

The INEOS logo is displayed in white, uppercase letters. The letter 'O' is stylized as a circle with a horizontal line through its center. The background of the entire page is a photograph of an industrial refinery at dusk, with various towers and structures illuminated by warm lights. A worker in a hard hat and safety vest is visible on a red metal platform in the foreground on the right. The sky transitions from a deep blue at the top to a soft orange and pink near the horizon. There are also some faint, overlapping circular patterns in shades of blue and white across the background.

INEOS

# 2019 SUSTAINABILITY REPORT

Version 2. INEOS has changed the naming convention of its sustainability reports to align with its financial reporting year. No material changes have been made to the content of the report.



# CONTENTS

## About this report

This report describes our 2019 performance and approach for our operations worldwide.

This report is aligned with the Global Reporting Initiative (GRI) framework (Core option) and was prepared with the support of Quantis, a global sustainability consulting group. It focuses on the issues most material to our company and our stakeholders. The data collected provides information for 2019 across all INEOS businesses worldwide.

Any questions and/or feedback regarding this report should be directed to [ineos.sustainability@ineos.com](mailto:ineos.sustainability@ineos.com).





# 1.0 GENERAL OVERVIEW



# 1.1 TACKLING GLOBAL CHALLENGES



## "INEOS commits to achieving net zero emissions by 2050"

Following the Paris Climate Agreement of 2015, most nation states have set the goal of achieving a net zero emission economy by 2050, and are adopting regulations and legislation to support this.

In response, INEOS businesses have put in place roadmaps to lead the transition to a net zero economy in our industry by no later than 2050, whilst remaining profitable, and staying ahead of evolving regulations and legislation. Based on these roadmaps, we are setting ambitious but achievable targets for 2030 which are in line with our 2050 commitment. We expect to publish these shortly.

Actions and improvements are already in hand. We will reduce like-for-like emissions by 10% by no later than 2025, and we are investing over three billion euros over the next five years to reduce our footprint further.

As part of this effort, we are also investing in new products and technologies to drive the industry to a circular economy in which materials are re-used to the maximum extent, and no products, once used, enter the natural environment. We have outlined many of the actions already being taken in the accompanying website pages.

The products we make are essential for a myriad of applications upon which society relies. That is why governments worldwide regard the industry as a critical sector, as we have seen during the recent pandemic. The range of applications includes the following:

- health and medical devices,
- clean water,
- food conservation and preservation,
- renewable energy technologies,

- lighter energy-saving materials for transport and mobility,
- affordable clothing and apparel,
- construction and transmission of water and gases,
- electrical insulation,
- household and electrical goods.

Our products are essential because, based on performance, affordability, and environmental footprint, they are the best available materials for the applications concerned. In some cases, especially in the medical sphere, they are the only available materials. INEOS is part of the solution to the challenges world faces, and we look forward to achieving a net zero economy whilst continuing to deliver products which are essential to society.

Sir Jim Ratcliffe



## 1.2 VIEWS FROM OUR CEOs



Since the dawn of time, chemistry has played a key role in society. Our products enhance almost every aspect of modern life. Our industry is the cradle of industrialisation, prosperity and innovation, valuing the triple bottom line: people, planet, profit - and adding passion! INEOS aims to be the bridge that enables society to keep running today, while creating innovations needed for the future.

### **TOM CROTTY**

Director Corporate Affairs  
INEOS Group



We are committed to staying ahead of EU climate and energy targets in the drive towards net zero greenhouse gas emissions. Across Europe and worldwide, our sites are preparing roadmaps to tackle the grand challenges we face today, as the chemical industry transitions towards climate and resource neutrality.

### **HANS CASIER**

CEO  
INEOS Phenol & INEOS Nitriles



Most people used to look at recycled materials as an inferior and cheaper alternative to virgin material, but now they're seeing them as an integral part of the solution. Plastics are a valuable resource. They should not end up in a landfill or in the ocean.

### **KEVIN MCQUADE**

Chairman  
INEOS Styrolution



The hydrogen economy will play a crucial role in helping our planet achieve climate and resource neutrality. INEOS is aiming to contribute not only by decarbonising energy for its existing operations, but also by providing hydrogen that will help other businesses and sectors do the same. INEOS is uniquely placed to play a leading role in developing these new opportunities, driven by emerging demand for affordable, low carbon energy sources, combined with our existing capabilities in operating large-scale electrolysis.

