this report and have therefore prepared these financial statements on a going concern basis.

2. PRINCIPAL ACCOUNTING POLICIES

The financial information has been prepared and approved by the directors in accordance with IAS 34 "Interim financial reporting" as adopted by the European Union in response to the IAS regulation (EC 1606/2002) effective from January 1, 2023. In compliance with IAS 34, the Company has opted for a condensed scope of reporting in the condensed interim financial statements compared with the consolidated annual financial statements.

The accounting policies adopted in the preparation of the condensed consolidated interim financial statements are consistent with those followed in the preparation of the Group's audited consolidated annual report and accounts for the year ended December 31, 2022, except for the adoption of new standards, interpretations and amendments effective as of January 1, 2023. The adoption of new standards, interpretations and amendments in the current year has not had a material impact. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective at June 30, 2023.

3. SEGMENTAL INFORMATION

Revenue and EBITDA before exceptionals are key measures used by the chief operating decision makers of the Group to assess the performance of the Business segments.

The Group divides its operations into four segments:

- Styrolution, consisting of a portfolio of styrene monomer, polystyrene and acrylonitrile butadiene styrene ("ABS") and a number of other styrene derivatives under the category of "Specialties" such as ABS specialty and copolymers.
- *INOVYN*, consisting of general purpose and specialty suspension PVC, emulsion PVC, caustic soda, caustic potash, chlorine and chlorine by-products, brine and water, salt, hydrochloric acid, chlorinated paraffins, chlorinated solvents, allylics and epichlorohydrin.
- *Acetyls*, consisting of a variety of organic compounds, including acetic acid, acetic anhydride, methanol, ethyl acetate and vinyl acetate.
- *Aromatics*, consisting of a variety of aromatic chemical compounds, including paraxylene, purified terephthalic acid, benzene and metaxylene.

The revenue and EBITDA before exceptionals attributable to each business segment is as follows:

_	Three-Month Period Ended June 30,		Six-Month Ended Ju			
_	2023	2022	2023	2022		
	(€ in millions)					
Revenue						
Styrolution	1,168.6	1,830.9	2,387.9	3,512.8		
INOVYN	905.5	1,328.5	2,015.4	2,699.5		
Acetyls	207.7	380.2	459.3	770.9		
Aromatics	870.4	1,535.2	1,797.6	2,744.4		
Eliminations	(3.9)	(30.3)	(11.1)	(52.1)		
	3,148.3	5,044.5	6,649.1	9,675.5		

3 SEGMENTAL INFORMATION (continued)

_	Three-Month Period Ended June 30,		Six-Month Ended Ju		
_	2023 2022		2023	2022	
		(€ in mill	lions)		
EBITDA before exceptionals					
Styrolution	32.7	286.7	98.0	540.3	
INOVYN	163.8	343.9	426.8	665.4	
Acetyls	23.0	137.7	50.3	272.2	
Aromatics	(7.3)	148.8	18.6	326.2	
_	212.2	917.1	593.7	1,804.1	

Reconciliation of earnings before operating exceptional items, interest, taxation, impairment, depreciation and amortisation and after the share of profit/loss of associated undertakings and joint ventures using the equity accounting method ("EBITDA before exceptionals") to operating profit:

_	Three-Month Period Ended June 30,		Six-Month Ended Ju		
_	2023	2022	2023	2022	
	(€ in millions)				
EBITDA before exceptionals	212.2	917.1	593.7	1,804.1	
Depreciation and amortisation	(183.6)	(163.9)	(368.0)	(327.5)	
Share of profit of joint ventures and					
associated undertakings	(8.3)	(80.3)	(17.3)	(169.4)	
Operating profit	20.3	672.9	208.4	1,307.2	

EBITDA before exceptionals 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.

4. NET FINANCE COSTS

	Three-Month Period		Six-Month Period			
	Ended Ju	ne 30,	Ended Ju	ne 30,		
	2023	2022	2023	2022		
		(€ in mil	lions)			
Finance income						
Interest on bank and other short-term deposit	16.1	0.7	26.3	1.1		
Interest receivable from associated undertakings	1.6	0.4	3.5	0.8		
Exchange movements	0.2	49.1	-	66.1		
Other finance income	4.0	(0.3)	8.0	2.5		
Net fair value gain on derivatives	12.3	<u> </u>	36.5	<u>-</u>		
Total finance income	34.2	49.9	74.3	70.5		
Finance costs before exceptional items						
Interest payable on Term Loans	(83.6)	(32.6)	(146.8)	(63.2)		
Interest payable on Senior Secured Notes and Senior						
Notes	(16.9)	(17.0)	(33.9)	(33.8)		
Interest payable on securitization facility	(1.0)	(0.9)	(2.1)	(1.8)		
Interest payable on the ABS Plant Facility	-	(1.4)	-	(1.4)		
Borrowing costs capitalized in property, plant and						
equipment	-	1.4	-	1.4		
Interest payable to related parties	(0.4)	(0.5)	(0.9)	(0.9)		
Amortization of debt issue costs	(4.7)	(4.2)	(8.9)	(8.7)		
Interest payable on leases	(3.4)	(2.7)	(6.8)	(5.3)		
Net fair value loss on derivatives	-	(18.5)	-	(33.2)		
Exchange movements	-	-	(15.1)	-		
Other finance charges	(0.7)	(1.7)	(1.4)	(3.2)		
Interest on employee benefits	(1.3)	(0.5)	(2.7)	(0.9)		
Total finance costs before exceptional items	(112.0)	(78.6)	(218.6)	(151.0)		
Exceptional finance costs						
Debt issue costs	<u> </u>	(4.3)	<u> </u>	(4.3)		
Total exceptional finance costs	<u> </u>	(4.3)	<u> </u>	(4.3)		
Net finance costs	(77.8)	(33.0)	(144.3)	(84.8)		

The exchange movements reflect net foreign exchange gains or losses associated with short term intra-group funding.

Exceptional finance costs

No exceptional finance cost was incurred during the three-month period ended June 30, 2023. During the three-month period ended June 30, 2022, exceptional finance costs of €4.3 million were incurred in relation to the write off of unamortized debt issue costs associated with the Term Loan A Facilities due 2023 and the Term Loan A Facilities due 2025 which were repaid in full on May 31, 2022.

5. TAXATION

Taxes on income in the interim periods are accrued using the tax rate that would be applicable to the expected total annual profit or loss. The effective tax rate of approximately 11.0% for the six-months of 2023 (2022: 19.4%) reflects the anticipated tax rate for the Group for the full year. The effective tax rate for the group was lower than the standard rate in the United Kingdom as profits were mainly made in regions with lower rates and losses were mainly made in regions with higher rates.

6. PROPERTY, PLANT AND EQUIPMENT

In the six-month period ended June 30, 2023, the Group spent €209.0 million (six-month period ended June 30, 2022: €332.4 million) on property, plant and equipment. In the Styrolution business, the most significant expenditures were in relation to a new 100 kiloton ASA plant at Bayport, Texas and the development of a new technology to recycle styrene monomer. In the INOVYN business, the most significant expenditures consisted of a new mechanical vapor recompression salt plant at Tavaux, France, a brine borehole drilling program at Northwich, UK and general SHE/sustenance expenditure. There were also planned turnaround events of the chlor-alkali and VCM assets at Martorell in Spain. In the Acetyls business, the most significant expenditures were mainly on sustenance and safety compliance work. In the Aromatics business, the most significant expenditures consisted of planned turnarounds at Zhuhai in China and at Cooper River in the USA.

