INEOS

Sustainability Report 2022

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About this report

This report, published in June 2023, details INEOS' global sustainability performance as a group over the 2022 calendar year. It has been produced in accordance with Global Reporting Initiative standards (GRI 1 Foundation 2021) and serves as INEOS' United Nations Global Compact progress report. Selected disclosures in the report have been externally assured by KPMG in accordance with ISAE 3000, as described in the Assurance Report within. Questions or feedback concerning the report should be directed to the following email address: ineos.sustainability@ineos.com.

INEOS reports on sustainability performance at group level in relation to the legal entity INEOS AG. INEOS AG is a private company that is incorporated in Switzerland and headquartered in Rolle, with additional group headquarters in London. It is ultimately owned by Sir Jim Ratcliffe, Andy Currie, and John Reece. In 2022, INEOS AG had operations in 29 countries.

The INEOS AG sustainability reporting boundary covers all the entities in the consolidated financial accounts of INEOS Group Holdings SA, INEOS Quattro Holdings Limited (and its parent INEOS Industries Limited), and INEOS Enterprises Holdings Limited. Collectively, these accounts cover the vast majority of INEOS AG's sustainability reporting boundary and are produced for each calendar year like the INEOS AG sustainability report. As well as including all the entities in these consolidated financial accounts, the INEOS AG sustainability reporting boundary also includes INEOS O&P South entities and INEOS' sports and fashion businesses.

INEOS keeps an inventory of all its operations broken down by location and business using a unique site-business identifier. Data are gathered from these operations and consolidated based on whether the business in question is a subsidiary, joint operation, joint venture, or associate of INEOS AG, in line with IFRS definitions and INEOS' financial accounts. This inventory is updated every year to take account of structural changes using the all-year, same-year approach. When data from recent acquisitions are not yet available, however, we use the all-year, year-after approach.

When consolidating environmental data, INEOS excludes offices on the grounds of materiality and follows the Financial Control approach as defined in the GHG Protocol. As such, we fully consolidate

data from subsidiaries, proportionally consolidate data from joint operations and joint ventures at equity share, and do not consolidate data from associates or minor investments. In addition, we fully consolidate data from leased ships where INEOS is the lessee.

When consolidating general social and governance data, INEOS excludes shipping operations and offices with fewer than 10 employees. INEOS fully consolidates data from subsidiaries but does not consolidate data from joint arrangements or associates, except in the specific case of safety figures. INEOS fully consolidates health and safety data from subsidiaries and joint arrangements.

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General overview

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1.1 Tackling global challenges: views from our leadership

1.1.1 Statement from our Chairman

The INEOS roadmap to achieving net-zero emissions by 2050.

COP 26 in Glasgow has reaffirmed the global commitment to reducing the impact of the modern world on the climate of our planet. Most nation states have set the goal of achieving net-zero emissions by 2050. That will only be achieved through the concerted efforts of governments, industry and the general public and I am fully committed to INEOS playing a key role in that transition.

Our INEOS businesses are developing roadmaps to deliver net-zero emissions across all of our operations by 2050, whilst remaining profitable and staying ahead of evolving regulations and legislation. Based on the roadmaps developed to date, we have set a reduction target of 33% by 2030. We only make pledges that we can support with real world action plans.

This process has already started. We will spend over €6 billion to back our plans. In addition to investing over €3 billion in a wide range of projects that will reduce our footprint, we have announced ambitious plans to harness our expertise and technology to drive the development of a new hydrogen economy. In addition to a €1.2 billion investment in blue hydrogen allied to carbon capture technology at our major site at Grangemouth in Scotland, we have also announced a further €2 billion in a series of green hydrogen plants throughout Europe.

Our commitment to the development of a true circular economy is another key part of our plan for a sustainable future, where materials are reused to the maximum extent and no products, once used, enter the natural environment. We have a wide range of new products and new technologies designed to support this change to a genuine circular economy.

INEOS will play a full and active part in the transition to net zero, not only through reducing the impact of our operations but by providing the products that support other industries and individuals to reduce their own impact on the climate.

Our range of applications include the following:

- health and medical devices,
- clean water,
- food conservation and preservation,
- renewable energy products,
- lighter energy-saving materials for transport and mobility,
- clothing and apparel
- construction and transmission of water and energy,
- electrical insulation and information technology,
- household and electrical goods.

Our products are essential to modern life based on their performance, affordability and environmental footprint and are the best, and sometimes only, materials for each use. INEOS is here to provide the solutions to the challenges that the world faces, and we are determined that we will achieve net-zero emissions whilst continuing to deliver what the world needs.

Sir Jim Ratcliffe, INEOS Chairman

1.1.2 Views from our leadership

"Sustainability is no longer a mere buzzword; it has become a critical factor in recruitment and retention of talented people in our organisation.

Today's workforce seeks purpose and a sense of responsibility. By embracing sustainability practices, we attract top talent, retain motivated employees, and foster a culture of innovation that fuels long-term success for both our organisation and the planet."

Allison Crawford, HR Director
INEOS Olefins & Polymers Europe

"The path to long-term business success lies in embracing the opportunities presented by sustainability. As a petrochemicals and polymers business, we have a responsibility to mitigate our own environmental impact and help reduce the impact of our customers and those that use our products.

By integrating sustainable practices into our operations, we not only contribute to a healthier planet but also unlock new market opportunities, enhance brand reputation, and secure a prosperous future for our business."

Rob Ingram, CEO
INEOS Olefins & Polymers Europe

"As the site director of the Chocolate Bayou petrochemicals facility, I am steadfast in our commitment to becoming a more sustainable business.

Through efficient processes, responsible resource management, and continuous improvement, we work to minimise our ecological footprint, prioritise reliability and safety, while contributing to a better environment for future generations."

Cathy Culpepper, Site Director
Chocolate Bayou
INEOS Olefins & Polymers USA

"Sustainable development is win-win, for business and the planet.

We introduced the latest generation PTA technology in our Zhuhai, China facility. Our step out technology has not only improved the cost position of our assets but has cut our greenhouse gas emissions and reduced our liquid and solid waste production.

By investing in these innovative technologies we improve our business and minimise environmental impact."

Steve Dossett, CEO
INEOS Aromatics

1.1.3 Views from our young leaders

"I chose to start my career at INEOS because the chemical industry is facing paramount climate challenges. I want to take part in finding solutions and setting sustainability strategy for INEOS towards 2030 and 2050.

As our products touch every aspect of modern-day life, it is in everyone's interest to make the sector and INEOS more sustainable."

Marie Casier
Sustainability Officer, INEOS Group

"In my role I am building hydrogen production capacity and developing hydrogen applications to drive forward the transition to net zero and resource circularity.

I launched the young Climate and Energy Network (yCEN) to inform and exchange ideas with like-minded peers and enable my generation to play our part in advancing the post-2030 climate, energy, and wider sustainability agenda."

Matthias Schnellman
Business Development Manager, Hydrogen

"I strongly believe INEOS provides all the correct development opportunities to enable graduates to receive accountability and therefore workscopes that can make a difference.

An example is being a core member of yCEN and also setting up the Grangemouth Energy Network. Senior management agreed to our proposals and provided support and guidance to allow the networks to develop.

I believe this role particularly helps INEOS staff visualise and understand the net-zero pathway for INEOS."

Brendan Craggs
Asset Mechanical Engineer, INEOS FPS

"I want to help develop strategies and find ways to promote Diversity, Equality, and Inclusion within INEOS.

In order to tackle the challenges of the future, we need to attract and retain women in STEM careers, break down stereotypes, and create truly equal opportunities."

Johanna Pauly
Junior Communications Manager, INEOS O&P North

1.1.4 A word to our Investors

Following the Paris Climate Agreement of 2015, most nation states have recognised the threat posed by climate change and have set the goal to achieve a net-zero emission economy by 2050 and are adopting regulations and legislation to support this objective.

In response, INEOS implemented management of the risks posed by climate change to each of its businesses and the potential new business opportunities and threats arising from the transition. The assessments will be regularly updated in the context of three Intergovernmental Panel on Climate Change (IPCC) climate change scenarios in which temperature rise compared to the pre-industrial period is limited to 2°C or less, 2-4.5°C, and 5-8.5°C respectively.

An INEOS-wide target has been set to achieve 33% reduction in GHG emissions by 2030 (compared to 2019) and net-zero emissions by 2050. In line with this, INEOS businesses have each developed a roadmap which outlines plans and key actions required to deliver our 2030 target.

Actions to achieve this 33% reduction are discussed throughout section 2.1.

Dr. Peter Williams,
INEOS Group Head of Investor Relations

1.2 INEOS in profile

1.2.1 INEOS at a glance

INEOS is a global manufacturer of petrochemicals, speciality chemicals and oil products.

In addition to our core chemicals businesses, INEOS has oil and gas operations and has expanded into new sectors in recent years. This includes launching INEOS Automotive and INEOS Hygienics, acquiring the iconic British clothing brand Belstaff, and building a diverse portfolio of sports interests.

In 2022, we operated 26 individual businesses, with 186 facilities in 29 countries. We see opportunities where others see issues. We excel while advancing our core values with a passion for challenges and adventure.

26
INDIVIDUAL BUSINESSES

186
FACILITIES

29
COUNTRIES

1.2.1 INEOS at a glance

(continued)

66m
TONNES OF PRODUCT

$68bn
TURNOVER

25k
EMPLOYEES

KEY

- Manufacturing Sites
- JV sites
- Platforms*
- Other

*Platforms include INEOS Energy/FPS and O&P USA.

1.2.2 Our structure

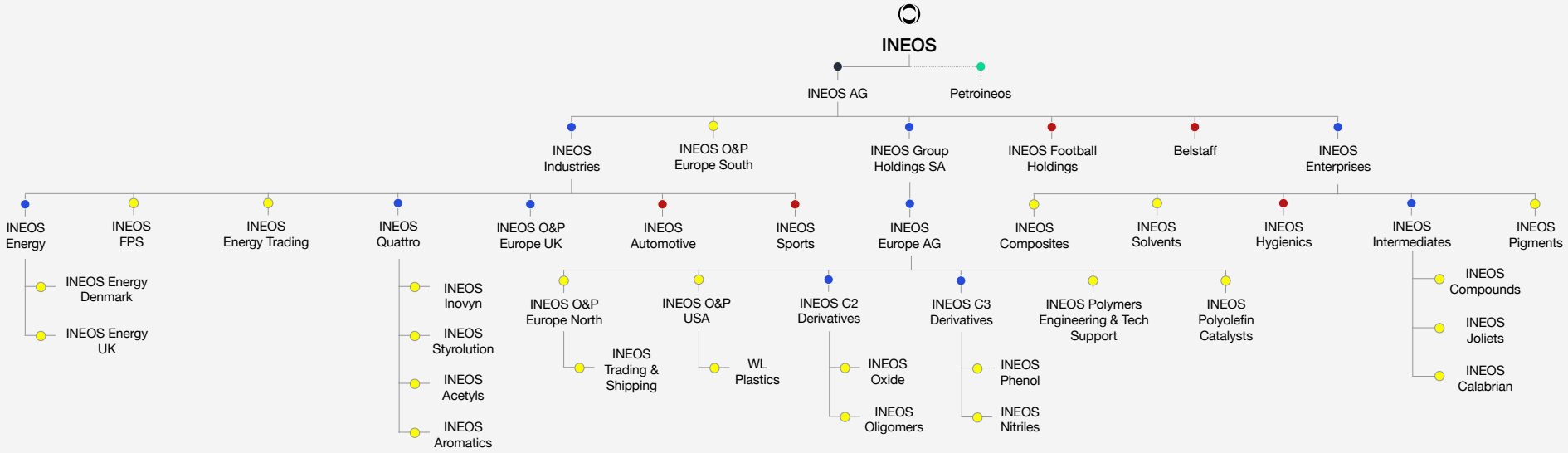
- Top company
- Joint venture
- Holding company
- INEOS Business
- Consumer businesses and sports

INEOS operates according to a federal structure and system of governance where each INEOS business has its own executive board and is directly accountable to INEOS' shareholders: Sir Jim Ratcliffe, Andy Currie, and John Reece.

Although each business is responsible for its own management, it must operate in accordance with INEOS' group-wide policies, guidelines, and targets, including those concerning sustainability, which are detailed below.

The executive board of each INEOS business comprises a chairperson who is accountable for approving business strategy and investments, a CEO who is nominated and selected by INEOS' shareholders to oversee the overall management of the business, and directors of operations, business, procurement, finances, and HR. Each business is responsible for all its functions, including business management, finances, operations, procurement, IT, HR, communications, banking, legal, and tax.

Every INEOS business reports on its performance to INEOS' shareholders throughout the year via regular executive committee meetings and half-yearly CEO days. In addition, every year the CEO of each business must submit letters of assurance to INEOS' shareholders confirming that the business is run according to group-wide operational and financial standards.



1.2.2.1 Significant structural changes in 2022

Acquisitions

In January 2022, INEOS acquired a site that manufactures polyethylene pipes in Titusville, Pennsylvania from Charter Plastics. This has been incorporated into INEOS AG's sustainability reporting boundary on an all-year, same-year basis.

In December 2022, INEOS acquired a potassium hydroxide and chlorine plant in Ashtabula, Ohio from Bigshire Mexico. This will be incorporated into INEOS AG's sustainability reporting boundary next year once data are available (following the all-year, year-after approach).

In December 2022, INEOS also finalised two joint ventures in China with SINOPEC to manufacture petrochemicals and ABS. These ventures will be incorporated into INEOS AG's sustainability reporting boundary next year once data are available. Two further joint ventures with SINOPEC should be completed in 2023.

Divestments

INEOS sold its stake in INEOS Styrolution India (which manufactures ABS and SAN) to Shiva Performance Materials in November 2022. The associated operations have been removed from INEOS AG's sustainability reporting boundary on an all-year, same-year basis.

INEOS Group Holdings SA, a subsidiary of INEOS AG, sold its shares in Petroineos to INEOS Limited, the ultimate parent of INEOS AG in December 2022. As such, the associated operations have been removed from INEOS AG's sustainability reporting boundary on an all-year, same-year basis.

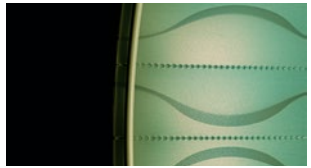
For the purposes of tracking progress, INEOS restates past disclosures when structural changes on a cumulative basis would result in more than a 1% change in the original disclosure or one of its important sub-disclosures at INEOS AG level (or at the level of a significant subsidiary). The same policy is applied to accounting changes and errors. Restatements are indicated as they arise throughout the report and explained under GRI 2-4 in the GRI Index in section 3.3.1.

1.2.3 Our value chains

INEOS' upstream value chain primarily comprises extraction and refining companies that provide us with hydrocarbon feedstocks and fuel, as well as electricity companies that provide us with power, and chemical companies that provide us with materials for further processing.

Our downstream value chains, by contrast, are highly complex and varied because we make a wide range of chemicals and plastics that have many different applications and end-of-life outcomes. Some of these market applications are illustrated on the right and explained in greater detail on our website.

01 Adhesives



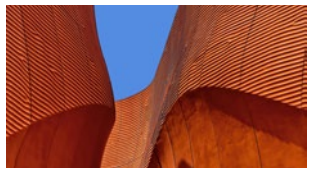
02 Agriculture

03 Automotive

04 Chemicals

05 Coatings

06 Construction



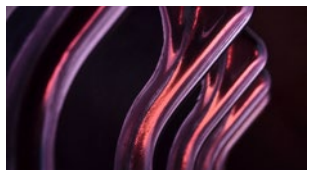
07 Cosmetics

08 Film and sheet

09 Food

10 Home and electronics

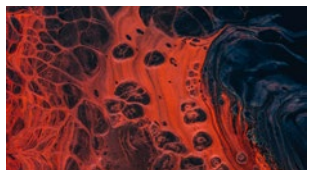
11 Manufacture



12 Medical and pharma

13 Packaging

14 Paint and ink



15 Pipes

16 Pulp and paper

17 Rubber and tyre

18 Textiles

19 Wire and cable

1.2.4 Our key values and ethos

We strive to deliver continuous improvement across all activities in all locations, and we work with local communities and stakeholders to be a responsible neighbour.

INEOS is committed to finding scientific and engineering solutions to global challenges, taking a creative approach, and moving quickly to achieve change. Our culture is entrepreneurial, defined by a lack of bureaucracy. Being privately owned offers us the freedom to take a long-term view, while a simple and decentralised organisational structure enables quick and efficient decision-making. Sports and fitness are integral to the INEOS culture, as are grit, rigour, humour, and a real team ethos.

OUR FOUNDING PRINCIPLES

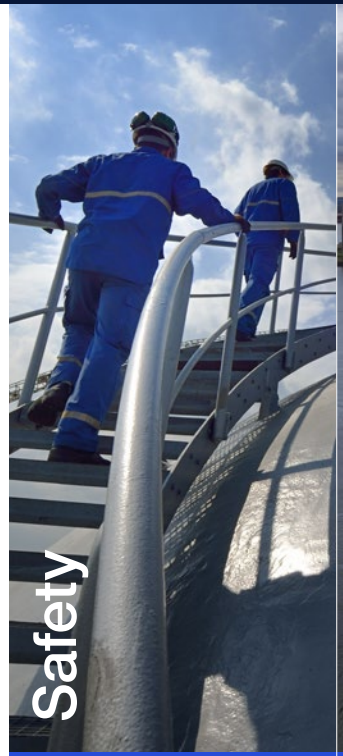
Grit
Rigour
Humour

Hard work and the belief that nothing is impossible is what makes INEOS people different from others. Our founding principles–Grit, Rigour and Humour–are built on an understanding of science and engineering, and the passion and skill of our people. Grit and rigour reflect the attitude that our people bring to their work and the achievements they make. Humour reflects the spirit of our people, who aim to enjoy the work they do.

1.2.4 Our key values and ethos

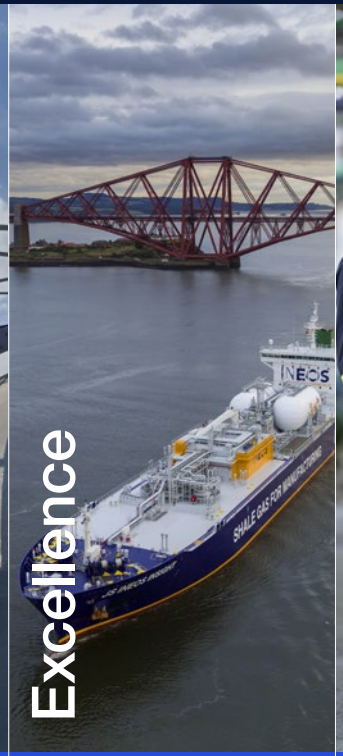
(continued)

OUR KEY VALUES



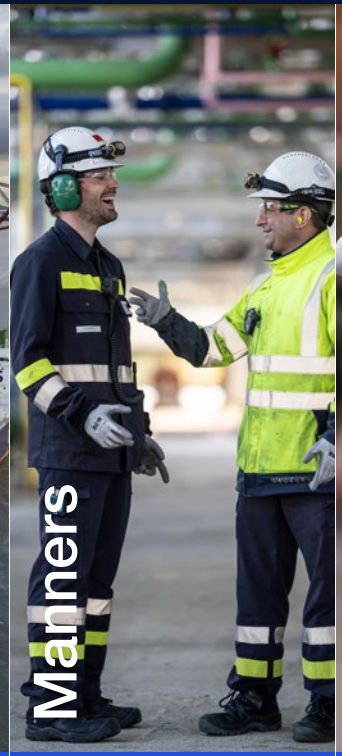
Safety is the top priority for everyone at INEOS. Collectively and individually, we are committed to protecting the health and safety of our employees and the communities in which we operate.

→



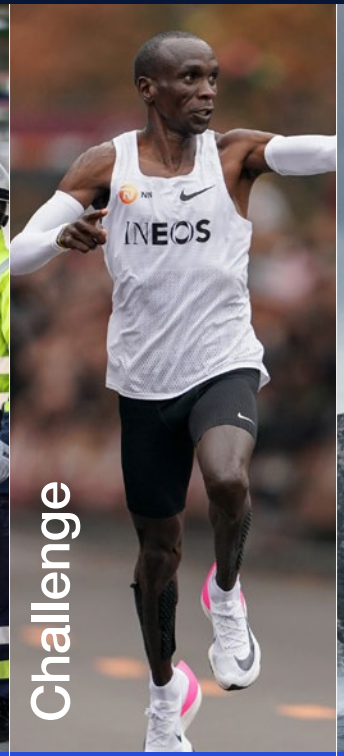
We don't settle for less than excellence. We have high expectations of ourselves, each other, and our businesses because we know what's possible when we give it all we've got.

→



We value each other and act with integrity, treating everyone with the respect and dignity that they deserve. Good manners don't cost anything but are integral to forming and maintaining the long-term relationships that contribute to the success of our business.

→



Challenge brings us together and demands the best from us. It gets us out of bed in the morning, gives us purpose and shows us what we are capable of.

→

Competition keeps us on our toes and our unwavering desire to be the best keeps us out in front. It's amazing what people can achieve when they take the brakes off.

→

1.2.5 Review of 2022 performance

BUILDING ON EXPERIENCE

Having shown resilience during a tough period, INEOS is entering a new phase of expansion and growth.

Even against a backdrop of price volatility, rising energy costs, and supply chain challenges, INEOS' plans remain firmly on track.

"**For us, I think this past year has been about resilience during the current downturn as well as geographic expansion, particularly in China**," says Tom Crotty, Director of Corporate Affairs.

To use the classic football analogy, 2022 was a game of two halves for the chemicals industry, with strong demand in the first half of the year giving way to weaker market conditions. As was the case with many across industry, we trimmed back production, but our focus on safety, reliability, feedstock flexibility, and cost efficiency across a strong product portfolio, maintained our profitability through the cycle.

Compared to the global financial crisis of 2008–09, INEOS is in a far stronger position to deal with the temporary impact on our bottom line due to our improved financial position. We are covenant light, and our scale and breadth means we can weather the storm.

"**Our core values are grit, rigour, and humour. They're the qualities that help get us through situations like these and have made us resilient and robust**," says Tom.

With INEOS celebrating its 25th anniversary on 5 May 2023, it is this mindset that has allowed the business to navigate difficult conditions and emerge stronger through innovation, new partnerships, and ground-breaking projects.

It has long been our ambition to expand our footprint in Asia, given the strong petrochemicals growth in the region. In 2022 we signed four major deals with Sinopec, including an agreement to acquire half of SECCO, plus a host of downstream investments from HDPE to ABS. This adds around $10 billion to our revenue in China, helping balance our portfolio between Europe, the US, and Asia.

And INEOS' ambitions have not been confined to Asia. In the US, we have just agreed a major renewable solar power deal for our Chocolate Bayou site, for example, and the Inflation Reduction Act creates real opportunities for further green growth that we intend to exploit.

In Europe, the development of our landmark €4bn petrochemical complex, Project ONE, is advancing well. The first sheet pile went into the ground in Antwerp, Belgium, in December 2022, kicking off construction of the first cracker to be built in the region for over two decades. Once complete, it will be the most efficient cracker in Europe–three times better than average–and it will eventually run on zero-emission green hydrogen.

Meanwhile, in the Middle East, construction of our three world-scale Jubail 2 plants in Saudi Arabia is advancing to plan and on schedule.

INEOS also made its first foray into the global Liquified Natural Gas (LNG) market towards the end of 2022, signing a deal with Sempra Infrastructure to export 1.4 million tonnes of LNG from the US Gulf Coast every year for use in our European processes and for sale in the global market. The deal builds on the success of INEOS' ethane imports into Europe and comes at a critical time for energy markets, providing much needed security of supply, and reducing dependency on Russian gas.

INEOS continued to support the development of carbon capture and storage in 2022, playing a leading role in projects such as

1.2.5 Review of 2022 performance

(continued)

Project Greensand, Acorn, Zero Carbon Hull, Antwerp@C, and HyNet North West–the world's first low carbon industrial cluster that will also be used for hydrogen storage.

In addition, we have continued to leverage our capabilities as one of the world's largest manufacturers and experts in electrolysis to advance the clean hydrogen economy. Our first in a series of green hydrogen projects is now underway and we have plans to exploit blue hydrogen on the horizon.

We also expanded our range of sustainable polymers and chemicals made from bio-attributed and recycled materials, which have a reduced carbon footprint and divert waste from landfill and incineration.

In recognition of our overall sustainability performance, INEOS was awarded another gold sustainability rating from EcoVadis in 2022, putting us in the top 8% of companies in the sector.

One of our major subsidiaries—INEOS Group Holdings SA—also received a low-risk rating from Sustainalytics and was ranked the third best commodity chemicals company out of 234 rated by the agency.

In terms of our consumer businesses, the INEOS Hygienics healthcare brand continues to enjoy success in a highly-competitive market. Now three years since its launch, its hand sanitisers, sprays, and wipes are widely available on store shelves and online.

Also gaining traction is INEOS' uncompromising 4x4 off-roader, the Grenadier. With healthy order books and a string of positive test drives and reviews, deliveries of the petrol and diesel models have started to roll out across Europe. A staggered launch will see them reach US shores in 2023, with an electric version to follow from 2026.

It is this drive and ambition that has helped INEOS establish itself as one of the world's leading manufacturers over its 25-year history. Whether taking unloved assets and turning them into successful businesses, or adding brands and business units to expand into new markets full of growth potential, we have repeatedly shown that nothing is impossible.

In the last five years alone, INEOS has expanded into the Middle East and China, developed new consumer businesses with Belstaff, Hygienics, and Automotive, acquired major acetyls and aromatics assets from BP, and continued to build our impressive portfolio of sports interests.

Tom concludes: "**At INEOS, we never sit down and discuss where we're going to be in 10 years' time. We take a pragmatic approach and remain fleet of foot, looking for good deals when they arise.**"

"**Something that's stayed the same after all these years is our management approach. We run the businesses with a model that has proven to be robust despite our size. We continue to have individual businesses that are run by their own boards with a light touch from the centre and we share best practice across the entire organisation.**"

1.3 INEOS and sustainability

Our sustainability strategy is to manufacture essential products needed to address global challenges, such as climate change, resource scarcity, and pollution, while minimising our negative impacts on the environment and people around us.

Our approach to sustainability focuses on eight key areas, which structure this report.

1 Climate change

Advancing the transition to net zero in our industry

Read more

2 Circular economy

Maximising resource efficiency and eliminating waste

Read more

3 Water stewardship

Tracking and reducing our water footprint chains

Read more

4 Zero pollution

Driving progress towards sustainable chemical value chains

Read more

5 Our people

Prioritising workplace health and safety (SHE) and fairness

Read more

6 People in our value chain

Safeguarding conditions and human rights

Read more

7 People in our communities

Respecting and supporting local communities

Read more

8 Governance

Maintaining the highest standards of ethics and compliance

Read more

1.3.1 Our commitments and policies

Sustainability is fundamental to how INEOS operates. We seek to advance sustainability in society through our innovative products and processes, while minimising any negative impacts of our operations on people and planet.

We strive to cause no harm to employees, local communities, and customers, and we work to achieve climate neutrality, circularity, and zero pollution in our value chains, while avoiding adverse impacts on water scarcity and biodiversity. We aim to meet or exceed all sustainability regulatory requirements and we recognise our obligation to reduce greenhouse gas emissions consistently with Paris targets.

INEOS supports the 17 UN Sustainable Development Goals, and we apply the principles of the United Nations Global Compact (UNGC) across our operations. All our businesses and employees are required to follow our Code of Conduct, which is based on the 10 UNGC principles; the United Nations Guiding Principles on Business and Human Rights; the International Labour Organization Declaration on Fundamental Principles and Rights at Work; and the Responsible Care Global Charter.

Our Code of Conduct governs our activity as a group in relation to health and safety, the environment, fair competition, ethical business, political engagement, financial integrity, working conditions, digital security, and human rights. It is approved at the highest level within INEOS, by our owners.

To promote sustainable practices in the value chain, INEOS requires suppliers to follow its Supplier Code of Conduct, which is based on the same internationally recognised standards as our own Code of Conduct, as well as the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-risk Areas. Our supplier code sets out our expectations of suppliers with respect to health and safety, environmental protection, labour practices, human rights, and ethical business.

1.3.1 Our commitments and policies

(continued)

INEOS also has a dedicated group-wide safety, health, environment, and quality policy. Our SHEQ policy includes our policies on climate change, circular economy, zero pollution, water, and biodiversity. As part of this policy, all INEOS businesses are required to operate in accordance with INEOS' 7 life-saving rules and 20 principles of behavioural and process safety.

All sites follow SHEQ best practice as set out in an extensive suite of internal standards called INEOS Group Guidance Notes (IGGNs), which are designed to meet or exceed relevant ISO standards. Due diligence and the precautionary principle are fundamental to our management approach, ensuring we avoid harming human health or the natural environment.

INEOS has publicly pledged to reduce its operational greenhouse gas emissions by 33% by 2030 (compared to 2019) and reach net-zero greenhouse gas emissions by 2050. We have set the target of increasing the share of green power in our net electricity consumption to 20% by 2030.

INEOS has also pledged to increase the circularity of its plastics operations by 2025 by offering polyolefin products for packaging applications with at least 50% recycled content; using 30% recycled content (on average) in products for polystyrene packaging in Europe; using at least 325,000 tonnes of recycled material in our products; and ensuring 100% of our polymer products can be recycled. We have now set an additional 2030 target to incorporate at least 850,000 tonnes of recycled and bio-attributed material into our polymer products.

INEOS is a signatory to the United Nations Global Compact and the Responsible Care global charter, and participates in numerous value chain sustainability initiatives, such as Operation Clean Sweep, the Polyolefins Circular Economy Platform, and the Circular Plastics Alliance.

We are committed to transparency and open communication on our sustainability performance. In addition to publishing an annual sustainability report, we apply for sustainability ratings from Sustainalytics and EcoVadis and disclose information concerning our climate and water performance through the Climate Disclosure Project (CDP).

An overview of our ratings, memberships, charters, and pledges can be found on our website: Associations & Initiatives (ineos.com)

INEOS has publicly pledged to reduce its operational greenhouse gas emissions by 33% by 2030 (compared to 2019) and reach net-zero greenhouse gas emissions by 2050

1.3.2 Our material topics

INEOS undertakes regular materiality assessments to identify the most important sustainability issues for us to manage and report on. These assessments are conducted by the group ESG team with oversight from senior executives and assistance from an external consultancy. The process involves consulting internal experts on the environment, safety, human resources, compliance, and finance, as well as a wide range of stakeholders.

In 2022, a major assessment was conducted in accordance with GRI 3, focusing on the impact of INEOS on the economy, environment, and people. In early 2023, we updated this to consider financial impacts on INEOS (so-called 'double materiality') and align more closely with the draft European Sustainability Reporting Standards. This involved:

- updating the list of topics considered,
- introducing a distinct methodology for scoring financial impacts,
- involving a wider range of internal experts (including financial experts), and
- conducting a new stakeholder survey.

Our updated assessment identified the following material topics for INEOS AG: **climate change**, **circular economy, water, zero pollution, safety**, and **working conditions**. We have broadened the previous topic 'Workforce safety' to 'Safety', so as not to exclude the financial impact on INEOS of process safety incidents. The previous topic 'Political Influence' has been removed after being reviewed by internal experts and judged immaterial given our limited direct political engagement.

INEOS follows a four-step process when conducting its materiality assessment in accordance with the GRI 3 standard. This involves:

- mapping out INEOS' operations, stakeholders, business relationships, and global sustainability context,
- identifying relevant sustainability impacts by consulting expert sources,
- assessing and scoring the impacts for material significance, and
- selecting the most material impacts and grouping them into topics.

The expert sources we consulted included all relevant GRI topic standards; the GRI 11 Oil and Gas standard; the SASB standards for chemicals, automobiles, clothing, and oil and gas; the TCFD guidelines; and the draft European Sustainability Reporting Standards. We gathered views from employees, customers, suppliers, investors, industry associations, academic institutions, regulators, communities, and NGOs through a survey. We also reviewed previous materiality analyses conducted in various INEOS businesses, as well as feedback from sustainability rating companies, such as EcoVadis, Sustainalytics, and CDP.

Taking a value-chain perspective, we identified 183 impacts of relevance to INEOS, comprising 127 impacts of INEOS and 56 impacts on INEOS. All GRI 11 topics and impacts related to human rights were included and each impact was classified as actual or potential, positive or negative. Relevant internal experts then scored the impacts of INEOS following OECD principles, with consideration of scale, scope, irremediable character, and likelihood. And internal financial experts scored the impacts on INEOS using the ESRS 1 methodology, with consideration of financial effect and likelihood. Internal data on environmental, social, and governance performance, including from whistleblowing mechanisms, as well as separate financial assessments, were used to inform the scoring.