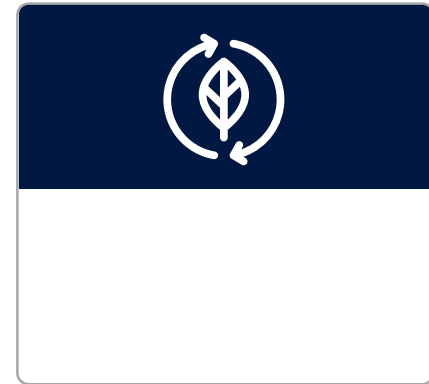
### **GEIR TUFT**

CEO  
INOVYN

## 1.3 OUR COMMITMENT TO SUSTAINABILITY

For INEOS, sustainability is fundamental to how we do business. It is a key driver of innovation in meeting the challenges associated with evolving societal needs. Our approach to sustainability encompasses 6 key areas around which our report is organised.

Our sustainability strategy is to develop and safely manufacture the products needed to address the evolving challenges of climate change, public health, resource scarcity, urbanisation and waste in a way which drives us all towards a net zero emission economy by 2050. We will do so whilst reducing the impact of our operations. INEOS businesses have put in place the plans and actions needed to ensure that they transition to a net zero economy by no later than 2050, whilst remaining profitable, and staying ahead of evolving regulations and legislation.



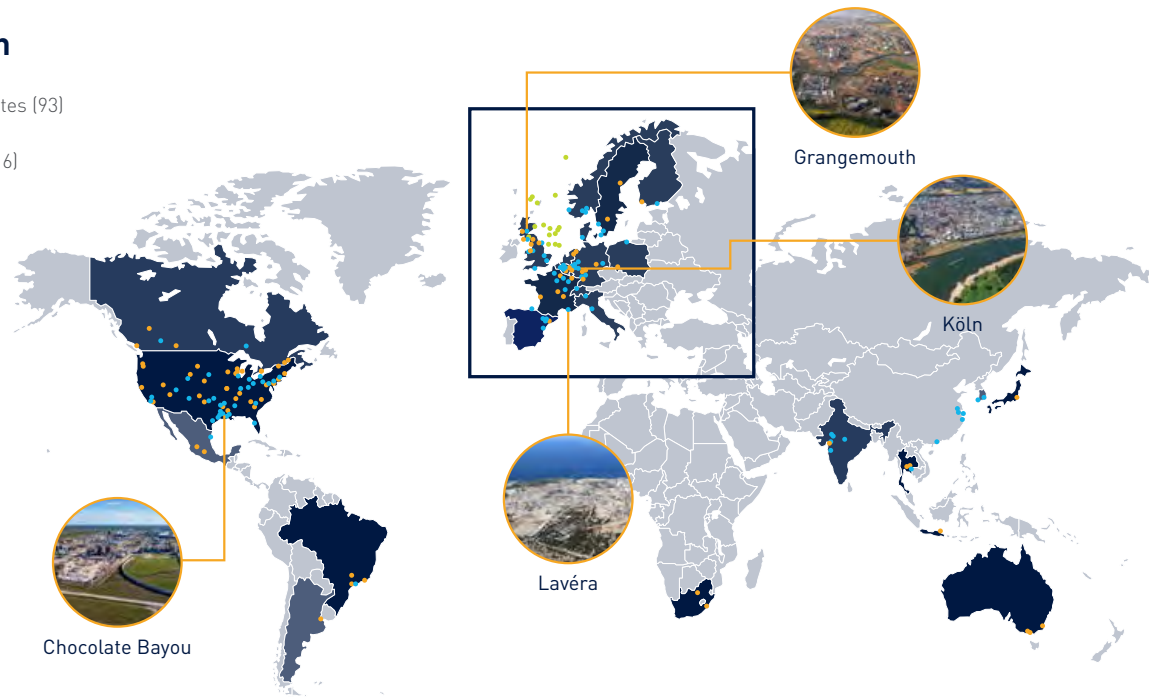


# 1.4 INEOS AT A GLANCE

INEOS is a global manufacturer of petrochemicals, speciality chemicals and oil products. Comprising 36 individual businesses, we operate 194 facilities in 29 countries. In recent years our scope of operations has diversified with the launch of INEOS Automotive and INEOS Hygienics, the acquisition of iconic British brand Belstaff and an ever-expanding sports portfolio. We offer a blend of opportunism, belief that we can add value, pursuit of our core values and passion for adventure. INEOS' headquarters are located in London, UK.