Investments in property, plant and equipment in the first half of 2022 by the Styrolution business mainly included a new 100 kilo ton ASA plant at Bayport, Texas, and a new 600 kilo ton ABS facility at Ningbo, China, which has been transferred to the joint venture created with Sinopec on December 28, 2022. In INOVYN, the largest investments in the comparative period were in relation to the expansion of the SPVC plant in Jemeppe, Belgium and a new mechanical vapor recompression salt plant at Tavaux, France. Capital expenditures in the Aromatics and Acetyls businesses were mainly on sustenance and safety compliance work.

7. INVENTORIES

	June 30, 2023	December 31, 2022	
	(€ in n	nillions)	
Raw materials and consumables	560.2	601.8	
Work in progress	145.8	165.6	
Finished products	583.4	706.2	
	1,289.4	1,473.6	

8. INTEREST BEARING LOANS AND BORROWINGS

Borrowing obligations as of June 30, 2023 and December 31, 2022 are as follows:

	June 30, 2023	December 31, 2022
-	(€ in n	nillions)
Non-current liabilities	,	,
Senior Secured Notes due 2026	1,259.2	1,268.7
Senior Notes due 2026	500.0	500.0
Term Loan B Facilities due 2026	3,281.6	3,328.1
Term Loan B Facilities due 2030	830.7	-
Term Loan B Facilities due 2027	627.9	632.5
Senior Secured Notes due 2027	600.0	600.0
Loan from related party	42.5	41.7
Other loans	0.1	0.1
Gross borrowings	7,142.0	6,371.1
Less: unamortized finance costs	(40.3)	(34.6)
Net borrowings	7,101.7	6,336.5
Current liabilities		
Term Loan B Facilities due 2026	18.4	18.7
Term Loan B Facilities due 2030	3.4	-
Term Loan B Facilities due 2027	1.9	1.9
Gross borrowings	23.7	20.6
Less: unamortized finance costs	(17.5)	(16.1)
Net borrowings	6.2	4.5

Gross debt and issue costs	June 30, 2023			
	Gross loans and borrowings	Issue costs	Net loans and borrowings	
		(€ in millions)		
Senior Secured Notes due 2026	1,259.2	(11.0)	1,248.2	
Senior Notes due 2026	500.0	-	500.0	
Term Loan B Facilities due 2026	3,300.0	(25.8)	3,274.2	
Term Loan B Facilities due 2030	834.1	(15.6)	818.5	
Term Loan B Facilities due 2027	629.8	(2.7)	627.1	
Senior Secured Notes due 2027	600.0	(2.6)	597.4	
Securitization facilities	-	(0.1)	(0.1)	
Loan from related party	42.5	-	42.5	
Other loans	0.1		0.1	
	7,165.7	(57.8)	7,107.9	

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

Gross debt and issue costs	D	ecember 31, 202	2
	Gross loans and		Net loans and
	borrowings	Issue costs	borrowings
		(€ in millions)	
Senior Secured Notes due 2026	1,268.7	(13.2)	1,255.5
Senior Notes due 2026	500.0	-	500.0
Term Loan B Facilities due 2026	3,346.8	(31.2)	3,315.6
Term Loan B Facilities due 2027	634.4	(3.1)	631.3
Senior Secured Notes due 2027	600.0	(3.0)	597.0
Securitization facilities	-	(0.2)	(0.2)
Loan from related party	41.7	-	41.7
Other loans	0.1		0.1
	6,391.7	(50.7)	6,341.0

Terms and debt repayment schedule as at June 30, 2023

	Currency	Nominal interest rate	Year of maturity
Euro Senior Secured Notes due 2026	€	2.50%	2026
Dollar Senior Secured Notes due 2026	\$	3.375%	2026
Senior Notes due 2026	€	3.75%	2026
Senior Secured Notes due 2027	€	2.25%	2027
Dollar Term Loan B Facility due 2026	\$	SOFR (floor of 0.5%) + 2.75%	2026
Euro Term Loan B Facility due 2026	€	EURIBOR (floor of 0.0%) + 2.75%	2026
Euro Term Loan B Facility due 2027	€	EURIBOR (floor of 0.5%) + 2.00%	2027
Dollar Term Loan B Facility due 2027	\$	SOFR (floor 0.0%) + 2.00%	2027
Euro Term Loan B Facility due 2030	€	EURIBOR (floor of 0.0%) + 4.00%	2030
Dollar Term Loan B Facility due 2030	\$	SOFR (floor 0.0%) + 3.75%	2030
Securitization facilities	\$/€/£	Variable	2024

Senior Secured Notes due 2026

In January 2021 the Group raised €1,206.5 million of Senior Secured Notes maturing on January 15, 2026 and consisting of €800.0 million of Euro Senior Secured Notes and \$500 million of Dollar Senior Secured Notes.

The Senior Secured Notes outstanding at June 30, 2023 before issue costs were €1,259.2 million (December 31, 2022: €1,268.7 million). The total amounts outstanding on the Euro denominated Secured Notes were €800.0 million (December 31, 2022: €800.0 million) and the US dollar denominated Secured Notes were \$500.0 million (€459.2 million equivalent) (December 31, 2022: €468.7 million).

The Senior Secured Notes are listed on the Euro MTF - Luxembourg stock exchange. The Euro Senior Secured Notes bear interest at a rate of 2½% per annum. The Dollar Senior Secured Notes bear interest at a rate of 3¾% per annum. Interest on the Euro Senior Secured Notes and the Dollar Senior Secured Notes is payable semi-annually in arrears. The Senior Secured Notes have no repayment until maturity.

The Euro Senior Secured Notes and the Dollar Senior Secured Notes are jointly and severally guaranteed on a senior secured basis by certain of the Group's subsidiaries. The Euro Senior Secured Notes and the Dollar 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 Credit Facility Agreements, the Senior Secured Notes due 2027, and certain hedging obligations and cash management arrangements.

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

The Euro Senior Secured Notes are subject to redemption at any time on or after January 15, 2023, at the option of the Issuer, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the twelve-month period beginning on January 15 of the year indicated below:

	Euro Senior Secured
• 7	Notes Redemption Price
Year	. ———
2023	101.250%
2024	100.625%
2025 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 Dollar Senior Secured Notes are subject to redemption at any time on or after January 15, 2023, at the option of the Issuer, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the twelve-month period beginning on January 15 of the year indicated below:

	Donar
	Senior
	Secured
	Notes
	Redemption
Year	Redemption Price
2023	101.6875%
2024	100.84375%
2025 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 Euro Senior Secured Notes and the Dollar Senior Secured Notes contain a number of restrictions including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Senior Secured Notes due 2026 are stated net of debt issue costs of €11.0 million (December 31, 2022: €13.2 million). These costs are allocated to the profit and loss account over the term of the Senior Secured Notes due 2026.

Senior Notes due 2026

In January 2021 the Group raised €500.0 million of Senior Notes maturing on July 15, 2026. The Senior Notes outstanding at June 30, 2023 were €500.0 million (December 31, 2022: €500.0 million).

The Senior Notes are listed on the Euro MTF - Luxembourg stock exchange. The Senior Notes bear interest at a rate of 33/4% per annum. Interest on the Senior Notes is payable semi-annually in arrears. The Senior Notes have no repayment until maturity.