The group sustainability team ranked the impacts and applied a threshold to select those that were most material based on their expert judgment and through comparison with reporting standards, competitors, and how stakeholders rated topics in INEOS' stakeholder consultation. The chosen impacts were then grouped into six material topics and relevant standards were identified, primarily from the GRI framework, for the purposes of reporting disclosures, as shown below.

In this report, our disclosures on safety and working conditions are grouped in section 2.5 Our people. Information on topics of general interest that are not key material for INEOS, such as human rights, anti-competition, IT security, and anti-bribery and corruption can be found in the sections on governance and people outside of our organisation.

TOPIC	DISCLOSURE STANDARDS
Climate change	GRI302 energy, GRI305 emissions, GRI201(-2) economic performance
Circular economy	GRI306 waste
Water	GRI303 water and effluents
Zero pollution	GRI306 waste, GRI303 water and effluents, GRI305 emissions
Safety	GRI403 occupational health and safety, SASB RT-CH-320a.1*
Working conditions	GRI404 training and education, GRI401-1 new hires and turnover

* INEOS records health and safety incidents in accordance with OSHA, so uses SASB RT-CH-320a.1 rather than GRI 403-9 and 403-10.

1.3.2 Our material topics

(continued)

The following table provides an overview of our impacts and how we manage them. More detailed information on our management of sustainability impacts can be found in section 2 of this report.

ENVIRONMENT	SOCIETY	ECONOMY
Our positive impacts	**Our positive impacts**	**Our positive impacts**
Advancing the clean hydrogen economy and establishing CCUS value chains that store and recycle carbon	Making products that are vital to the provision of healthcare, sanitation, shelter, transport, infrastructure, and communications	Supporting strong industrial clusters and a wide range of value chains in Europe, the Americas, and Asia
Making materials that facilitate renewable power generation and improve the energy-efficiency of buildings and transport	Providing high quality jobs and training, as well as wider personal development opportunities to employees	Creating new market opportunities by investing in commercial production of clean hydrogen and demonstrating CCUS
Developing new recycling technologies and incorporating recycled and bio-based materials into products	Supporting projects that tackle global health challenges and childhood poverty and promoting STEM subjects	Increasing economic productivity with materials that improve the yield and efficiency of processes
Our negative impacts	**Our negative impacts**	**Our negative impacts**
Contributing to climate change by emitting greenhouse gases such as CO_2	Potential health and safety incidents that could harm employees and contractors at our sites	Potential disruption to regional economies and value chains, were INEOS to contract
Contributing to the consumption of virgin resources and the generation of waste	Potential instances of discrimination or human rights violations in our value chains	Potential disruption to existing markets due to investment in emerging markets
Potentially contributing to chemical pollution due to spills or poor downstream use of our products	Potential disturbance to local communities due to incidents at our sites	
How we limit negative impacts	**How we limit negative impacts**	**How we limit negative impacts**
Setting climate targets and implementing net-zero roadmaps to reduce emissions at all our sites	Applying a strict health and safety management system with regular auditing and training, as well as performance-based incentives	Managing business risks and pursuing opportunities to ensure INEOS' continued economic success
Setting circular economy targets and implementing plans to expand our range of sustainable products	Requiring our employees and suppliers to follow a Code of Conduct and training our employees on managing human rights risks in the value chain	
Following strict procedures to avoid spills and applying best practice in product stewardship in accordance with REACH, Responsible Care, and Operation Clean Sweep	Setting up grievance mechanisms to identify issues and remediate negative impacts on communities and other stakeholders	

1.3.3 Sustainability governance

1.3.3.1. Policy development

As detailed above, INEOS has group-wide policies governing its sustainability performance, including our Code of Conduct, Supplier Code of Conduct, SHEQ policy, 7 life-saving rules, 20 principles of behavioural and process safety, and our suite of INEOS Group Guidance Notes.

We also have aggregated group-wide targets to reduce greenhouse gas emissions and improve the circularity of our polymer products. These policies and targets govern our management of cross-business topics that we have identified as material, as well as wider environmental, social, and governance matters.

Prospective group-wide polices and targets are initially developed by the INEOS group functions teams in consultation with our businesses through cross-business networks. This includes the climate and energy network, as well as our networks of business directors and managers for operations, procurement, legal, accounts, and HR. This process is informed by INEOS' group-wide data collection and materiality analysis, through which we monitor sustainability impacts and identify priority issues.

Prospective policies and targets are then presented to INEOS' ESG Committee, which issues a recommendation to INEOS' shareholders for final approval. The ESG Committee comprises CEOs from different INEOS businesses, as well as group directors. Group-wide policies and targets are then enforced through INEOS' federal reporting structure once officially adopted.

INEOS businesses are free to develop their own sustainability policies to complement group-wide policies. When they do so, they are expected to follow international standards and have the policy approved at senior management or board level. They are encouraged to make commitments to implement measures, set quantitative and/or qualitative targets as appropriate, and monitor their progress.

1.3.3.2 Roles and responsibilities

In line with INEOS' federal structure, each business is responsible for delivering its own sustainability strategy in accordance with group policies and targets. This includes implementing 2030 climate roadmaps and plans to improve the circularity of plastic products, as well as establishing management systems to optimise energy consumption, minimise environmental impacts and health and safety risks, and operate in full compliance with INEOS' Code of Conduct, which covers working conditions, human rights, digital security, and financial integrity.

The CEO of each business is responsible for overall sustainability strategy and recommending investment opportunities to the board; operations directors oversee safety, health, and environmental (SHE) performance and climate roadmaps; procurement directors oversee sustainability in the supply chain; HR directors oversee working conditions and human rights; and business and finance directors oversee ethical business conduct and IT security.

Each board reports to INEOS' shareholders on its sustainability performance throughout the year at executive committee (ExCo) meetings and half-yearly CEO days. In addition, all CEOs confirm that their business is meeting group-wide sustainability standards in annual letters of assurance to INEOS' shareholders. The climate and SHE performance of each business is tracked at ExCo meetings using business specific KPIs and executive bonuses are partly conditional on meeting SHE targets.

In 2022, all INEOS CEOs appointed a business gatekeeper for ESG data. This dedicated employee is responsible for monitoring and managing the sustainability performance of all sites in their business in relation to the environment, people in the value chain, fair business, ethics, and the workforce. In the vast majority of cases, there is also a dedicated employee or team at site level. How the responsibility for sustainability is delegated across our businesses and sites is set out in greater detail in tables 10-13 in the annex.

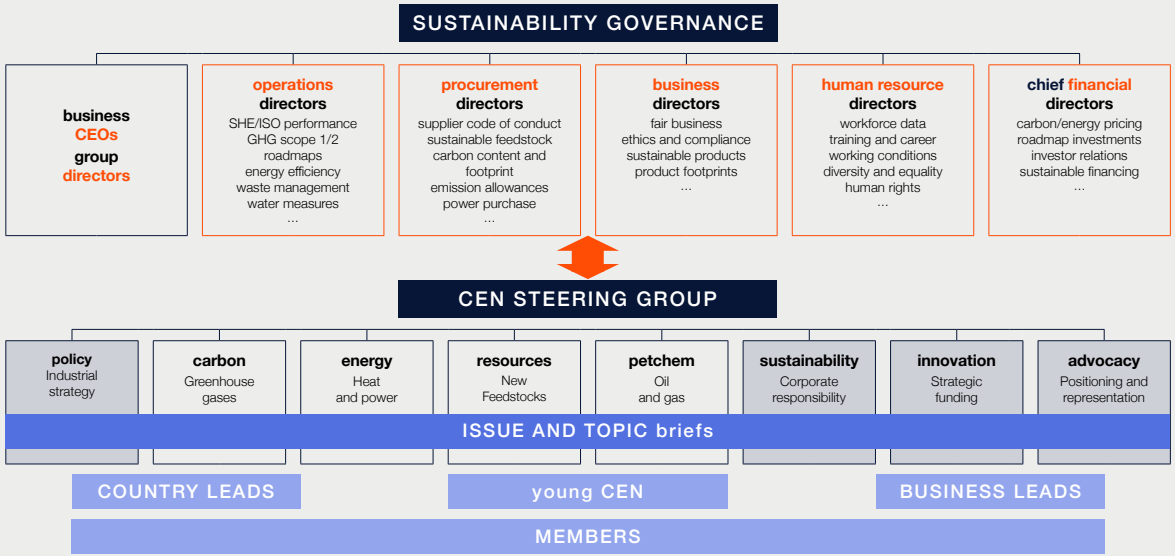
1.3.3 Sustainability governance

1.3.3.3 Networks

Networks are fundamental to INEOS' system of sustainability governance due to our federal structure. As well as playing a critical role in developing group-wide policies, as mentioned above, our cross-business networks are used to disseminate information on group policies and targets, share sustainability best practice, and collaborate on managing cross-business sustainability issues.

INEOS' climate and energy network (CEN) is coordinated at group level via a steering group that oversees eight issue teams working on a comprehensive range of sustainability topics. Issue and topic leads are experts from within our businesses; they have ownership of specific ESG areas and share expertise across the group through the network. Leads are also selected to represent each INEOS business and country of operation, and a dedicated future-looking group of young colleagues (yCEN) prepares post-2025 strategies and actions in dedicated calls every two months. Ultimate governance of CEN is provided by our CEOs and directors. News reports are distributed to all CEN members weekly, steering group calls and mailings happen monthly, and the network holds a globally attended annual meeting.

INEOS sustainability governance, climate and energy network



INEOS operations directors meet three to four times a year on manufacturing excellence days to discuss matters such as SHE performance, ISO management systems, energy efficiency audits, water and waste audits, and emission reduction plans.

INEOS procurement and business directors meet every two months to discuss matters such as implementing INEOS' supplier code and questionnaire, sourcing sustainable feedstock, purchasing emissions allowances, calculating product footprints and scope 3 emissions, arranging logistics, and exploring joint purchase agreements.

INEOS HR directors have monthly meetings to discuss matters such as workforce data, the composition of INEOS' workforce, training and career development, working conditions, human rights, ethics, and INEOS' Code of Conduct.

INEOS CFOs meet on an ad hoc basis to discuss matters such as carbon pricing, carbon border adjustments, energy taxes, roadmap investments, investor relations, sustainable financing, and ESG disclosures.

1.3.3 Sustainability governance

1.3.3.4 Stakeholder engagement

Ongoing engagement with stakeholders is central to INEOS' sustainability management, allowing us to identify issues, coordinate our response, and benefit from collaborating with others. We currently engage with ten categories of stakeholders that we have identified as important to our sustainability performance. The non-exhaustive table below summarises some of the main channels we use and topics we discuss with these groups to ensure we manage sustainability issues effectively.

STAKEHOLDER GROUP	METHOD	TOPICS
Employees and contractors	Works councils, town halls, team meetings, training modules, performance reviews, intranet, newsletters, 24/7 hotline, networks	Code of conduct and sustainability policies, health and safety performance, working conditions, equality and diversity
Customers	Safety data sheets, sustainability handbooks, customer events, value chain initiatives	Product stewardship, responsible care, Operation Clean Sweep, product performance
Suppliers	Procurement negotiations, supplier assessments and surveys, audits	Supplier code of conduct, environmental performance, product footprints, human rights, ethical business conduct
Investors, lenders, and creditors	Quarterly investor meetings, weekly written updates, annual investor days, financial statements	Business strategy, economic performance, ESG strategy and performance
Trade associations and unions	Members' events and communications, working groups	Regulations, labour practices, sectoral sustainability initiatives and policies
Universities and scientific institutions	Conferences, workshops, R&I consortia, partnerships, job fairs	Research and innovation, recruitment and partnership opportunities
Regulators and governments	Indirect engagement through associations, consultations, meetings and briefings	Policies relating to climate change, the circular economy, zero pollution, and other issues affecting the chemical industry
Communities	Direct engagement, community initiatives, press releases, grievance mechanisms	Site issues such as noise and air pollution, local projects that INEOS supports
Non-governmental organisations and civil society	Surveys, working groups, press releases	INEOS' sustainability performance and policy positions
Media partners	Press releases, interviews, social media	INEOS' sustainability activities, such as investments in hydrogen, CCUS, and the circular plastics economy

1.3.4 Contributing to the UN SDGs

INEOS contributes positively to ten of the United Nations Sustainable Development Goals (UN SDGs).

INEOS produces chemicals that are used to produce retro/antivirals, antibiotics, steroids, anti-inflammatories, paracetamol/aspirin, and the reagent chemicals used in virus testing kits (goal 3). Our businesses make products that are essential for sanitation pipes and industrial systems, as well as chemicals that are needed to treat sewage and ensure water is safe for drinking (goal 6). In addition, INEOS' materials are the building blocks for innovation in renewable energy technologies (goal 7 and sub-target 7.2).

Many INEOS products are vital in the provision of efficient housing, infrastructure, water and energy networks, and transport systems in the urban environment (goal 11). Other INEOS products, such as carbon fibre, contribute to a lower carbon society and are needed to produce renewable energy such as wind and solar power. As Europe's largest operator of electrolysis technology for producing hydrogen, we are in a unique position to enable the energy transition away from fossil fuels (goal 13). We have set up a separate business, INEOS Hydrogen, to help our businesses develop hydrogen projects at their sites.

We promote strong economic growth and provide work opportunities to communities by investing in businesses that are no longer strategic to their owners, supporting and enhancing their sustainable success (goal 8). In 2022, we made multiple acquisitions in China and in the US (see section 1.2.2.1 Significant structural changes in 2022).

INEOS is actively involved in several cross-sector initiatives that reduce raw material consumption, prevent waste, and support circular business models, such as the Hubs for Circularity flagship initiative in the EU (goal 9, and sub-target 9.4). We participate in industry charters, research and innovation consortia, and multi-partner initiatives to share knowledge and take joint action to address global sustainability challenges (goal 17 and sub-target 17.16). This includes signing up to the United Nations Global Compact in July 2022.

INEOS has been a signatory to the Responsible Care global charter since 2015. We also invest in mechanical and advanced recycling and our businesses have obtained ISCC PLUS certifications for many new circular products (goal 12 and sub-target 12.5). As part of the Operation Clean Sweep initiative, we are actively working to address marine litter and pellet loss across our facilities and value chain. We aim to give waste plastic value to ensure it is recycled at the end of its life (goal 14).

1.3.4 Contributing to the UN SDGs (continued)

In addition to the United Nations SDGs, INEOS also supports the 10 principles of the United Nations Global Compact

SDG 7.2

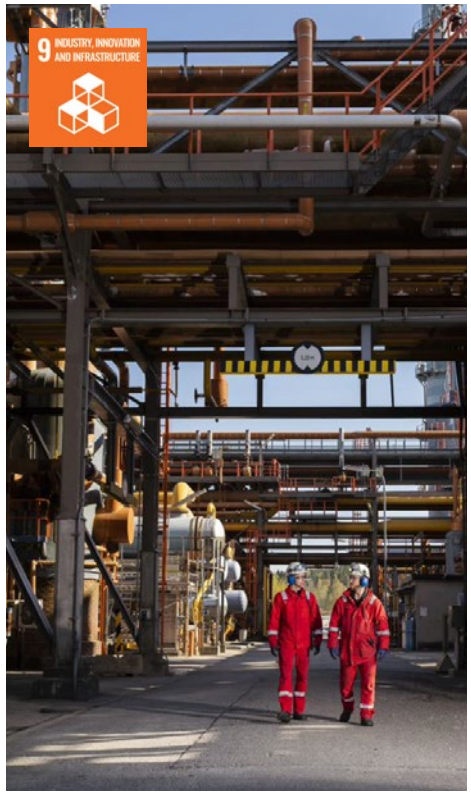
By 2030, increase substantially the share of renewable energy in the global energy mix.

INEOS is Europe's largest operator of electrolysis technology and has launched a new clean hydrogen business that will help increase the share of renewable energy in the global energy mix. Moreover, our materials make innovation in renewable energy possible. This includes the production of 100-meter-long wind turbine blades and synthetic oils to extend the service life of wind turbine gearboxes. We are also incorporating renewable energy into our own operations, signing Power Purchase Agreements that bring new renewable capacity online (see section 2.1.4.1).

SDG 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

INEOS is working to reduce its climate impact across its businesses through resource efficiency projects and investing in climate roadmaps to reach net zero by 2050, as set out in section 2.1.4. We share best practice via our climate and energy network and through collaborative initiatives. We invest in best available technologies, such as our ground-breaking Project ONE facility in Antwerp (Belgium), which will be the most efficient cracker in Europe in terms of its environmental footprint.



1.3.4 Contributing to the UN SDGs

(continued)

SDG 12.5

By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

INEOS minimises its own waste through optimising the material efficiency of processes and valorising waste and by-products within industrial clusters that close material loops. We are also working to reduce end-of-life plastic waste in our value chains by incorporating recycled content into our polymers, designing products for recyclability, and investing in new technologies that make it possible to recycle more plastic waste. We participate in the Operation Clean Sweep scheme to prevent plastic pellet leakage and we are signatories to the Responsible Care Global Charter for safely managing chemicals throughout their lifecycle. More information on our waste management and product stewardship can be found in sections 2.2 and 2.3, respectively.

SDG 17.16

Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology, and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

To accelerate the achievement of the SDGs, we work on many multi-stakeholder initiatives, collaborating with other companies, communities, universities, and partners all along the value chain. INEOS is actively involved in several cross-sector initiatives to address environmental and resource concerns, reduce raw material consumption and waste disposal, and support circular business models.

See our website for a list of our corporate memberships, industry charters and management standards.

1.3.5 Sustainability highlights

INEOS continues to improve its performance year after year.

TUESDAY, JANUARY 11, 2022

INEOS and NEXTLOOPP work together to recycle polypropylene.

Read more

WEDNESDAY, JANUARY 12, 2022

INEOS signs renewable power deal with Eneco. The deal increases INEOS' total Belgian offshore wind generation to over 200MW and reduces CO_2 emissions by nearly 3 million tonnes.

Read more

THURSDAY, JANUARY 27, 2022

INEOS at Grangemouth announces plans to construct a low-carbon hydrogen manufacturing plant.

Read more

TUESDAY, MARCH 1, 2022

INEOS Aromatics reduces CO_2 emissions and increases capacity with $70 million modernisation of PTA facility in Merak, Indonesia.

Read more

THURSDAY, APRIL 28, 2022

335,000 children worldwide helped The Daily Mile to celebrate its 10th birthday with a global celebration, today.

Read more

WEDNESDAY, MAY 4, 2022

Hydrogen fuel network trial gets underway with INEOS at Grangemouth.

Read more

THURSDAY, JUNE 2, 2022

INEOS Olefins Belgium joins Fluxys project for hydrogen network with open access in Antwerp.

Read more

TUESDAY, JUNE 7, 2022

Greatview develops its first sustainable packaging solution Greatview Planet in co-operation with INEOS and UPM Biofuels– all certified by the RSB.

Read more

TUESDAY, JUNE 14, 2022

INEOS Phenol launches new lower carbon bio product line to be called INVIRIDIS for its phenol acetone and alphamethylstyrene business.

Read more

1.3.5 Sustainability highlights (continued)

WEDNESDAY, JUNE 15, 2022

Indaver and INEOS Styrolution sign offtake agreement for recycled styrene monomer.

Read more

THURSDAY, JUNE 30, 2022

INEOS in Cologne receives state funding for green hydrogen feasibility study to cut CO_2 by more than 100,000 tonnes per year.

Read more

WEDNESDAY, JULY 20, 2022

INEOS invests in state-of-the-art technology to design recyclable flexible packaging film to prevent one million tonnes of waste going to landfill each year.

Read more

TUESDAY, JULY 26, 2022

INEOS Olefins and Polymers Europe joins the HolyGrail 2.0 Initiative for recycling plastic waste.

Read more

WEDNESDAY, JULY 27, 2022

INEOS launches new bio-attributed ethylene oxide, completely substitutes fossil feedstock with renewable biomass.

Read more

WEDNESDAY, AUGUST 24, 2022

INEOS supplies Covestro with mass-balanced raw materials for polycarbonate plastics.

Read more

TUESDAY, OCTOBER 18, 2022

INEOS O&P Europe announces €30m upgrade of Lillo polyolefins plant to increase focus on durable products that will play key role in transition to net zero.

Read more

MONDAY, OCTOBER 31, 2022

INEOS signs agreement with Plastic Energy for its largest plant to produce 100,000 tonnes of raw materials from plastic waste.

Read more

MONDAY, NOVEMBER 21, 2022

The new Polestar 3 all electric SUV is to use INEOS Inovyn BIOVYN™ bio-attributed vinyl car seats to further reduce CO_2 from its latest vehicles.

Read more

FRIDAY, DECEMBER 2, 2022

MIDEA, GER and INEOS Styrolution collaborate to create the first large scale home appliance closed-loop circular economy system in the world

Read more

2

Sustainability performance

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Sustainability performance

This section of the report sets out INEOS' sustainability performance and activities in relation to eight key areas for the group.

To compile the quantitative disclosures in this section, INEOS gathered data from 184 distinct operations worldwide, comprising four shipping operations (responsible for 20 vessels), 129 manufacturing operations including 10 oil and gas operations, and 51 office operations. Operations are distinguished by i) the INEOS business conducting the operation, and ii) the location where it takes place (or, in the case of shipping operations, the class of vessel).

Operations are distinguished by the INEOS business conducting the operation, and the location where it takes place (or, in the case of shipping operations, the class of vessel).

For the 2022 reporting year, data were not available for our joint operation Tavaux GIE and our non-operated JV Taichung. This has a negligible impact on INEOS AG's overall figures. INEOS does not collect data from its sports and fashion businesses, associated undertakings, or offices with fewer than 10 employees. From our ships, INEOS only collects ENV data, and from offices only HR data.

Further information on the consolidation of data can be found in the *About this report* section, page 3.

INEOS ENTITIES IN 2022	REGION				TOTAL
	EUROPE	AMERICAS	ASIA PACIFIC	OTHER	
INEOS operations	**97**	**59**	**24**	**4**	**184**
# manufacturing	**67**	**47**	**15**	-	**129**
subsidiaries	54	45	9	-	108
joint operations/ventures*	13	2	6	-	21
# shipping (leased/operated)**	-	-	-	**4**	**4**
# offices > 10 employees	**30**	**12**	**9**	-	**51**

* Two omissions: one JO in Europe and one JV in Asia
** INEOS shipping activities are consolidated whether the ship is owned or leased; INEOS' fleet comprises 20 ships divided into four groups: 4 large gas barges, 4 naphtha barges, 4 very large ethane carriers (VLECs), and 8 dragon ships

ENVIRONMENT

1 CLIMATE CHANGE
Advancing the transition to net zero in our industry

2 CIRCULAR ECONOMY
Maximising resource efficiency and eliminating waste

3 WATER STEWARDSHIP
Tracking and reducing our water footprint

4 ZERO POLLUTION
Driving progress towards sustainable chemical value chains

PEOPLE

5 OUR PEOPLE
Prioritising workplace health and safety (SHE) and fairness

6 PEOPLE IN OUR VALUE CHAINS
Safeguarding conditions and human rights

7 PEOPLE IN OUR COMMUNITIES
Respecting and supporting local communities

GOVERNANCE

8 GOVERNANCE
Maintaining the highest standards of ethics and compliance

ENVIRONMENT

Environment

2.1 Climate change: advancing the transition to net zero in our industry

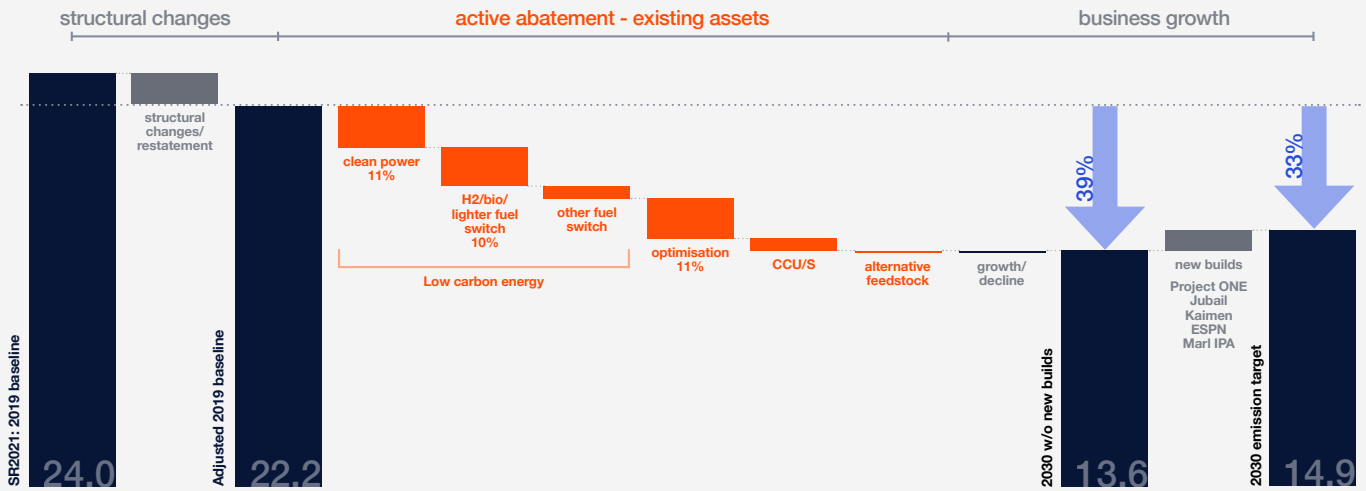
INEOS is committed to reducing its greenhouse gas emissions in accordance with the Paris Agreement and has a company-wide GHG management system in place to reduce emissions to net zero by 2050. All our businesses monitor and report emissions in accordance with the GHG Protocol and have dedicated emissions reduction roadmaps for each of their sites.

Based on these roadmaps, we have set a company-wide target to reduce scope 1 and 2 emissions by 33% by 2030 compared to 2019, while allowing for growth. This is an important step towards meeting our 2050 net-zero target. In 2022, our scope 1 and scope 2 emissions amounted to 19.6 Mt CO_2-eq, representing a 12% reduction compared to 2019.

This was mostly due to reduced production levels stemming from energy and feedstock shortages as a result of the war in Ukraine, COVID-19 lockdowns in China, and overall lower demand.

But active abatement measures made a significant contribution as well, such as our PPA with Eneco that started to supply wind power to our European sites, as well as wider fuel switching projects, and continuous optimisation efforts at our sites.

INEOS' site-roadmap initiative and 2030 investment plans aim to drive down our GHG emissions, while remaining profitable. To back our plans and take advantage of opportunities offered by the evolving energy and climate environment, we will invest over €6 billion in the years to come.



We are pursuing a broad range of roadmap initiatives including:

Roadmap initiatives

- Developing a new hydrogen business
- Producing clean hydrogen as a fuel
- Purchasing green power to run our operations
- Producing recycled plastics products
- Using bio-based feedstocks instead of fossil-based resources
- Pursuing continuous process optimisation
- Implementing electrification and low-carbon technologies
- Capturing CO_2 for storage or utilisation
- Partnering with our suppliers to reduce value chain emissions
- Investing in new assets that effect a step change in energy and emissions intensity

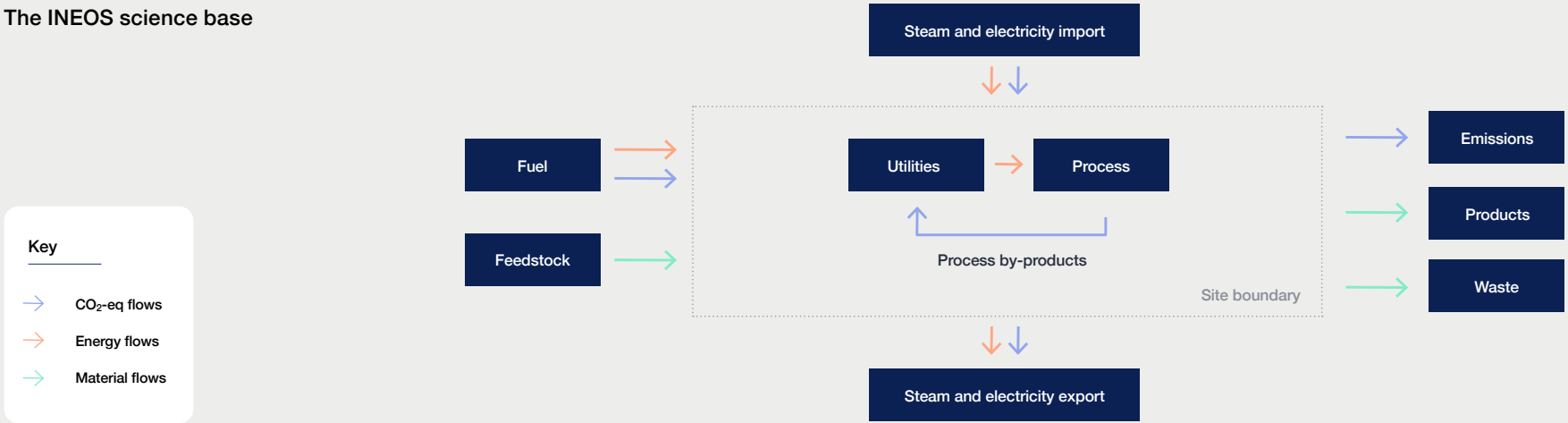
2.1.1 The INEOS science base

The INEOS science base is the verified emissions accounting system that we use to calculate scope 1 and 2 GHG emissions at our sites in accordance with the GHG Protocol. It covers CO_2 and the six remaining Kyoto Protocol gases (CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3) converted to CO_2-eq using Global Warming Potential (GWP) factors from the IPCC's 6th Assessment Report.

When using the science base, we follow the quality criteria in the GHG Protocol for emissions factors and calculate our scope 2 emissions on a location and market basis. We exclude captured CO_2 that is transferred to third parties or embedded in intermediate products from our scope 1 emissions.

For the purposes of setting and tracking our emissions targets with the science base, we use market-based accounting for scope 2 emissions and exclude emissions associated with exported energy from our footprint.

The INEOS science base



2.1.2 GHG emissions

2.1.2.1 Scope 1 and 2 emissions

We report our operational GHG emissions every year to track progress with our climate targets against a 2019 baseline. In several regions, such as Europe and China, we also report our scope 1 emissions to local authorities with verification from third parties.

In 2022, our operational GHG footprint was 19.6 Mt CO_2-eq (including CO_2 and other greenhouse gases). This comprised 13.9 Mt CO_2-eq of scope 1 emissions (71%) and 5.7 Mt CO_2-eq of scope 2 emissions (29%). This discounts CO_2 that is captured at our sites and transferred to third parties, which amounted to 0.2 Mt. It also excludes 1.2 Mt CO_2-eq of emissions associated with exported energy streams that are used by third parties, either directly in chemical parks or via grid connection (the third parties report these emissions in their scope 2 footprints). A detailed GHG inventory according to the GHG Protocol is disclosed in section 3.2 and on our website.

Our core chemical production accounted for 18.6 Mt CO_2-eq of our footprint, while the remaining 1.0 Mt CO_2-eq was associated with our other activities, namely exploration, production and pipeline transportation of oil and gas, activities in the automotive sector, extraction of brine, trading and shipping. The emissions intensity of our core chemical products was 0.42 t CO_2-eq/t based on manufactured volumes. This is useful for the purposes of benchmarking and tracking our progress as a key performance indicator.

INEOS' reporting boundary changed significantly in 2022 due to the structural changes set out in section 1.2.2.1, most notably the transfer of INEOS' stake in Petroineos to INEOS Limited. Overall, these structural changes reduce our footprint (approximately 1.4 Mt CO2-eq in 2022), which required us to revise down our 2019 baseline and historical data.

Controlling for these structural changes, INEOS has reduced its carbon footprint by 2.6 Mt CO_2-eq (12%) since 2019. The majority of the reduction can be attributed to lower production levels due to the war in Ukraine, COVID-19 lockdowns in Asia, and overall lower demand. But over 0.3 Mt CO_2-eq of the reduction was due to power purchase agreements, which are now supplying several INEOS sites with wind power in Europe and nuclear power in the USA. Continuous optimisation measures at our sites and step changes in our processes also contributed.

2.1.2.1 Scope 1 and 2 emissions
(continued)

INEOS is planning and implementing measures to reduce emissions in accordance with our mid-term and long-term targets to make a meaningful contribution to mitigating climate change:

We are establishing a new hydrogen business within INEOS Inovyn to promote cleaner energy sources.

We are phasing out the use of carbon-intensive heavy fossil fuels in our operations, such as in Sarralbe, France.

We are sourcing green and nuclear power for our operations through Power Purchase Agreements (PPAs) in Belgium, Germany, Norway, and the USA.

We are working to continuously optimise our processes and enhance the energy integration of our sites, such as in Tavaux, France, and Merak, Indonesia.