## Global reach

- Manufacturing sites (93)
- JV sites (85)
- Oil & Gas sites (16)



Turnover  
**\$61bn**

Employees  
**26,000**

Production  
**54m tonnes**

Sites  
**194**

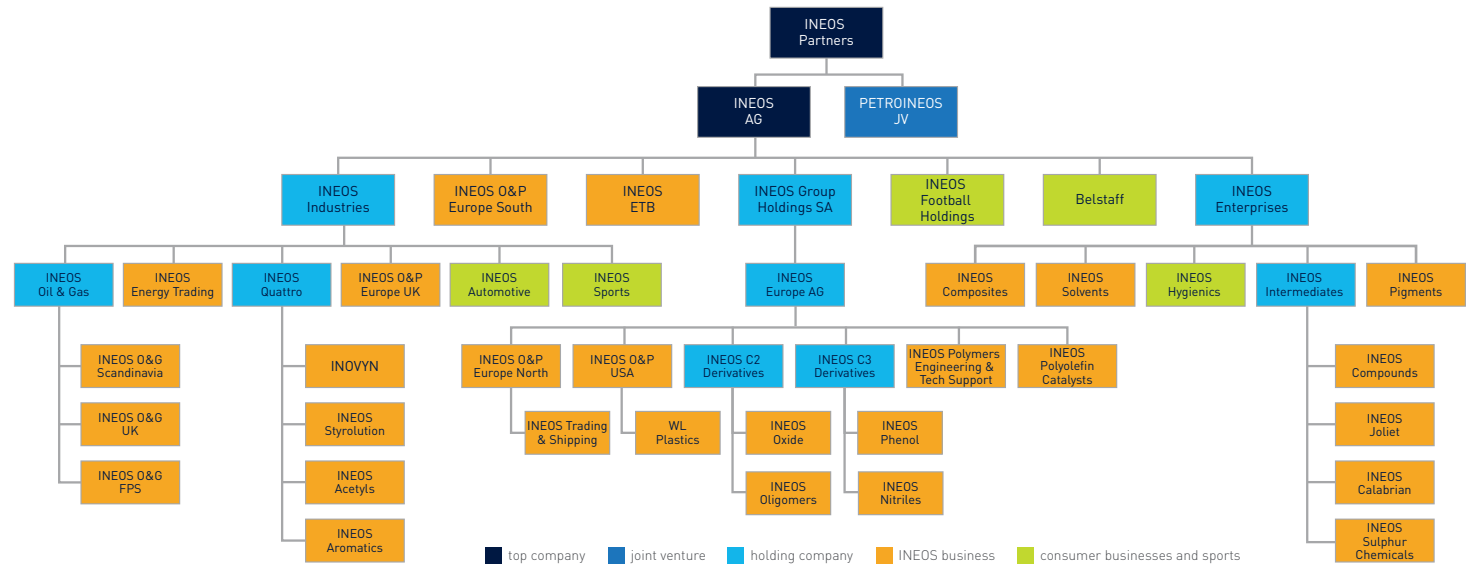
Countries  
**29**



# 1.5 OUR STRUCTURE

INEOS is led by its founder and chairman Sir Jim Ratcliffe and co-owners Andy Currie and John Reece. We operate a federal structure based on clear reporting lines and direct accountability. Each INEOS business has its own executive board (CEO, CFO, operations, business, purchasing and HR directors) which is responsible for all functions. These include business management, operations, procurement, IT, HR, communications, banking, legal and tax. INEOS business executive boards are fully accountable for the management of their business and strategy in its entirety. INEOS shareholders chair the executive committee meetings for each business regularly throughout the year, providing crucial oversight of the operation of each business.

The INEOS central office function is extremely lean, with around 40 people compared with typically hundreds



in organisations of comparable size. The federated structure and minimal hierarchy encourages an agile organisation in which internal communications and decision-making happen quickly.





Strategies such as safety, health and environment (SHE) and IT security are governed at a group level and implemented by each business. Safety, health and environmental performance are our highest priorities and are reported upon at the beginning of each executive committee meeting.