The Senior Notes are jointly and severally guaranteed on a senior subordinated basis by the guarantors (other than the parent, which guarantees the Senior Notes on a senior basis). The Senior Notes and the related guarantees are secured by second-ranking security interests (subject to certain exemptions) over the shares of the capital stock of the Issuer and the loan made by INEOS Quattro Finance 2 Plc to the Issuer of the proceeds of the Senior Notes. These security interests rank behind the security interests granted over those assets in favor of the creditors of certain other indebtedness, including under the Senior Secured Notes due 2027, the Senior Secured Notes due 2026 and the Credit Facility Agreements.

Dollar

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

The Senior Notes are subject to redemption at any time on or after January 15, 2023, at the option of the Issuer, in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the twelve-month period beginning on January 15 of the year indicated below:

	Senior
	Notes
	Redemption
Year	Price
2023	. 101.875%
2024	. 100.9375%
2025 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 Notes contain a number of restrictions including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

Term Loan B Facilities due 2026 and 2030

On July 31, 2020, the Group has entered into a Term Loan Agreement (as amended and restated) which consists of:

- (i) Term loans maturing in 2023 denominated in US dollar and denominated in euro, in aggregate principal amount of \$140.0 million (the "Three-Year Dollar Term Loan A Facility") and €120.0 million (the "Three-Year Euro Term Loan A Facility"), respectively, (together, the "Term Loan A Facilities due 2023").
- (ii) Term loans maturing in 2025 denominated in US dollar in an aggregate principal amount of \$210.0 million (the "Five Year Dollar Term Loan A Facility"); and
- (iii) Term loans maturing in 2026 denominated in US dollar (the "Dollar Term Loan B Facility due 2026") and in euro (the "Euro Term Loan B Facility due 2026"), in an aggregate principal amount of \$2,000.0 million and €1,500.0 million, respectively, (together, the "Term Loan B Facilities due 2026").

The Five-Year Euro Term Loan A Facility was fully repaid in January 2021. The Three-Year Euro Term Loan A Facility and the Five-Year Dollar Term Loan A Facility were fully repaid in May 2022.

On March 14, 2023, the Group successfully raised incremental debt under the existing 2026 term loans increasing the principal amount of the Euro Term Loan B borrowings by €375 million (the "Euro Term Loan B due 2030") and the Dollar Term Loan B borrowings by \$500.0 million (the Dollar Term Loan B due 2030"). The 2030 Term Loans were made in a single drawing on March 14, 2023.

As at June 30, 2023, \$1,960.0 million was drawn under the Dollar Term Loan B Facility due 2026 (ϵ 1,800.0 million equivalent); ϵ 1,500.0 million was drawn under the Euro Term Loan B Facility due 2026; \$500.0 million was drawn under the Dollar Term Loan B Facility due 2030 (ϵ 459.1 million equivalent); and ϵ 375.0 million was drawn under the Euro Term Loan B Facility due 2030.

Since May 2023, the Dollar Term Loan B Facility due 2026 bears interest at a rate per annum equal to the applicable Term SOFR plus 0.11448% CSA (subject to a floor of 0.5%) plus 2.75%.

The Dollar Term Loan B Facility due 2030 bears interest at a rate per annum equal to the applicable Term SOFR plus 0.10% CSA (subject to a floor of 0% per annum) plus a margin of 3.75%.

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

Term Loan B Facilities due 2026 and 2030 (continued)

The Term Loan B Facilities denominated in euros bear interest at a rate per annum equal to EURIBOR (subject to a floor of 0% per annum) plus 2.75% for the Euro Term Loan B Facility due 2026 and 4.0% for the Euro Term Loan B Facility due 2030.

The obligations under the Term Loans are jointly and severally guaranteed on a senior basis by the certain of the Group's subsidiaries.

The Term Loan Agreement contains a number of restrictions including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Dollar Term Loan B Facility due 2026 and the Dollar Term Loan B Facility due 2030 are to be repaid in quarterly instalments beginning on September 30, 2021 and September 30, 2023, respectively, equal to 0.25% of the original aggregate principal amount of the Dollar Term Loan B Facility due 2026 and the Dollar Term Loan B Facility due 2030. The Euro Term Loan B Facility due 2026 and the balance of the Dollar Term Loan B Facility due 2026 are payable, subject to certain exemptions, on January 15, 2026. The Euro Term Loan B Facility due 2030 and the balance of the Dollar Term Loan B Facility due 2030 are payable, subject to certain exemptions, on March 14, 2030.

The Term Loans B facilities due 2026 are stated net of debt issue costs of €25.8 million (December 31, 2022: €31.2 million). The Term Loans B facilities due 2030 are stated net of debt issue costs of €15.6 million (December 31, 2022: €nil). These costs are allocated to the profit and loss account over the term of the Term Loans.

Term Loan B facilities due 2027

The Group has outstanding borrowings under a credit facilities agreement dated November 7, 2014 (as amended and restated) which consist of euro and US dollar denominated Term loans (referred to as the "Term Loan B Facilities agreement").

On January 31, 2020, the Group successfully completed a refinancing transaction of the existing term loans increasing the principal amount of the Euro Term Loan B borrowings to €450.0 million (the "Euro Term Loan B due 2027") and the Dollar Term Loan B borrowings remained at \$202.3 million (the Dollar Term Loan B due 2027").

As at June 30, 2023, €450.0 million under the Euro Term Loan B due 2027 and \$195.7 million (€179.8 million equivalent) under the Dollar Term Loan B Facility due 2027 remained outstanding.

Since May 2023, the Dollar Term Loan B Facility due 2027 bears interest at a rate per annum equal to the applicable Term SOFR plus 0.10% CSA (subject to a floor of 0% per annum) plus a margin of 2.00%.

From January 2020, the new Euro Term Loan B Facility due 2027 bears interest at a rate per annum equal to EURIBOR (subject to a floor of 0.50% per annum) plus 2.00%.

The obligations under the Term Loan B Facilities due 2027 is jointly and severally guaranteed on a senior basis by the certain of the Group's subsidiaries.

The Term Loan B Facilities due 2027 contains a number of restrictions including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Term Loan B Facilities due 2027 do not contain any financial maintenance covenants.

The new Dollar Term Loan B Facility due 2027 is to be repaid in quarterly instalments equal to 0.25% of the original principal amount of the new Dollar Term Loan B Facility due 2027. The new Euro Term Loan Facility due 2027 and the balance of the new Dollar Term Loan B Facility due 2027 are payable on January 31, 2027.

The Term Loans B facilities due 2027 are stated net of debt issue costs of €2.7 million (December 31, 2022: €3.1 million). These costs are allocated to the profit and loss account over the term of the Term Loans.

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

Senior Secured Notes due 2027

On January 31, 2020, the Group issued €600.0 million aggregate principal amount 2¼% Senior Secured Notes due 2027 (the "Senior Secured Notes due 2027"). The Senior Secured Notes due 2027 are listed on the Euro MTF - Luxembourg stock exchange and bear interest at 2¼% per annum, payable semi-annually in arrears on January 15 and July 15 of each year, beginning July 15, 2020. Unless previously redeemed as noted below, the Senior Secured Notes due 2027 will be repaid by the Group at their principal amount on January 16, 2027.

The Senior Secured Notes due 2027 outstanding at June 30, 2023 were €600.0 million (December 31, 2022: €600.0 million).

The Senior Secured Notes due 2027 are subject to redemption at any time on or after January 15, 2023 in whole or in part, at the following redemption prices (expressed as percentages of the aggregate principal amount), if redeemed during the twelve-month period beginning on January 15 of the year indicated below:

	Senior Secured
	Notes due
	2027
**	Redemption
Year	Price Price
2023	
2024 and thereafter	

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 2027 are jointly and severally guaranteed on a senior secured basis by certain of the Group's subsidiaries. They are secured by first priority liens (subject to certain exceptions) on the same assets that secured the obligations under the Term Loan B Facilities due 2027, the Term Loan Agreement and certain hedging obligations and cash management arrangements.