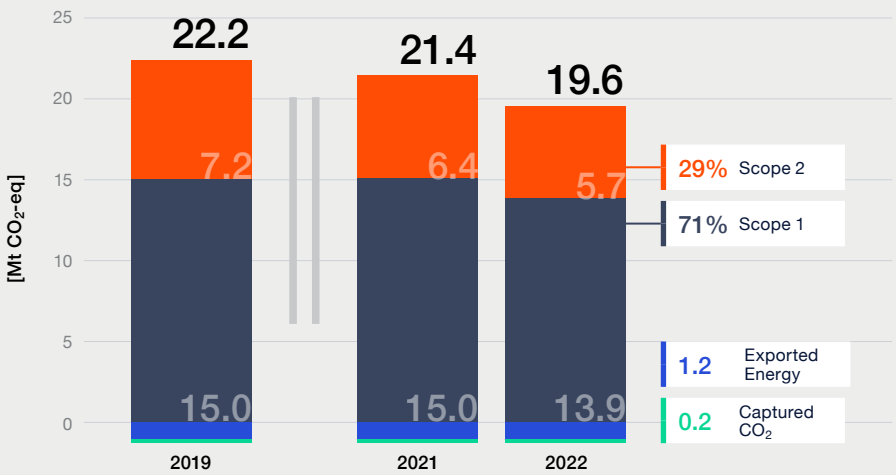
We are capturing CO_2 emissions from our operations for utilisation in locations like Lavera and Tavaux in France, Antwerp in Belgium, and Cologne in Germany.

We are testing and demonstrating the potential for CO_2 transport and storage in our value chains with projects like Greensand in Denmark and Antwerp@C in Belgium.

We are exploring additional opportunities for Carbon Capture and Storage (CCS) in Houston in the US and as part of the Acorn project in the UK.

We are investing in abatement projects to further advance our sustainability goals.

GHG footprint across all businesses worldwide



2.1.2.2 Scope 3 emissions

As well as reducing our own scope 1 and scope 2 emissions, INEOS is committed to working with customers and suppliers to reduce scope 3 emissions in our value chains.

INEOS is committed to publishing a robust scope 3 inventory based on solid accounting methods and reporting practices so we can set meaningful goals, devise targeted abatement plans, and track our progress with reducing value chain emissions.

We have advanced significantly with calculating scope 3 emissions in material categories for INEOS based on the current GHG Protocol, existing sector guidance, and available data from suppliers and databases.

Through our industry associations and wider company engagements, we are closely monitoring and participating in ongoing discussions about emerging best practice in accounting methods, emissions factors, and target setting. Our plan is to review our initial figures and publish robust and complete scope 3 data with assurance in the near future.

In 2022, after assessing all fifteen scope 3 categories for materiality, we applied accounting methodologies for priority categories in accordance with the GHG Protocol and strengthened group-wide data collection through our existing digital platforms. This included gathering data on over 95% of our feedstock purchases (by mass) for the purposes of calculating category 3.1 emissions—our most material scope 3 category. We also sourced emissions factors for all priority scope 3 categories, either from value chain partners (when available and substantiated) or from respected public and commercial databases, such as Ecoinvent, Eco-profiles, and Carbon Minds.

Our next steps are to assess in greater detail the materiality and feasibility of certain scope 3 categories for INEOS. We will also review our accounting methodologies in light of emerging best practice in the sector, as well as forthcoming mandatory reporting standards, and the ongoing revision of the GHG Protocol. In addition, we will review our emissions factors as higher quality supplier data become more readily available and product databases are updated.

ENVIRONMENT

Assessing product carbon footprints for climate change mitigation

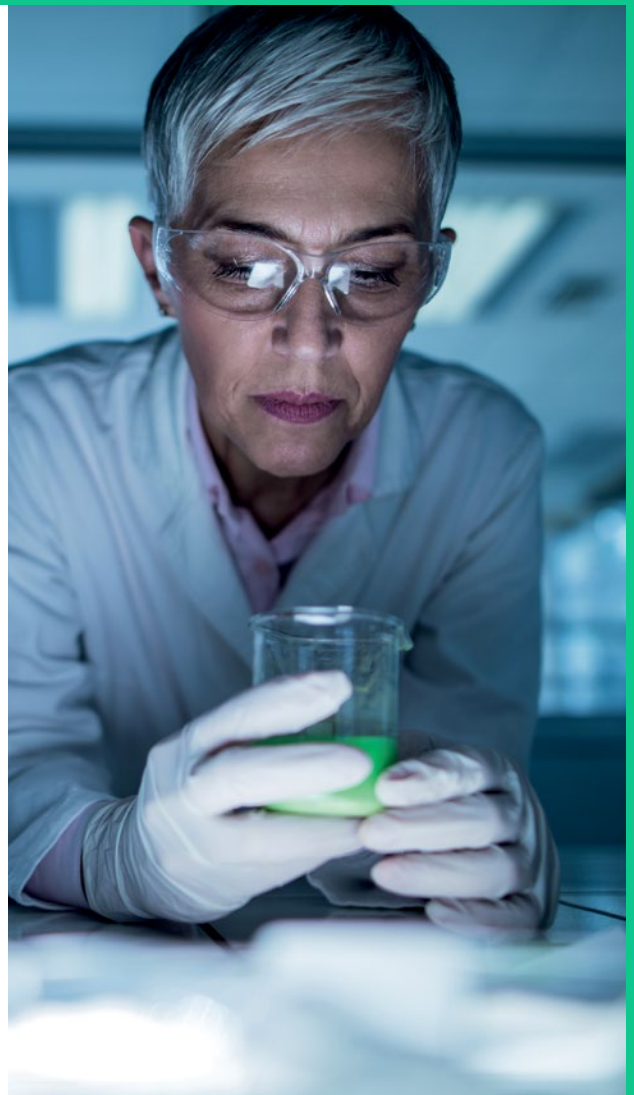
INEOS | CASE STUDY #1

INEOS Styrolution's range of ECO solutions enable its customers to develop competitive and sustainable products. One effective approach is the assessment of product carbon footprints (PCF) to measure the environmental impact of our products (based on greenhouse gas emissions) from cradle to gate. In other words, the carbon impact of our product from resource extraction or "cradle" up to the factory gate.

INEOS Styrolution analysed the inputs (raw materials and utilities such as electricity) and outputs (emissions and waste) across the entire product lifecycle, converting various emissions into carbon dioxide equivalent (CO_2e). This helped to determine the product carbon footprint or emissions per unit of product. By calculating PCFs, INEOS Styrolution was able to identify areas with significant environmental impact and is implementing targeted measures to reduce and ideally eliminate these hotspots.

So far, INEOS Styrolution has verified the PCFs of over 100 products from multiple production sites. All PCFs comply with ISO 14040 standards and have been independently verified by Ethos Research and by Scientific Certification Systems (SCS Global Services) as part of the Roundtable on Sustainable Biomaterials (RSB) audits.

PCFs provide a quantifiable metric to substantiate sustainability claims and offer valuable data for customers to calculate the PCF of their own applications, aiding them in achieving ambitious sustainability goals. By prioritising PCF assessment, INEOS Styrolution demonstrates its commitment to climate change mitigation and supports customers in their pursuit of a more sustainable future.



- Up to 99% carbon footprint reduction from new INEOS Styrolution bio-attributed styrenics
- INEOS Styrolution presents industry leading line-up of uncompromising sustainable polystyrene
- INEOS Styrolution introduces range of new sustainable ABS specialty solutions

2.1.3 Energy

As an energy-intensive industrial company, energy-related emissions account for the majority of our operational GHG footprint and energy efficiency is critical to our competitiveness. Striving for continuous improvement at our sites worldwide and implementing step changes in our processes makes good business sense, reducing costs, increasing resource efficiency, and driving our emissions reduction strategy.

As part of our management approach, we collect and analyse energy data by site, business and across the company, providing a comprehensive overview of the energy consumption and sources for the group. This enables us to identify further areas for process improvement or refurbishment through technology optimisation or fuel switching. Both abatement pathways are crucial to the emissions reduction roadmaps at each INEOS site.

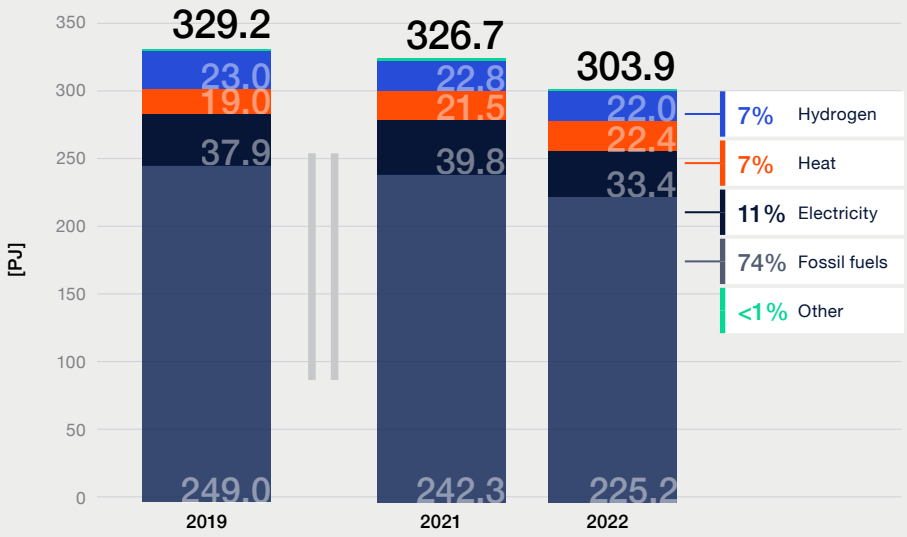
INEOS' energy footprint in 2022 amounted to 303.9 PJ, comprising 248.2 PJ of fuel consumption, 33.4 PJ of net electricity consumption, 22.0 PJ of net steam and hot water consumption, and 0.3 PJ of consumption of other utilities. In terms of our fuel consumption, 225.2 PJ came from fossil fuels, 22.4 PJ from hydrogen, and 0.6 PJ from renewable fuels. The category of other utilities primarily encompasses cooling and compressed air imported from third parties near our sites.

INEOS meets a significant share of its electricity and steam needs with own combined heat and power plants (CHP) and boilers. The energy consumed by these utility systems is included in our fuel consumption figures. In addition to natural gas, process off-gasses and liquid residues are valorised through combustion within these utility systems and we are exploring opportunities to fire cleaner fuels, such as hydrogen. Excess electricity, steam, and hot water are sold to third parties and the grid. INEOS sold 6.8 PJ electricity and 12.7 PJ steam and hot water in 2022.

INEOS' energy profile changed significantly in 2022 due to structural changes but our 2022 energy footprint was 8% lower than our 2019 baseline mostly due to lower production, next to continuous optimisation projects and disruptive changes at several INEOS sites. Our energy consumption was 7% lower in 2022 than 2021 also as a result of lower production levels.

In 2022, the energy intensity of INEOS chemicals was, on average, 6.58 GJ/t compared to 6.61 GJ/t in 2019. Despite the implementation of continuous optimisation and disruptive improvement projects at our sites, our energy intensity improved by a relatively modest amount due to lower production levels suppressing our overall efficiency. This intensity value is based on final energy consumption, including fuels, electricity, steam, and other utilities at INEOS chemicals sites. It excludes INEOS' automotive, oil and gas, brine, trading and shipping, and pipeline activities.

Energy footprint across all businesses worldwide



As part of our 2030 emissions reduction strategy, we continuously investigate and implement measures to optimise the use of energy in our operations and to substitute fossil fuel sources. For instance, our businesses and sites are switching to cleaner energy sources by co-firing hydrogen, using biogas to replace natural gas, and procuring green power through power purchase agreements (PPAs) and their own investments.

ENVIRONMENT

A new solar project: renewable power purchase agreement signed by O&P USA

INEOS | CASE STUDY #2

INEOS Olefins & Polymers USA has announced it has entered into a renewable power purchase agreement which will enable the construction of a new 310 MW solar project located in north central Texas.

The INEOS Hickerson Solar Farm will be constructed, owned and operated by a subsidiary of NextEra Energy Resources, LLC, the world's largest generator of renewable energy from wind and sun and a world leader in battery storage. The entire output of the new solar project will be dedicated to INEOS O&P USA and is projected to cover the net purchased electricity load of all 14 of INEOS O&P USA's manufacturing, fractionation and storage facilities in the US.

The new solar project will be located in Bosque County, Texas, and is ultimately expected to produce 730,000 MWh of clean energy annually–the equivalent of over 68,000 homes' annual electricity use–and is expected to reduce greenhouse gas emissions by more than 320,000 tonnes per year.

INEOS Olefins & Polymers USA announces renewable power purchase agreement with NextEra Energy Resources for new solar project

> "INEOS O&P USA seeks to be a bellwether of what the petrochemical community can do to adopt renewable energy among its long-term energy demands, and this is one of many important steps being taken globally to reduce the carbon footprint of all the INEOS businesses."

Mike Nagle,
CEO, Olefins and Polymers USA

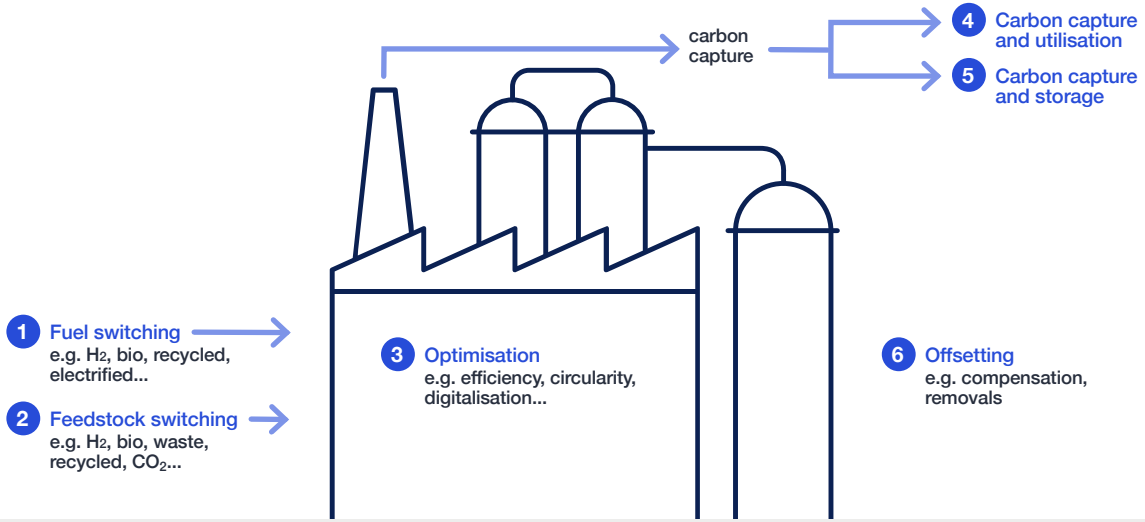
2.1.4 Our roadmaps and targets

At INEOS we recognise six main pathways to achieve net-zero emissions

In 2020, INEOS implemented a 2030 roadmap protocol recognising six net-zero pathways, as detailed in our 2021 sustainability report. Our 2030 roadmaps are built around the first five active abatement pathways, leaving the sixth (offsetting) for neutralising unabated emissions to reach net zero closer to 2050.

The protocol has helped INEOS sites draw up dynamic, realistic 2030 roadmaps, using 2019 as reference year. This baseline is recognised for its accurate, complete, and consistent data for all INEOS sites, and is subject to recalculation to reflect structural changes in the company following the all-year/same-year approach of the GHG Protocol.

Reduction options in each of the five active abatement pathways are assessed and arranged into realistic roadmaps for each site, based on economic and technical feasibility. Each site roadmap is signed off at business board level and submitted to INEOS group. As well as aggregating the reduction measures per pathway, organic growth or contraction is reflected as an increase or decrease in emissions in line with the GHG Protocol, where new builds are included with their estimated GHG emissions impact.



2.1.4 Our roadmaps and targets

(continued)

INEOS has set a group-wide target to reduce scope 1 and 2 emissions by 33% by 2030.

Following this bottom-up approach that builds on detailed input from all sites, INEOS has set a group-wide target to reduce scope 1 and 2 emissions by 33% by 2030. Transitioning to low-carbon energy is expected to reduce emissions by 24%, optimisation is expected to reduce emissions by 11%, and expanding carbon capture is expected to reduce emissions by 3%. Switching to alternative feedstock will not bring large reductions in scope 1 and 2 emissions but will make a significant contribution to reducing product carbon footprints and scope 3 emissions, in the future. This puts us on track to hit our 33% target, while allowing for growth and new builds.

Examples of our roadmap projects	Location	Energy type	Energy reduction [GJ/y]	GHG reduction [tCO_2-eq/y]
Engie PPA delivering wind power to INEOS sites with a contract duration of 10 years	Belgium, Germany, Norway	Electricity	-	200,000
RWE PPA delivering wind power to INEOS sites with a contract duration of 10 years				
Eneco PPA delivering wind power to INEOS sites with a contract duration of 10 years				
Nuclear PPA delivering nuclear power to one of our North American sites	USA	Electricity	-	123,000
Installation of a larger oxidation reactor, reconfiguration of the reactor's heat recovery system, and revamp of the process air compressor train	Indonesia	Electricity	91,000	20,000
Installation of a new salt plant that uses mechanical vapour recompression instead of conventional steam evaporators	France	Steam	828,000	60,000

2.1.4.1 Transition to lower carbon energy

The potential of hydrogen in the economy

Europe has proposed scaling up renewable hydrogen production to 10 million tonnes by 2030, and other major regions such as North America and Asia have similarly ambitious plans to expand low-carbon hydrogen production to reduce emissions. INEOS is well positioned to take a leading role in the emerging low-carbon hydrogen market as it is currently Europe's largest operator of electrolysis through its INEOS Inovyn business.

INEOS launched a new hydrogen business to develop and build green hydrogen capacity across Europe in November 2020 and has plans to invest €2 billion in electrolysis projects across Europe, starting with projects in Norway, Germany, and Belgium, and looking to invest further in the UK and France. In 2022, we selected Atkins to design a world-scale low-carbon hydrogen plant at our Grangemouth site that is expected to reduce our annual emissions by 1 million tonnes once up and running in 2030.

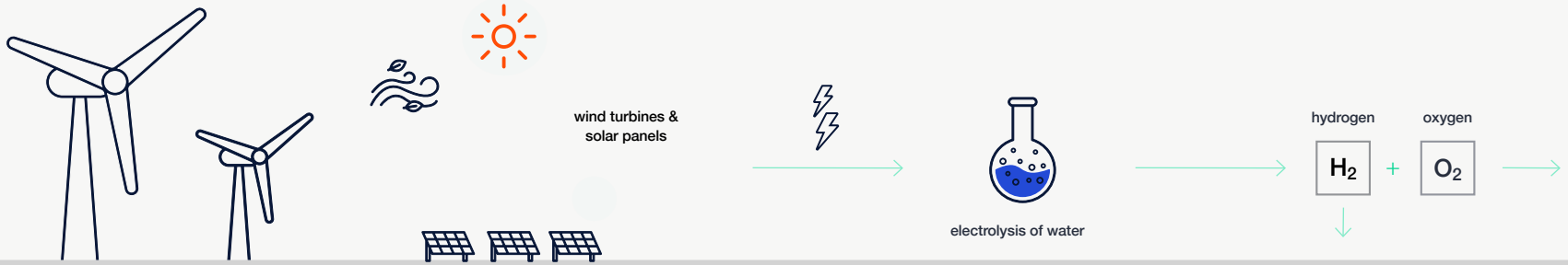
Developing clean hydrogen as a fuel

Hydrogen has been used for a long time in the chemical industry as feedstock in the manufacture of products such as fertilisers. There is also growing interest in hydrogen and its derivatives, such as ammonia and methanol, as a zero-carbon energy source in the chemical industry and wider economy, for example in transportation.

Each year INEOS produces more than 400,000 tonnes of hydrogen through its chlor-alkali, refining and cracking operations. This is enough to fuel 300 million miles of heavy goods vehicle travel: the equivalent of 12,000 trucks circumnavigating the world. Hydrogen is essential for our transition to net zero by 2050 and can contribute significantly to our 2030 reduction target.

While the key advantages of hydrogen lie in it being a zero-carbon energy carrier and the fact that it can be used to store energy, it is important to note that it should be produced in a low-carbon manner, such as electrolysis with renewables, or through steam methane reforming (SMR) with carbon capture and storage (CCS).

In addition to being Europe's largest operator of electrolysis technology, INEOS also owns hydrogen storage infrastructure. The two combined can help buffer the intermittency of renewable energy. As a producer and user of hydrogen, we are in a unique position to use our existing co-produced hydrogen to kickstart the hydrogen economy for INEOS, Europe, and the wider world.



ENVIRONMENT

Low-carbon hydrogen manufacturing plant at INEOS O&P UK's Grangemouth site

INEOS | CASE STUDY #3

INEOS Grangemouth is taking the next significant step in its roadmap by inviting major engineering design contractors to tender for the next stage of the design of a world-scale, carbon-capture-enabled hydrogen production plant and major associated infrastructure.

INEOS has already committed over £500m to active projects across the site including investment in a New Energy Plant which is due to commission in late 2023. This power plant will employ highly efficient technology to supply energy to all our site operations and will drive down emissions by at least 150,000 tonnes of CO_2 per annum. This new power plant will then be converted to run on hydrogen which will further reduce CO_2 emissions.

INEOS at Grangemouth announces plans to construct a Low-Carbon Hydrogen Manufacturing Plant

> "The construction of a world scale low carbon hydrogen plant is an exciting development at Grangemouth and one that will deliver on our commitment to achieve net zero by 2045. It builds on the significant CO_2 reductions we've already made at Grangemouth since we acquired the site in 2005."

Andrew Gardner
Chairman, INEOS Grangemouth

2.1.4.2 Continuous process optimisation and step changes

Continuous improvement in efficiency and reduction of energy use and carbon emissions is standard practice across INEOS.

Our sites implement energy management systems in accordance with standards such as ISO 50001. Additionally, they participate in regulatory and voluntary energy assessment schemes, such ESOS in the UK, and EBO in Flanders (Belgium), and have regular energy audits conducted in compliance with INEOS Group Guidance Notes. These comprehensive measures allow us to assess the energy performance of our sites on a regular basis so we can identify areas for continuous improvement and implement incremental and transformative changes. This helps us achieve our climate targets, reduce energy consumption, and enhance the sustainability and competitiveness of our business.

INEOS is pursuing a wide range of optimisation opportunities, such as new methods that improve process efficiency, innovative solutions for heat and power integration, waste heat valorisation, and more selective catalysts. Our projects encompass:

- Efficiency improvements in our power plants, such as at our Grangemouth site.
- Optimisation of the steam networks at our sites with substantial steam consumption.
- Integrated waste heat valorisation, such as at our Tavaux site through mechanical vapor recompression.
- Electrification of low-temperature processes, as planned for our operations in Antwerp.
- Minimisation of waste heat from processes at our sites.
- Recovery and reuse of off-gasses in utilities, such as at our Chocolate Bayou site.
- Flaring reduction, such as envisioned for our Lavera site.
- Cooling tower optimisation, such as at our Cologne site.
- Advanced process control strategies, such as the advanced distillation columns at our Sarnia site in Canada.
- Catalyst improvements to enhance process efficiency.

Each INEOS site is measured against the previous year and our 2019 baseline, as well as compared with other manufacturing sites in the business, and benchmarked for its profile in a region or country. At a higher level, emissions and energy data are ranked per INEOS business, highlighting potential areas of improvement and measures to replicate across the group.

INEOS' carbon and energy footprint for each business is reviewed regularly by the board. Progress against site 2030 roadmaps is part of the sustainability reporting at each business executive committee meeting.

Energy audit preparation and on-site workshops

ENVIRONMENT

Project Electra: INEOS Inovyn's green technology at Rafnes

INEOS | CASE STUDY #4

INEOS Inovyn will develop and install new world leading technology to electrify the production of vinyl chloride at the Rafnes site, making it possible to replace fossil energy with renewable electricity. The project has been named "Electra".

Project Electra will reduce CO_2 emissions by up to 21,000 tonnes per year at Inovyn's site in Rafnes. It builds upon groundbreaking technology that fully electrifies the production of vinyl chloride. Together with ongoing project Aquarius, Electra will allow for a 40% reduction of Inovyn's CO_2 production in Norway.

Inovyn takes the next step in developing and implementing green technology at its petrochemical site in Rafnes

> "The project is part of a roadmap for the stepwise transition of our activities in Norway in which the use of renewable hydropower will play an important role."

Nils Eirik Stamland
Project Director and Chairman, Inovyn Norge

2.1.4.3 Carbon capture, utilisation and/or storage (CCU and CCS)

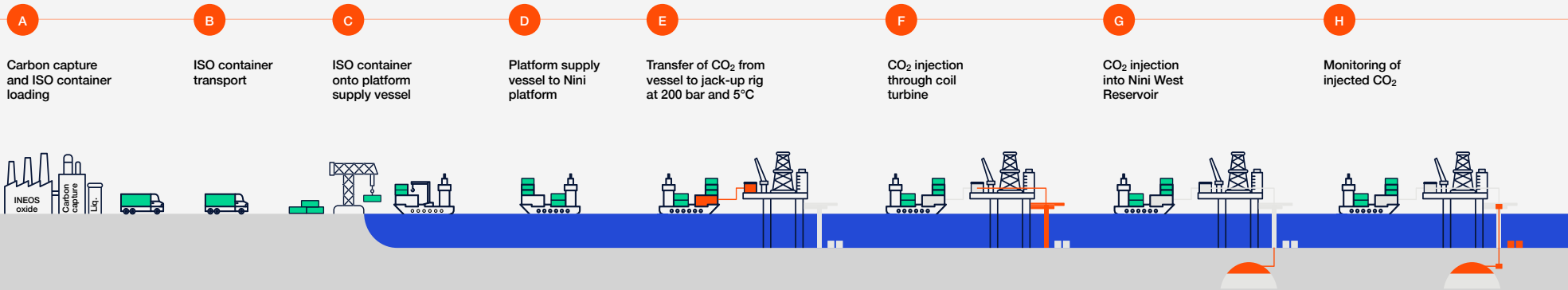
Although INEOS' primary goal is to cut emissions at source, we recognise that CCS will continue to play an important role in mitigating GHG emissions in the short run, alongside CCU in the longer run. Indeed, over the past two decades, INEOS has been capturing GHG emissions at our plants in Antwerp (Belgium), Tavaux and Lavera (France), and Cologne (Germany), removing over 300,000 tonnes of CO_2 a year, which is equivalent to the annual emissions from around 30,000 cars.

We are a leading partner in the Greensand project which has recently demonstrated that it is possible to transport captured CO_2 by ship from our Antwerp site in Belgium across borders to our depleted oil fields in the Danish North Sea to store the CO_2 permanently. During this world-first demonstration, Greensand overcame legal barriers after the governments of Denmark, Belgium, and Flanders signed cross-border agreements for the transportation of the CO_2. Greensand was also awarded a full CO_2 exploration licence in 2022 to mature the licence for permanent storage. The project plan is to store up to 8 million tonnes of CO_2 by 2030.

INEOS is also participating in the Antwerp@C project in Belgium, which was selected for funding from the Connecting Europe Facility in December 2022 to develop infrastructure in the Port of Antwerp-Bruges that will enable industrial sites to transport, liquify, and export captured CO_2. In addition, in Scotland we are a partner in the Acorn CCUS project and in the US we are one of 11 companies supporting the development of a large CCUS hub in Texas.

Our ultimate goal is to capture CO_2 and derive value from it. To this end, we are working with partners in the port of Antwerp-Bruges, to build a demonstration plant to make clean fuel from captured CO_2 and green hydrogen. The project will use INEOS' expertise in electrolysis, hydrogen, and carbon capture, and if successful will be a breakthrough in the path towards large-scale production of zero-emission liquid fuels.

INEOS Greensand CSS project



2.1.4.4 Transition to sustainable feedstocks

Several INEOS businesses continue to substitute fossil-based raw materials with recycled and bio-based feedstocks at commercial scale.

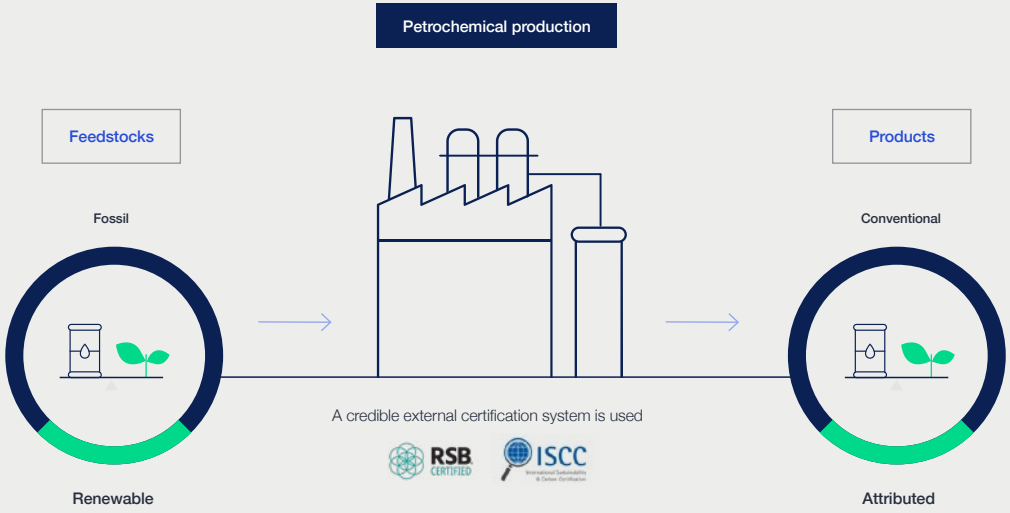
For example, at our olefins plant in Cologne (Germany), biomass co-produced by the wood pulping industry has been successfully converted into bio-olefins. Similarly, our Inovyn plant in Tavaux (France) is producing bio-attributed epichlorohydrin (REODRIN™) from renewable feedstocks that do not compete with the food chain, reducing GHG emissions by up to 70% compared to the fossil-based equivalent. INEOS has also started producing commodity chemicals, such as phenol, acetone, styrene, and PVC, with bio-based feedstocks.

INEOS' bio-attributed products can be made with 100% substitution of bio-feedstock on a mass-balance basis and provide significant GHG savings in the value chains of our products. It results in products which have a proven positive impact on the environment without sacrificing product performance.

Using alternative feedstocks can also have a positive impact on INEOS' emissions from its operations by reducing non-biogenic emissions released from chemical reactions or when process steps can be avoided by using more refined or recycled feedstocks. This is why the use of alternative feedstocks is included in our 2030 roadmaps, even if the impact of this pathway on scope 1 and scope 2 emissions is modest.

The renewable feedstock sources are certified by the RSB and ISCC PLUS to assess that they are managed in accordance with their sustainability criteria.

The renewable feedstock sources are certified by the RSB and ISCC PLUS to assess that they are managed in accordance with their sustainability criteria.



2.1.5 Emission reductions in the value chain

INEOS is taking action to reduce its value chain emissions through sustainable procurement, innovative product development, industrial symbiosis, and optimisation of our logistics.

Value chain emissions

We have a company-wide supplier code of conduct in place that requires our suppliers to manage their emissions consistently with Paris obligations. We monitor compliance with the code through our supplier questionnaire.

We have developed an INEOS science base for our businesses to calculate product carbon footprints and we are developing scope 3 reporting in all material categories (as outlined in section 2.1.2.2), which will inform our strategy to reduce value chain emissions.

We have launched many low-carbon products that reduce emissions on a life cycle basis. In addition to the bio-attributed products mentioned above, our low-carbon and carbon-neutral PTA (PTAir™ and PTAir Neutral™) help partners in the polyester value chain reduce emissions.

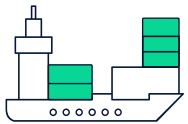
Our procurement and business directors meet regularly through our cross-business networks to develop strategies and share best practice on advancing sustainability in our value chain. This includes sourcing alternative feedstocks and developing sustainable products. We require our suppliers contractually to be as efficient as possible when providing services on our behalf. Together with efficient transport planning, this helps us maintain safe and sustainable procurement and reduces emissions and costs from logistics.

We continue to encourage our customers to co-locate at our industrial sites or interconnected locations to create efficient chemical clusters that provide opportunities for industrial symbiosis. We do this in port areas such as Antwerp (Belgium), Lavera (France), Rosignano (Italy), Rafnes (Norway), Grangemouth (UK), and Houston (US). Additionally, in Cologne (Germany) we are a member of the Produktionsverbund chemical network, which aims to close material and energy loops and valorise waste and by-products, either through direct supply or delivery of product via pipeline.