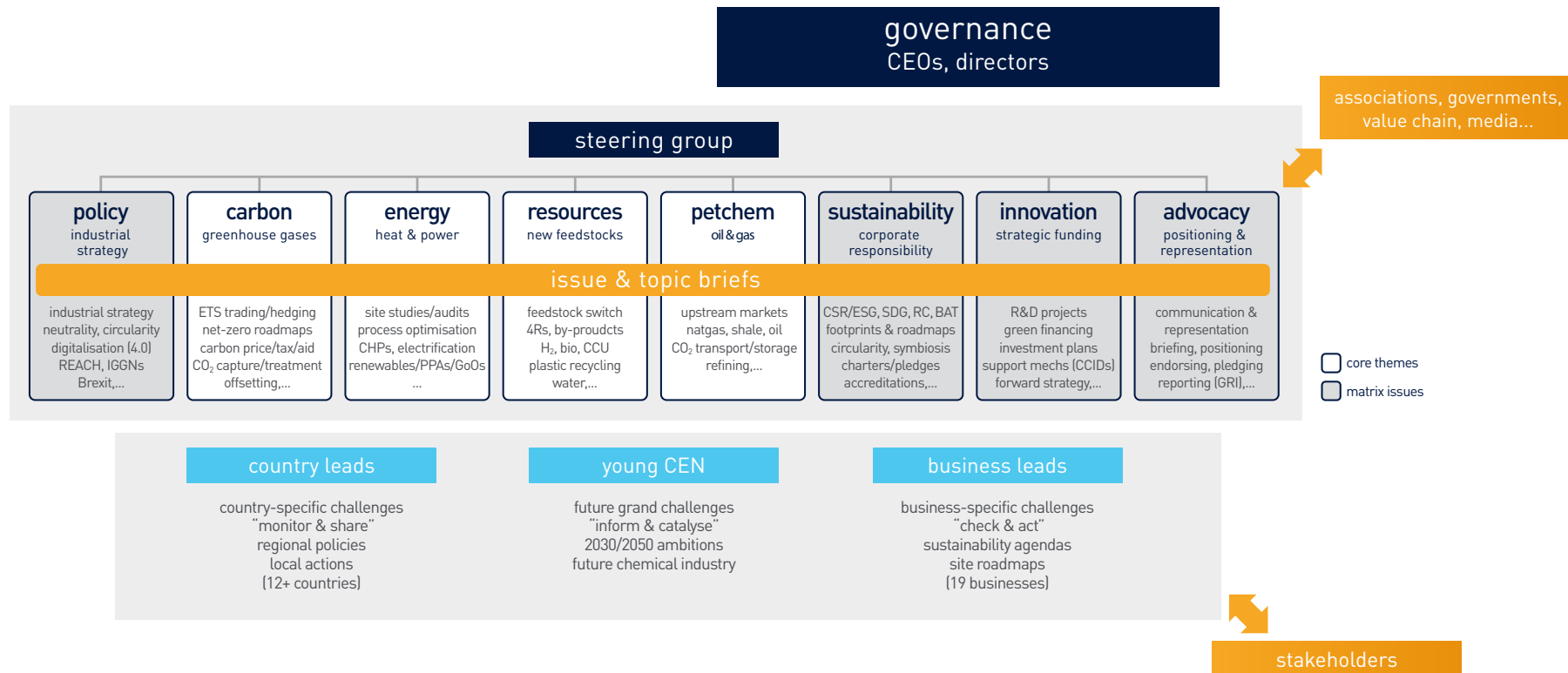
Each business determines its own sustainability strategy. Group-wide, this is coordinated through the climate and energy network (CEN). The CEN works with all INEOS businesses on climate and energy matters. CEN 'issue teams' work at the policy and advocacy level, sharing best practice, new

business opportunities and innovation. The network covers greenhouse gas (GHG) emissions, heat and power, sustainability, innovation, policy, advocacy and more.

Updates from the CEN and SHE performance are both shared at

the half-yearly meetings bringing together all business CEOs. Every year, the CEO of each INEOS business ensures the compliance of each of their manufacturing sites with INEOS' highest operational and financial standards.

## Climate and Energy Network (CEN)



# 1.6 SIGNIFICANT CHANGES TO THE ORGANISATION

## Business acquisitions and divestments 2020:

- 1 INEOS builds hand sanitiser plants in the UK, US, France and Germany. Each was assembled in 10 days to make 1 million bottles per month, to be delivered free of charge to hospitals and front-line medical staff in the battle against COVID-19.
- 2 INEOS launches global consumer healthcare business under the name INEOS Hygienics.
- 3 INEOS launches a new clean hydrogen business to accelerate the drive to net zero carbon emissions
- 4 INEOS O&P USA to acquire Sasol's ownership of Gemini HDPE LLC
- 5 INEOS Automotive confirms acquisition of Hambach production site from Mercedes-Benz
- 6 INEOS completes the acquisition of BP's global Aromatics & Acetyls business







## 1.7 OUR APPROACH, GOALS AND KEY VALUES

INEOS is committed to helping to find the scientific and engineering solutions to the climate challenge facing the world. We use our ability to solve problems and move quickly to achieve change.

Our products make an indispensable contribution to society, often providing the most sustainable options for a wide range of societal needs.