The Senior Secured Notes due 2027 contain a number of restrictions including limitations on indebtedness, restricted payments, transactions with affiliates, liens, sale of assets and dividend payments.

The Senior Secured Notes due 2027 are stated net of debt issue costs of €2.6 million (December 31, 2022: €3.0 million). These costs are allocated to the profit and loss account over the term of the Notes.

Securitization facilities

INEOS Styrolution Group GmbH and certain other Group companies are party to a €600.0 million trade receivables securitization program (the "Styrolution Securitization Program") that matures on June 30, 2024. The facility is secured by pledges over the trade receivables sold into the program. For drawn amounts, interest is charged on the facility at a rate of either EURIBOR or SOFR or short-term commercial paper rates plus a margin of 0.95%. For undrawn amounts, the facility bears interest of 0.5%.

INOVYN Group Treasury Limited and certain other INOVYN business' companies are party to a €240.0 million trade receivables securitization program (the "INOVYN Securitization Program") that matures on June 30, 2024. The facility is secured by pledges over the trade receivables sold into the program. For drawn amounts, interest is charged on the facility at a rate of either EURIBOR, SOFR or SONIA or short-term commercial paper rates plus a margin of 0.95%. For undrawn amounts, the facility bears interest of 0.5%.

8. INTEREST BEARING LOANS AND BORROWINGS (continued)

Other facilities

The Group has several short-term credit facilities with different local banks to fund working capital requirements up to a total aggregate amount of \in 238.4 million equivalent as of June 30, 2023 (December 31, 2022: \in 224.2 million equivalent) in China, Malaysia, Singapore, South Korea, Thailand, and United Kingdom. The available amount under the working capital facilities at June 30, 2023 amounted to \in 190.9 million equivalent (December 31, 2022: \in 197.8 million equivalent), with \in 47.5 million (December 31, 2022: \in 26.4 million) of certain trade finance facilities being utilized in China.

The Group also has letter of credit facilities in China, Malaysia, Indonesia, Mexico, Singapore, South Korea, Thailand, and United Kingdom. As of June 30, 2023, the drawn amount under all letter of credit facilities was €35.0 million equivalent (December 31, 2022: €16.0 million equivalent). The letters of credit are generally secured by current assets. The facilities also provide for a limited number of other financial services, such as bank guarantees and foreign exchange hedging lines.

9. FINANCIAL INSTRUMENTS

The carrying amount is a reasonable approximation of fair value of trade receivables and payables.

The financial assets/liabilities categorised as Fair Value through Profit and Loss (FVTPL) presented in Level 2 contains commodity derivatives and those presented in Level 1 contains interest rate swaps.

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	
	Fair value	1 June 3	$\frac{2}{50,2023}$	3	Fair value	<u>1</u> December	$\frac{2}{31,2022}$	3
				(€ in m	illions)			
Financial assets/(liabilities) held for trading at fair value through profit and loss:				V	,			
Interest rates swaps	10.3	10.3	-	-	-	-	-	-
Derivative commodity contracts .	(16.9)		(16.9)		(46.2)		(46.2)	
Total financial assets/(liabilities) held for trading at fair value through profit and loss	(6.6)	10.3	(16.9)		(46.2)		(46.2)	<u> </u>

The commodity derivatives are fair valued using rates in a quoted market. The interest rate swaps are fair valued using quoted prices in active markets. There have been no transfers between levels during the six-month period ended June 30, 2023 (2022: no transfers between levels).

9. FINANCIAL INSTRUMENTS (continued)

			Level				Level	
	Fair value	1 June 30	2 2023	3	Fair value	1 December	2 21 2022	3
Financial assets designated as		June S	0, 2023	(€ in m		ecember	31, 2022	
fair value through other comprehensive income:	7.5	7.5			~ ~	~ ~		
Equity instruments Total financial assets designated as fair value through other	7.5	7.5	<u> </u>		5.5	5.5		
comprehensive income	<u>7.5</u>	7.5			<u>5.5</u>	5.5		-

Credit risk

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. The Group has established a credit policy under which each new customer is analyzed 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.

Liquidity risk

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 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.

Currency risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar, Sterling, Norwegian krone and Swedish krona as well as other currencies including the Chinese renminbi, the Korean won and Thai baht. Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities.

A substantial portion of the Group's revenue is generated in, or linked to, Sterling, US dollars and the Euro. Product prices, certain feedstock costs and most other operating costs are denominated in US dollar, Sterling, Euro, Norwegian krone, Swedish krona, the Chinese renminbi, the Korean won and Thai baht. In the US petrochemical and specialty chemical businesses, product prices, raw materials costs and most other costs are primarily denominated in US dollars.

The Group has established a currency risk policy under which material currency flows are analysed and if management considers it needed the risks are mitigated. The Group looks at transactional and translation currency risks.

9. FINANCIAL INSTRUMENTS (continued)

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 feedstocks, electricity 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 in some circumstances enters into swap contracts to acquire physical volumes of commodities at future dates which are not covered under the own use exemption and are recognised as derivative instruments. The Group operates within procedures and policies designed to ensure that risks, including those relating to the default of counterparties, are minimised.

10. CONTINGENCIES

The Group is subject to various proceedings instituted by governmental authorities arising under the provisions of applicable laws or regulations relating to the discharge of materials into the environment or otherwise relating to the protection of the environment. In management's opinion, none of the proceedings is material to the financial condition or results of operation of the Group.

11. RELATED PARTIES

Related parties comprise:

- Parent entities and their subsidiaries not included within the INEOS Quattro Holdings Limited group;
- Entities controlled by the shareholders of INEOS Limited, the ultimate parent company of INEOS Quattro Holdings Limited;
- Key management personnel;
- Jointly controlled entities and associated undertakings held by INEOS Limited (and their subsidiaries); and
- Jointly controlled entities and associated undertakings held within the INEOS Quattro Holdings Limited group.

Mr JA Ratcliffe, Mr AC Currie and Mr J Reece are shareholders in INEOS Limited.

11. RELATED PARTIES (continued)

Parent entities and their subsidiaries not included within the INEOS Quattro Holdings Limited group

Material trading and non-trading transactions by the Group with the entities controlled by INEOS Limited are as follows:

	Transaction value		Balance outstanding		
	Six-Months Po	eriod Ended	Period F	Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	December 31, 2022	
		(€ in mil	lions)		
Sale of products	126.5	173.2	-	-	
Purchase of raw materials	(548.5)	(718.7)	-	-	
Cost recoveries	51.4	41.2	-	-	
Services received	(106.2)	(98.7)	-	-	
Net interest	(0.4)	(0.9)	-	-	
Trade and other receivables	-	-	84.7	97.0	
Loan receivables	-	-	-	500.8	
Trade and other payables	-	-	(150.4)	(172.4)	
Interest-bearing loans and borrowings	-	-	(42.5)	(41.7)	

Included within services above is a management fee paid to INEOS Limited of €33.8 million (June 30, 2022: €29.8 million). No amounts remained outstanding at the period-end (December 31, 2022: €nil).

In general, all outstanding balances with INEOS companies are priced based on contractual arrangements and are to be settled in cash within two months of the reporting date, with the exception of the interest-bearing loans and borrowings. None of the balances are secured. The transactions were made on terms equivalent to those that prevail in arm's length transactions. There were no provisions for doubtful debt related to INEOS companies as at June 30, 2023 (December 31, 2022: €nil).