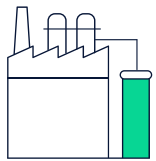
INEOS also pursues urban-industrial or cross-sectorial symbiosis at several sites, working hand-in-hand with nearby cities or communities, such as in Gladbeck or Antwerp, and with industries from other sectors, such as steel or cement. These INEOS clusters actively reduce emissions and energy in the value chain and contribute to the circular economy flagship initiative called Hubs for Circularity, which is a key pillar in Europe's roadmap towards achieving the circular economy and climate objectives in the Green Deal.

Our next preference to co-location or pipeline transport is to use a ship or barge, then rail and, finally, road. In all stages of transport and distribution, INEOS monitors the carbon footprint of its activities. As part of ongoing work with our service providers, we require training for drivers on safe and fuel-efficient driving.

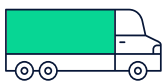
1 Responsible procurement of our raw materials



2 Energy and resource efficient production of our products



3 Safe and reliable transportation of our products to our customers



ENVIRONMENT

2.1.6 Climate-related financial risks and opportunities

INEOS acknowledges the need for consistent, comparable, clear, and reliable corporate disclosure of climate-related financial information. We outline the main climate-related risks and opportunities we face as a business, and how we manage them, in our group CDP disclosure, as well as in our main consolidated financial accounts for investors:

- INEOS Group Holdings
- INEOS Quattro Holdings
- INEOS Enterprises Holdings Limited

We are currently assessing our climate-related risks and opportunities in greater detail and conducting scenario analysis, so we are ready to make TCFD-based disclosures for our major UK entities next year. We will continue to strengthen our activity in this area to meet investor expectations and comply with mandatory reporting frameworks, such as the CSRD in the EU and SDR in the UK.

ENVIRONMENT

2.2 Circular economy: maximising resource efficiency and eliminating waste

Resource conservation and waste reduction are major societal and political challenges that demand a response from industry. Across INEOS our chemical sites aim to optimise material efficiency and use recycled or renewable materials as feedstock to cut waste and pollution.

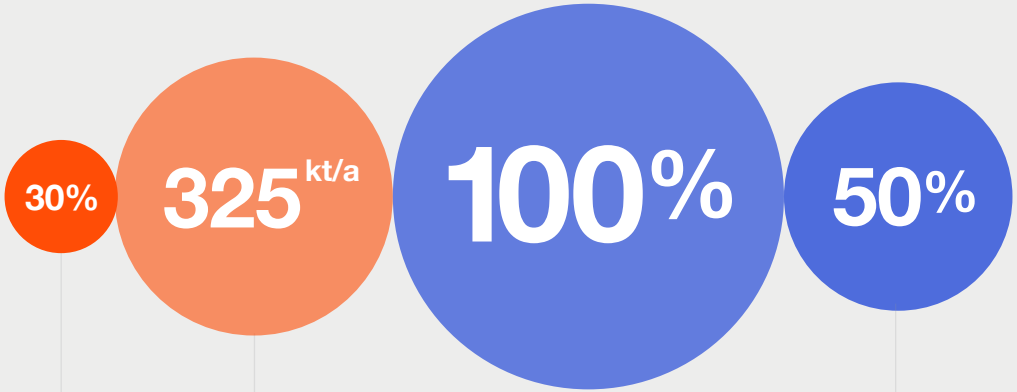
We contribute to the transition to a bio-based and circular economy by investing in bio-attributed and circular products that save resources, reduce greenhouse gas emissions, and create opportunities for our customers and businesses to meet consumer demands and enter new markets. We also work to improve the recyclability of our products, so they can be reused, or recycled to the maximum extent possible, reducing landfill, incineration, and lowering the demand for fossil-based raw materials.

This is a particular priority for our businesses that make products that reach end-consumers, such as polyethylene, polypropylene, polystyrene, and PVC. The move to a circular economy will maximise the valuable contribution that such plastics make to society, while minimising their environmental impact.

We have set ambitious targets to incorporate recycled material into our polymers and ensure our polymer products are 100% recyclable by 2025. We are on track to exceed these targets and have made a new pledge to incorporate at least 850,000 tonnes of recycled and bio-sourced material per annum into our polymers by 2030.

The INEOS pledge

2025 pledge



We will ensure our products destined for polystyrene packaging in Europe contain at least 30% recycled content on average

We will incorporate 325 kt/a of recycled material into our products

We will ensure 100% of our polymer products can be recycled

We will offer a range of polyolefin (PE and PP) products for packaging applications containing at least **50%** recycled material

2030 pledge

We will incorporate at least 850,000 tonnes of recycled and bio-sourced polymer into our polymer products by 2030

2.2.1 Materials

INEOS' main raw materials derive from natural gas and crude oil, which contain the hydrogen and carbon molecules we need to make many vital chemical products.

As well as using natural gas to make ammonia, for instance, we use ethane derived from natural gas in our steam crackers to produce ethylene, which is the building block for a wide range of our chemicals. Similarly, we use materials derived from crude oil, such as naphtha that we crack to produce ethylene, and aromatics that we use to make many of our chemicals and plastics.

INEOS recognises that fossil resources are limited and valuable, and yet they often end up in landfill or incineration. Extracting these resources also has a significant environmental footprint. This is of particular concern in value chains where resources are used in short-lived applications, such as single-use plastic items. INEOS is committed to using raw materials as efficiently as possible and transitioning to renewable and recycled materials, when available and affordable, so we can continue to make products of vital importance to modern life, while minimising our environmental impact.

At our sites we work to optimise the material efficiency of our processes and exploit opportunities to valorise waste and by-products, whether within our own operations or in conjunction with neighbours through industrial symbiosis. Our sites are located in highly integrated industrial clusters, and we participate in initiatives such as the Produktionsverbund network in Germany and the Hubs for Circularity programme in the EU to close material loops with industrial partners.

We are investing in reusing co-produced hydrogen in our processes as well as producing green hydrogen, which will be important recycled and renewable feedstocks for the chemicals industry in the future. In Norway, for instance, we are advancing with plans to build a 20 MW green hydrogen production facility at our Rafnes site. Produced from water and renewable energy, green hydrogen does not rely on finite fossil resources or create CO_2 emissions.

In line with our 2025 and 2030 polymer targets, we are also incorporating recycled and renewable materials into many of our products (detailed below) to reduce our reliance on fossil fuels, divert plastic waste from landfill and incineration, and improve the carbon footprint of our products.

2.2.2 Products

2.2.2.1 Incorporating recycled and renewable content

INEOS has launched more than 30 product grades that contain over 50% recycled content. Many of these products match the performance of new materials. This includes our Recycl-IN range of mechanically recycled polyolefins that compound recycled plastic waste with highly engineered virgin resins, as well as our Terluran ECO range of mechanically recycled ABS–both of which offer drop-in performance with up to 70% recycled content. We have also launched a mechanically recycled polystyrene with 100% recycled content behind a functional barrier that makes it suitable for food contact applications.

We are currently working with partners that specialise in advanced recycling (also known as chemical recycling) to thermally convert plastic waste into feedstock for our crackers at Cologne, enabling us to produce a wide range of virgin-quality products from recycled materials. We are also participating in the NEXTLOOPP project in the UK to develop tailored, food-grade recycled polypropylene solutions by mixing mechanically recycled polypropylene from the NEXTLOOPP process with virgin polypropylene.

As well as developing recycled product ranges, we are rapidly expanding our range of polymers and chemicals made from renewable materials. We introduced BIOVYN™—the world's first bio-attributed PVC—in 2019, and we now offer bio-attributed versions of many of our other products, including styrene (Styrolux ECO and Styroflex ECO), phenol (INVIRIDIS™), polyolefins, ethylene oxide, and epichlorohydrin (REODRIN™).

We attribute recycled and renewable content to our products on a mass balance basis, with certification from organisations such as ISCC PLUS and RSB. We also offer RecyClass certification for our mechanically recycled ranges. Our sustainable products reduce our reliance on fossil materials and deliver significant greenhouse gas savings compared to equivalents–in some cases reducing emissions by over 100%.

ENVIRONMENT

INEOS Oxide launches 100% bio-attributed ethylene oxide

INEOS | CASE STUDY #5

Ethylene oxide (EO) is an important building block for a wide variety of derivative products, which are used in the production of detergents, thickeners, solvents, and plastics. EO is consumed internally by INEOS Oxide in the production of intermediates such as glycols, ethanolamines, glycol ethers, and ethoxylates.

Both RSB (Roundtable on Sustainable Biomaterials) and ISCC PLUS (International Sustainability and Carbon Certification PLUS) have certified that the new product is 100% renewable on a mass balance basis and delivers a greenhouse gas saving of over 100% compared to conventionally produced EO.

This new product reaffirms INEOS' commitment to developing more sustainable ways to produce the materials we use and rely on every day. In addition to bio-attributed EO, INEOS Oxide is also developing a suite of other sustainable products with reduced carbon footprint.

INEOS launches new bio-attributed ethylene oxide, completely substitutes fossil feedstock with renewable biomass

> "Our new EO delivers identical performance to traditional feedstocks–the fundamental performance of the product is not changed, but it comes with huge savings in fossil fuel usage and greenhouse gas emissions."

Tobias Hannemann
CEO, INEOS Oxide

2.2.1.2 Designing for circularity

Plastics have many beneficial properties and make a significant contribution to modern life but currently only about 20% of plastic waste is recycled globally.

As a plastics producer, INEOS recognises that designing products to be recyclable is an essential part of the solution to improving recycling rates and reducing end-of-life impacts.

We have pledged to ensure that all our polymers are recyclable by 2025. Through our Design for Recycling initiative, we are working with value chain partners to develop mono-material plastic applications that are easier to recycle. We are investing in Machine Direction Orientation technology to produce recyclable films using fewer polymers and we are switching to carbon-free pigments in our black plastics that can be detected by sorting facilities.

In addition, we are exploring the use of watermarks on products to improve sortability as part of the HolyGrail 2.0 project.

More broadly, INEOS manufactures many products that make an important contribution to the circular economy by facilitating recycling and improving resource efficiency in society at large. This includes chlorine and caustic soda that are vital for purifying wastewater, light-weight plastics that help reduce the material content in many applications, and coatings that extend the life of buildings, vehicles, and infrastructure.

ENVIRONMENT

An INEOS world first: recyclable flexible packaging film made from more than 50% recycled plastic waste

INEOS | CASE STUDY #6

In 2022, INEOS O&P Europe announced a major investment in state-of-the-art technology that will enable it to work with partners to develop more recyclable, single polymer flexible packaging products, replacing difficult-to-recycle multi-material products that combine polymers from different chemical families. These packaging films play an important role in society, increasing food shelf life and providing a low carbon solution for transporting goods.

INEOS was the first raw material supplier to invest in this Machine Direction Orientation technology, developed by Hosokawa Alpine, a pioneer in this area. This investment alone could help to prevent around one million tonnes of waste from being sent to landfill each year.[1] However, in May 2023, the business went further, announcing a world first: making an ultra-thin, rigid film for recyclable flexible packaging, containing Recycl-IN resins with more than 50% recycled content.

INEOS' Recycl-IN range compounds recycled plastic waste with highly engineered new resins to help partners produce high quality products while increasing recycled content.

As well as helping to create a circular economy, using Recycl-IN resins also reduces carbon emissions by 25–50% compared to the use of virgin feedstocks.[2]

1 Source: Circular Economy for Flexible Packaging, 2016. CEFLEX is a collaboration of over 180 European companies, associations and organisations representing the flexible packaging value chain.

2 Independently verified by third parties.

"These initiatives demonstrate our commitment to taking real action to create a more sustainable future. Combining this leading technology with Recycl-IN resins enables our business to make a unique contribution to the development of a circular economy for these products. I'm excited about the prospect of working closely with our partners to make a real difference."

Rob Ingram
CEO, INEOS Olefins and Polymers North

INEOS world first with recyclable flexible packaging film made from more than 50% recycled plastic waste

2.2.3 Waste

INEOS is committed to monitoring and reducing its waste footprint and safely managing its hazardous waste to protect the natural environment, comply with national regulations, and conserve resources.

As a partner in the transition to a circular economy, INEOS plays its role in optimising resources and eliminating waste where possible. We are dedicated to reducing the environmental impact of our operations on air, soil, and water and we strive to minimise the consumption of virgin materials and the volume of waste generated through our activities.

Across INEOS we seek to optimise resource efficiency and minimise waste at our sites by following the principles of the waste hierarchy: reduce, reuse, recycle, recover (energy). In 2022, 18% of all waste generated at our sites was recycled or reused, and another 20% was sent for energy recovery.

Our sites have environmental management systems in place in line with ISO 14001 to identify and implement opportunities to reduce material consumption and valorise waste and by-products.

4Rs

Reduce
Lowering waste and energy produced

Reuse
Using materials repeatedly

Recycle
Using materials to make new products

Recover
Recovering energy from waste

Reducing, reusing, and recycling waste is standard practice across our business and sites. When on-site recycling or reuse is not possible, by-products are often valorised by third parties.

Remaining waste that cannot be reused or recycled is shipped to specialist waste treatment facilities. Stringent procedures and safety checklists are standard at all sites.

All personnel working with, handling, or transporting hazardous materials and waste are required to have proof of the appropriate specialist training.

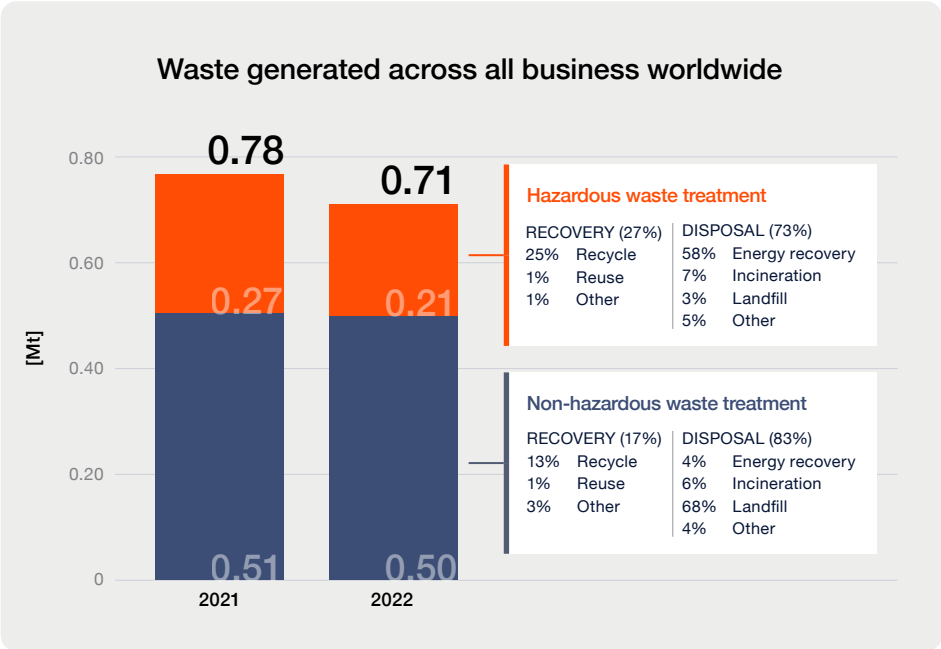
2.2.3.1 Waste footprint

All our manufacturing sites monitor their waste production and handling, classifying waste as hazardous or non-hazardous, and recording how and where waste is treated.

Waste management is heavily regulated, and requirements will continue to get stricter as society moves to a circular economy. To inform our waste management strategy, we track our waste footprint on an annual basis, gathering data on the quantity, classification, and destination of waste according to the GRI 306 standard.

All our manufacturing sites monitor their waste production and handling, classifying waste as hazardous or non-hazardous, and recording how and where waste is treated. They enter data into our shared digital platform that is then consolidated to produce the group figures below. We also consolidate data at the level of our businesses to monitor performance internally. INEOS' 2022 waste footprint is based on a full response rate from our sites, including jointly controlled sites (JVs and JOs) at equity share.

In 2022, we generated a total of 714 kt of waste across our sites, 29% of which was classed as hazardous. In comparison to 2021, INEOS' waste generation decreased by about 8%: 20% of all waste generated was recovered (i.e. through reuse, recycle or other recovery operations), while 80% was disposed of (through incineration, landfilling or other disposal operations). Changes at site and business level are mainly due to an overall decrease in production levels but are also affected by factors such as one-off events, turnarounds, maintenance, and construction projects.



2.2.3.2 Waste management

We seek to minimise waste generation in the first instance and recover waste where possible through reuse (without processing) and recycling (after treatment). We consider incineration (with or without energy valorisation) and landfilling to be a last resort. Across INEOS worldwide, waste is handled in compliance with local regulations. To be transparent and aligned with international reporting standards, we monitor and disclose our waste generation.

When waste is handled by a third party off site, we ensure that the service and contractors follow the applicable regulations, whether on waste, SHE, or labour, in compliance with our Supplier Code of Conduct through external audits as appropriate. We collect non-hazardous waste fractions separately at our sites for recycling by third parties.

Deriving value from waste and by-products

We identify and implement opportunities to valorise waste and by-products at our sites.

For example:

- Reusing co-products on-site or exporting them as raw material to third parties at many INEOS sites.
- Selling waste as a by-product to be recycled or reused as refuse-derived fuel at INEOS Compounds.
- Achieving almost 100% waste and energy recovery at INEOS Automotive, by strictly monitoring the loading and unloading of hazardous materials in compliance with the ADR regulation.
- Implementing tools to facilitate industrial symbiosis, e.g. at Hull (UK) as a result of the European Horizon 2020 project EPOS.

2.2.4 Waste in the value chain

As a plastics producer, INEOS is committed to reducing the impact of end-of-life plastic waste that can end up in landfill or incineration, or even leak into the environment. As well as incorporating recycled content into our own products and designing our products to be recyclable, we participate in voluntary initiatives to recover and recycle waste and are investing in new technologies that will make it possible to recycle more plastic.

INEOS participates in VinylPlus®, a voluntary initiative of the European PVC industry that has recycled over 8 million tonnes of PVC since 2000, saving over 16 million tonnes of CO_2. The scheme recycled 813,266 tonnes of PVC waste in 2022 and aims to recycle 1 million tonnes by 2030.

INEOS is also investing in a range of advanced recycling technologies that can process waste streams that could not otherwise be recycled and that can produce new plastics of virgin quality that are suitable for high performance applications. This includes our Infinia pilot plant that converts unrecyclable PET into virgin quality feedstock, as well as our forthcoming TruStyrenyx facility that will convert polystyrene waste back into high purity styrene monomer. We have also announced an agreement with Plastic Energy to develop 100,000 tonnes per annum of recycled raw materials from plastic waste for use in our Cologne cracker from 2026.

ENVIRONMENT

INEOS Aromatics' Infinia–enabling circularity for unrecyclable PET plastic waste

INEOS | CASE STUDY #7

infinia

Infinia, an INEOS Aromatics' technology, will enable currently unrecyclable PET plastic waste–such as multilayer food trays and coloured bottles–to be diverted from landfill or incineration and instead transformed back into new, virgin-quality feedstocks.

The new feedstocks are interchangeable with those made from traditional hydrocarbon sources and can be used to make new polyester products that can be recycled again and again.

Infinia is complementary to mechanical recycling, dealing with PET waste that is currently difficult or impossible to process using mechanical methods. It will play an essential role in helping the polyester industry meet EU recycled content requirements.

The pilot process is under way, tasked with proving the technology; after which the business will consider the next steps for commercialisation. If deployed at scale in several facilities the technology has the potential to prevent billions of PET bottles and trays from ending up in landfill or incineration every year.[1]

1 Production of recycled PTA from various facilities at the scale of one existing PTA plant (producing more than 1 million tonnes), would require feedstock totalling many millions of tonnes of opaque and difficult-to-recycle PET packaging. Based on the average weight (from 10 to 30 grams) of specific packaging types suitable for this technology, this feedstock would equate to billions of packaging items.

Infinia | INEOS Aromatics

ENVIRONMENT

2.2.4.1 Mechanical recycling

Product innovation is at the heart of our business.

In mechanical recycling, plastic waste is physically sorted, shredded, cleaned, and processed into smaller pieces without changing the basic structure of the material. This is then reprocessed back into products and is the quickest route to increasing recycling rates.

As set out above, our businesses have already launched more than 30 new product grades that contain over 50% mechanically recycled content. Many of these are newly developed high-performance products that match the performance of virgin materials.

One of the main bottlenecks in this approach, however, is the economic collection and recovery of sufficient volumes of plastic waste of the right quality. To this end, INEOS is working with partners to help stimulate investment in recovery infrastructure in Europe.

2.2.4.2 Advanced recycling

Unlike mechanical recycling, advanced recycling converts hard-to-recycle plastic waste back into monomers or feedstock, extending the range of new products the recycled material can be used in. Among the various advanced recycling technologies, we distinguish between dissolution, depolymerisation, pyrolysis, and gasification processes.

Dissolution technology

Waste polymers can be purified by dissolving them in a solvent and reducing or eliminating additives, colours, and impurities. The technology is still in the early stages of commercial development.

Depolymerisation

In depolymerisation, polymers are recovered and separated from consumer waste streams then unzipped back to the starting monomers from which they were made. These can then be purified and repolymerised to make high purity virgin resin. In a world first, INEOS Styrolution has proven the concept for polystyrene. It has demonstrated full circularity by depolymerising waste polystyrene back to styrene, then repolymerising it to make products identical to fossil carbon-based materials. We are now working with several partners to commercialise the process using state-of-the-art technologies.

Pyrolysis

Another approach is pyrolysis of mixed plastic waste, in which mixed plastic waste is converted to an oil via a thermal cracking process. This oil is further purified and processed, then used as feedstock in steam crackers to produce the building blocks (ethylene, propylene, butadiene, benzene) necessary for polymer and chemical production.

This recycling method is developing rapidly, and INEOS is at its forefront. The advantage is that it can process a wide range of post-consumer mixed plastic waste that could not otherwise be recycled and would end up in landfill or be burnt.

We have recently demonstrated the technology at commercial scale by feeding oils derived from mixed plastic waste into our large olefins unit in Cologne, Germany. The process and resulting products have been certified by the ISCC, an independent accreditation body.

Also in 2021, INEOS O&P US received ISCC PLUS certification across many of its sites including three sites in Texas and California following the successful commercial scale trials of advanced recycling production through pyrolysis.

Gasification

Mixed plastic wastes can also be converted by gasification to a synthesis gas which can then be further converted into polymers and other products. We are exploring this approach with academic and industry partners because it may provide a large scale, flexible, cost-effective way of reusing difficult-to-recycle mixed waste streams.

Gasification offers the highest flexibility and scalability in terms of waste, feed and recyclate. However, it requires significant investment and development, for which joint industry collaboration will be needed. These advances have been made by our multidisciplinary research teams, formed to bring material science, product design, and applications and process knowledge together for a common purpose.

ENVIRONMENT

Polystyrene: circular recyclability at its best

INEOS | CASE STUDY #8

Polystyrene's high-performance properties, combined with its recyclability and ease of processing, set it apart as an exemplary model of circularity.

Unlike many other polymers, polystyrene can be recycled multiple times without compromising its inherent properties. This attribute alone sets it apart, making it an ideal material for closed-loop systems, where waste is collected, recycled, and subsequently used again for identical applications.

Polystyrene can be recycled through all major recycling technologies such as mechanical recycling, dissolution, depolymerisation, and pyrolysis, offering flexibility in recycling processes.

Within the waste stream, polystyrene exhibits low contamination absorption, ensuring its integrity throughout recycling. It can be easily detected and sorted, maintaining purity and quality throughout the process. The consistency of polystyrene properties over time is remarkable, avoiding common issues such as yellowing, often seen in recycled polymers.

Polystyrene is well-suited for food-contact to food-contact recycling. Recycled polystyrene products match the quality and performance of their conventional counterparts, eliminating the need for downcycling. This characteristic enables the recycled material to be utilised in the same applications, exemplifying true circularity.

The recyclability of polystyrene not only reduces waste but also significantly diminishes the product's carbon footprint, thus propelling the shift to a low-carbon, circular economy.

INEOS Styrolution has successfully commercialised mechanically recycled polystyrene for food-contact applications, expanding capacities to engage customers and end-consumers in the plastics circular economy.

- MIDEA GER and INEOS Styrolution collaborate to create the first large-scale home-appliance closed-loop circular-economy system in the world
- INEOS Styrolution and COEXPAN claim food contact standards across all dairy formats using 100% mechanically-recycled polystyrene
- INEOS Styrolution presents industry-leading line-up of uncompromising sustainable polystyrene

2.3 Water stewardship: tracking and reducing our water footprint

Water shortage affects every continent we operate in, so we have a duty to use water responsibly for the good of society and the natural environment.

INEOS is committed to using water sustainably and recognises the human right to water and sanitation.

As a Responsible Care company, we strive to protect water as a scarce resource, reduce emissions to water, and continually improve the water efficiency of our sites. We monitor our wastewater as a priority and evaluate its potential impact in accordance with local regulation. We work with local authorities to ensure compliance with safety measures and minimise the environmental impact of wastewater on water bodies and drinking water. This helps protect the natural environment and the wellbeing of our employees and people near our sites.

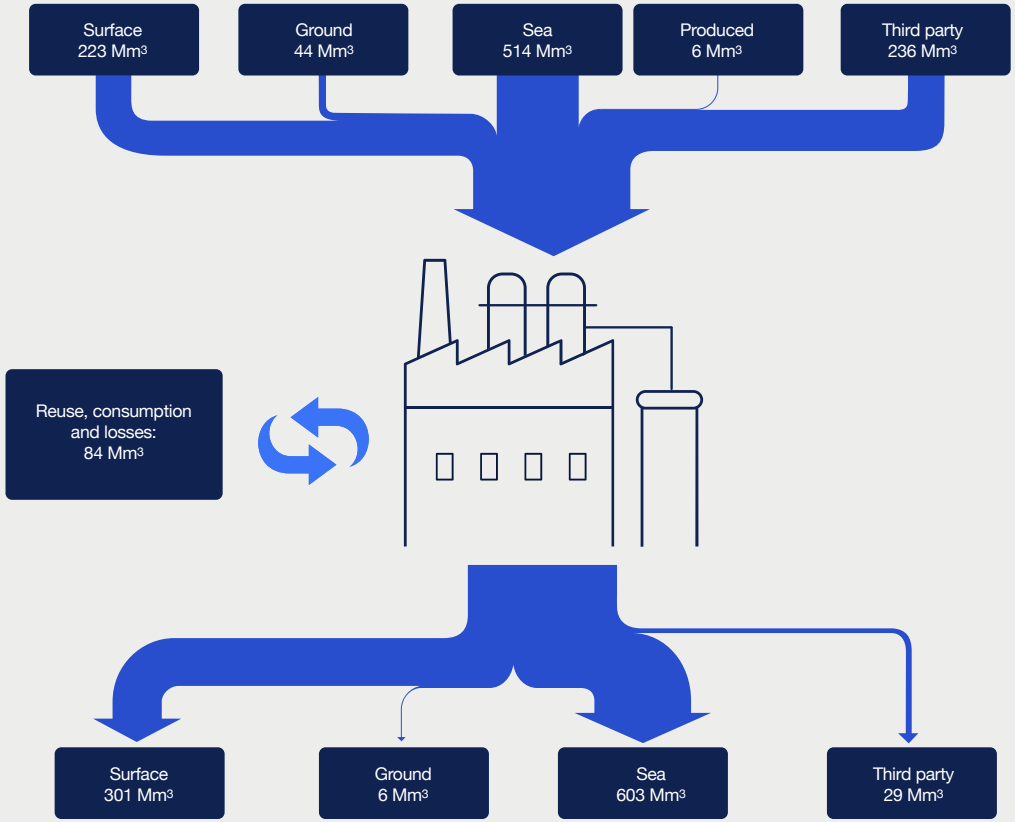
We have a company-wide system in place to track our water withdrawals and discharges, and many of our sites have environmental management systems in place in line with ISO 14001. We implement opportunities to strengthen our sustainable water management through recycling our process water, minimising our drinking water consumption, and optimising our handling, transport, and treatment of wastewater.

2.3.1 Water footprint

All INEOS sites monitor their water intake and output throughout the year. They enter data into our shared digital platform that are consolidated to produce the group figures below. We also consolidate data at the level of our businesses to monitor performance internally. INEOS' 2022 water footprint is based on a full response rate from our sites, including joint arrangements at equity share.

In 2022, our withdrawal and discharge of water amounted to 1,023 Mm^3 and 939 Mm^3, respectively. This means that 84 Mm^3 of the water we withdrew was consumed, i.e. was not discharged in the form of liquid. This includes water embedded in our products, e.g. brine, as well as evaporation losses from steam networks and cooling systems. INEOS' water withdrawals and discharges both decreased by 5% in 2022 compared to 2021, while production across INEOS decreased by 11%. This is mostly due to the base load of cooling systems, which are operated even during temporary plant shutdowns.

Total water withdrawal: 1,023 million m^3



Total water discharge: 939 million m^3

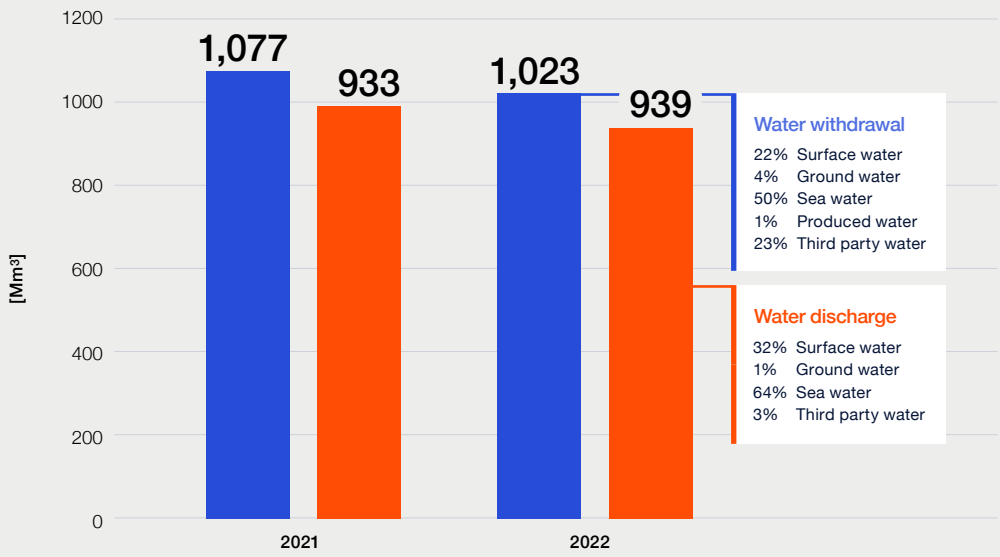
2.3.1 Water footprint
(continued)

Because process water comes into contact with our products, it must be sent for on-site of off-site wastewater treatment, unless it is reused in the process itself or valorised as a solvent or cleaning fluid. Cooling water, on the other hand, is contained in a separate system, so does not come into contact with products and is not subject to contamination. Regardless of regional differences, INEOS monitors the quality and quantity of process and cooling water in full compliance with local standards.

As well as monitoring where our water comes from, we also track where the water we discharge ends up. We differentiate between four discharge destinations: surface water, groundwater, sea water, and third-party water.

According to the site permit and local regulations, the water output quality is measured using various parameters, including temperature, pH, and effluent composition. This also includes other site-specific substances of concern as required. We take into account the receiving waterbody for bringing the quality of our water discharge to the required local specifications as temperature difference and effluent limits vary depending on the destination.

Water withdrawal and discharge across all businesses worldwide



2.3.2 Water management

We closely monitor data from all INEOS manufacturing sites to manage our water balance and optimise our water strategy.

Water consumption per site is calculated as the difference between withdrawal and discharge and this balance is shared with each INEOS business for appropriate water planning and actions. This is a particular priority at INEOS sites in water stress areas. We have identified 22 such sites by screening all our locations using the WRI Water Risk Atlas (Aqueduct 3.0, 2019) in accordance with GRI standards. These sites (17% of our 129 manufacturing sites in 2022) account for approximately 2% of our total water withdrawals and discharges, as well as 6% of our total water consumption.

Reducing our water consumption is a group-wide ambition that we put into practice at each of our manufacturing sites. It is also an essential consideration in the design and retrofit of our plants.

For example:

Our new cracker in Antwerp (Belgium) is designed to use demineralised water in the cooling circuits instead of city water and to reuse rainwater, which will considerably reduce water consumption.

Across INEOS, focusing on identified water stress areas, our manufacturing sites are invited to share plans to reduce, reuse, or replace fresh water.

We have taken action to reduce our use of cooling water by optimising an osmosis plant in Rosignano (Italy) and substituting water jets in Marl (Germany).