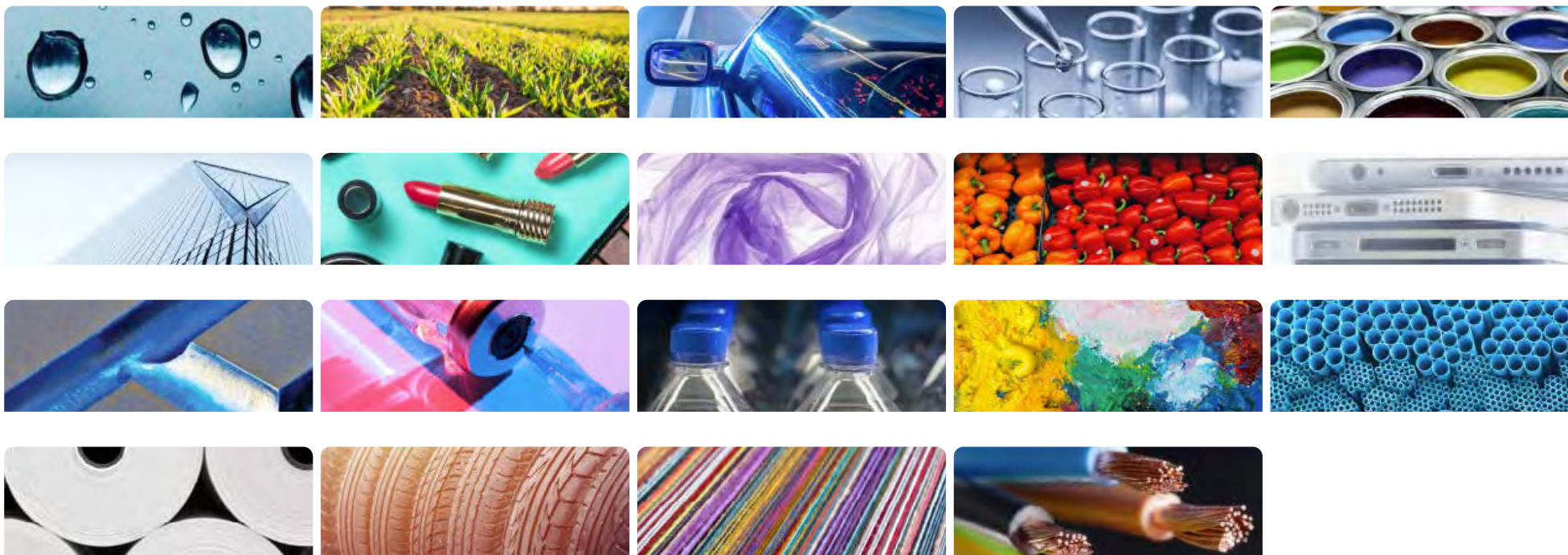
Our culture is entrepreneurial, defined by a lack of bureaucracy. Being privately owned offers the freedom to take a long-term view, while a simple and decentralised organisational structure enables quick and efficient decision-making. Sports and fitness are integral to the INEOS culture, as are grit, rigour, humility and a real team ethos.

**We are committed to delivering continuous improvement across all activities in all locations, and to working with local communities and stakeholders to be a responsible neighbour.**



## 1.8 OUR PRODUCTS AND MARKETS

INEOS has a diversified product portfolio with a wide range of end market applications. Our chemical intermediates businesses, with leading global positions and differing industry cycles, provide earnings strength worldwide.