The interest-bearing loan is an unsecured loan due to INEOS Enterprises Holdings Limited. The loan bears interest at a rate of 4.5%. There is no formal repayment date under the loan agreement.

The loan receivable of €500.8 million as at December 31, 2022 was an unsecured loan owed by INEOS Industries Holdings Limited. This loan was fully settled through a dividend distribution on January 23, 2023.

Entities controlled by the shareholders of INEOS Limited

The shareholders of INEOS Limited own a controlling interest in the share capital of INEOS Limited and Screencondor Limited. During the six-month period ended June 30, 2023, the Group made no sales or purchases with these companies (June 30, 2022: €nil). As at June 30, 2023, amounts owed by Screencondor Limited were €1.5 million (December 31, 2022: €1.4 million).

11. RELATED PARTIES (continued)

Jointly controlled entities and associated undertakings held within the INEOS Limited group and jointly controlled entities and associated undertakings held within the INEOS Quattro Holdings Limited group.

Material trading and non-trading transactions with these entities during the period were as follows:

_	Transaction value		Balance outstanding		
	Six-Months Pe	eriod Ended	Period Ended		
	June 30,	June 30,	June 30,	December	
	2023	2022	2023	31, 2022	
		(€ in mil	lions)		
Sale of products	22.7	7.0	-	-	
Purchase of raw materials	(173.9)	(314.5)	-	-	
Cost recoveries	57.7	150.1	-	-	
Net interest	1.6	0.8	-	-	
Trade and other receivables	-	-	32.2	77.8	
Trade and other payables	-	-	(67.1)	(67.1)	
Deferred consideration	-	-	240.5	239.0	
Loans receivable	-	-	67.3	75.1	

In general, all outstanding balances with these related parties are priced based on contractual arrangements and are to be settled in cash within two months of the reporting date with the exception of the interest-bearing loans and borrowings. None of the balances are secured. The transactions were made on terms equivalent to those that prevail in arm's length transactions. There were no provisions for doubtful debt related to INEOS companies as at June 30, 2023 (December 31, 2022: €nil).

The deferred considerations are related to future instalments to be received from Sinopec on the achievement of certain milestones, which are expected to be fulfilled by December 2023.

FORWARD-LOOKING STATEMENTS

The Company includes "forward-looking statements," within the meaning of the US securities laws, based on our current expectations and projections about future events, including:

- the cyclical and highly competitive nature of our businesses;
- our 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 report including, without limitation, statements regarding our future financial position, risks and uncertainties related to our business and the notes, 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. 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. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

The following discussion is based upon the unaudited consolidated historical financial statements of Quattro prepared in accordance with IFRS. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements.

Overview

Combined Business

We are a leading global petrochemicals producer, marketer and merchant. Our business operates approximately 45 manufacturing sites in 19 countries in the Americas, Europe and Asia. We have a strong global footprint and leading market positions with respect to our key products. Our business benefits from cost advantages as a result of operating large scale, highly integrated facilities strategically located near major transportation routes and customer locations.

Results of Operations

Consolidated

The following table sets forth, for the periods indicated, our revenue and expenses and such amounts as a percentage of revenue on a pro forma combined basis as described in the Basis of Preparation.

Three-Mo	nth 1	eriod
Ended	Tuna	20

	Ended June 30,			
	2023		2022	
	(ϵ) in millions)	%	(ϵ) in millions)	%
Revenue	3,148.3	100.0	5,044.5	100.0
Cost of sales	(2,844.8)	(90.4)	(3,962.7)	(78.6)
Gross profit	303.5	9.6	1,081.8	21.4
Distribution costs	(128.5)	(4.1)	(252.6)	(5.0)
Administrative expenses	(154.7)	(4.9)	(156.3)	(3.1)
Operating profit	20.3	0.6	672.9	13.3
Share of profit of joint ventures and associated				
undertakings	8.3	0.3	80.3	1.6
Loss on disposal of investments	=	-	(0.1)	-
Profit on disposal of property, plant and				
equipment	1.7	0.1	3.3	0.1
Profit before net finance costs	30.3	1.0	756.4	15.0
Net finance costs before exceptional items	(77.8)	(2.5)	(28.7)	(0.6)
Exceptional finance costs		<u>-</u>	(4.3)	(0.1)
(Loss)/profit before tax	(47.5)	(1.5)	723.4	14.3
Tax credit/(charge)	14.5	0.5	(142.2)	(2.8)
(Loss)/profit for the period	(33.0)	(1.0)	581.2	11.5

Three-month period ended June 30, 2023, compared with three-month period ended June 30, 2022

Consolidated

Revenue. Revenue decreased by $\{1,896.2 \text{ million}, \text{ or } 37.6 \%, \text{ to } \{3,148.3 \text{ million} \text{ in the three-month period} \right)$ ended June 30, 2023, from $\{5,044.5 \text{ million} \text{ in the three-month period} \right)$ ended June 30, 2022. The decrease in revenue was driven by lower average sales prices and volumes than in the comparative period across all businesses. Global demand was soft as the market confidence was affected by high energy prices, inflation and increasing interest rates. On the American market, customer demand recovery was lower than anticipated and sales volumes remained low. The European market remained challenging due to high energy price and high volume of low-cost imports from Asia in the region. The Asian market was characterized by a weak demand combined with additional capacity coming on stream. The average sales prices were lower than in the comparative period due to the decrease in feedstocks and energy prices.

Cost of sales. Cost of sales decreased by €1,117.9 million, or 28.2%, to €2,844.8 million in the three-month period ended June 30, 2023, from €3,962.7 million in the three-month period ended June 30, 2022. The decrease was the result of lower costs of the Group's key raw materials including ethylene, benzene and methanol (linked to lower oil prices) and lower electricity and natural gas costs as well as the reduction in production.

Gross profit. Gross profit decreased by €778.3 million, or 71.9%, to €303.5 million in the three-month period ended June 30, 2023, from €1,081.8 million in the three-month period ended June 30, 2022. The decrease was primarily driven by a reduction in average margins across all businesses combined with a reduction in volumes. Margins in Europe remained heavily impacted by the low-cost import from Asia although the stabilization of the European energy markets brought some relief. Margins reduced on the American market as demand weakened and low-cost import from Asia drove margins down across all products. The Asian market remained at bottom of cycle level across all businesses due to a soft demand combined with additional capacities.

Distribution costs. Distribution costs decreased by \in 124.1 million, or 49.1%, to \in 128.5 million in the three-month period ended June 30, 2023, from \in 252.6 million in the three-month period ended June 30, 2022. This was mainly due to lower sales volumes and lower transportation prices.

Administrative expenses. Administrative expenses decreased by €1.6 million, or 1.0%, to €154.7 million in the three-month period ended June 30, 2023, from €156.3 million in the three-month period ended June 30, 2022 mainly as a result of higher other operating income and positive foreign exchange impact driven by a weaker US dollar versus euro in the three-month period ended June 30, 2023, as compared to the same period in 2022.

Operating profit. Operating profit decreased by €652.6 million, or 97.0% to €20.3 million in the three-month period ended June 30, 2023, from €672.9 million in the three-month period ended June 30, 2022.