To reduce our water footprint, INEOS practises responsible water care. Best available technologies, such as closed-loop water systems and procedures to reuse process water or condensates on-site or at neighbouring production plants are standard practice at our sites. Due to the nature of chemical processes, wastewater is nearly always contaminated, which is why INEOS sites are optimised to reuse wastewater streams until no further use is possible. Remaining contaminated water is regularly treated on-site using appropriate technologies, such as biological wastewater treatment, in line with site permits. We also deploy methods to minimise sludge from wastewater treatment, reducing the volume for further processing. If not treated on-site, contaminated wastewater and sludge are sent for treatment off site.

For example:

In Hull (UK) we purify process water in ethanol recovery and recycle it back into other processes.

In Gladbeck (Germany) we use wastewater to dilute caustic soda.

In Feluy (Belgium) we feed process purge water into the cooling towers.

In Rheinberg (Germany) we treat wastewater to permitted specification, using our own product derivatives before discharging it back into the Rhine.

In Pasadena (USA) we use phenolic wastewater as nutrient feed for the biota in the on-site wastewater treatment plant, avoiding the need to dispose of it as hazardous waste.

At our Merak site (Indonesia) we are running an anaerobic reactor to treat the wastewater prior to discharge.

At our Green Lake site (US) we have constructed a new biochemical tank to reduce sludge waste prior to disposal.

All our sites in the Port of Antwerp-Bruges are participating in a study to maximise sustainable and circular use of industrial water. This is a priority in at-risk areas as water gets increasingly scarce. The study has helped many of our Flemish sites identify opportunities to repurpose and reuse process water instead of discharging it. By joining forces with third parties, we have found that risks of water scarcity can be mitigated and opportunities for urban-industrial water symbiosis can be explored, securing the future of industry in the port, and improving water management in the wider Antwerp area. We are reviewing the potential to extend the findings of the study to our operations globally.

2.4 Zero pollution: driving progress towards sustainable chemical value chains

INEOS is committed to advancing towards sustainable chemical value chains with zero pollution.

At our own sites, we closely monitor our emissions to air and water through our company-wide data platform and share best practices through our networks to minimise the impact of pollution on the environment and people.

We consider it a priority to prevent spills and leaks and have a company-wide management system in place to identify risks, record incidents, and take corrective action. We strive to comply with all local regulations governing emissions of pollutants.

We are committed to reducing pollution in our value chains through effective product stewardship and substituting hazardous substances in products for more sustainable alternatives, where feasible. We have a company-wide product stewardship network in place to ensure compliance with all regulatory frameworks, such as REACH, and share responsible care best practices. We also require our suppliers to minimise their pollution and safely handle chemicals and products in accordance with our Supplier Code of Conduct.

2.4.1 Avoiding pollution to air, water, and soil

We consider it a priority to avoid pollution to air, water, and soil at our sites through effective monitoring and by implementing best practices to minimise risks and take corrective action.

Preventing spills and leaks

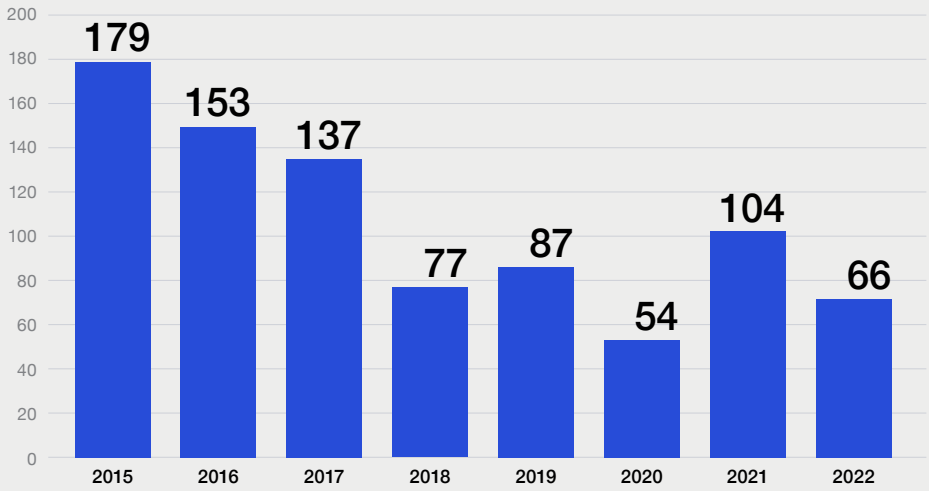
Safe handling and containment of chemicals is of particular importance to INEOS to protect the natural environment and the people on and around our sites. Our processes, operating procedures, and working practices are designed to secure containment of all products and raw materials.

It is extremely rare for our sites to experience a loss of containment, but in the event of an incident that exceeds reportable levels, we immediately notify the relevant authorities in accordance with regulations. To minimise the risk of such incidents, we closely monitor all our operations and have an internal system in place to record and investigate any loss of containment above a tenth of the reportable level. We call these LOC10s. Through monitoring and taking corrective action in response to LOC10s, we have reduced the frequency of minor losses significantly over the last eight years.

This includes:

1. Operating according to Best Available Techniques (BAT): INEOS sites adhere to industry-leading practices and technologies, known as Best Available Techniques, to minimise pollution.
2. Monitoring emissions to air, water, and soil: robust monitoring systems are in place to measure emissions to detect issues or potential risks, allowing for timely corrective actions.
3. Assessing pollution-related risks: our sites conduct risk assessments to identify potential sources of pollution and prioritise prevention measures and mitigation strategies.
4. Observing strict procedures in case of incidents: in the event of an incident, we have well-defined procedures in place at our sites to contain the situation and provide appropriate remediation.
5. Communicating internally and with authorities: INEOS shares information internally and with local authorities to learn from incidents, disseminate best practices, and comply fully with regulations, facilitating continuous improvement across the company.

INEOS LOC10s across all businesses worldwide



ENVIRONMENT

Detecting fugitive leaks using drones at INEOS Phenol

INEOS | CASE STUDY #9

INEOS Phenol has successfully demonstrated the feasibility of detecting small leakages from installations at its Doel (Belgium) site using state-of-the-art drone technology that can access difficult-to-reach areas.

INEOS Phenol collaborated with Aeromon, a Finnish supplier of sensitive measuring equipment, and Skyebase, a drone piloting company, to conduct the first test flight in early 2022.

The drone, carrying a measuring device, collects data during its flight, which are transmitted wirelessly for immediate analysis and adjustments. The collected data are used to produce comprehensive reports and can even be used to generate 3D leakage maps, which help the site minimise fugitive emissions.

Drone in action as flying detective at INEOS Phenol

2.4.1.1 Emissions to air

All INEOS sites monitor air emissions such as NOx, SOx, CO, volatile organic compounds (VOC), and dust, so that they can identify opportunities to reduce their impact on air quality and ensure they operate in full compliance with local and national regulations governing air pollution. INEOS' non-GHG air emissions in 2022 were as follows: 8.38 kt NOx, 0.69 kt SOx, 54.80 kt CO, 14.42 kt VOC, 0.17 kt NH_3, 0.13 kt HAP, 0.69 kt dust, and 0.10 kt CFC11-eq of ozone depleting substances (ODS) as defined under the Montreal Protocol.

INEOS reduces air emissions by investing in systems such as low NOx burners, selective catalytic reduction, and DeNOx treatment based on urea injection. We also have leak detection and quantification (LDAR) programmes in place for detecting and eliminating fugitive emissions from equipment.

2.4.1.2 Emissions to water

Our sites closely measure pollutants in wastewater to minimise their impacts on water bodies and comply fully with regulations. This includes wastewater discharged directly from cooling systems, which does not come into contact with products, as well as process water that must be treated before it is discharged because it does come into contact with products.

INEOS discharged 939 Mm^3 of water in 2022, 35% of which was process water. This was either treated at one of our own treatment plants or sent to a third party for treatment. The wastewater we discharged from our own treatment plants contained 105 tonnes of phosphor and 577 tonnes of nitrogen. Our water discharge also contained 45 tonnes of heavy metals and 2,742 tonnes of suspended solids.

2.4.1.3 Emissions to soil and groundwater

We take action at our sites to monitor and prevent accidental emissions to soil and groundwater. This includes defining reference levels for substances in local groundwater in initial state reports to measure our impacts in accordance with the Industrial Emissions Directive at our EU sites. We also conduct groundwater monitoring at our US sites, particularly those with permitted disposal facilities, to promptly detect issues.

To further enhance protection, we install storage tanks and loading/unloading facilities in bunds, utilise impervious floors, kerbing, and bunding, and construct process units on concrete with dedicated sewage facilities. We closely monitor and manage soil contamination in compliance with local regulations, such as soil legislation in Flanders (Belgium) and brownfield management rules in Germany.

2.4.1.4 Operation Clean Sweep

INEOS is committed to keeping plastic out of the environment. Since 2016, we have been signatories to the Operation Clean Sweep (OCS) programme—an international initiative of the plastics industry to stop plastic pellet pollution. We apply this commitment at all our sites worldwide to achieve zero pellet, flake, and powder loss in our operations and value chains.

We implement measures at all our polymer plants to stop pellet loss. This includes installing pellet containment technologies, such as filters, water separators, extractors, air blowers, and rumble strips. We also train employees, truck drivers, and hauliers, and include clauses in our contracts with suppliers requiring them to adhere to OCS principles.

2.4.1.4 Operation Clean Sweep
(continued)

The 6 commitments of Operation Clean Sweep® that we endorse

By signing the OCS pledges, each pellet-handling company recognises the importance of preventing spillages into the environment and commits to the following six actions.

In the unlikely event of leaks, we have procedures in place that specify direct actions. In case remediation is needed, we follow the rules stipulated by local authorities and INEOS' Group Guidance Notes.

1. Improving worksite set-up to prevent and address spills
2. Auditing performance regularly
3. Creating and publishing internal procedures to achieve zero industrial plastic material loss
4. Complying with all applicable state and local regulations governing industrial plastics containment
5. Providing employee training and accountability for spill prevention, containment, clean-up, and disposal
6. Encouraging partners (contractors, transporters, distributors, etc.) to pursue the same goals

ENVIRONMENT

Local clean-up events: INEOS Aromatics' Cooper River site in the spotlight

INEOS | CASE STUDY #10

Members of the INEOS Aromatics team, families, and local government authorities took part in South Carolina's largest one-day volunteer waterway clean-up event, the Beach and River Sweep. Since 1988, South Carolinians have participated in similar events to clear beaches, rivers, lakes, marshes, swamps, and barrier islands of aquatic debris. Barrier islands are critical to protecting coastal communities and ecosystems from extreme weather as they absorb wave energy before waves hit the mainland.

This year, five boats ferried 37 volunteers representing INEOS from the Isle of Palms Marina to the beach front of Capers Island, an undeveloped barrier island 15 miles north of the Charleston Harbor. From there the teams swept the beach, removing trash, rope, fishing lines, nets, traps and other debris.

Cooper River team support local clean-up event

www.scseagrant.org/bsrs/

ENVIRONMENT

2.4.2 Preventing pollution in the value chain

INEOS is committed to advancing towards zero pollution in its value chains.

We consider it a priority to prevent chemical pollution downstream of our operations through effective product stewardship and sustainable product innovation.

We expect our partners to comply with relevant environmental laws, use resources responsibly, and minimise negative impacts relating to pollution. As outlined in our supplier code of conduct, we require our suppliers to manage their emissions to air, water, and soil, and follow Responsible Care principles when managing chemicals. Suppliers are also required to participate in the Operation Clean Sweep initiative if they handle plastic pellets.

2.4.2.1 Compliance with global product safety regulations

As part of our dedication to excellence in safety, health, and environmental management, INEOS considers it a priority to act in full compliance with product safety regulations to protect the environment and the well-being of people in our value chains.

In Europe, we comply with the REACH regulation (Registration, Evaluation, Authorisation and Restriction of Chemicals) to manage risks associated with our products effectively and provide customers with the information they need to handle products in a safe and sustainable way. Similarly, we take on chemical registration responsibilities in other jurisdictions, such as Korea, Turkey, and the UK to ensure that customers manage products safely and legally.

We have a company-wide network and global management system in place to deliver excellence in product stewardship. This ensures we meet regional legal requirements as a minimum, as well as our own internal standards that often exceed what is mandated in regulation. This includes implementing measures such as the following:

- Providing safety data sheets (SDS) to customers according to regulatory requirements in each country we operate in. Our SDS are classified and labelled with reference to the Global Harmonised System (GHS).
- Offering extended SDS that include an exposure assessment for each use of a substance, setting out necessary risk management measures for specific handling activities related to a given use.
- Providing an open access document management system to store and share all SDS, as well as ISO certificates, product specifications, and information on impurities and compliance with specific regulations. This includes an automatic distribution system linked with the internal SAP system. All our safety data sheets include emergency phone numbers and can be accessed on our website along with our ISO certificates per business (and site).
- Continually improving product design to avoid potential problems before they become human or environmental hazards.
- Utilising hazard identification systems that exploit relevant available information to prioritise risk management.
- Managing chemicals in commerce using a risk-based process to identify, understand, and prioritise concerns.
- Implementing risk reduction measures, including phasing out or limiting the use of specific chemicals where risks are not otherwise manageable and outweigh the benefits of the chemical in the context of its use.
- Facilitating transparent information flow throughout the value chain to enable effective risk management by manufacturers and users.
- Publishing product information on hazard, exposure, and risk.
- Ensuring that all our suppliers comply with REACH regulations as required by EU law.

INEOS has specific policies in place for transport safety and performs customer audits prior to delivery to ensure that customers have the facilities and know-how to receive and store our products safely. We have a free carrier (FCA) policy that is distributed to customers, hauliers, and supply chain partners prior to the collection of olefin and polymer products from our European facilities, setting out their safety, health, and environmental requirements.

In addition to sharing knowledge within the INEOS REACH network, several businesses have subscribed to Chemical Watch. This is a platform that provides insights on regulatory and non-regulatory news from member companies around the world leading to the continual improvement of the safe use of chemicals, including risk assessment, policy, legislation, and voluntary initiatives.

2.4.2.1 Compliance with global product safety regulations

(continued)

PFAS Statement

INEOS is reviewing the potential impact of proposed PFAS regulations on our industrial activities and value chain.

At INEOS, protecting safety, health, and the environment is a core guiding principle and our number one priority. At each step of our activities, we safeguard the health and safety of our employees, the communities in which we operate, and the users of our products.

INEOS does not manufacture PFAS or use PFAS as basic raw materials in its processes.

INEOS' manufacturing sites use PFAS in diversified applications, however, such as membranes for electrolysers, gaskets, and lined piping or vessels because of their unique properties. Some applications are recognised as Best Available Techniques, while others provide significant benefit for safe and continued reliable operations of our industrial assets, with no equivalent alternatives currently available.

INEOS will contribute to the REACH restriction process by responding to the public consultation. More specifically, we will flag those uses of PFAS that are critical to our operations and identify critical applications that merit a derogation.

2.4.2.2 Responsible Care

INEOS has been a signatory to the International Council of Chemical Associations' (ICCA) Responsible Care Global Charter since 2015.

Signing the charter is part of our commitment to strengthening chemicals management, safeguarding people and the environment, and working towards sustainable solutions in our value chains. Through applying Responsible Care® principles, we conduct business in a safe, ethical, and environmentally responsible manner by:

1. Maintaining a corporate leadership culture
2. Safeguarding people and the environment
3. Strengthening chemicals management systems
4. Influencing business partners
5. Engaging stakeholders
6. Contributing to sustainability

INEOS adopts a comprehensive approach to product stewardship, so that our products enter and move along the supply chain to the customer in a safe and ethical manner. We work with all customers to ensure they have the necessary information, procedures, and facilities to receive, store, and use products safely.

Our European sites participate in Cefic's Responsible Care self-assessment to benchmark their performance against peers and identify opportunities to strengthen product stewardship practices.

THE INTERNATIONAL COUNCIL OF CHEMICAL ASSOCIATIONS

Responsible Care® Global Charter

Responsible Care is the global chemical industry's unifying commitment to the safe management of chemicals throughout their life cycle, while promoting their role in improving quality of life and contributing to sustainable development.

As a signatory to the Responsible Care Global Charter my company will actively strengthen the Responsible Care initiative worldwide and is committed to:

1. **A Corporate Leadership Culture** that proactively supports safe chemicals management through the global Responsible Care initiative
2. **Safeguarding People and the Environment** by continuously improving our environmental, health and safety performance; the security of our facilities, processes and technologies; and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain
3. **Strengthening Chemicals Management Systems** by participating in the development and implementation of lifecycle-oriented, sound-science and risk-based chemical safety legislation and best practices
4. **Influencing Business Partners** to promote the safe management of chemicals within their own operations
5. **Engaging Stakeholders,** understanding and responding to their concerns and expectations for safer operations and products and communicating openly on our performance and products
6. **Contributing to Sustainability** through improved performance, expanded economic opportunities and the development of innovative technologies and other solutions to societal challenges

INEOS
Company

CEO Signature

12TH MARCH 2015
Date

Responsible Care®

Approved by the ICCA Board of Directors, May 29, 2014

INTERNATIONAL COUNCIL OF CHEMICAL ASSOCIATIONS

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2.4.3 Biodiversity and ecosystems

INEOS recognises that chemical pollution can be harmful to ecosystems and biodiversity, whether it is industrial spills or downstream pollution from products at the end-of-life stage.

We are committed to building sustainable chemical value chains that minimise the impact of pollution on the natural world through effective product design and strong stewardship.

We welcome the global biodiversity framework agreed at COP15 in December 2022.

In light of potential targets, and forthcoming reporting requirements under frameworks such as the CSRD in the EU, INEOS conducted an initial screening for biodiversity risks at all our manufacturing sites in 2022. This entailed assessing each site based on its GPS coordinates against 17 measures of biodiversity risk to identify those with the most contact with endangered species, protected areas, and key biodiversity areas, as recognised by organisations such as IUCN and UNESCO.

Building on this initial assessment we intend to examine our biodiversity contact points more thoroughly in future years in accordance with the LEAP process advocated by TNFD to identify our dependencies and gauge our impacts, including in the value chain, so we can take targeted action and disclose high quality information for stakeholders.

IUCN Red List species

Critically endangered species, facing extremely high risks of extinction in the wild

Endangered, facing very high risk of extinction in the wild

Vulnerable, facing high risk of extinction in the wild

Near threatened, likely to classify as one of the above categories in the near future

Least concern, species with none of the above classifications

Data deficient, having inadequate information to assess its extinction risk

IUCN Red List of Threatened Species

Protected areas

National protected areas

Natura2000, which is a European network of protected sites under the European Habitats and Birds Directives

World Heritage selected by UNESCO

Regional seas established under the Regional Seas Conventions

Ramsar wetlands protected by the Convention on Wetlands of International Importance

MAB, which is a global network established and recognised under UNESCO's Man and Biosphere Programme

Emerald Network comprised of protected areas of Special Conservation Interest (ASCI)

Explore the World's Protected Areas (protectedplanet.net)

Key biodiversity areas

Protected areas globally important for the conservation of bird species

Important Bird and Biodiversity Areas (IBAs) holding one or more globally or regionally threatened species

Alliance for Zero Extinction, which are the highest priority key biodiversity areas and trigger critical habitat status

Key Biodiversity Areas.org

PEOPLE

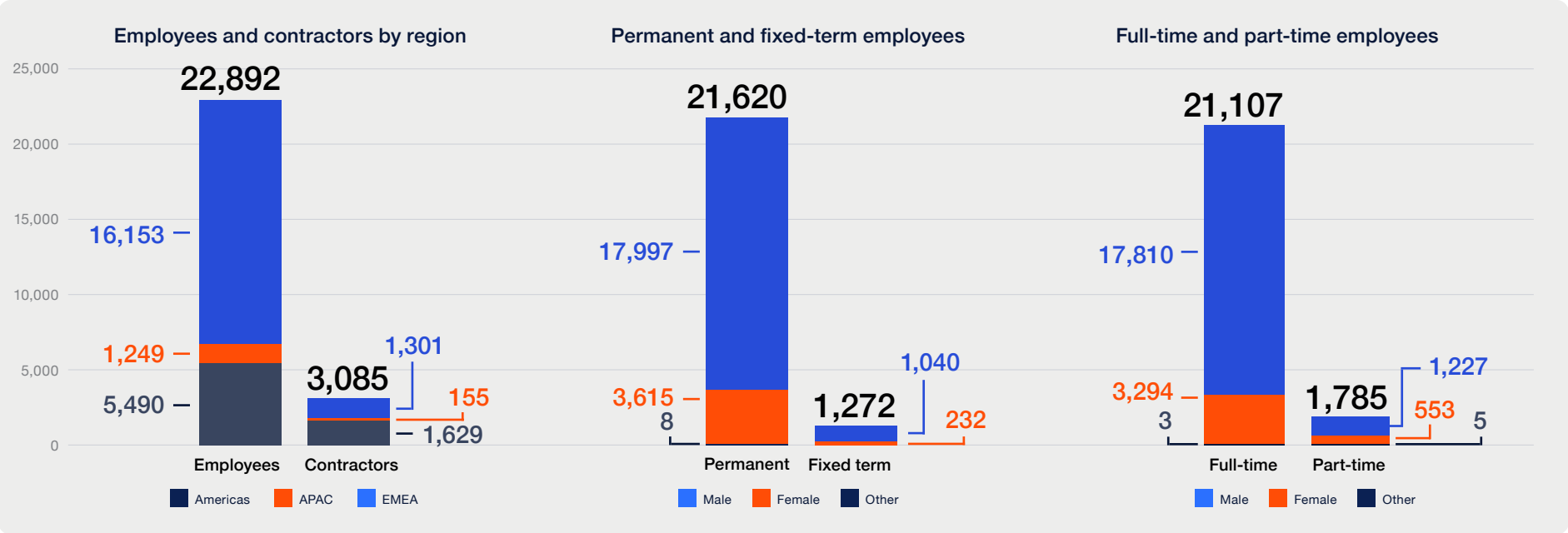
People

2.5 Our people: prioritising workplace health and safety (SHE) and fairness

INEOS employed nearly 23,000 people in its core operations as of the end of 2022 on a full-time equivalent basis, with 71% of our employees based in EMEA countries, 24% in the Americas, and 5% in APAC nations. Most of our employees are permanent and work full-time, as detailed below.

These figures do not include our offices with fewer than 10 employees, nor our joint arrangements and sports and fashion businesses. We estimate that including these additional operations, would increase the size of our workforce to around 25,000, which is consistent with the figures reported in our sustainability report last year.

As of the end of 2022, INEOS also had approximately 3,100 contractors working on core business activities. This does not include contractors brought in specifically to work on turnarounds, or contractors providing services via a third party. Our contractors work on-site or remotely and can be part-time or full-time.



PEOPLE

2.5 Our people: prioritising workplace health and safety (SHE) and fairness

(continued)

We are committed to ensuring our people are valued and human rights are respected throughout our operations. In particular, the health and safety of employees, contractors, and visitors to our sites is our highest priority, given the nature of our processes.

It is also of great importance to us to maintain a working environment of mutual trust where all employees are treated with respect, compensated fairly based on local market conditions, and entitled to reasonable working hours.

All our employees and contractors, across our businesses, are required to follow our Code of Conduct, which governs how we manage health and safety, workers' rights, equal opportunity in the workplace, working conditions, career management, training, harassment, and personal conduct. Our group-wide management of health and safety is also governed by our dedicated SHEQ policy, 7 life-saving rules, 20 principles of behavioural and process safety, and INEOS Group Guidance Notes.

As stated in our Code of Conduct, INEOS respects the rights in the International Bill of Human Rights and the International Labour Organization Declaration on Fundamental Principles and Rights at Work. We recognise employees' right to collective bargaining and freedom of association, and we work to prevent any instances of forced or compulsory labour, child labour, or employment discrimination throughout our operations. All our businesses and employees must uphold these standards and report suspected violations as a priority.

In every country in which we operate, we abide by local, regional, and national laws regarding human rights. All our employees have the right to join labour unions, works councils, participate in collective bargaining or equivalent initiatives. On average, around 43% of INEOS employees globally are covered by a collective labour or bargaining agreement (CLA/CBA), which provides a formal framework for constructive engagement on fair terms and conditions of employment. The regional distribution of this coverage is as follows: 54% in EMEA countries, 13% in the Americas, and 32% in the APAC region. This reflects the diversity of labour markets and legal frameworks in different countries. These numbers vary from last year as a consequence of implementing improved data collection.

INEOS' European sites participate in European Works Council (EWC) meetings twice a year and produce an annual report for the EWC. Committees and CLAs/CBAs are in place addressing employee and contractor health and safety, wages and working benefits, working conditions, recruitment, training and development, diversity, and equality, and more. In addition to works councils, some sites use union delegations, formal or informal team meetings, and safety committees to communicate with employees.

Employees who are not covered by CLAs/CBAs, are covered by local employment laws to determine working conditions. Our sites have also put in place employee forums to ensure these employees can raise concerns through elected employee representatives.

PEOPLE

2.5.1 Health and safety: ensuring the safety of our people

Our goal is zero injuries and product spills, which we pursue through rigorous application of best practices and a positive safety culture that recognises that all accidents are preventable.

Health and safety of our employees, contractors, and site visitors is the highest priority for INEOS. Collectively and individually, we are committed to maintaining the highest standards of health and safety.

We meet or exceed regulatory requirements and do not compromise our standards for commercial benefit or any other reason. Although our safety record already ranks among the best in the industry, we believe there is always room for improvement (see 2.5.1.2).

Our goal is **zero** injuries and product spills.

2.5.1.1 Health and safety management system

INEOS has a long-standing group-wide health and safety management system that keeps our employees and contractors safe. This internally audited system covers 100% of our employees, contractors, and any external person who arrives at an INEOS site. It was put in place voluntarily but meets all local health and safety regulations at a minimum. The system was developed through INEOS' health and safety working groups and is based on the recognised OSHA standards, as well as regional regulations and wider best practices.

The system is codified in our code of conduct, SHEQ policy, 7 life-saving rules, 20 principles of behavioural and process safety, and INEOS Group Guidance Notes (IGGNs). Anyone arriving at an INEOS manufacturing site, whether employee, contractor, service provider, or visitor, must follow the policies and receives core health and safety training. Employees and contractors at all levels of the organisation are instructed to respect the limits of their knowledge and only work within those limits. Training is provided to meet legal requirements (such as certification) and give staff the technical skills required to carry out their roles. This covers initial training and refresher training, as well as suitable competence demonstration. Ongoing training needs are discussed in annual appraisals.

Every month, appointed experts from each INEOS business gather data on all health and safety incidents, near-misses, fatalities, high potential incidents, and other KPIs at their locations. Once checked and approved by a designated person from each business, the data are recorded in a central database. A group-level report is then compiled and approved by group directors for distribution to C-level executives and SHE managers. For an incident to be recorded in a given month, it must be a new case that is work-related and exceeds a severity threshold. Workers are expected to report incidents at sites for potential inclusion in the database and are required to remove themselves from unsafe work situations in accordance with INEOS' 20 principles of safety.

Information about incidents and near-misses is communicated across the group through alerts to identify corrective actions and opportunities to strengthen performance. A safety alert is a one-page document shared between operations directors from INEOS businesses, which describes a serious incident or near-miss and discusses why it happened and what can be learned from it. The most important events, including safety alerts, are further discussed in dedicated quarterly operations directors' meetings and biannual manufacturing excellence days, led by the group operations director focusing on process and behavioural performance and improvement areas.

The CEO of each INEOS business is responsible for the health and safety performance of that business, which is reviewed monthly by the executive board of the business. Each business then reports on its health and safety performance directly to the shareholders of INEOS at business Exco meetings every two months.

In addition, the board of each business must submit a signed letter of assurance to INEOS' shareholders every year confirming that the business is operating in accordance with INEOS' company-wide operational and financial standards. Each operations director and CFO must review the health and safety performance of all sites operated by the respective business prior to issuing this letter of assurance by the end of Q1.

1

We believe that excellence in health and safety performance can only be achieved if we are expert in what we do.

We give our people and teams the training, development and support they need to become experts.

We share best practices and maintain understanding and knowledge so our employees remain at the top of their game.

2

We have rigorous principles and procedures in place which everyone who works on our sites must follow. We back this up with audits and checks and make it clear that each INEOS employee is accountable for following these best practices.

3

We review our safety, health and environmental performance at every business team and monthly board meeting. It is the top priority for everyone in the company, from our owners to our technicians. Bonus pay is conditional on achieving our safety performance targets.

PEOPLE

2.5.1.1 Health and safety management system (continued)

The INEOS 20 Principles

To make our approach clear, we have summarised our safety philosophy into what we call the INEOS 20 principles, each one consisting of a list of sub-principles (e.g. on mandatory PPE requirements and SHE improvement programmes).

This company-wide management system addresses the safety of people and plant operations. The safety principles apply to all employees as well as all contractors. These are published in many languages on our website and intranet.

Behavioural safety principles

1. We believe all incidents and injuries can be prevented.
2. Everyone's first responsibility is to ensure they work safely.
3. Everyone has the duty to stop work if they feel the situation is unsafe.
4. The expectations and standards are the same for everyone on the site.
5. Rules and procedures must be observed and respected.
6. We should look out for each other's safety and unsafe situations.
7. All injuries and incidents/near misses must be reported and investigated.
8. Risk assessment must be carried out prior to, during and on completion of work.
9. All team leaders have a special responsibility for promoting and upholding these principles.
10. We must always work within the limit of our competency and training.

Process safety principles

1. The asset operating manager is responsible for its overall integrity.
2. The asset engineers are responsible for maintaining the asset and protective systems integrity.
3. The responsibilities in the organisation for defining and maintaining the correct operating envelopes must be clear.
4. Operating procedures and envelopes must be observed. Deviations must be reported and investigated.
5. Any changes must be properly risk assessed and subjected to MOC procedures.
6. We believe all incidents and injuries can be prevented.
7. All assets must be subject to periodic inspection designed to ensure their integrity and the reliability of their protective systems investigated.
8. Operations must always place the safe operation or shutdown of the asset ahead of production.
9. When in doubt the asset must always be taken to its safest state.
10. We have emergency plans based on assessed risks which are regularly tested.

2.5.1.1 Health and safety management system

(continued)

Every behaviour and process safety principle is divided into several sub-principles, and performance against these is audited on a three-year cycle at every INEOS site. Process safety is audited in the first year of the cycle, behavioural safety in the second, and sites have a break from audits in the third year. Opportunities for improvement are logged and actioned in short-term and longer-term plans.

As part of this auditing process, site employees and contractors are consulted on the functioning of the health and safety management system. The outcome of each site audit is made available on our internal safety management sharepoint which allows for site-to-site and business-to-business benchmarking. All results are reported yearly to each business' board of executives, which allows for top-down implementation of improvements.

Life-saving rules

1. No consumption or being under the influence of alcohol or drugs on company property.
2. No smoking outside dedicated smoking areas.
3. No work on live equipment/machines to commence without authorisation.
4. Safety critical devices/interlocks must not be disabled or overridden without authorisation.
5. Persons working at height must use proper fall protection.
6. No entry to confined space without authorisation and gas test.
7. Lifting/hoisting: no authorised person to enter the defined danger zone where objects can fall.

Each INEOS site also has a dedicated SHE committee in place to involve workers in the development and evaluation of the health and safety management system.

The meeting frequency and topics discussed depend on the site itself.

The safety principles are supplemented by our life-saving rules, set out in an IGGN. These are mandatory rules that must never be broken. The seven simple but crucial life-saving rules were put in place to avoid health and safety incidents. Anyone found to be breaking these rules is immediately suspended from INEOS' property pending an investigation. If the person is found to have intentionally acted with negligence, they are automatically dismissed from INEOS, whether they are an employee or third-party worker.

Across all our sites, we invest in continuous improvement of infrastructure and the working environment, and we audit standards periodically.

Although individual businesses take full responsibility for their own overall operation, INEOS applies common health and safety standards. These are set out in more than 30 IGGNs that meet or exceed ISO health and safety standards (see table 9. manufacturing site certifications). IGGNs are designed to minimise safety risks, and cover, for example, rules for work permits, equipment inspection, and change management. All employees have access to the IGGNs through company intranets. IGGNs must be fully reviewed by each business, site, and facility within INEOS to identify deviations from best practice and take corrective action.

To protect our employees, INEOS sites perform noise assessments and draw sound maps at plant level to determine when appropriate personal protective equipment must be worn, such as ear defenders. Mandatory health checks for our employees are also organised per business and/or site in compliance with local regulation. For example, some of our Belgian sites use the external service Attentia for employee health checks. Check-ups are conducted on-site based on a risk matrix and off-site medical screening is offered to employees over 45 years old. Other sites, such as Herne and Moers in Germany, have a physician available on-site approximately one day a week. They perform health checks related to job exposure or function, covering all site employees.