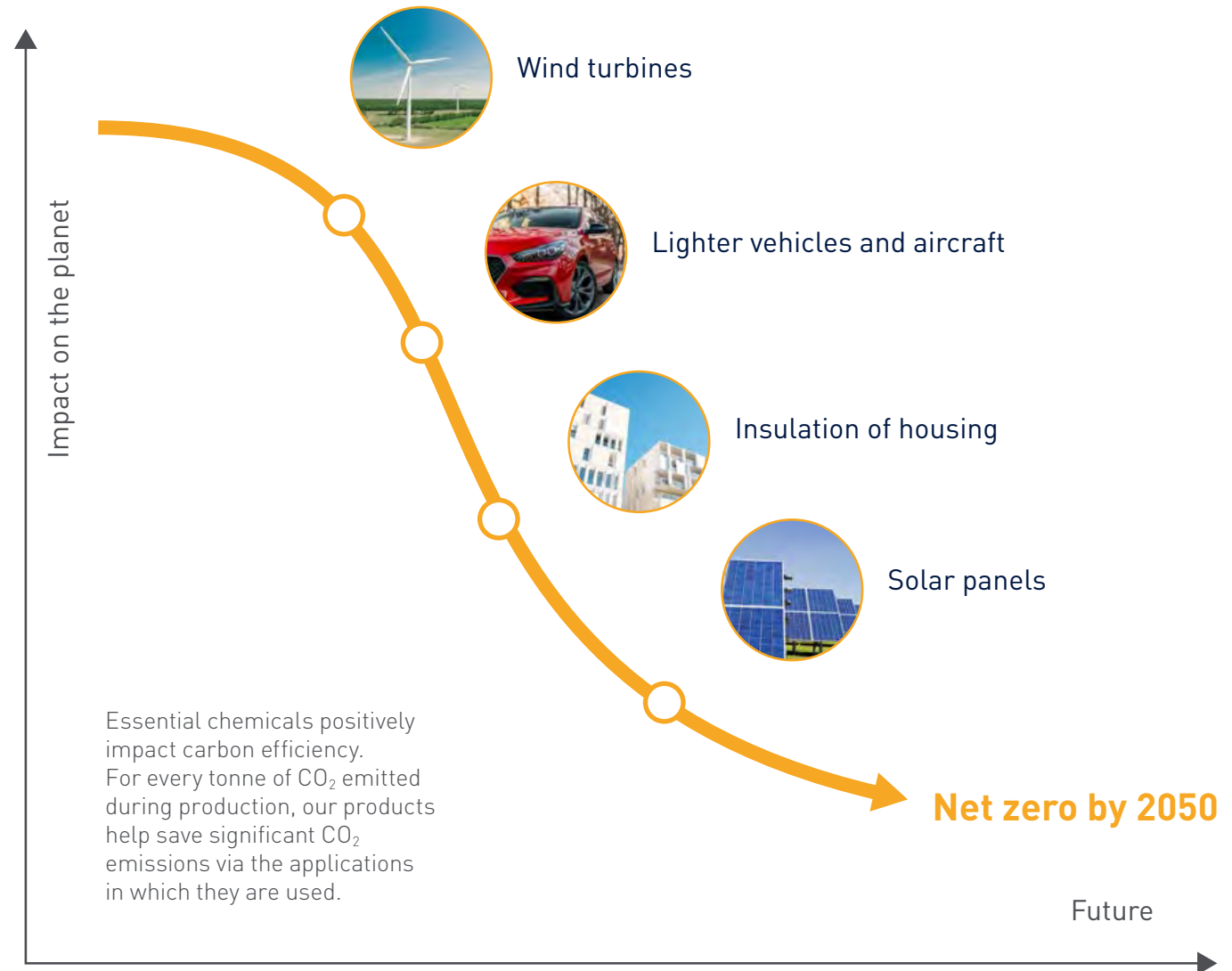
Our products make an indispensable contribution to society.

For example:

- preservation of food and clean water,
- construction of wind turbines, solar panels and other renewable technologies,
- production of lighter and more fuel-efficient vehicles and aircraft,
- development of medical devices and applications,
- production of clothing and apparel,
- enabling telecommunication, insulation and other industrial and home applications.

If polymers and plastics were to be replaced to the maximum extent in applications where they can be substituted, overall lifecycle GHG emissions in Europe would increase by more than 50% ([ref. denkstatt Vienna 2010, updated 2020](#)).

INEOS businesses have put in place the plans and actions needed to ensure that they lead the transition to a net zero emission economy by 2050, in line with the Paris Climate Agreement, whilst remaining profitable, and staying ahead of evolving regulations and legislation.







# 1.9 DETERMINING WHAT IS MATERIAL

Selecting and assessing what is material for INEOS helps us to understand threats and opportunities that could affect our businesses.

By listing the material topics and assessing their impact, we can inform our strategy and prioritise our reporting.

INEOS engages with key stakeholders to understand sustainability topics relating to our businesses that are important to them. In 2020 we performed a formal materiality assessment aligned with the GRI reporting framework. Nineteen topics were assessed across nine stakeholder groups. Stakeholders were identified based on their importance to our business operations and their knowledge of our business activities. They represent a wide variety of functions, regions and business segments.

Views from these groups are incorporated into the matrix, which shows the position of all 19 material topics relative to the degree of stakeholder interest. The results of this assessment will be reviewed periodically with key stakeholders to maintain relevance.

The matrix shows climate and resource neutrality as material topics for INEOS. Where relevant and practicable, INEOS is committed to setting quantitative targets for these priorities to help measure and report upon future performance. This report includes a description of our management approach addressing the relevant topics based on this matrix.

## Stakeholders

Materiality topics	Environment	Economy	Society	Customers	Suppliers	Employees	Industry associations	Universities & scientific institutions	Shareholders & investors	Regulators	Communities	NGOs
Climate change	Very High	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Circular economy	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Hydrogen economy	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Economic performance	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
SHE & REACH	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Management standards	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
IT security	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Carbon neutrality	Very High	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
GHG emissions management	Very High	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Energy management	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Waste management	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Water management	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Sustainable procurement	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Working conditions	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Labour unions	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Training & career management	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Diversity & equality	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Ethics	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low
Community engagement	High	Medium	Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low	Very Low