Share of profit of joint ventures and associated undertakings. Share of profit of joint ventures and associated undertakings decreased by ϵ 72.0 million, or 89.7% to ϵ 8.3 million in the three-month period ended June 30, 2023, from ϵ 80.3 million in the three-month period ended June 30, 2022. Share of profit of joint ventures has fallen across all regions. Demand remained weak across all Asian countries pushing margins of acetic acid down. On the American market, methanol margins were also negatively impacted by a weak demand.

Loss on disposal of investments. Loss on disposal of investments were \in nil for the three-month period ended June 30, 2023, as compared to \in 0.1 million for the same period in 2022.

Profit on disposal of property, plant and equipment. Profit on the disposal of property, plant and equipment was €1.7 million for the three-month period ended June 30, 2023, as compared to €3.3 million for the same period in 2022.

Profit before net finance costs. Profit before net finance costs decreased by €726.1 million, or 96.0%, to €30.3 million for the three-month period ended June 30, 2023, as compared to €756.4 million for the same period in 2022.

Net finance costs before exceptionals. Net finance costs before exceptionals increased by €49.1 million, or 171.1%, to €77.8 million in the three-month period ended June 30, 2023 from €28.7 million in the three-month period ended June 30, 2022. The main reason for the increase was €51.0 million of higher interest rate due to increase in interest rate and the new Term loan facilities contracted in March 2023. Additionally, the decrease in net foreign exchange gains (predominantly due to translation effects from intercompany loans) of €48.9 million was partially offset by €30.8 million of higher fair value gains on commodity derivatives and €15.4 million of higher interest income in the three-month period ended June 30, 2023, compared to the comparative quarter.

Exceptional finance costs. Exceptional finance costs were €nil in the three-month period ended June 30, 2023, as compared to €4.3 million in the three-month period ended June 30, 2022. Following the early repayment of the Three-Year Dollar and Euro Term Loan A and the Five-Year Dollar Term Loan A facilities on May 31, 2022 the Group wrote-off €4.3 million of unamortized debt issue costs associated with these borrowings in the comparative period.

Profit before tax. Profit before income tax decreased by €770.9 million, or 106.6%, to €(47.5) million in the three-month period ended June 30, 2023, from €723.4 million in the three-month period ended June 30, 2022.

Tax credit/(charge). Tax credit/(charge) decreased by €156.7 million, or 110.2%, to a credit of €14.5 million in the three-month period ended June 30, 2023, from a charge of €(142.2) million in the three-month period ended June 30, 2022. The underlying effective tax rate for the three-month period ended June 30, 2023 was 30.5% compared to 19.7% in the comparative quarter. The higher anticipated effective tax rate for the three-month period ended June 30, 2023 as compared to the same period in 2022 resulted from losses mainly made in regions with lower rates and profits mainly made in regions with higher rates.

(Loss)/profit for the period. (Loss)/profit for the period decreased by €614.2 million, or 105.7%, to a €(33.0) million loss in the three-month period ended June 30, 2023 from a €581.2 million profit in the three-month period ended June 30, 2022.

Business segments

The Group reports under four business segments: Styrolution, INOVYN, Acetyls and Aromatics.

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

_	Three-Mont Ended Ju		Six-Month Ended Ju	
_	2023	2022	2023	2022
		(€ in mill	lions)	
Revenue				
Styrolution	1,168.6	1,830.9	2,387.9	3,512.8
INOVYN	905.5	1,328.5	2,015.4	2,699.5
Acetyls	207.7	380.2	459.3	770.9
Aromatics	870.4	1,535.2	1,797.6	2,744.4
Eliminations	(3.9)	(30.3)	(11.1)	(52.1)
	3,148.3	5,044.5	6,649.1	9,675.5
_	Three-Month Period Ended June 30,		Six-Month Period Ended June 30,	
_	2023	2022	2023	2022
		(€ in mill	lions)	
EBITDA before exceptionals				
Styrolution	32.7	286.7	98.0	540.3
INOVYN	163.8	343.9	426.8	665.4
Acetyls	23.0	137.7	50.3	272.2
Aromatics	(7.3)	148.8	18.6	326.2
_	212.2	917.1	593.7	1,804.1

Styrolution

Revenue. Revenue in the Styrolution segment decreased by €662.3 million, or 36.2%, to €1,168.6 million in the three-month period ended June 30, 2023, as compared to €1,830.9 million for the same period in 2022. The decrease in revenue was driven by lower sales pricing combined with lower volumes. Polymer sales volumes were lower due to general economic uncertainty and customers postponing orders. This was partially offset by higher external styrene monomer sales volumes as less monomer was internally consumed by polymers. High energy prices, inflation and increasing interest rates weakened the overall market sentiment. This was prevalent in all regions and industry sectors. Demand for durables reduced compared to top of cycle conditions seen during the COVID-19 lockdown in 2021 and up to the first half of 2022. Average sales prices decreased across all product groups and all regions due to the weak demand.

EBITDA before exceptionals. EBITDA before exceptionals in the Styrolution segment decreased by €254.0 million, or 88.6%, to €32.7 million in the three-month period ended June 30, 2023, as compared to €286.7 million in the same period in 2022. Business profitability in the three-month period ended June 30, 2023, was impacted by a reduction in margins primarily driven by Asia where low demand combined with additional capacity in China drove the margins to bottom-of-cycle conditions. The comparative quarter was by contrast characterized by top of cycle margins due to the strong demand in the first half of 2022. Gross margins were impacted by inventory losses of €16.8 million due to continuously reducing prices in the three-month period ended June 30, 2023 as opposed to inventory gains of €75.0 million in the comparative period.

INOVYN

Revenue. Revenue in the INOVYN segment decreased by €423.0 million, or 31.8%, to €905.5 million in the three-month period ended June 30, 2023, as compared to €1,328.5 million for the same period in 2022. The decrease in turnover was driven by lower sales pricing and volumes of our key products. General purpose PVC sales volumes and pricing in domestic markets was significantly lower than the prior year due to weak demand, high industry stock levels and ample supply complemented by higher-than-normal volumes of competitively priced imports. Export sales volumes were higher than the comparative quarter due to very weak demand in European markets, but pricing was lower on the back of subdued global demand and abundant availability of material from China and the US. Specialty PVC volumes and pricing in our domestic European market was lower than in prior year with customers acting cautiously against a background of difficult economic conditions and lack of consumer confidence. Export specialty PVC sales continued to be affected by lower internal Chinese demand resulting in continued increased competition and lower demand due to the general economic macro environment. Demand for caustic soda, in a well-supplied European market remained well below historical levels with the operating rate of European chlorine producers falling to around 60% compared to 70% in the second quarter of 2022. Export caustic soda pricing eroded further due to weak demand in the US and Asian markets leading to a global excess of supply with producers in those regions looking for options outside their domestic markets to sell this excess. Revenues of other products such as caustic potash, epichlorohydrin, chloromethanes and salt were also lower than the second quarter of 2022.

EBITDA before exceptionals. EBITDA before exceptionals in the INOVYN segment decreased by €180.1 million, or 52.4%, to €163.8 million in the three-month period ended June 30, 2023, as compared to €343.9 million in the same period in 2022. The decrease in EBITDA compared to the comparative quarter was mainly the result of lower margins of general purpose PVC, specialty PVC and caustic soda, partially compensated by lower energy costs. As a result of the subdued demand environment for general purpose PVC, the spread over ethylene in domestic markets was 50% lower than the second quarter of 2022, with even greater decreases observed in export markets. Margins on specialty PVC remain healthy, albeit at lower levels than the comparative quarter. The Q2 2023 European caustic soda contract price settled at €907/tonne which was 21% lower than the same quarter of 2022. Offsetting these negative impacts was the reduced cost of electricity and natural gas with EEX (German power) and TTF (Dutch natural gas) indices trading at levels that were respectively 51% and 67% lower than the comparative quarter, although prices were still high compared with historical levels. Lower margins were achieved in the second quarter of 2023 on other products such as Cereclor, epichlorohydrin, chloromethanes and caustic potash due to a combination of volume and price impacts.