PEOPLE

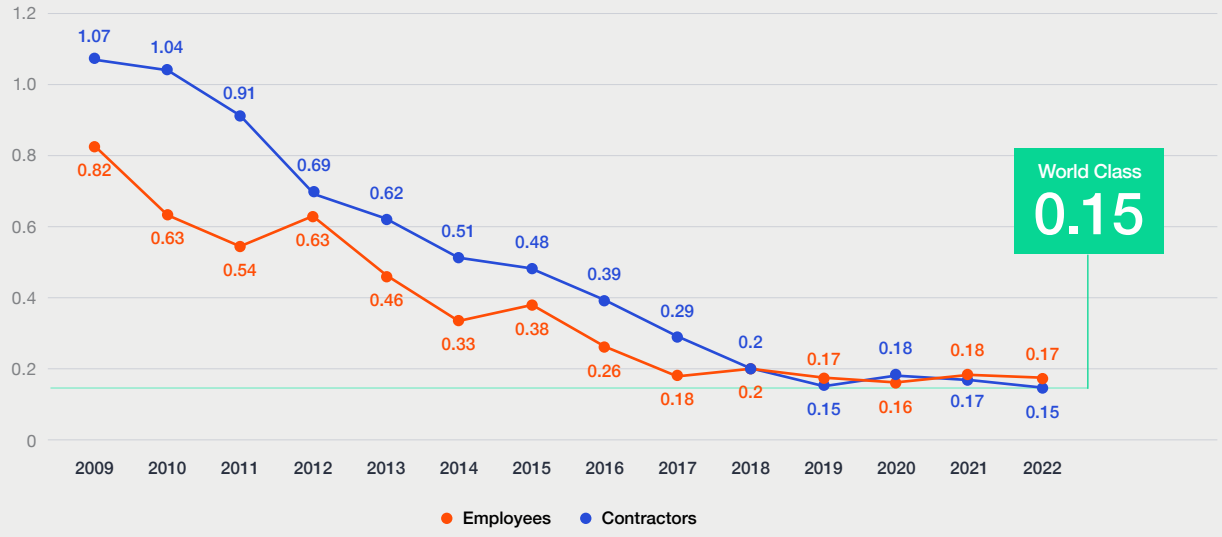
2.5.1.2 Health and safety performance

Over the past decade, the INEOS approach to safety has resulted in a fourfold decrease in the injury rate among employees and contractors. When it comes to health and safety, we treat employees and contractors alike, which is why we report combined performance figures for all people working on our sites.

In 2022, zero fatalities were reported across all INEOS sites and our OSHA (Occupational Safety and Health Administration) recordable injury rate (total recordable incident rate, TRIR) was 0.17 injuries per 200,000 hours worked for our employees (and for contractors 0.15), which was 'best in class' in our industry. According to OSHA data in the US, this is five times lower than the industry average and over 10 times lower than the average seen in the utilities, construction, and other manufacturing industries. Nevertheless, we are constantly striving to better this. Our target is to achieve a zero-injury rate and make every working day injury free.

INEOS safety performance across all businesses worldwide

OSHA recordable rate per 200,000 hours for employees + contractors



PEOPLE

A new occupational safety record at INEOS Oxide

INEOS | CASE STUDY #11

Safety first at INEOS!

The employees and contractors of INEOS Oxide in Zwijndrecht (Belgium) reached the milestone of 3 million working hours without a serious accident, so-called OSHA-free working hours. All employees will be given a gift in recognition of their impressive achievement.

Our goal is zero injuries, to be achieved through a positive safety culture in which we believe all accidents are preventable.

We care…

About the safety, security, and health of our workforce, customers, suppliers, and neighbours,

About the environment, today and tomorrow,

About compliance with the law,

About developing a workforce of SHE champions.

We hold ourselves and each other accountable for SHE performance.

Safety record at INEOS Oxide

PEOPLE

2.5.1.3 Health and wellbeing

We support and encourage a healthy lifestyle for our employees.

INEOS is committed to supporting employees' physical health and mental wellbeing, and promoting work-life balance.

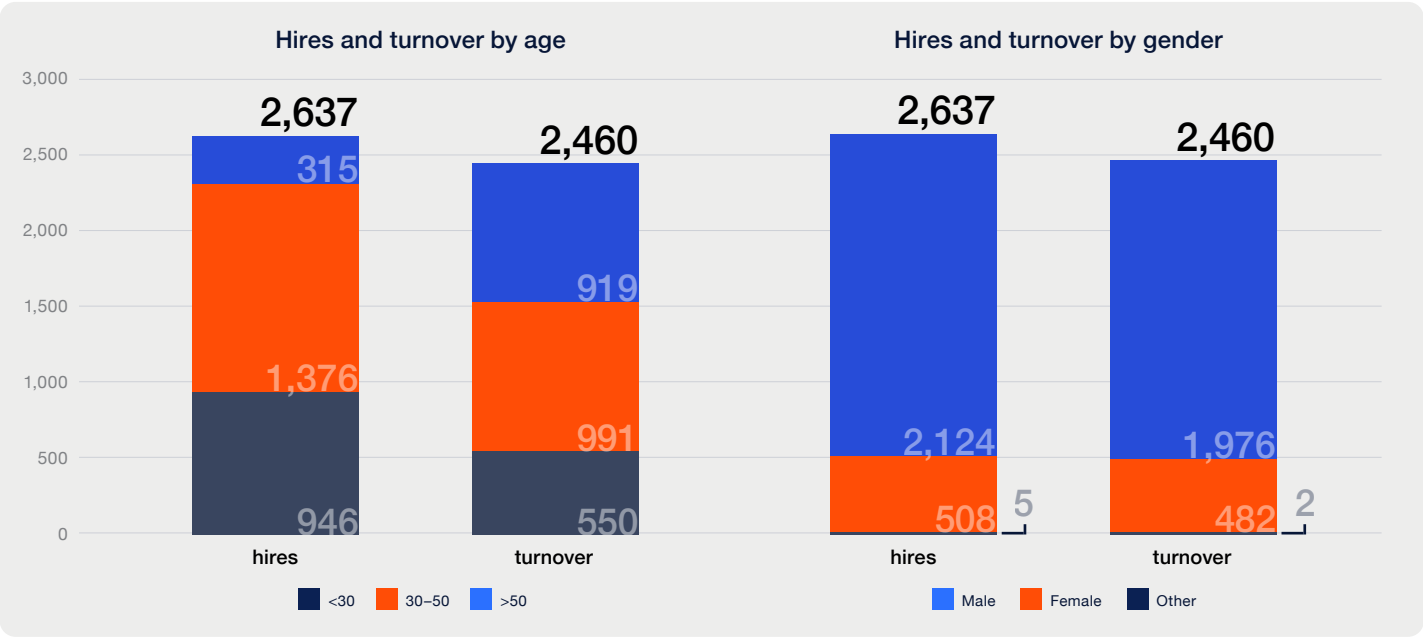
Some of our businesses and sites conduct surveys and annual reviews to determine the satisfaction of our employees in this important area.

We have equipped many of our main manufacturing sites and offices with gyms. Most of these are on site but, where this is not possible, we subsidise access to local gyms close to our facilities. Employees are free to use the gym to follow their own fitness programmes or sign up to classes at their location. During the COVID pandemic many classes were given online and made available to all INEOS employees and families worldwide.

INEOS Energy Station is an online health and wellbeing platform for all INEOS employees and their friends and family to follow fitness, health, and lifestyle tips, and share experiences. Through the platform, INEOS employees can book classes at any of the INEOS gyms and sign up to company-wide events and exciting fitness and wellbeing challenges. The INEOS Energy Station is open to all and was particularly valuable for engaging employees in a wide range of activities when many had to work from home due to country restrictions during the pandemic. The platform has over 9,000 users from across all INEOS regions.

2.5.2 Recruitment, development, and remuneration

2.5.2.1 Recruitment



We rely on the creativity, diversity, knowledge, passion, and expertise of our people to drive sustainable business success and achieve a competitive advantage. We value fresh thinking and new ways of doing things.

Our core guiding principle is to 'value and respect'. INEOS encourages an entrepreneurial culture where talent is fostered and developed, and where people are rewarded for taking accountability and delivering both as individuals and within teams. We believe in a healthy body and a healthy mind and support our employees to stay active. Our aim is to provide an environment where everyone can develop to their full potential. INEOS is well known for its entrepreneurial spirit, and we encourage an adaptable, agile, and forward-looking approach to the way we do business.

We want to develop that innate willingness to learn and push towards increasingly ambitious goals, which means attracting a diverse range of the highest quality candidates for each available position, with recruitment based on merit following the principles of equal opportunity. Through our transparent and fair recruitment process (Careers | INEOS Group), all candidates are kept up to date on the evolution of their application and are objectively reviewed at each stage. We ensure that the staff who undertake our recruitment activities have gone through adequate training.

At each of our locations, where possible, we directly recruit local talent. These local opportunities are supplemented by group-wide initiatives such as our Graduate Engineering Programmes and our European Commercial Programme.

As of the end of 2022, INEOS had hired 2,637 new employees, whereas our turnover was 2,460. This amounts to a 11.5% hire rate, and 10.7% turnover rate.

PEOPLE

2.5.2.1 Recruitment
(continued)

The INEOS young graduate programme

Graduates are assigned a senior manager as a mentor and attend corporate events in the first and third years of the programme. These provide valuable networking opportunities and allow our graduates to meet senior leaders from across INEOS.

Candidates participate in interactive sessions and hands-on learning to further develop their understanding of financial management, leadership, and business strategy. We also focus on personal health at the year 3 event, with learning sessions on the importance of exercise, nutrition, sleep, and wellbeing.

During their third year at INEOS our graduates are invited to take part in an adventure of a lifetime: IN NAM. This is the ultimate personal and team challenge aimed to show what is possible when you take the mental brakes off. Graduates are given world class support during the nine months leading up to IN NAM, on their personal and team approach, with past IN NAM graduates and senior executives joining in.

Graduates and young professionals are invited to join the young Climate and Energy Network, which gives them a voice within the company to shape our future direction and make a difference to how INEOS operates today, to 2050, and beyond.

2.5.2.2 Development

Training and development are continuous processes at INEOS. From the first day of introduction onwards, safety and job-related training is paramount. We focus on enhancing professional and technical knowledge, as well as developing management and executive skills. Where appropriate, we also support working towards externally recognised qualifications.

Mentoring and support is a key part of career progression, and all employees are expected to participate in regular appraisals with their line managers to review performance, agree targets for the year ahead and discuss their individual training and development needs.

In-house training programmes include modern apprenticeship schemes, our PhD strategy, and ongoing training for technicians, executives, and leadership teams. These range from enhancing SHE skills and environmental protection training to creating awareness about business ethics issues in the form of acceptable conduct and soft skills.

All sites operate an annual performance appraisal system and training/development process that help to identify requirements and deliver these for our employees. Best practices are shared across the group and experiences and achievements compared and built upon.

Building the best workforce

Universities

An ever-growing number of projects in collaboration with universities involving PhD students

Grad scheme

A 5-year graduate programme available in 4 countries

People

25,000 employees

TuWaS!

15 years of inspiring school pupils aged 6 to 12 in Germany with TuWaS!

Apprenticeships

Our Cologne apprenticeship programme attracts 3,000 applications for 60 places

2.5.2.2 Development
(continued)

INEOS training programmes

INEOS operates as a federation rather than a corporation, adopting a decentralised structure and approach where each individual business is responsible for developing and training its own employees. Consequently, training programmes at INEOS are tailored to meet the specific needs of our businesses, focusing on several key areas:

1. **Health and Safety** covering health and safety risks, promoting good working practices, and ensuring a safe work environment.
2. **Environment** including climate and energy actions, resource efficiency, circular economy principles, and safe handling and transportation of hazardous materials.
3. **Labour and human rights** promoting values, beliefs, and attitudes that encourage individuals to uphold their own rights and the rights of others, fostering a respectful and inclusive work culture.
4. **Career and soft skills development** enhancing employees' knowledge and skills relevant to their specific roles, supporting their professional growth and career advancement.
5. **Diversity, anti-discrimination, and anti-harassment** addressing topics such as diversity, discrimination, and harassment, equipping employees with the knowledge to build an inclusive and respectful workplace and prevent hostile or discriminatory situations.
6. **Bribery and corruption** for 'at risk' employees to increase their awareness of incidents related to bribery and corruption and learn how to effectively handle such situations.
7. **Anti-trust and competitive practices** for 'at risk' employees to raise their awareness of free competition laws, the abuse of dominant market positions, and how to handle situations related to breaches of such laws.
8. **Modern slavery and people trafficking** for 'at risk' employees to raise their awareness of risks of forced labour and people trafficking, empowering them to minimise such risks appropriately.
9. **International trade and sanctions** for 'at risk' employees to increase their awareness of breaches or circumventions of international laws or regulations related to trade and sanctions, equipping them to navigate such situations effectively.

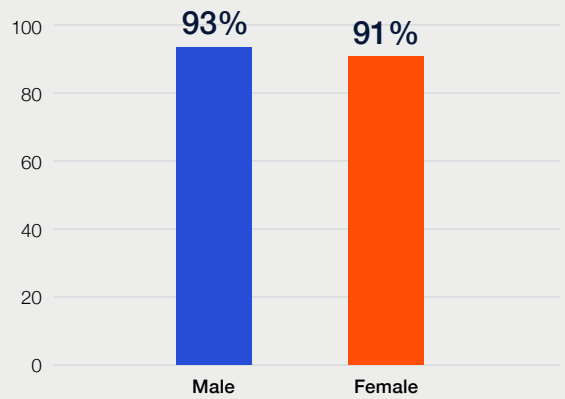
PEOPLE

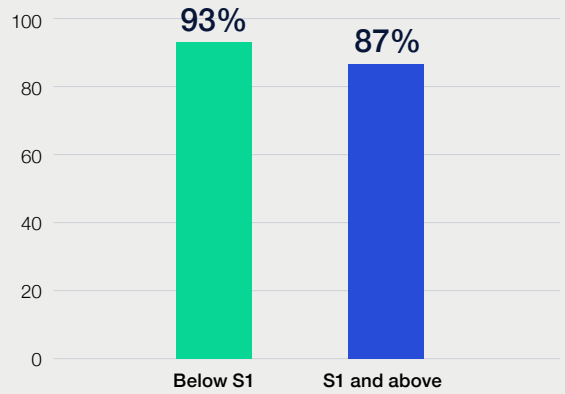
2.5.2.2 Development (continued)

By offering comprehensive training programmes in these areas, INEOS strives to create a culture of responsibility, compliance, and continuous learning, ensuring that employees are equipped with the knowledge and skills necessary to maintain the highest standards. For further information on our training, please consult table 16.1.

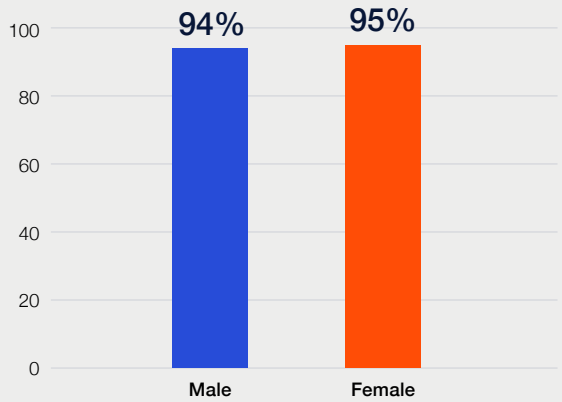
In 2022, we recorded a global average of about 25 hours of training per employee; around 30 hours at our manufacturing sites and 12 hours at our offices. In 2022, 94% of our employees have received regular performance and career development reviews.

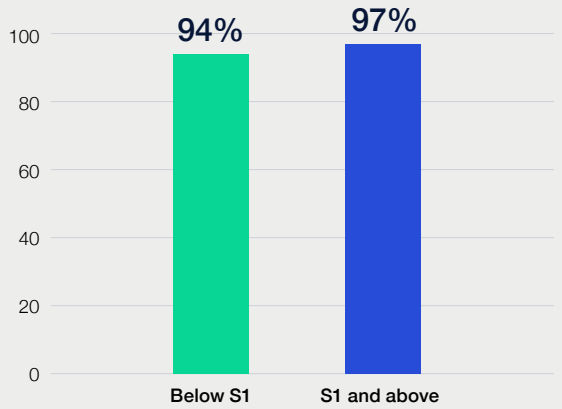
Percentage of employees receiving training in 2022





Percentage of employees receiving performance reviews in 2022





S1 is INEOS' first tier of senior management

PEOPLE

2.5.2.3 Renumeration

Our remuneration strategy is to pay above market rates and to reward productive team behaviours.

We have a fixed pay element set annually and linked to individual performance in a given role, and a variable pay element linked to business performance on safety and other goals (see section 1.3.3 Sustainability governance).

INEOS holds remuneration committee meetings at each level in the organisation. For senior executives, the committee is chaired by INEOS' Chairman and comprises other shareholders, the Group HR Director, and the relevant business CEO. For senior management, the committee is chaired by the Group HR Director and comprises the Business CEO, the Business Executive team, and the Business HR Director. For more junior employees in a business, the Committee is chaired by the Business CEO and comprises the Business Executive team, relevant senior managers, and the Business HR Director. In addition, the Group HR Director provides assurance that similar standards are being applied across all INEOS businesses, using external references as appropriate.

The actual reward structure varies by country and business, but in all cases, we ensure that our overall compensation is competitive in the appropriate market.

Senior managers through to board members, are rewarded using global benchmarks to ensure consistent treatment at this level and to aid movement and progression within INEOS.

2.5.3 Diversity, inclusion, and equality

INEOS is a global company that values diversity. We respect the rights, values, and dignity of all our employees, customers, contractors, vendors, and other stakeholders. All our employees, wherever they are in the world, know that they must hold themselves to the highest standards of ethics, integrity, openness, and accountability.

Our INEOS Speak Up! whistleblowing service allows employees to share concerns anonymously if they believe anyone representing INEOS is not acting consistently with these values. Speak Up! is accessible via an independent third party online or through a 24/7 toll-free phone number.

All employees understand that they have a duty to ensure that decisions regarding recruitment, selection, development, and advancement are based on merit, qualifications, demonstrated skills, and achievements. We practice equal opportunity without regard to race, colour, religion, gender, age, national origin, sexual orientation, marital status, disability, or political affiliation, and do not allow these considerations to influence our judgment or treatment of others.

We maintain fair, balanced, and objective pay for all our employees worldwide. This approach to diversity and inclusion forms part of the INEOS Code of Conduct, which describes in detail the behaviours we expect of all employees and is available and distributed to everyone within the company. All other stakeholders can access the code via our website.

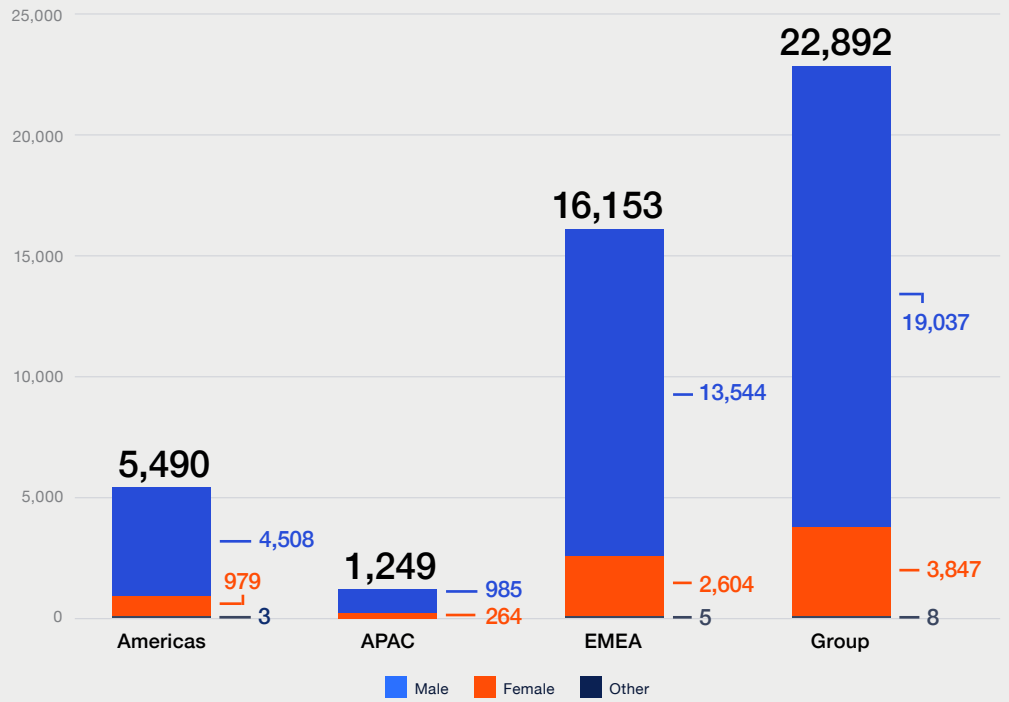
At the end of 2022, 17% of our workforce was female, 83% male, and 0.03% other. This gender gap is reflected in the wider chemical industry. To encourage a more diverse range of job applicants, we promote science, engineering, and chemistry to young people, for instance through our TuWas! programme and STEM Crew initiative. In the coming years, we will start to report on gender pay within INEOS.

To encourage a more diverse range of job applicants, we promote science, engineering, and chemistry to young people.

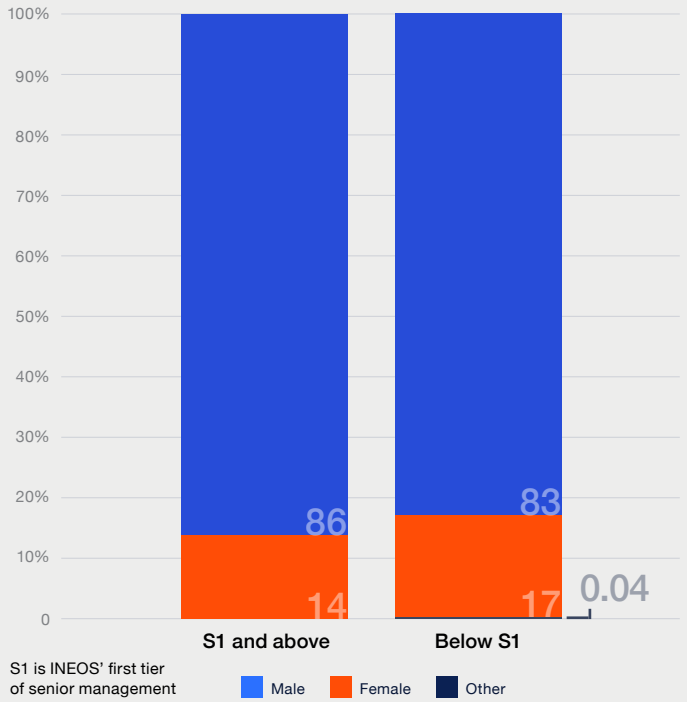
2.5.3 Diversity, inclusion, and equality

(continued)

The gender of our workforce by region



The gender of our workforce by seniority



S1 is INEOS' first tier of senior management

PEOPLE

Diversity at O&P North's Cologne site: the Lean In initiative

INEOS | CASE STUDY #12

INEOS in Cologne (Germany) stands for a corporate culture that is committed to diversity, respect, and openness. As early as 2013, INEOS in Cologne signed the Charter of Diversity with the aim of creating a climate of acceptance and mutual trust.

To this end, INEOS in Cologne participates every year in the German Diversity Day and shows its support for diversity in the world of work and beyond.

Women's career network Lean In

An important measure within the framework of the systematic promotion of women is participation in the women's career network "Lean In". It supports women to achieve their personal and professional goals and helps to create inclusive workplaces. To this end, female INEOS employees come together in groups of eight to twelve women at least once a month in so-called "Lean In" circles to share experiences and support each other.

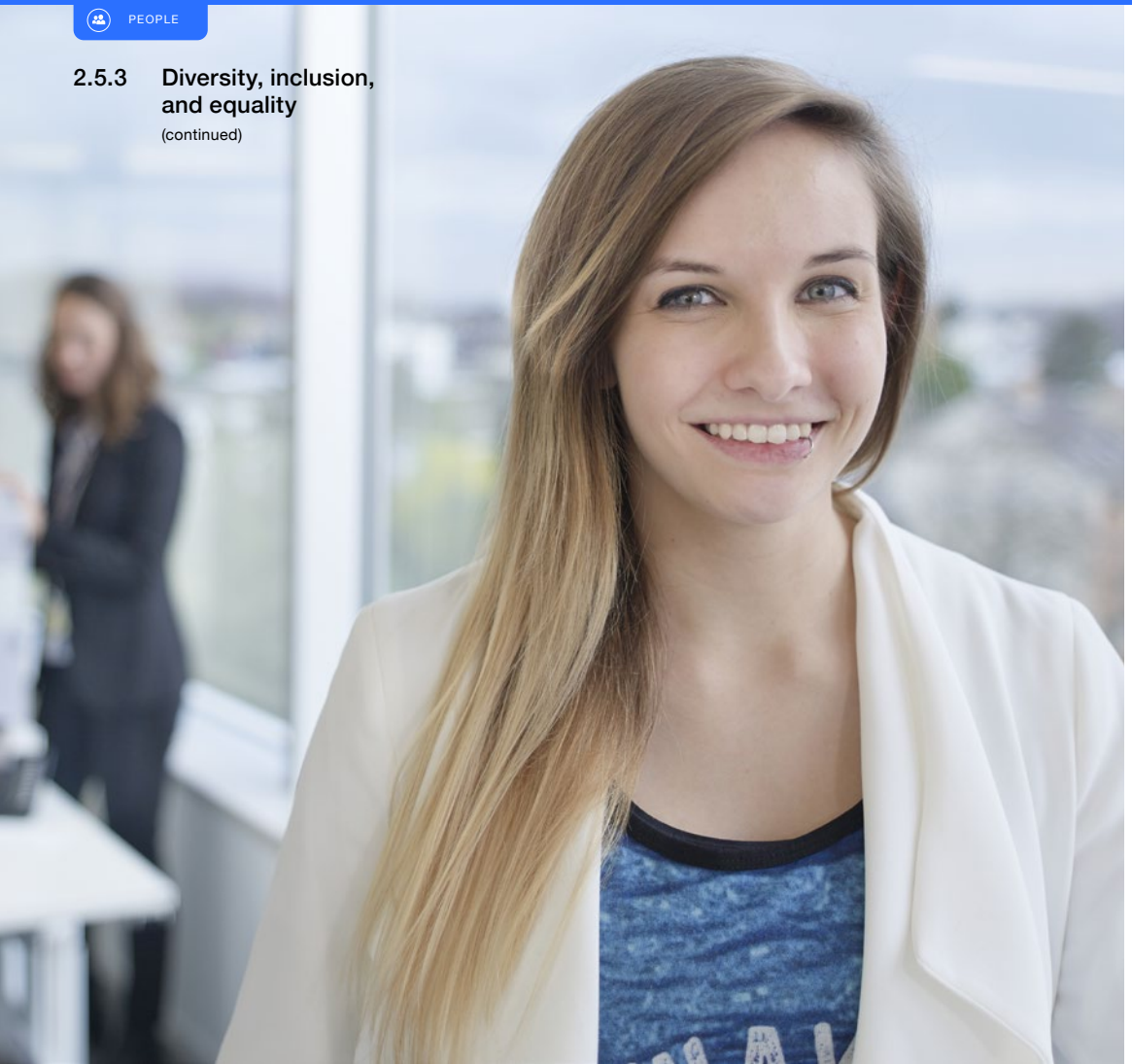
We believe in tolerance and respect. With a series of initiatives and projects in Cologne, INEOS is working every day to promote diverse and respectful coexistence–within the company and beyond. Discrimination, racism, sexism, degradation and exclusion have no place in our working lives.

ineos_insight22.pdf (ineoskoeln.de)

PEOPLE

2.5.3 Diversity, inclusion, and equality

(continued)



To monitor the evolution of our workforce, we track employee demographics and review the changes annually across INEOS.

The data are used to review manpower planning requirements, and to ensure that succession planning, and recruitment and development are meeting business objectives based on merit.

We collect data on age and gender, but do not universally track demographic data based on ethnicity, as definitions of racial and ethnic groups differ from country to country and collecting such data in some countries is a violation of privacy laws.

PEOPLE

2.6 People in our value chain: safeguarding conditions and human rights

INEOS recognises the right to collective bargaining and freedom of association, and we work to prevent any instances of forced or compulsory labour, child labour, or employment discrimination in our value chains.

We require our suppliers to protect human rights and ensure their employees are safe and well-treated. We work with responsible suppliers that comply with applicable laws and adhere to internationally recognised ESG standards, including those set forth in our Code of Conduct and SHEQ policy. INEOS believes that workers in the value chain deserve a fair and ethical workplace and must be treated with dignity and respect.

Through our Supplier Code of Conduct, we require our suppliers to protect human rights and provide a safe and fair working environment for employees by meeting standards in the following areas:

Supplier Code of Conduct key areas

- Health and safety, anti-discrimination, anti-harassment, and abuse
- Prevention of forced labour and human trafficking
- Prevention of child/under-age labour
- Avoidance of conflict minerals
- Fair working conditions
- Freedom of association and collective bargaining

Jurisdictions are introducing requirements for companies to conduct value-chain due diligence, which will include screening for risks of human rights incidents, introducing measures to mitigate risks and provide remediation, and reporting on progress annually. INEOS is currently strengthening its due diligence processes in anticipation of such forthcoming requirements under frameworks such as the LkSG in Germany and the CSDDD in the EU.

PEOPLE

INEOS Project ONE and the city of Antwerp join forces to employ local workers in the construction works for the new ethane cracker

INEOS | CASE STUDY #13

With Project ONE, INEOS is bringing technological innovation to the Port of Antwerp-Bruges by building a plant there for the production of ethylene, one of the most widely used basic chemicals in the world. Construction will take four years and at the height of the works some 2,500 workers will be working on site every day. There are currently 28,832 job-seekers in Antwerp. The need is therefore high. Together with the city of Antwerp, INEOS has now committed to hiring workers from Antwerp.

INEOS and the city of Antwerp are convinced that Antwerp job seekers can develop successful careers in the port and the chemical industry given the right support. INEOS believes that the Project ONE site could be the start of that career for those who want to work here. Workers will be able to work on both the preparatory works and the actual construction of the production unit.

INEOS and the city of Antwerp will work together to employ Antwerp workers in the construction works for the ethane cracker

Work for Project ONE - INEOS Project ONE

> “Project ONE is the biggest investment in the chemical cluster in the port of Antwerp for decades. Thousands of workers will be employed by contractors and subcontractors. INEOS shares the responsibility for deploying Antwerp jobseekers on this site.”

John McNally
CEO, INEOS Project ONE

2.6.1 Modern slavery and people trafficking in the supply chain

INEOS takes a zero-tolerance approach to modern slavery in the supply chain.

Most of our activities are carried out in the EU and the US in sectors at lower risk of modern slavery. Nevertheless, we recognise our responsibility to engage with value chain partners and staff, and alert them to the risks of slavery, however small, in their businesses and supply chains and help them act on it. We recognise that conducting forced labour due diligence is particularly important when using contractors for major construction projects.

Our approach includes regular checks and due diligence for on-boarding suppliers; monitoring potential risks in supply chains; carrying out selective supplier audits; implementing due diligence regarding slavery in mergers and acquisition activity; and protecting whistle-blowers. We also provide relevant training and make our anti-slavery policy available to all employees.

INEOS' anti-slavery policy reflects our commitment to acting ethically and with integrity in all our business relationships. It also leads to implementing and enforcing effective systems and controls to ensure slavery and human trafficking are not taking place anywhere in our supply chains.

Further information on INEOS' policy on modern slavery can be found in our Modern Slavery Transparency Statement.

PEOPLE

2.6.2 Supplier and customer monitoring

Our Supplier Code of Conduct defines and summarises what we expect of our suppliers, suppliers' subsidiaries and affiliates, their subcontractors or other business partners' contractors and agents, regardless of location or background in terms of Corporate Social Responsibility (CSR).

INEOS' group-wide Supplier Code of Conduct is part of our commitment to CSR. It can be found on our website in 22 languages. Each of our businesses, covering all INEOS sites worldwide, is expected to present the code and an associated questionnaire, available in 11 different languages, to all suppliers to monitor their ESG performance. All replies are automatically updated in a central database, which is accessible to all INEOS businesses.

INEOS provides sustainable procurement training and disseminates information across its businesses to implement the supplier code, which includes sharing examples of contractual clauses and assessments, and putting in place monitoring systems.

On specific occasions, INEOS performs supplier and contractor audits to monitor social (and environmental) performance and make sure that we are doing business with responsible companies who value their employees' human rights.

The following list of KPIs has been created and validated by our central procurement team.