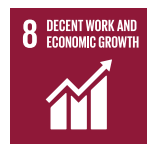

Impact: Very High High Medium Low Very Low

# 1.10 CONTRIBUTING TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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



**Our efforts are aligned with the United Nations Sustainable Development Goals, with particular emphasis on the following areas:**

<b>INEOS' contribution to the SDGs</b>	<b>Read more</b>
<div data-bbox="134 414 280 558">  <p><b>3</b> GOOD HEALTH AND WELL-BEING</p> </div> <p data-bbox="313 414 1187 574">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. It also produces the plastics necessary for medical equipment, face masks, ventilators, sterile gloves, eye visors, and respiratory care tubing.</p>	<p data-bbox="1209 414 1825 438"><a href="#">2.1 Excellence in safety, health and the environment</a></p> <p data-bbox="1209 446 1724 470"><a href="#">2.1.1 INEOS' health and safety performance</a></p>
<div data-bbox="134 630 280 774">  <p><b>6</b> CLEAN WATER AND SANITATION</p> </div> <p data-bbox="313 630 1187 726">INEOS businesses provide products essential for sanitation pipes and industrial systems as well as chemicals needed to ensure water is safe for drinking and to treat sewage.</p>	<p data-bbox="1209 630 1568 654"><a href="#">1.8 Our products and markets</a></p> <p data-bbox="1209 662 1612 686"><a href="#">2.1.4 Water management and use</a></p>
<div data-bbox="134 821 280 965">  <p><b>7</b> AFFORDABLE AND CLEAN ENERGY</p> </div> <p data-bbox="313 821 1187 981">INEOS materials provide the building blocks for innovation in renewable energy technologies; our composites make it possible to produce 100m long wind turbine blades and our oligomer based synthetic oils to extend the service life of wind turbine gearboxes to ensure more energy-efficient products.</p>	<p data-bbox="1209 821 1568 845"><a href="#">1.8 Our products and markets</a></p>
<div data-bbox="134 1029 280 1173">  <p><b>8</b> DECENT WORK AND ECONOMIC GROWTH</p> </div> <p data-bbox="313 1029 1187 1157">We promote strong economic growth and provide work opportunities to communities through our practice of investing in businesses that are no longer strategic to their owners, supporting and enhancing their sustainable success.</p>	<p data-bbox="1209 1029 1478 1053"><a href="#">2.4 Valuing our people</a></p>
<div data-bbox="134 1220 280 1364">  <p><b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> </div> <p data-bbox="313 1220 1187 1316">INEOS is actively involved in several cross-sector initiatives to address environmental and resource concerns, reduce raw material and waste disposal costs and support circular business models.</p>	<p data-bbox="1209 1220 1792 1244"><a href="#">2.2.4 Clean energy sources to run our operations</a></p> <p data-bbox="1209 1252 1758 1276"><a href="#">2.2.5 Development of clean hydrogen as a fuel</a></p> <p data-bbox="1209 1284 1915 1308"><a href="#">2.2.6 Capture, utilisation or storage of carbon dioxide (CO<sub>2</sub>)</a></p> <p data-bbox="1209 1316 1870 1380"><a href="#">2.2.7 Use of recycled and bio-based feedstocks instead of fossil-based feedstocks</a></p> <p data-bbox="1209 1388 1814 1412"><a href="#">2.2.8 Reducing emissions through our supply chain</a></p> <p data-bbox="1209 1420 2083 1444"><a href="#">2.3 Circular economy: maximising the reuse and recycling of our products</a></p> <p data-bbox="1209 1452 1534 1476"><a href="#">2.3.1 Mechanical recycling</a></p> <p data-bbox="1209 1484 1512 1508"><a href="#">2.3.2 Advanced recycling</a></p>



## INEOS' contribution to the SDGs

## Read more



INEOS products are essential in the provision of efficient housing, providing basic infrastructure for the provision of water and energy networks, sustainable transport systems, sustainable urbanisation, and sustainable buildings.

- [1.8 Our products and markets](#)
- [2.2.4 Clean energy sources to run our operations](#)
- [2.2.5 Development of clean hydrogen as a fuel](#)
- [2.2.6 Capture, utilisation or storage of carbon dioxide \(CO<sub>2</sub>\)](#)
- [2.2.7 Use of recycled and bio-based feedstocks instead of fossil-based feedstocks](#)
- [2.2.8 Reducing emissions through our supply chain](#)
- [2.3 Circular economy: maximising the reuse and recycling of our products](#)
- [2.3.1 Mechanical recycling](#)
- [2.3.2 Advanced recycling](#)



INEOS is a signatory of the Responsible Care Global Charter and committed to safely managing chemicals throughout their lifecycle. We invest in recycling technologies to promote a circular economy.