Acetyls

Revenue. Revenue in the Acetyls segment decreased by €172.5 million, or 45.4%, to €207.7 million in the three-month period ended June 30, 2023, as compared to €380.2 million for the same period in 2022. The decrease in revenues compared to the prior year quarter was driven by lower sales volumes combined with lower average sales prices compared to the second quarter of 2022. Sales volumes were 8% lower compared to the same period in the prior year because of a reduction in volumes across all regions. Challenging market conditions continued in Europe with an oversupply issue, compounded by weak demand and unpredictable fluctuation in gas prices. In Asia, the demand remained weak with plant industry average operating at around 70%. Production rates were also curtailed in the US due to weak demand. Sales prices were down across all regions compared with the second quarter of 2022.

EBITDA before exceptionals. EBITDA before exceptionals in the Acetyls segment decreased by €114.7 million, or 83.3%, to €23.0 million in the three-month period ended June 30, 2023, as compared to €137.7 million in the same period in 2022. The EBITDA decrease was mainly driven by reduction in volumes coupled with a reduction in margins across all regions. Among the regions, Europe experienced the sharpest reduction in margins with a drop of 50% compared to the same period in the prior year. Europe continued to be disadvantaged by costs due to high gas prices and increased imports from the US and Asia. Share of profit of joint ventures and associated undertakings decreased by €62.0 million compared to the same period in 2022 mainly due to weak demand across Asia.

Aromatics

Revenue. Revenue in the Aromatics segment decreased by €664.8 million, or 43.3%, to €870.4 million in the three-month period ended June 30, 2023, as compared to €1,535.2 million for the same period in 2022. The decrease in revenues compared to the prior year quarter was driven by lower sales volumes and lower average sales prices across all regions. PTA sales volumes were down by 50% in the US and by 38% in Europe compared to the second quarter of 2022. The reduction in volumes in the US was driven by key customers reducing their purchase volume in response to weak demand and higher import from Asia. The European market remained subdued due to ongoing weak customers' demand. Volumes in Asia were lower due to a planned turnaround at the plant in Zhuhai, China. Sales prices were lower compared to the second quarter of 2022 in all regions due to a reduction in crude oil price from \$113/bbl to \$78/bbl.

EBITDA before exceptionals. EBITDA before exceptionals in the Aromatics segment decreased by €156.1 million or 104.9%, to €(7.3) million in the three-month period ended June 30, 2023, as compared to €148.8 million in the same period in 2022. The EBITDA decrease was mainly driven by a reduction in volumes in all regions and a reduction in margins in the US, partially offset by improved margins in Europe. In the US, margins decreased versus the same quarter in 2022 as increased discount were required to secure sales volume in a weak demand environment. In Europe, margins improved as cost competitiveness started to return due to lower material and energy costs. In Asia, margins remained flat compared to the comparative quarter as the ongoing oversupply kept margins subdued. EBITDA was negatively impacted by €12.9 million of inventory losses in the three-month period ended June 30, 2023 due to decrease in crude oil prices compared to gains of €105.4 million in the comparative period, where crude oil prices had raised sharply.

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, to fund movements in our working capital and to pay taxes.

Our primary sources of liquidity are cash flows from operations of subsidiaries, cash on balance sheet and borrowings under our Securitization Programs. As of June 30, 2023, our Securitizations Programs remained undrawn. 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 borrowings program under the Securitization Programs and other facilities that we are able to sufficiently fund our working capital requirements, anticipated capital expenditures and debt service requirements as they become due, although this may not be the case. Management estimates that, even in a downturn in the business cycle and weaker market conditions, we would have

sufficient liquidity to meet our anticipated liabilities when due without incurring unacceptable losses or risking damage to our reputation.

Our working capital requirements depend on market price developments of our key feedstock, market demand and planned maintenance. We anticipate that our working capital requirements will vary due to changes in raw material, which affect inventory, accounts receivable and accounts payable levels as well as 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 the Securitization Programs.

Financing Arrangements

As of June 30, 2023, the Group's financing arrangements included 6800.0 million and \$500.0 million of Senior Secured Notes due 2026, 6600.0 million of Senior Secured Notes due 2027, 6500.0 million Senior Notes due 2026, 600.0 million and \$1,960.0 million Term Loan B facilities due 2026 and 6450.0 million and \$195.7 million Term Loan B facilities due 2027. On March 14, 2023, the Group successfully raised incremental debt under the existing 2026 term loans increasing the principal amount of the Euro Term Loan B borrowings by 6375 million (the "Euro Term Loan B due 2030") and the Dollar Term Loan B borrowings by 6375 million (the Dollar Term Loan B due 2030"). Our financing arrangements also include Securitization Programs, which as at June 30, 2023 had a total capacity of 6840.0 million and an available drawdown amount of 6577.0 million, none of which was drawn. The programs are subject to certain borrowing limits that are adjusted periodically based on the amount of eligible trade receivables available at the time of adjustment.

The Group also has various short-term credit facilities with different local banks to fund our working capital requirements in China, Malaysia, Singapore, South Korea, Thailand and the United Kingdom.

We or our affiliates may repay, redeem or repurchase any of our outstanding debt instruments, including term loans and notes, at any time and from time to time in the open market, in privately negotiated transactions, pursuant to one or more tender or exchange offers or otherwise, upon such terms and with such consideration as we or any such affiliate may determine. The amounts involved may be material.

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 six-month periods ended June 30, 2023 and 2022, capital expenditures analysed by business segment were as follows:

	For the six-month period ended June 30,	
	2023	2022
	(€ in millions)	
Styrolution	72.3	212.9
INOVYN	106.9	83.1
Acetyls	27.6	12.6
Aromatics	2.2	23.8
Total	209.0	332.4

In the Styrolution business, the most significant expenditures were in relation to a new 100 kiloton ASA plant at Bayport, Texas and the development of a new technology to recycle styrene monomer. In the INOVYN business, the most significant expenditures consisted of a new mechanical vapor recompression salt plant at Tavaux, France, a brine borehole drilling program at Northwich, UK and general SHE/sustenance expenditure. There were also planned turnaround events of the chlor-alkali and VCM assets at Martorell in Spain. In the Acetyls business, the most significant expenditures were mainly on sustenance and safety compliance work. In the Aromatics business, the most significant expenditures consisted of planned turnarounds at Zhuhai in China and at Cooper River in the USA.

Investments in property, plant and equipment in the first six months of 2022 by the Styrolution business mainly included a new 100 kilo ton ASA plant at Bayport, Texas, and a new 600 kilo ton ABS facility at Ningbo, China, which has been transferred to the joint venture created with Sinopec on December 28, 2022. In INOVYN, the largest investments in the comparative period were in relation to the expansion of the SPVC plant in Jemeppe, Belgium and a new mechanical vapor recompression salt plant at Tavaux, France. Capital expenditures in the Aromatics and Acetyls businesses were mainly on sustenance and safety compliance work.

Working Capital

We anticipate that our working capital requirements will vary due to changes in raw material and energy costs, which affect inventory, accounts receivable and accounts payable levels as well as sales volumes. Working capital levels typically develop in line with raw material and energy 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 the Securitization Program and other short-term credit facilities.