Supplier code KPIs

- Distribution of the Supplier Code of Conduct
- Inclusion of social and environmental clauses in standard terms of purchase and in contracts
- Proportion of suppliers that have signed the Supplier Code or equivalent
- Proportion of procurement staff that have attended sustainable procurement training or self-training programme
- Response rate to the supplier questionnaire
- Suppliers with third-party CSR accreditation and which rating bands they belong to (i.e. platinum, gold, silver, or bronze)

2.7 People in our communities: respecting and supporting local communities

INEOS is committed to being a responsible neighbour and supporting local communities around our sites. We recognise that this underpins our licence to operate and is essential to the long-term prosperity of our business.

All INEOS businesses are required to operate according to robust SHE standards made clear in our Code of Conduct and SHEQ policy, both of which are designed to prevent incidents that could harm people in the vicinity of our sites or pollute the local environment.

We consult communities about any local development, and we seek to collaborate with neighbouring companies to strengthen local economies, use resources efficiently, and minimise waste. We have played a leading role in developing strong industrial clusters in Antwerp in Belgium, Cologne in Germany, Lavera in France, Grangemouth and Hull in the UK, Houston in the US, and Rafnes in Norway.

To minimise disturbance to local communities, we ensure that noise and odour pollution is kept to the lowest possible level around our facilities. Our sites perform regular measurements, either in their own right or through a third party, to make sure that any nuisance does not exceed the thresholds set by local legislation.

In addition to managing the impact of our sites on communities, INEOS is committed to supporting local causes and projects, with a focus on children, health, education, and access to grassroot sports. By working with schools, universities, hospitals, sports teams, local government, and charities we aim to inspire the next generation of scientists and engineers and promote general physical health, wellbeing, and fitness. In order to encourage diversity and equality across our skilled workers, we promote talented women at our locations with various projects. As well as providing funding, our employees contribute time and expertise directly to local projects. During humanitarian crises, we sometimes match donations from our employees and release them from work in support of communities.

By working with schools, universities, hospitals, sports teams, local government, and charities we aim to inspire the next generation of scientists and engineers

2.7.1 INEOS charities and foundations

INEOS is proud to support a wide range of charitable projects, such as The INEOS Oxford Institute, The Daily Mile, and The Forgotten Forty.

We are also involved in several conservation initiatives, including projects to preserve threatened Atlantic Salmon stocks in Iceland and protect the biodiversity of vital wetland regions in Tanzania. For further information, please refer to our website.

The INEOS Oxford Institute

In January 2021, INEOS announced a £100 million donation to Oxford University to establish the INEOS Oxford Institute for Antimicrobial Resistance (AMR) Research, which will work on tackling the global threat of drug-resistant infection.

The Daily Mile

Since 2016, INEOS has supported The Daily Mile initiative, which encourages children to develop positive habits for life by running a mile every day at school; over 3 million children from over 80 countries currently take part in the scheme.

The Forgotten Forty

In 2020, INEOS launched the Forgotten Forty initiative to alleviate childhood poverty in the UK by funding the most disadvantaged primary schools.

PEOPLE

The Daily Mile's 10th birthday: 335,000 children worldwide helped in cooperation with INEOS

INEOS | CASE STUDY #14

The Daily Mile, supported by INEOS, celebrated its 10th birthday in 2022 with a huge global event, bringing together 320,000 children in 1,340 schools in 21 countries across the globe to participate in The Daily Mile together.

The Daily Mile, supported by INEOS, is a transformative initiative where children run, jog wheel or walk for fifteen minutes every day in school, in which time, most people will average a mile or more. The initiative has enjoyed phenomenal success since it was started by then Headteacher Elaine Wyllie just ten years ago at a single primary school in Stirling, Scotland.

The Daily Mile | INEOS Foundations

> "INEOS has supported the Daily Mile for years because it's a free, simple, and effective way to improve children's physical and mental wellbeing. It has been a natural fit for us to work with an initiative that is so passionate about helping more children enjoy exercise more often, and we look forward to its success as it continues to transform more lives around the world."

Sir Jim Ratcliffe
Founder of INEOS

PEOPLE

The INEOS community fund: local mountain rescue team funding

INEOS | CASE STUDY #15

The Ochils Mountain Rescue Team that helps keep the local community safe in the Scottish Mountains has received over £15,000 from the INEOS Community Fund to assist their vital work.

From their base at Fishcross, near Alloa, the OMRT are a group of volunteers whose purpose is to locate and recover people who have found themselves in difficulties in the outdoors. They are available 24 hours a day, 365 days a year, in any weather conditions, to provide such support. Since the pandemic there has been a 50% increase in call-outs. They use specialist helicopters and search dogs when appropriate. The OMRT also deliver workshops on mountain safety in the local area.

Local Mountain Rescue Team receives £15,000 boost from the INEOS Community Fund to help keep people safe in the Scottish mountains

> "INEOS has recognised the important role of the OMRT in the local community close to our manufacturing operations in Grangemouth, and we are proud to help them during their time of need to keep people safe whilst enjoying the wonderful landscapes right on our doorstep."

Stuart Collings
CEO, INEOS Chemicals Grangemouth

PEOPLE

Empowering women through Habitat for Humanity's Women Build event

INEOS | CASE STUDY #16

Colleagues from our INEOS Styrolution office in Aurora, Illinois, participated in Chicagoland Habitat for Humanity's Women Build Event in West Chicago in October 2022.

Bringing women together in service of their communities, volunteers spent the day building affordable housing for a habitat family, the majority of which have female heads of household. The INEOS Styrolution team joined forces with a Habitat family, working side by side to build not only a physical home but also a foundation for a brighter future. By supporting the construction of affordable housing, these volunteers contributed to empowering families and promoting stability and independence through affordable homeownership.

The Women Build Event emphasises the power of collective action and highlights the importance of women's empowerment within communities. By participating in this event, INEOS Styrolution exemplifies its dedication to fostering positive change and making a meaningful impact on the lives of others.

https://www.chicagolandhabitat.org/site/PageServer?pagename=homepage_dupage#

GOVERNANCE

Governance

2.8 Governance: maintaining the highest standards of ethics and compliance

INEOS is committed to maintaining the highest ethical standards and operating responsibly in accordance with the law and our Code of Conduct, which is regularly updated and shared with our employees and key external stakeholders. Individually and collectively our teams are accountable for legal compliance, and our requirements and behavioural expectations for all INEOS businesses and their employees are outlined in our code.

The board of each INEOS business is responsible for ensuring that every employee adheres to INEOS' policies and operates within the law at all times. Legal compliance is a regular item on board agendas. To assist the board, a compliance manager is embedded within each business. Compliance managers lead legal compliance initiatives, help ensure adherence to INEOS' compliance policies, and support the board with the development and implementation of business compliance plans.

There are four key areas to compliance management that businesses must address:

1. ANTI-BRIBERY AND CORRUPTION
2. ANTI-SLAVERY, ANTI-CHILD LABOUR, AND ANTI-PEOPLE TRAFFICKING
3. ANTI-TRUST / COMPETITION LAWS
4. INTERNATIONAL TRADE / SANCTIONS

In addressing these areas in their compliance programmes, executive boards and compliance managers must have regard to the following elements of effective compliance management:

Elements of effective compliance management

Risk assessment: Identifying risks when engaging with new counterparties or trading in new products or jurisdictions and assessing such risks by completing comprehensive due diligence.

Prioritising and planning: Prioritising and planning for outcomes using a risk-based approach built on the likelihood of an event occurring and its potential impact and severity.

Training: Identifying all staff who are exposed to actual or potential risk and ensuring they are allocated and complete required training in the four areas of compliance listed above, which is monitored using a virtual training assistant (VTA) system.

Record keeping: Ensuring complete and accurate records are kept of external advice received, training content and completion, board meetings, trade conferences and seminars, meetings with competitors, trade unions and other key stakeholders, and external statements.

Reviewing: Reviewing business compliance plans regularly to account for changes in law, markets, and operations.

Reporting: Providing both the relevant board and the group legal compliance team with periodic reports on compliance issues, as well as annual training completion statistics.

Auditing: Conducting periodic audits of the relevant business to ensure appropriate compliance priorities are identified and addressed at a given business.

2.8 Governance: maintaining the highest standards of ethics and compliance

(continued)

While executive boards, with the assistance of compliance managers, are best placed to effectively identify and manage compliance risks within their business according to specific business needs and circumstances, they are supported at the central level by the group legal compliance team.

The group legal compliance team provides regular reporting and assurance on compliance matters to INEOS' shareholders. Significant business compliance issues are also reported to the shareholders of INEOS directly by the board of the relevant business.

The remit of the group legal compliance team includes the following:

- Circulating guidance notes and regular updates on changing areas of law.
- Providing free competition and commercial law helplines with external international law firms.
- Maintaining a central legal compliance database containing internal policies, guidance notes, reference materials, checklists, process and procedural documents, and sample contract terms and templates.
- Auditing legal compliance across existing and newly acquired businesses and commissioning spot-audits on businesses in legal compliance areas.
- Providing online training in compliance areas (monitored per business in the group VTA system), supplemented by in-person training events hosted by external experts.
- Hosting legal compliance conferences to discuss current issues, share knowledge, and promote development.
- Operating a compliance network for sharing best practice.

INEOS is committed to an environment where open, honest communications are the expectation, not the exception.

While INEOS encourages staff to report any instances of apparent or suspected malpractice to senior management of the relevant business in the first instance, INEOS also has an independent whistleblowing system in place known as Speak Up!. The system is hosted by a third-party operator and enables employees and contractors working on INEOS sites to report any concerns across the following areas anonymously:

- Dangers to safety, health and the environment
- Financial malpractice, impropriety, or fraud
- Failure to comply with a legal obligation or statutes
- Criminal activity
- Improper conduct or unethical behaviour
- Attempts to conceal any of the above

The Speak-Up! system is accessible 24 hours a day, 365 days a year by staff at each INEOS site globally, with reports able to be made in local languages. The group legal compliance team has established detailed guidance for the handling of reports issued through the system, including KPIs for response times to ensure that all reports are addressed as a matter of priority and resolved in a timely fashion.

Reports are allocated to the human resources director or compliance manager of the relevant business (as appropriate) so they can be thoroughly investigated, and enforcement action taken as required.

GOVERNANCE

INEOS receives gold sustainability rating from EcoVadis

INEOS | CASE STUDY #17

The overall rating, covering the company's global operations, puts INEOS in the top 8% of companies in the sector demonstrating an advanced management system in terms of environment issues, ethics, labour and human rights, and sustainable procurement.

INEOS scored particularly well on its environmental performance. In this category it was placed it into the top 6% of companies in the sector. This reflects INEOS' commitment to reducing emissions, with net-zero roadmaps for all our sites built around transitioning to green power and clean fuels, capturing CO_2, and switching to recycled or bio-feedstock.

INEOS is also committed to reducing plastic waste, as demonstrated by our 2025 and 2030 polymer targets.

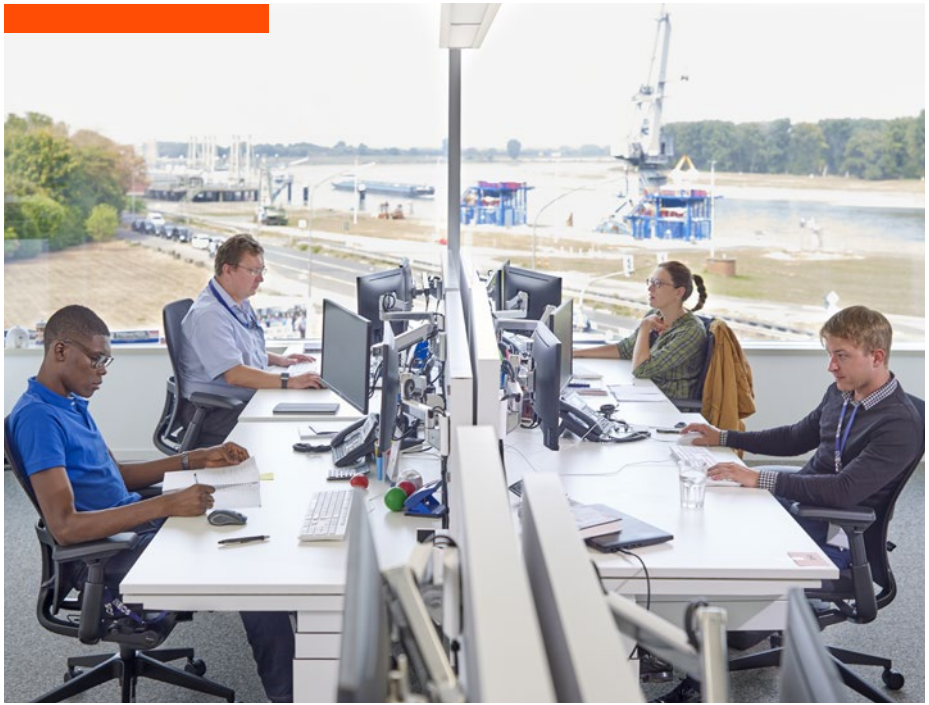
INEOS continues to work together with leading companies along the value chain to explore innovative recycling technologies and new feedstocks to produce new polymers that contain high levels of recycled plastic.

INEOS receives gold sustainability rating from EcoVadis

> "The gold rating by EcoVadis confirms a strong position in the industry based on our sustainability objectives and performance. It reflects our commitment to continuous improvement as we advance our long-term sustainability goals."

Prof. Dr. Greet Van Eetvelde
Global Head of Climate,
Energy & Innovation, INEOS Group

2.8.1 Anti-bribery and corruption



INEOS recognises its responsibility to maintain robust policies and ensure that its businesses and employees abide by all relevant laws and regulations to counter bribery and corruption in all the countries in which we operate.

We strictly prohibit the payment of bribes, kickbacks, or any form of improper payment to government personnel, officials, suppliers, customers, or any other party. We similarly prohibit any improper offer or promise, in cash or kind, to obtain or retain business or otherwise gain advantage for INEOS. These prohibitions apply irrespective of whether payments or offers are made directly or indirectly.

Each business is responsible for developing and maintaining internal controls that are proportionate to the risk of bribery and corruption faced by that business. Such controls must be subject to ongoing risk assessment, monitoring, and updating in order to ensure they remain effective and valid in response to changing circumstances. Businesses are also required to conduct appropriate due diligence and screening processes before forming contractual relationships with agents and distributors.

Training is provided to at-risk employees and monitored per business in the group VTA system. All employees are encouraged to seek clarification and guidance in cases of doubt.

INEOS has a zero-tolerance approach to breaches of its anti-bribery and corruption policies and internal control procedures. Any reports of actual or suspected violations are thoroughly investigated and appropriate sanctions imposed for non-compliance.

2.8.2 Anti-trust and anti-competitive practices

Vigorous competition, free from collusion and unreasonable restraints, is the most effective mechanism for ensuring that INEOS produces high-quality, well-priced products and services.

Anti-trust laws and competition laws regulate anti-competitive conduct by companies to ensure that this fair competition exists in an open-market economy. These laws are relevant to all INEOS businesses and ensuring compliance with these laws forms an integral part of each business' compliance plan.

Failure to comply with competition, anti-trust, and other trade regulation laws in any jurisdiction in which we conduct business could result in serious consequences, for INEOS and the offending individuals, including significant civil and criminal penalties.

To mitigate risk, employees are regularly trained on applicable anti-trust and competition rules and regulations and free helplines have been established with external legal advisers to which employees may direct queries at any time. Businesses are also required to carry out regular assessments to identify areas of potential risk in their business relating to anti-competitive behaviour.

GOVERNANCE

2.8.3 IT security

IT systems of large companies are under constant attack, which is why INEOS has a group-wide management system in place to minimise digital security risks.

We conduct regular threat hunting across INEOS' platforms and have a group-wide contract with a leading provider to monitor and alert us to potential threats across our network. INEOS is committed to respecting the intellectual property and data of customers, suppliers, and employees in full compliance with regulations, including the General Data Protection Regulation.

All INEOS employees are obliged to undergo regular cybersecurity training and have received a copy of our 10 golden IT security rules, which they are required to follow under our Code of Conduct. In addition to our behavioural codes, we have IT security incident management guides and Cybersecurity Incident Response Plans (CIRPs) in place, and we regularly undertake system vulnerability assessments and IT audits.

2.8.4 Political engagement

INEOS does not make any financial or in-kind political contributions and is committed to transparent political engagement that is in the interests of democracy and good governance.

We abide by local regulations on lobbying and our employees are required to follow the rules set out in INEOS' Code of Conduct when interacting with government representatives or undertaking political activity.

INEOS primarily engages in policy debates through industry associations, contributing to briefings and meetings that provide useful information and lend valuable expertise to the policymaking process. On occasion we also engage directly with policymakers on issues of concern to us that may not be covered by our associations. Our corporate affairs departments for climate and energy and communications are responsible for overseeing this political activity, which is supported by INEOS' networks.

INEOS discloses information on its EU political engagement via the EU transparency register. Our submission details the areas of policy we engage on, the associations of which we are a member, and the financial and human resources we devote to political activity. Our financial expenditure is calculated based on the number of FTEs involved and our contribution to associations (primarily Cefic). We also disclose information on our climate-related political engagement in our CDP disclosure.

We engage on policy concerning climate change, energy, the circular economy, pollution, chemical regulation, and energy-intensive industries. The positions we advocate in our political engagement, and the positions advocated by our associations, are consistent with our public statements and commitments.

As well as participating in national trade associations and councils, we are a member of various supranational groups. INEOS is also a signatory to numerous industry charters and voluntary agreements.

For further memberships, partnerships, and industry charters, please refer to our website.

Supranational groups:

- Cefic: ExCom, Board, programme councils, forums, issue teams, working and sector groups
- PlasticsEurope: ExCom, Board, strategic councils, working groups
- Petrochemicals Europe: ExCom, Board and working groups
- Eurochlor: Board and task forces
- EPCA: Board
- SusChem: co-chair SusChem Switzerland, member SusChem Europe
- A.SPIRE: corporate member
- RSB: corporate member
- ISCC: corporate member
- NAPCOR: corporate member
- PETCORE: corporate member

Industry charters and voluntary agreements:

- United Nations Global Compact
- Carbon Disclosure Project
- Responsible Care Global Charter
- Operation Clean Sweep
- Cefic sustainability charters and product charters, e.g. glycol ethers charter
- PlasticsEurope voluntary agreements
- Styrenics Circular Solutions (INEOS Styrolution)
- VinylPlus (INEOS Inovyn)
- Polyolefins Circular Economy Platform (INEOS O&P)
- Circular Plastics Alliance
- European Chemicals Agency charter on REACH
- SusChem
- UN CEO Water Mandate

3

Annexes

3.1 Independent limited assurance report on selected Sustainability Information of INEOS AG 119
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3.3 Reporting standards 146

3.1 Independent limited assurance report on selected Sustainability Information of INEOS AG

To the Board of Directors of INEOS AG, Rolle

We have conducted a limited assurance engagement on the Sustainability Information of INEOS AG (hereinafter referred to as "INEOS") for the sections highlighted as "assured by KPMG" in the GRI Index (page 146–158) of the Sustainability Report for the year ended on December 31, 2022 (hereinafter referred to as the "Sustainability Information").

Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Sustainability Report, Annual Report or any other Report, including any images, audio files or embedded videos.

Our limited assurance conclusion

Based on the procedures we have performed as described under the 'Summary of the work we performed as the basis for our assurance conclusion' and the evidence we have obtained, nothing has come to our attention that causes us to believe that INEOS' Sustainability Information in the above-mentioned sections of the Sustainability Report for the year ended December 31, 2022 is not prepared, in all material respects, in accordance with the Reporting Criteria.

We do not express an assurance conclusion on information in respect of earlier periods or to any other information included in the Sustainability Report or any other Report, including any images, audio files or embedded videos.

Understanding how INEOS AG has prepared the sustainability information

The Global Reporting Initiative (GRI) Standards, the Greenhouse Gas Protocol, the SASB Chemicals Standard, and internally developed criteria as disclosed in the GRI Index (pages 146–158) have been used as criteria references for the disclosures (Reporting Criteria). Consequently, the Sustainability Information needs to be read and understood together with the Reporting Criteria.

Inherent limitations in preparing the sustainability information

Due to the inherent limitations of any internal control structure, it is possible that errors or irregularities may occur in disclosures of the Sustainability Information and not be detected. Our engagement is not designed to detect all internal control weaknesses in the preparation of the Sustainability Information because the engagement was not performed on a continuous basis throughout the period and the audit procedures performed were on a test basis.

INEOS' responsibilities

The Board of Directors of INEOS is responsible for:

Selecting or establishing suitable criteria for preparing the Sustainability Information, taking into account applicable law and regulations related to reporting the Sustainability Information;

The preparation of the Sustainability Information in accordance with the Reporting Criteria;

Designing, implementing and maintaining internal control over information relevant to the preparation of the Sustainability Information that is free from material misstatement, whether due to fraud or error.

Our responsibilities

We are responsible for:

Planning and performing the engagement to obtain limited assurance about whether the Sustainability Information is free from material misstatement, whether due to fraud or error;

Forming an independent conclusion, based on the procedures we have performed and the evidence we have obtained; and

Reporting our independent conclusion to the Board of Directors of INEOS.

As we are engaged to form an independent conclusion on the Sustainability Information as prepared by management, we are not permitted to be involved in the preparation of the Sustainability Information as doing so may compromise our independence.

Professional standards applied

We performed a limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board.

Our independence and quality control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

Our work was carried out by an independent and multidisciplinary team including assurance practitioners and sustainability experts. We remain solely responsible for our assurance conclusion.

Summary of the work we performed as the basis for our assurance conclusion

We are required to plan and perform our work to address the areas where we have identified that a material misstatement of the Sustainability Information is likely to arise. The procedures we performed were based on our professional judgment. Carrying out our limited assurance engagement on the Sustainability Information included, among others:

Assessment of the design and implementation of systems, processes and internal controls for determining, processing and monitoring sustainability performance data, including the consolidation of data;

Inquiries of employees responsible for the determination and consolidation as well as the implementation of internal control procedures regarding the selected disclosures;

Inspection of selected internal and external documents to determine whether quantitative and qualitative information is supported by sufficient evidence and presented in an accurate and balanced manner;

Assessment of the data collection, validation and reporting processes as well as the reliability of the reported data on a test basis and through testing of selected calculations;

Analytical assessment of the data and trends of the quantitative disclosures included in the scope of the limited assurance engagement;

Assessment of the consistency of the disclosures applicable to INEOS AG with the other disclosures and key figures and of the overall presentation of the disclosures through critical reading of the Sustainability Report.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

KPMG AG

Zurich, 26th June 2023

— Silvan Jurt
Licensed audit expert

— Cyrill Kaufmann
Licensed audit expert

3.2 Sustainability data

Table 1

INEOS AG Greenhouse Gas inventory

[kt CO_2-eq]	2022	2021	2020	2019
Scope 1 emissions				
Carbon dioxide (CO_2)	13,724.99	14,850.39	14,429.06	14,848.89
Other GHG emissions[a]:				
Methane (CH_4)	94.33	83.72	86.32	68.74
Nitrous oxide (N_2O)	25.72	29.85	30.27	41.04
Hydrofluorocarbons (HFC)	32.09	30.01	11.27	22.01
Perfluorocarbons (PFC)	0.00	0.00	0.00	9.39
Sulphur hexafluoride (SF_6)	0.99	0.52	0.00	0.00
Nitrogen trifluoride (NF_3)	0.00	0.00	0.00	0.00
Exported energy to third parties[b]	1,231.10	1,249.25	1,379.15	1,303.40
Scope 2 emissions[c]				
Market-based emissions	5,716.54	6,421.05	6,713.27	7,202.94
Location-based emissions	4,529.98	5,289.13	5,082.62	5,744.74
Total emissions excluding exported energy[d]	**19,594.67**	**21,415.55**	**21,270.20**	**22,193.01**
Total emissions including exported energy	20,825.77	22,664.80	22,649.35	23,496.41
Additional data				
Captured CO_2[e]	244.67	303.93	254.64	258.92
Biogenic CO_2 from fuels	28.79	16.92	18.69	13.24
Biogenic CO_2 from imported energy	311.38	331.92	262.85	243.20
Offsets	-	-	-	-

Footnotes:

a. Other GHG emissions are converted to CO_2eq using the 100-year Global Warming Potential (GWP) factors from the IPCC's sixth assessment report (AR6) in 2022 and fifth assessment report (AR5) in previous years. Historical data are not recalculated with AR updates due to immaterial contribution of other GHGs to our inventory; CH_4 and N_2O emissions were 3,166 t and 94 t respectively in 2022, while other GHG data are collected only in tCO_2-eq due to lower materiality.

b. Emissions on energy exported to third parties are reported as a separate subcategory of scope 1; all emissions in this category are considered as CO_2 since the contribution of other GHGs is negligible (<0.01%).

c. The scope 2 figure is based on gross energy purchase with negligible contribution of other GHGs (<0.01%); highest quality available emission factors are used as per the hierarchy in the GHG protocol.

d. Total emissions are calculated using the market-based scope 2 figure.

e. Transferred CO_2 mainly covers captured carbon sold to third parties.

3.2 Sustainability data

Table 2

INEOS Group Holdings SA greenhouse gas inventory

[kt CO_2-eq]	2022	2021	2020	2019
Scope 1 emissions:				
Carbon dioxide (CO_2)	6,963.14	7,525.95	7,215.56	7,438.08
Other GHG emissions:				
Methane (CH_4)	29.41	25.93	25.51	14.45
Nitrous oxide (N_2O)	12.63	15.10	16.45	28.23
Hydrofluorocarbons (HFC)	8.61	4.56	2.18	7.07
Perfluorocarbons (PFC)	0.00	0.00	0.00	0.00
Sulphur hexafluoride (SF_6)	0.09	0.00	0.00	0.00
Nitrogen trifluoride (NF_3)	0.00	0.00	0.00	0.00
Exported energy to third parties	571.32	525.84	571.87	541.34
Scope 2 emissions:				
Market-based emissions	1,520.50	1,603.07	1,745.28	1,916.28
Location-based emissions	1,013.90	1,378.63	1,390.21	1,616.14
Total emissions excluding exported energy	**8,534.38**	**9,174.60**	**9,004.98**	**9,404.11**
Total emissions including exported energy	9,105.70	9,700.44	9,576.85	9,945.45
Additional data				
Captured CO_2	210.95	263.82	228.72	223.15
Biogenic CO_2 from fuels	16.36	5.57	6.05	0.29
Biogenic CO_2 from imported energy	25.05	26.18	16.10	23.04
Offsets	-	-	-	-

Tables 2–4 contain the GHG inventories of the main subsidiaries of INEOS AG that produce consolidated financial accounts of interest to our investors, namely INEOS Group Holdings SA, INEOS Quattro Holdings Limited, and INEOS Enterprises Holdings Limited. The INEOS AG inventory in Table 1 includes the emissions in these three subsidiary inventories, as well as emissions from certain other INEOS AG entities (see About this report). It should be noted that the figures reported here for INEOS Enterprises Holdings Limited exceed those reported under the UK's Streamlined Energy and Carbon Reporting framework because they cover global operations rather than only UK operations.

3.2 Sustainability data

Table 3

INEOS Quattro Holdings Limited greenhouse gas inventory

[kt CO_2-eq]	2022	2021	2020	2019
Scope 1 emissions:				
Carbon dioxide (CO_2)	3,349.40	3,662.71	3,641.06	3,850.05
Other GHG emissions:				
Methane (CH_4)	47.70	39.73	41.16	34.52
Nitrous oxide (N_2O)	3.40	4.34	3.79	2.43
Hydrofluorocarbons (HFC)	19.21	14.67	5.83	13.10
Perfluorocarbons (PFC)	0.00	0.00	0.00	9.39
Sulphur hexafluoride (SF_6)	0.87	0.52	0.00	0.00
Nitrogen trifluoride (NF_3)	0.00	0.00	0.00	0.00
Exported energy to third parties	238.44	305.52	331.65	287.22
Scope 2 emissions:				
Market-based emissions	3,635.52	4,189.02	4,304.44	4,352.28
Location-based emissions	2,938.38	3,324.31	3,108.01	3,406.62
Total emissions excluding exported energy	**7,056.09**	**7,911.00**	**7,996.27**	**8,261.78**
Total emissions including exported energy	7,294.53	8,216.52	8,327.93	8,549.00
Additional data				
Captured CO_2	1.85	2.95	2.90	2.90
Biogenic CO_2 from fuels	0.00	0.00	0.00	0.00
Biogenic CO_2 from imported energy	280.50	305.73	246.75	220.16
Offsets	-	-	-	-

3.2 Sustainability data

Table 4

INEOS Enterprises Holdings Limited greenhouse gas inventory

[kt CO_2-eq]	2022	2021	2020	2019
Scope 1 emissions:				
Carbon dioxide (CO_2)	877.14	938.82	937.63	884.08
Other GHG emissions:				
Methane (CH_4)	0.20	0.19	0.18	0.09
Nitrous oxide (N_2O)	0.19	0.18	0.18	0.10
Hydrofluorocarbons (HFC)	0.07	0.20	0.08	0.20
Perfluorocarbons (PFC)	0.00	0.00	0.00	0.00
Sulphur hexafluoride (SF_6)	0.00	0.00	0.00	0.00
Nitrogen trifluoride (NF_3)	0.00	0.00	0.00	0.00
Exported energy to third parties	20.80	19.72	22.94	39.24
Scope 2 emissions:				
Market-based emissions	356.47	468.91	493.54	719.94
Location-based emissions	393.64	458.04	444.81	531.92
Total emissions excluding exported energy	**1,234.07**	**1,408.30**	**1,431.62**	**1,604.41**
Total emissions including exported energy	1,254.87	1,428.03	1,454.56	1,643.65
Additional data				
Captured CO_2	0.00	0.00	0.00	0.00
Biogenic CO_2 from fuels	0.00	0.00	0.00	0.00
Biogenic CO_2 from imported energy	5.83	0.00	0.00	0.00
Offsets	-	-	-	-

3.2 Sustainability data

Table 6

Breakdown of energy footprint

We calculate our energy consumption from fuels using the lower heating value and mass flow rate of each fuel. The energy content of our steam, electricity, and other utilities is typically calculated based on invoices. Electricity is directly metered but steam consumption is metered in terms of mass flow, which is multiplied with enthalpy to calculate its energy content.

[PJ]	2022
FUELS	**248.18**
Non-renewable fuel consumption - other	225.20
Non-renewable fuel consumption - hydrogen	22.40
Renewable fuel consumption	0.58
ELECTRICITY	**33.35**
Non-renewable electricity consumption	33.59
Renewable electricity consumption	6.54
Electricity sold	6.78
HEAT (STEAM, HOT WATER, HOT OIL)	**22.03**
Non-renewable heat consumption	33.84
Renewable heat consumption	0.91
Heat sold	12.72
OTHER UTILITIES	**0.37**
Non-renewable other utility consumption	0.37
Renewable other utility consumption	0.00
Other utility sold	0.00

3.2 Sustainability data

Table 7

Breakdown of water footprint

[Mm³]	Water stress sites	Other sites
WITHDRAWAL	**21**	**1,002**
Seawater	4	510
Produced water	0	6
Surface water	9	214
Groundwater	4	40
Third party water	4	232
Third party from surface	2	204
Third party from sea	0	0
Third party from ground	2	28
Third party from produced	0	0
WITHDRAWAL BY TYPE		
Fresh water withdrawal	16	487
Other water discharge	4	516
WITHDRAWAL BY USE		
Cooling water	8	796
Process water	13	206

[Mm³]	Water stress sites	Other sites
DISCHARGE	**16**	**923**
To sea	6	598
To surface waters	10	291
To groundwater	0	6
To third party	0	28
DISCHARGE BY TYPE		
Fresh water discharge	5	248
Other water discharge	11	675
DISCHARGE BY USE		
Cooling water	1	611
Process water	15	312
WATER CONSUMPTION	**5**	**79**

3.2 Sustainability data

Table 8

Breakdown of waste footprint

[t]	2022
HAZARDOUS WASTE	**208,085**
Recycling	52,139
Off-site	36,534
On-site	15,605
Reuse	2,344
Off-site	2,344
On-site	0
Other recovered[a]	2,385
Recovery of energy	120,019
Off-site	43,971
On-site	76,049
Incineration	14,712
Off-site	13,303
On-site	1,409
Landfill	6,621
Off-site	6,488
On-site	133
Other disposed[a]	9,865
Total hazardous waste diverted from disposal	**56,868**
Total hazardous waste directed to disposal	**151,217**

[t]	2022
NON-HAZARDOUS WASTE	**505,449**
Recycling	68,073
Off-site	67,700
On-site	373
Reuse	5,960
Off-site	5,673
On-site	287
Other recovered[a]	14,067
Recovery of energy	19,871
Off-site	19,871
On-site	0
Incineration	32,642
Off-site	22,384
On-site	10,258
Landfill	344,550
Off-site	69,920
On-site	274,630
Other disposed[a]	20,286
Total non-hazardous waste diverted from disposal	**88,100**
Total non-hazardous waste directed to disposal	**417,349**

Footnote:

a. Other waste was not split into recovered and disposed before 2022, so it is assumed that other waste was 100% directed to disposal before 2022.