Cash Flows

During the six-month periods ended June 30, 2023 and 2022, the Group's net cash flows were as follows:

	For the six-month period ended June 30,		
	2023	2022	
	(€ in millions)		
Net cash flows from operating activities	642.8	935.1	
Net cash flows from investing activities	(105.2)	(61.9)	
Net cash flows from/(used) in financing activities	86.4	(880.8)	

Net cash flows from operating activities

Net cash flows from operating activities in the six-month period ended June 30, 2023 were ϵ 642.8 million, compared to ϵ 935.1 million in the same period in 2022. Positive cash flow was generated by profit generated from operations and by working capital inflows. Working capital inflows were ϵ 164.8 million in 2023, compared to outflows of ϵ 505.2 million in 2022. The inflows in 2023 were caused by lower closing stocks as the businesses actively managed stocks levels in the current soft demand environment. Lower raw material prices led to an offsetting reduction in both trade debtors and trade creditors. The outflows in 2022 were due to higher feedstock price and higher receivables due to increase in revenue.

There were outflows of €22.6 million on provisions and employee benefits in the six-month period ended June 30, 2023 (six-month period ended June 30, 2022: €32.1 million outflow), mainly for UK pension schemes in the INOVYN business.

The Group made taxation payments of €75.8 million in the six-month period ending June 30, 2023 (six-month period ending June 30, 2022: €162.3 million). The largest payments were in Germany, Switzerland and Mexico (six-month period ending June 30, 2022: Germany, USA, Switzerland, Korea, India and China).

Net cash flows used in investing activities

The total cash outflow for investing activities in the six-month period ended June 30, 2023 was \in 105.2 million compared to \in 61.9 million in the same period in 2022.

During the six-month period ended June 30, 2023 the Group received dividends from joint ventures and other investments of $\[\in \]$ 91.7 million and $\[\in \]$ nillion and $\[\in \]$ six-month period ended June 30, 2022: $\[\in \]$ 282.6 million and $\[\in \]$ 0.8 million respectively). The Group received $\[\in \]$ 1.8 million in proceeds for the disposal of property, plant and equipment mainly in relation to the sale of real estate in France and the sale of redundant equipment in the US (six-month period ended June 30, 2022: $\[\in \]$ 7.1 million in relation to the sale of precious metal catalyst in Zhuhai, China).

Spend on intangible assets of $\in 8.5$ million in the six-month period ended June 30, 2023 primarily consisted of EU and UK CO₂ emission allowances (six-month period ended June 30, 2022: $\in 25.3$ million).

During the six-month period ended June 30, 2023 the Group received \in 10.9 million of interest payment related to external cash investments and \in 3.3 million of interest payment in relation to shareholder loans to related parties (six-month period ended June 30, 2022: \in 2.3 million and \in 0.3 million respectively). In addition, \in 4.6 million was received from the Group's associated undertaking, INEOS Runcorn (TPS) Limited for partial repayment of a shareholder loan in the six-month period ended June 30, 2023 (six-month period ended June 30, 2022: \in 2.7 million).

There were no other significant cash flows from investing activities in the six-month period ended June 30, 2023 and 2022 other than the acquisition of property, plant and equipment (refer to the "Capital Expenditure" section).

Net cash flows from/(used) in financing activities

The total cash inflows/(outflows) for financing activities in the in the six-month period ended June 30, 2023 was €86.4 million compared to €(880.8) million in the same period in 2022.

On March 14, 2023, the Group raised incremental debt under the existing 2026 term loans increasing the principal amount of the Euro Term Loan B borrowings by €375.0 million and the Dollar Term Loan B borrowings by \$500.0 million (€471.6 million equivalent). Debt issue costs of €16.5 million were paid in relation with this transaction.

In January 2022, the Styrolution business entered into a new long-term loan agreement with Bank of China and ICBC to provide RMB 3,300.0 million of financing for the construction of a new 600 kiloton ABS plant in Ningbo, China. Drawdowns of RMB 1,497.6 million (ϵ 212.9 million equivalent) were made in the six-month period ended June 30, 2022. On December 28, 2022, the Group completed an equity transfer agreement with Sinopec relating to the sale of 50% equity interest in INEOS Styrolution Advanced Materials (Ningbo) PTE Ltd. As a result of this divesture, the obligations of the Group under this term loan facility were transferred to the newly created joint venture and derecognised from the Group's financial statements.

In the six-month period ended June 30, 2023, the Group made scheduled repayments of \$10.0 million (€9.5 million equivalent) on the Dollar Term Loan B Facility due 2026 (six-month period ended June 30, 2022: €9.1 million) and \$1.0 million (€0.9 million equivalent) on the Dollar Term Loan B Facility due 2027 (six-month period ended June 30, 2022: €0.9 million). In the six-month period ended June 30, 2022, the Group made scheduled repayments of €15.0 million on the Three-Year Euro Term Loan A Facility, \$17.5 million (€15.6 million equivalent) on the Three-Year Dollar Term Loan A Facility. The Group also made total scheduled repayments of €4.7 million to the Bank of China Zhuhai branch in respect of a loan acquired as part of the Aromatics business acquisition.

On May 31, 2022, the Group repaid the amounts outstanding under the Three-Year Dollar Term Loan A Facility of \$87.5 million (€83.2 million equivalent), the Three-Year Euro Term Loan A Facility of €75.0 million and the Five-Year Dollar Term Loan A Facility of \$210.0 million (€199.7 million equivalent).

Interest payments of \in 194.6 million were made for the six-month period ended June 30, 2023 compared to \in 113.9 million for the period ended June 30, 2022. The interest payments during the first six month of 2023 related primarily to scheduled cash payments in respect of the Term Loan B Facilities due 2026, 2027 and 2030, Senior Secured Notes due 2026 and 2027, Senior Notes due 2026, securitization facilities of \in 2.1 million, lease liabilities of \in 6.8 million and payments to settle losses on commodity derivative contracts of \in 2.0 million. The interest payments during the first six months of 2022 related primarily to scheduled cash payments in respect of the Term Loan A Facilities due 2023 and 2025, Term Loan B Facilities due 2026 and 2027, Senior Secured Notes due 2026 and 2027, Senior Notes due 2026, securitization facilities of \in 1.8 million, lease liabilities of \in 5.3 million and payments to settle losses on commodity derivative contracts of \in 6.8 million.

During the six-month period ended June 30, 2023 the Group made payments of €38.7 million (June 30, 2022: €43.1 million) in respect of the capital element of lease liabilities.

The Group paid dividends of \in 500.0 million in the six-month period ended June 30, 2023 as compared to \in 521.0 million in the six-month period ended June 30, 2022. The Group paid dividends to minority interests of \in nil in the six-month period ended June 30, 2023 as compared to \in 34.9 million in the six-month period ended June 30, 2022.

On April 22, 2022, the Group sold 13.8% of its shareholding in INEOS Styrolution India Limited for consideration of \$25.1 million (€22.5 million equivalent). The Group's shareholding reduced from 75.0% to 61.2% as a result with control being retained.

Net debt

Total net debt as at June 30, 2023 was €5,026.6 million (December 31, 2022: €4,861.6 million), excluding lease liabilities of €290.2 million (December 31, 2022: €289.3 million). The Group held net cash balances of €2,139.1 million as at June 30, 2023 (December 31, 2022: €1,530.1 million) which included restricted cash of €13.5 million used as collateral against bank guarantees and letters of credit. As at June 30, 2023 the Group had availability under the undrawn securitization facilities of €577.0 million.