3.2 Sustainability data

Table 9

Manufacturing site certifications

CERTIFICATION KPIs		REGION				
		AMERICAS	APAC	EMEA	GROUP 2022	GROUP 2021
Proportion of sites with ISO certifications	ISO 9001	82.2%	100%	84.5%	84.8%	88.6%
	ISO 14001 EMAS	26.7%	77.8%	84.5%	60.7%	64%
	ISO 17020 17025	2.2%	0%	12.1%	7.1%	6.2%
	IGGNs (ISO45001/OHSAS18001)	100%	100%	100%	100%	100%
	ISO 45001 OHSAS 18001	0%	33.3%	19%	12.5%	12.3%
	ISO 50001 EBO ESOS	0%	33.3%	50%	28.6%	28.3%
Sites with feedstock certification	RSB	1	0	17	18	15
	ISCC PLUS	3	0	19	22	16
	PAS 2050 PAS 2060	0	0	1	1	2
Carbon neutrality certifications (PAS2050/2060)		0	2	0	2	2

3.2 Sustainability data

Table 10

Environmental governance KPIs

CERTIFICATION KPIs		REGION				
		AMERICAS	APAC	EMEA	GROUP 2022	GROUP 2021
Proportion of businesses with dedicated employee/team		100%	100%	100%	100%	100%
Proportion of sites with dedicated employee/team		78.2%	93.3%	84.8%	82.9%	-
Proportion of dedicated site employees/ teams covering:	Emergency preparedness response and investigation	100%	100%	100%	100%	98.2%
	GHG emissions management	97.8%	100%	87.9%	92.9%	92.1%
	Energy management and transition	71.1%	100%	94.8%	85.7%	67.5%
	Hazardous materials management	100%	100%	100%	100%	96.4%
	Waste management	100%	100%	100%	100%	97.4%
	Water management	100%	100%	94.8%	97.32%	91.2%
	Pollution to air, soil and water	100%	100%	93.1%	96.4%	-
	Product use and/or product end-of-life	35.6%	88.9%	55.2%	50%	-
	Customer health and safety	53.3%	88.9%	67.2%	63.4%	-
	Environmental services and advocacy	24.4%	55.6%	55.2%	42.9%	-

3.2 Sustainability data

Table 11

Workforce governance KPIs

WORKFORCE GOVERNANCE KPIs		REGION				
		AMERICAS	APAC	EMEA	GROUP 2022	GROUP 2021
Proportion of businesses with dedicated employee/team		100%	100%	100%	100%	100%
Proportion of sites with dedicated employee/team		86.7%	81%	78.8%	82.1%	-
Proportion of dedicated site employees/ teams covering:	Employee health and safety issues	100%	100%	100%	100%	100%
	Diversity initiatives	88.6%	55.6%	51.7%	66.7%	39.4%
	Community relations	88.6%	100%	84.5%	87.4%	71.6%
	Working conditions	100%	77.8%	98.3%	97.3%	89.9%
	Social dialogue	77.3%	66.7%	89.7%	82.9%	-
	Career management training and development	97.7%	100%	93.1%	95.5%	-
	External human rights issues	54.6%	66.7%	34.5%	45.1%	-

3.2 Sustainability data

Table 12

Ethics governance KPIs

ETHICS GOVERNANCE KPIs		REGION				
		AMERICAS	APAC	EMEA	GROUP 2022	GROUP 2021
Proportion of businesses with dedicated employee/team		100%	100%	100%	100%	100%
Proportion of sites with dedicated employee/team		90%	100%	92.4%	92%	-
Proportion of dedicated site employees/ teams covering:	Anti-bribery and corruption	95.6%	100%	93.2%	94.7%	84.2%
	Anti-trust and competitive practices	95.6%	100%	93.2%	94.7%	82.4%
	Modern slavery and people trafficking	84.4%	100%	88.1%	87.6%	78.1%
	International trade and sanctions	84.4%	100%	94.9%	91.2%	-

3.2 Sustainability data

Table 13

Sustainable procurement governance KPIs

SUSTAINABLE PROCUREMENT GOVERNANCE KPIs		REGION				
		AMERICAS	APAC	EMEA	GROUP 2022	GROUP 2021
Proportion of businesses with dedicated employee/team		100%	100%	100%	100%	100%
Proportion of sites with dedicated employee/team		45.6%	77.8%	83.9%	68.1%	-
Proportion of dedicated site employees/ teams covering:	Environmental management of suppliers	44.4%	77.8%	84.8%	68.1%	39.8%
	Social management of suppliers	46.7%	77.8%	83.1%	68.1%	32.7%

3.2 Sustainability data

Table 14.1

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
	Other	3	0	5	8
	Female	979	264	2,604	3,847
	Male	4,508	985	13,544	19,037
Total		5,490	1,249	16,153	22,892

3.2 Sustainability data

Table 14.2

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
	S1 or above	203	37	561	801
	Below S1	5,287	1,212	15,592	22,091
Total		5,490	1,249	16,153	22,892

Note: INEOS' grade classification for senior level management starts at S1.

3.2 Sustainability data

Table 14.3

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Percentage of FTE employees					
S1 or above	Other	0	0	0	0
	Female	13.79%	10.81%	14.38%	14.07%
	Male	86.21%	89.19%	85.62%	85.93%
Below S1	Other	0.06%	0	0.03%	0.04%
	Female	17.99%	21.45%	16.18%	16.9%
	Male	81.96%	78.55%	83.78%	83.06%

Note: INEOS' grade classification for senior level management starts at S1.

3.2 Sustainability data

Table 14.4

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
Permanent	Other	3	0	5	8
	Female	938	210	2,467	3,615
	Male	4,203	892	12,902	17,997
Total		5,144	1,102	15,374	21,620
Fixed	Other	0	0	0	0
	Female	41	54	137	232
	Male	305	93	642	1,040
Total		346	147	779	1,272
Grand total		5,490	1,249	16,153	22,892

3.2 Sustainability data

Table 14.5

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
Full-time	Other	3	0	0	3
	Female	909	264	2,121	3,294
	Male	4,089	985	12,736	17,810
Total		5,001	1,249	14,856	21,106
Part-time	Other	0	0	5	5
	Female	70	0	483	553
	Male	419	0	808	1,227
Total		489	0	1,296	1,785
Grand total		5,490	1,249	16,153	22,892

3.2 Sustainability data

Table 15.1

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
Hires	< 30 years old	309	33	604	946
	30-50 years old	505	60	811	1,376
	>50 years old	117	6	192	315
Grand total		931	99	1,607	2,637
Turnover	< 30 years old	222	40	288	550
	30-50 years old	373	54	565	992
	>50 years old	329	27	563	919
Grand total		924	121	1,415	2,460

3.2 Sustainability data

Table 15.2

Employee demographics

MEASURE		2022			
		REGION			
		AMERICAS	APAC	EMEA	GROUP
Number of FTE employees					
Hires	Other	4	0	1	5
	Female	149	28	331	508
	Male	778	71	1,275	2,124
Grand total		931	99	1,607	2,637
Turnover	Other	2	0	0	2
	Female	175	27	280	482
	Male	747	94	1,135	1,976
Grand total		924	121	1,415	2,460

3.2 Sustainability data

Table 16.1

Percentage of sites with training by type and by region

MEASURE	2022			
	REGION			
	AMERICAS	APAC	EMEA	GROUP
Percentage of sites with training by type				
Health and safety	96.4%	88.9%	89%	91.7%
Environment	89.3%	66.7%	78.1%	80.8%
Labour and human rights	76.8%	44.4%	48.8%	58.3%
Career and soft skills	85.7%	88.9%	93.9%	90.4%
Diversity and anti-harassement	89.3%	88.9%	70.7%	79.5%

3.2 Sustainability data

Table 16.2

Employee career management

MEASURE	2022			
	REGION			
	AMERICAS	APAC	EMEA	GROUP
Percentage of employees receiving training by seniority				
Below S1	99%	84%	92%	93%
S1 or above	99%	95%	82%	87%

Note: INEOS' grade classification for senior level management starts at S1.

3.2 Sustainability data

Table 16.3

Employee career management

MEASURE	2022			
	REGION			
	AMERICAS	APAC	EMEA	GROUP
Percentage of employees receiving training				
Other	33%	NA	100%	75%
Female	98%	85%	88%	91%
Male	100%	84%	92%	93%

3.2 Sustainability data

Table 16.4

Employee career management

MEASURE	2022			
	REGION			
	AMERICAS	APAC	EMEA	GROUP
Percentage of employees receiving a performance review				
Below S1	98%	87%	93%	94%
S1 or above	99%	100%	96%	97%

Note: INEOS' grade classification for senior level management starts at S1.

3.2 Sustainability data

Table 16.5

Employee career management

MEASURE	2022			
	REGION			
	AMERICAS	APAC	EMEA	GROUP
Percentage of employees receiving a performance review				
Other	33%	NA	100%	75%
Female	98%	99%	93%	95%
Male	98%	84%	93%	94%

3.3 Reporting standards

3.3.1 GRI

3.3.1.1 General disclosures

INEOS' 2022 sustainability report has been prepared in accordance with Global Reporting Initiative (GRI) standards, using GRI 1: Foundation 2021. This index sets out where information can be found in the report pertaining to specific GRI disclosures; namely all GRI 2 and GRI 3 disclosures, as well as the GRI disclosures of relevance to our material topics. In addition to reporting GRI disclosures, INEOS also reports general information on sustainability topics of wider interest. The contents page sets out where this information can be located in the report.

In our materiality assessment, which was conducted in accordance with GRI 3, the following GRI 11 topics were identified as not material for INEOS as a group in 2022; so have not been used to select disclosures for inclusion in the GRI index: *biodiversity, closure and rehabilitation, employment practices, non-discrimination and equal opportunity, forced labour and modern slavery, freedom of association and collective bargaining, economic impacts, local communities, land and resource rights, rights of indigenous peoples, conflict and security, anti-competitive behaviour, anti-corruption, payments to governments, and public policy.*

3.3.1.1 General disclosures

GRI	DISCLOSURE	SECTION	PAGE	COMMENTS	ASSURED BY KPMG
The organisation and its reporting practices					
2-1	Organisational details	Front cover About this report 1.2.1 INEOS at a glance 1.2.2 Our structure 1.2.2.1 Significant structural changes	1 3 8 10		✓
2-2	Entities included in the organisation's sustainability reporting	About this report 1.2.2 Our structure 1.2.2.1 Significant structural changes	3 10	Our audited consolidated financial statements are published online: Investors | INEOS Group.	✓
2-3	Reporting period, frequency and contact point	About this report	3		✓
2-4	Restatements of information	1.2.2.1 Significant structural changes 2.1 Climate change: advancing the transition to net zero in our industry 2.1.2.1 Scope 1 and 2 emissions 2.1.3 Energy 2.2.3.1 Waste footprint 2.3.1 Water footprint 3.2 Sustainability data	32 101	For the purposes of accurate comparison, INEOS has restated past environmental data to take account of structural changes in the company (detailed in section 1.2.2.1) as well as accounting improvements made in 2022. These improvements include: • Using more accurate emissions factors for steam, natural gas, and electricity. • Using improved methods for calculating the energy content of imported and exported steam. • Accounting for low temperature waste heat received from third parties. • Allocating water volumes that bypass INEOS sites to third parties. • Excluding cooling water that is circulated in loops from our withdrawal and discharge volumes. • Estimating rainwater abstraction as the difference between total discharge and withdrawal when discharge volume is larger. • Consolidating water and waste data for all joint arrangements at INEOS share (some small JVs had reported at full ownership in previous years). • Splitting waste associated with third parties neighbouring our sites from our waste. Overall, these changes resulted in a decrease of ~0.026 Mt CO_2-eq in scope 1 and 2 emissions, ~27 Mm^3 in water withdrawal, ~21 Mm^3 in water discharge, ~33kt in total waste and an increase of ~0.5 PJ in energy consumption in the 2021 data. The assurance of this disclosure pertains to the accuracy of the description of the restatement and not to the accuracy of the data from previous years.	✓

2-5	External assurance	3.1 Assurance report	98	The decision to seek assurance was taken at group level by senior INEOS directors. Greet Van Eetvelde, Global Head of Climate, Energy, and Innovation managed the process. Business CEOs and INEOS' owners were kept apprised of the process through INEOS' CEO ESG Committee.	✓
Activities and workers					
2-6	Activities, value chain and other business relationships	1.2.1 INEOS at a glance 1.2.2.1 Significant structural changes 1.2.3 Our value chains	8 11 12	Please refer to our website for further information on our i) businesses; ii) industries; iii) products (and upstream supply chains); iv) markets; and v) consumer brands.	✓
2-7	Employees	About this report 2.5 Our people 3.2 Sustainability data (Table 14.1-14.5)		Employee figures are calculated for 31 December 2022 on a Full Time Equivalent (FTE) basis (except averages). Percentages use the full FTE figure as the base. INEOS does not employ any non-guaranteed hours employees.	✓
2-8	Workers who are not employees	2.5. Our people 3.2 Sustainability data		Non-employee figures are calculated for 31 December 2022 on a Full Time Equivalent (FTE) basis. As this is the first year we report on number of contractors, we cannot describe significant fluctuations.	✓
Governance					
2-9	Governance structure and composition	About this report 1.2.2 Our structure 1.3.3 Sustainability governance		INEOS does not have a conventional highest governance body, as a large privately owned company with a federal structure comprising many business boards. Consequently, some of the requirements of this disclosure are not applicable to INEOS and have been omitted in keeping with GRI 1.	-
2-10	Nomination and selection of the highest governance body	1.2.2 Our structure		INEOS does not have a conventional highest governance body, as a large privately owned company with a federal structure comprising many business boards. Consequently, some of the requirements of this disclosure are not applicable to INEOS and have been omitted in keeping with GRI 1.	-
2-11	Chair of highest governance body	About this report 1.1 Tackling global challenges 1.2.2 Our structure		Our founder and majority owner Sir Jim Ratcliffe acts as chairman of INEOS.	-

2-12	Role of highest governance body in overseeing the management of impacts	1.2.2 1.3.1 1.3.2 1.3.3	Our structure Our commitments and policies Our material topics Sustainability governance	INEOS develops group-wide policies and targets that are approved at the highest level through our ESG Committee, which reports to our owners. Targets and policies are enforced through our federal reporting structure.	-
2-13	Delegation of responsibility for managing impacts	1.2.2 1.3.3	Our structure Sustainability governance		-
2-14	Role of highest governance body in sustainability reporting	1.2.2 1.3.3	Our structure Sustainability governance	INEOS' sustainability reporting is reviewed and approved at the highest level through our ESG Committee, which reports to INEOS' owners.	-
2-15	Conflicts of interest	1.2.2 1.3.1 2.8	Our structure Our commitments and policies Governance	INEOS does not have a conventional highest governance body, as a large privately owned company with a federal structure comprising many business boards. Consequently, some of the requirements of this disclosure are not applicable to INEOS and have been omitted in keeping with GRI 1.	-
2-16	Communication of critical concerns	1.2.2 1.3.3 2.5.1.1 2.8	Our structure Sustainability governance INEOS' health and safety management system Governance	Concerns are regularly discussed at board level within our businesses, as well as relayed to INEOS' owners through our ESG Committee and at ExCo meetings. INEOS does not have a conventional highest governance body, or means of quantifying concerns, so omits to report on this aspect of the disclosure on the grounds that the information is unavailable.	-
2-17	Collective knowledge of the highest governance body	1.1.1 1.2.2 1.3.3	Statement from our Chairman Our structure Sustainability governance	Sustainability knowledge is disseminated through INEOS via our networks and shared at the highest level in the organisation through our ESG Committee that reports to our owners.	-
2-18	Evaluation of the performance of the highest governance body			INEOS does not have a conventional highest governance body, as a large privately owned company with a federal structure comprising many business boards. Consequently, the requirements of this disclosure are not applicable to INEOS and have been omitted in keeping with GRI 1. Our business boards report regularly to our owners on their performance through ExCo meetings.	-
2-19	Remuneration policies	1.3.3 2.5.2.3	Sustainability governance Remuneration	More information on our remuneration strategy can be found on our website: Recruitment, Development and Remuneration | INEOS Group and Code of Conduct | INEOS Group.	-

2-20	Process to determine remuneration	1.3.3 2.5.2	Sustainability governance Recruitment, development, and remuneration		More information on our remuneration strategy can be found on our website: Recruitment, Development and Remuneration | INEOS Group and Code of Conduct | INEOS Group.	-
2-21	Annual total compensation ratio				Fair remuneration is fundamental to INEOS, but we do not consider this disclosure to be a meaningful measure for a large privately-owned company, so we omit it on the grounds that it is not applicable.	-
Strategy, policies, and practices						
2-22	Statement on sustainable development strategy	1.1	Tackling global challenges			✓
2-23	Policy commitments	1.3.1 2.5 2.8	Our commitment and policies Our people Governance		All group-wide policies mentioned in this report are approved at the highest governance level, and communicated to our internal and external stakeholders via our website: Policies and codes	✓
2-24	Embedding policy commitments	1.3.1 1.3.3 2.5 2.5.2 2.8 3.2	Our commitment and policies Sustainability governance Our people Recruitment, development, and remuneration Governance Sustainability data		More information on how we ensure responsible business conduct can be found on our website: Governance | INEOS Sustainability	✓

2-25	Processes to remediate negative impacts			As outlined in our IGGNs (INEOS Group Guidance Notes), INEOS monitors complaints from members of the public, as well as employees from other companies working at our sites, and regulatory authorities (including prosecutions and citations). Complaints are classified according to significance as follows: • Category I: Complaints from members of the public not considered to be justified against INEOS after appropriate investigation has been carried out. • Category IIa: Justified complaints from members of the public where three or fewer persons complained about the same event. • Category IIb: Justified complaints from members of the public where more than three persons complained about the same event. • Category III: Formal written complaints from regulatory authorities, including legally enforceable instruments requiring specific improvement. Issues are investigated and addressed as they arise. Each business gathers and reviews data on site complaints to determine what action is required and for the purposes of preparing its annual letter of assurance to INEOS' owners. We also have a list of contacts per INEOS business available on our website in case of emergencies and complaints: Contacts | INEOS.	NA
2-26	Mechanisms for seeking advice and raising concerns	2.8 Governance		More information can be found in our Code of Conduct, Supplier Code of Conduct and the INEOS Speak Up! service.	✓
2-27	Compliance with laws and regulations			INEOS omits GRI 2-27 on the grounds of confidentiality.	NA
2-28	Membership associations	1.3.1 Our commitment and policies 1.3.3 Sustainability governance 1.3.4 Contributing to the UN SDGs 2.4.1 Avoiding pollution to air, water, and soil 2.4.2.1 Compliance with global product safety regulations 2.4.2.2 Responsible Care 2.7.1 INEOS charities and foundations 2.8.4 Political engagement		Further information on our memberships, charities, and foundations can be found on our website: Associations, Charities and Foundations.	✓

Stakeholder engagement						
2-29	Approach to stakeholder engagement	1.3.3.4 1.3.4 2.7 3.2	Stakeholder engagement Contributing to the UN SDGs People in our communities Sustainability data			✓
2-30	Collective bargaining agreements	2.5	Our people		The percentage of INEOS employees covered by a CLA/CBA changed significantly as more accurate data was collected (i.e. we collected the data in terms of total numbers split by gender per site instead of one average percentage per site).	✓

3.1.1.2 Management approach

GRI	DISCLOSURE	SECTION		PAGE	COMMENTS	ASSURED BY KPMG
3-1	Process to determine material topics	1.3.2	Our material topics	19		✓
3-2	List of material topics	1.3.2	Our material topics	19		✓
3-3	Management of material topics	1.3.2	Our material topics throughout the report		For each material topic, the following information is explained throughout: • INEOS policies and commitments, • qualitative and quantitative targets, • actions taken to achieve targets, which includes monitoring progress, • any engagements, partnerships, and memberships to achieve these targets.	✓

3.1.1.3 Economics

GRI	DISCLOSURE	SECTION		PAGE	COMMENTS	ASSURED BY KPMG
Economic performance–INEOS' key material topics: climate change						
201-2	Financial implications and other risks and opportunities due to climate change	2.1.6 1.3.1	Climate-related financial risks and opportunities Our commitments and policies		INEOS does not currently disclose detailed information on the financial impact of climate-related risks and opportunities in its sustainability reports; however, impacts are disclosed in our annual CDP submission and the consolidated financial accounts of our three major finance groups, which can be found on our website: Investors | INEOS Group.	

3.3.1.4 Environment

GRI	DISCLOSURE	SECTION	PAGE	COMMENTS	ASSURED BY KPMG
Energy–INEOS' key material topics: climate change					
302-1	Energy consumption within the organisation	2.1.3 Energy 3.2 Sustainability data (Table 6)			✓
302-2	Energy consumption outside of the organisation			INEOS does not currently monitor energy consumption outside of the organisation so omits this disclosure on the grounds that the information is unavailable	NA
302-3	Energy intensity	2.1.3 Energy			✓
302-4	Reduction of energy consumption	2.1.3 Energy 2.1.4 Our roadmaps and targets 2.1.4.1 Tansition to lower carbon energy		Energy reduction figures are calculated based on the expected energy consumption prior and post project implementation for the same production rates. Emissions factors from the reporting year are used to calculate the impact of the projects in terms of GHG reductions. Only CO_2 is considered in the impact calculations since other GHGs would have a negligible contribution.	✓
Water and effluents–INEOS' key material topics: pollution, water					
303-1	Interactions with water as a shared resource	2.3 Water stewardship 1.3.1 Our commitments and policies 1.3.2 Our material topics			✓
303-2	Management of water discharge-related impacts	2.3 Water stewardship 2.3.2 Water management 2.4.1 Avoiding pollution to air, water and soil 2.4.2.1 Emissions to water 1.3.1 Our commitments and policies		Wastewater discharges from chemical plants are heavily regulated and rules vary depending on the nature of the plant, local conditions, and the regional legal framework. As such, INEOS does not apply a general standard on discharge quality but instead focuses on managing discharges in compliance with site permits and local regulations, while sharing best practices between our sites.	✓
303-3	Water withdrawal	2.3.1 Water footprint 3.2 Sustainability data (Table 7)		INEOS does not break down third-party water withdrawals in stress areas by source because this only represents 2% of our withdrawals.	✓

303-4	Water discharge	2.3.1 3.2	Water footprint Sustainability data (Table 7)		Substances of concern in water are monitored according to local requirements and not reported globally. INEOS does not currently collect group-wide data on the number of incidents of non-compliance with discharge limits so omits one of the datapoints from this disclosure on the grounds that the information is unavailable.	✓
303-5	Water consumption	2.3.1 3.2	Water footprint Sustainability data (Table 7)			✓
Emissions–INEOS' key material topics: climate change, pollution						
305-1	Direct (S1) GHG emissions	2.1.1 2.1.2.1 3.2	The INEOS science base Scope 1 and 2 emissions Sustainability data (Table 1)			✓
305-2	Indirect (S2) GHG emissions	2.1.1 2.1.2.1 3.2	The INEOS science base Scope 1 and 2 emissions Sustainability data (Table 1)			✓
305-3	Other indirect (S3) GHG emissions	2.1.2.2 2.1.5	Scope 3 emissions Emission reductions in the value chain		INEOS is currently reviewing its scope 3 footprint data before publication to take account of emerging best practice when it comes to accounting methods and as high-quality supplier emissions factors become more readily available and public databases are updated. As such, we omit this disclosure on the grounds that the information is not yet available.	NA
305-4	GHG emissions intensity	2.1.2.1	Scope 1 and 2 emissions			✓
305-5	Reduction of GHG emissions	2.1.2 2.1.4 2.1.5	GHG emissions Our roadmaps and targets Emission reductions in the value chain		Energy reduction figures are calculated based on the expected energy consumption prior and post project implementation for the same production rates. Emissions factors from the reporting year are used to calculate the impact of the projects in terms of GHG reductions. Only CO_2 is considered in the impact calculations since other GHGs would have a negligible contribution.	✓
305-6	Emissions of ozone-depleting substances (ODS)	2.1.1 2.4.1.1	The INEOS science base Emissions to air		Calculated according to the Montreal Protocol based on the ODSs released from chemicals production processes and utilities.	✓
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	2.1.1 2.4.1.1	The INEOS science base Emissions to air		Calculated according to local reporting requirements for combustion gases and other air emissions.	✓

Waste–INEOS' key material topics: circular economy, pollution						
306-1	Waste generation and significant waste-related impacts	2.2 2.2.3 2.2.4 1.3.1 1.3.2	Circular economy Waste Waste in the value chain Our commitments and policies Our material topics			✓
306-2	Management of significant waste-related impacts	2.2 2.2.3 2.2.4 2.4 1.3.1	Circular economy Waste Waste in the value chain Zero pollution Our commitments and policies			✓
306-3	Waste generated	2.2.3.1 3.2	Waste footprint Sustainability data (Table 8)			✓
306-3 (2016)	Significant spills	2.4.1	Avoiding pollution to air, water, and soil		INEOS uses its own, company-wide loss of containment measure to report on spills (IGGN01) rather than 306-3 (2016) and it is against this that we are assured. We do not report on spills in financial statements.	✓
306-4	Waste diverted from disposal	2.2.3.1 3.2	Waste footprint Sustainability data (Table 8)			✓
306-5	Waste directed to disposal	2.2.3.1 3.2	Waste footprint Sustainability data (Table 8)			✓

3.3.1.5 Society

GRI	DISCLOSURE	SECTION		PAGE	COMMENTS	ASSURED BY KPMG
Employment–INEOS' key material topic: working conditions						
401-1	New employee hires and employee turnover	2.5.2 3.2	Recruitment, development and remuneration Sustainability data (Tables 15.1-15.2)		INEOS does not currently collect group-wide data on average training hours by gender and employee type. As such, we omit these datapoints from the disclosure on the grounds that the information is unavailable. INEOS does, however, provide the total number of employees receiving training by gender and employee type. The average training hours of INEOS employees changed significantly but was confirmed to be correct through implementing our data quality protocol.	✓
Occupational health and safety–INEOS' key material topic: workforce safety						
403-1	Occupational health and safety management system	2.5.1 2.5.1.1	Health and safety: ensuring the safety of our people INEOS' health and safety management system		More information is available on our website: Health & Safety (ineos.com).	✓
403-2	Hazard identification, risk assessment, and incident investigation	1.3.1 1.3.3 2.5.1 2.5.1.1 2.8	Our commitments and policies Sustainability governance Health and safety: ensuring the safety of our people INEOS' health and safety management system Governance			✓
403-3	Occupational health services	2.5.1 2.5.1.1 2.5.1.3	Health and safety: ensuring the safety of our people INEOS' health and safety management system Health and wellbeing			✓

403-4	Worker participation, consultation, and communication on occupational health and safety	2.5 Our people 2.5.1 Health and safety: ensuring the safety of our people 2.5.1.1 INEOS' health and safety management system 2.5.1.3 Health and wellbeing		Our employees and contractors participate in safety teams, contribute to incident learning, and suggest ongoing improvements to our health and safety procedures. INEOS uses a Process Safety Group Intranet to: • store best practice documents for the group on Process Safety Management (PSM), • communicate and highlight PSM messages, • provide data on PSM KPIs throughout the group, • provide a central location for advice on process safety issues. More information is available on our website: Health & Safety (ineos.com).	✓
403-5	Worker training on occupational health and safety	2.5.1 Health and safety: ensuring the safety of our people 2.5.2.2 Development			✓
403-6	Promotion of worker health	2.5 Our people 2.5.1.1 INEOS' Health and safety management system 2.5.1.3 Health and wellbeing		Our initiatives to support healthy lives have a separate page on our intranet and website (Health & Wellbeing (ineos.com)). We also provide information on mental health and nutrition via our intranet.	✓
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2.4.2 Preventing pollution in the value chain 2.6 People in our value chains 2.6.2 Supplier and customer monitoring			✓
403-8	Workers covered by an occupational health and safety management system	2.5.1 Health and safety: ensuring the safety of our people 2.5.1.1 INEOS' health and safety management system			✓
403-9 & 403-10		2.5.1 Health and safety: ensuring the safety of our people 2.5.1.2 INEOS' health and safety performance		INEOS reports health and safety metrics following the SASB RT-CH-320a-1 standard (OSHA recordables), rather than GRI 403-9 and GRI 403-10, and it is against this standard that we are assured.	✓
Training and education–INEOS' key material topic: working conditions					
404-1	Average hours of training per year per employee	2.5.2.2 Development		INEOS does not currently collect group-wide data on average training hours by gender and employee type. As such, we omit these datapoints from the disclosure on the grounds that the information is unavailable. INEOS does, however, provide total number of employees receiving training by gender and employee type. The average training hours of INEOS employees changed significantly but was confirmed to be correct through implementing our data quality protocol.	✓

404-2	Programmes for upgrading employee skills and transition assistance programmes	2.5 2.5.2.2 2.6.2 2.8	Our people Development Supplier and customer monitoring Governance		✓
404-3	Percentage of employees receiving regular performance and career development reviews	2.5.2.2	Development		✓
Diversity and equal opportunity					
405-1	Diversity of governance bodies and employees	2.5.3	Diversity, inclusion and equality	Other indicators of diversity, such as minorities or vulnerable groups, were not deemed relevant for the 2022 reporting year as a definition for minorities and vulnerable groups is still being set up. INEOS does not currently collect group-wide data on the diversity of its governance bodies or of its general workforce by age group. Consequently, we omit these aspects of the disclosure on the grounds that the information is unavailable.	✓

3.3.2 UNGC

3.3.2.1 | HUMAN RIGHTS

Principle 1

Businesses should support and respect the protection of internationally proclaimed human rights

1.3.1 Our commitments and policies
1.3.2 Our material topics
1.3.4 Contributing to the UN SDGs
2.5 Our people: prioritising workplace health and safety (SHE) and fairness
2.6 People in our value chain: safeguarding conditions and human rights
2.7 People in our communities: respecting and supporting local communities

Principle 2

Businesses should make sure they are not complicit in human rights abuses

1.3.1 Our commitments and policies
2.5 Our people: prioritising workplace health and safety (SHE) and fairness
2.6 People in our value chain: safeguarding conditions and human rights
2.7 People in our communities: respecting and supporting local communities

3.3.2.2 | LABOUR

Principle 3

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

1.3.1 Our commitments and policies
2.5 Our people: prioritising workplace health and safety (SHE) and fairness
2.6 People in our value chain: safeguarding conditions and human rights

Principle 4

Businesses should uphold the elimination of all forms of forced and compulsory labour

1.3.1 Our commitments and policies
2.6 People in our value chain: safeguarding conditions and human rights
2.6.1 Modern slavery and people trafficking in the supply chain
2.8 Governance: maintaining the highest standards of ethics and compliance

Principle 5

Businesses should uphold the effective abolition of child labour

1.3.1 Our commitments and policies
2.6 People in our value chain: safeguarding conditions and human rights
2.6.1 Modern slavery and people trafficking in the supply chain
2.8 Governance: maintaining the highest standards of ethics and compliance

3.3.2.3 | ENVIRONMENT

Principle 6

Businesses should uphold the elimination of discrimination in respect of employment and occupation

1.3.1 Our commitments and policies
2.5 Our people: prioritising workplace health and safety (SHE) and fairness
2.5.3 Diversity, inclusion, and equality

Principle 7

Businesses should support a precautionary approach to environmental challenges

1.3.1 Our commitments and policies
2.1 Climate change: advancing the transition to net-zero economy in our industry
2.2 Circular economy: maximising resource efficiency and eliminating waste
2.3 Water stewardship: tracking and monitoring our water footprint
2.4 Zero pollution: driving progress towards sustainable chemical value chains

Principle 8

Businesses should undertake initiatives to promote greater environmental responsibility

1.3 INEOS and sustainability
2.1 Climate change: advancing the transition to net-zero economy in our industry
2.2 Circular economy: maximising resource efficiency and eliminating waste
2.3 Water stewardship: tracking and monitoring our water footprint
2.4 Zero pollution: driving progress towards sustainable chemical value chains

Principle 9

Businesses should encourage the development and diffusion of environmentally friendly technologies

2.1 Climate change: advancing the transition to net-zero economy in our industry
2.1.3 Our roadmaps and targets
2.1.4 Emission reductions in the supply chain
2.2 Circular economy: maximising resource efficiency and eliminating waste
2.2.4.1 Mechanical recycling
2.2.4.2 Advanced recycling
2.2.4.3 Bio-based and circular products
2.2.4.4 Product innovation
2.4 Zero pollution: driving progress towards sustainable chemical value chains

3.3.2.4 | ANTI-CORRUPTION

Principle 10

Businesses should work against corruption in all its forms, including extortion and bribery

2.8 Governance: maintaining the highest standards of ethics and compliance

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