- [2.1.3 Compliance with REACH](#)
- [2.3 Circular economy: maximising the reuse and recycling of our products](#)
- [2.3.1 Mechanical recycling](#)
- [2.3.2 Advanced recycling](#)



Many INEOS products, such as carbon fibre, contribute to a lower-carbon society, while others are needed to capture renewable energy such as wind and solar power. We are actively involved in carbon capture and storage. In addition, we are working to reduce our own climate impact across our businesses through energy efficiency projects and our climate and energy network (CEN). As Europe's largest producer of hydrogen, our expertise in the technology to produce, store and transport this important carbon-neutral fuel puts us in a unique position to enable energy transition away from fossil fuels.

- [1.5 Our structure \(CEN\)](#)
- [1.8 Our products and markets](#)
- [2.0 Improving the sustainability of our business and operations](#)



We are actively working to address marine litter and pellet loss (Operation Clean Sweep) across our facilities and value chain. And, through our work to create a more circular economy we hope to give waste plastic a value to ensure it is recycled at the end of its life rather than disposed of in landfill sites where it can escape into the natural environment.

- [2.1.4 Water management and use](#)



To accelerate the achievement of the SDGs, we work on many multi-stakeholder initiatives, collaborating with other chemical companies, communities, universities, and partners all along the value chain.

- [1.10 Contributing to the UNSDGs](#)
- [2.0 Improving the sustainability of our business and operations](#)
- [2.2.8 Reducing emissions through our supply chain](#)
- [2.5 In our communities](#)

**In addition to the United Nations SDGs, INEOS also supports the 10 principles of the United Nations Global Compact [UNGC].**



1.11

# SUSTAINABILITY HIGHLIGHTS 2020

INEOS continues to improve its safety performance year after year.

**INEOS achieves best OSHA Recordable Rate of 0.17 per 200,000 hours worked by employees and contractors combined. This is getting close to the world class benchmark of 0.15.**

FEBRUARY 2020

**INEOS and UPM Biofuels announce supply agreement for renewable raw materials to make plastic.** The world's first commercially available bio-attributed PVC is to use residue from wood pulp manufacture. [Read more...](#)

FEBRUARY 2020

**INEOS partners with Forever Plast to recycle over 6.5 billion bottle caps back into high quality caps.** INEOS launches the world's first high-quality polymer for caps made with 50% recycled bottle caps diverted from waste. [Read more...](#)

APRIL 2020

**INEOS and PLASTIC ENERGY to collaborate on new advanced plastic recycling facility.** INEOS will use PLASTIC ENERGY's recycled raw material produced in the advanced plastic recycling facility, which diverts waste plastic from landfill, incineration and the environment. [Read more...](#)

APRIL 2020

**AmSty, INEOS Styrolution and Trinseo sign Joint Development Agreement (JDA) to advance the circularity of polystyrene.** The joint 100-tonne-per-day facility constructed in Channahon, Illinois, utilises Agilyx advanced recycling technology to recycle post-use polystyrene products back into virgin-equivalent styrene monomer. [Read more...](#)

MAY 2020

**INOBYN to play vital role in ambitious 'power to methanol' project to produce sustainable methanol and reduce CO<sub>2</sub> in Antwerp.** The new project at Antwerp produces methanol from captured CO<sub>2</sub>, combined with hydrogen generated from renewable electricity. [Read more...](#)

JULY 2020

**INEOS Styrolution awarded Platinum rating by EcoVadis for its advanced sustainability performance.** The Platinum rating, awarded to the top 1% of companies, is based on the implementation of INEOS Styrolution's sustainability programme and its sustainability report published in 2019. [Read more...](#)

SEPTEMBER 2020

**INEOS Olefins & Polymers Europe announces the expansion of the Recycl-IN range of products to include flexible packaging solutions with over 60% recycled content.** The long-term agreement will help INEOS serve the growing demand for increased levels of recycled product in sustainable, virgin quality flexible packaging. [Read more...](#)



## 1.11 Sustainability highlights 2020 | continued

SEPTEMBER 2020

### **INEOS agrees to the largest ever industrial wind power purchase contract in Belgium with ENGIE.**

The 10-year deal, through which ENGIE will supply renewable energy to INEOS from the Northern offshore windfarm, will reduce INEOS' carbon footprint by 1,150,000 tonnes of CO<sub>2</sub>. [Read more...](#)

NOVEMBER 2020

### **INEOS launches a new clean hydrogen business to accelerate the drive to net zero carbon emissions.**

INEOS is aiming to contribute not only by decarbonising energy for its existing operations, but also by providing hydrogen that will help other businesses and sectors to do the same. [Read more...](#)

NOVEMBER 2020

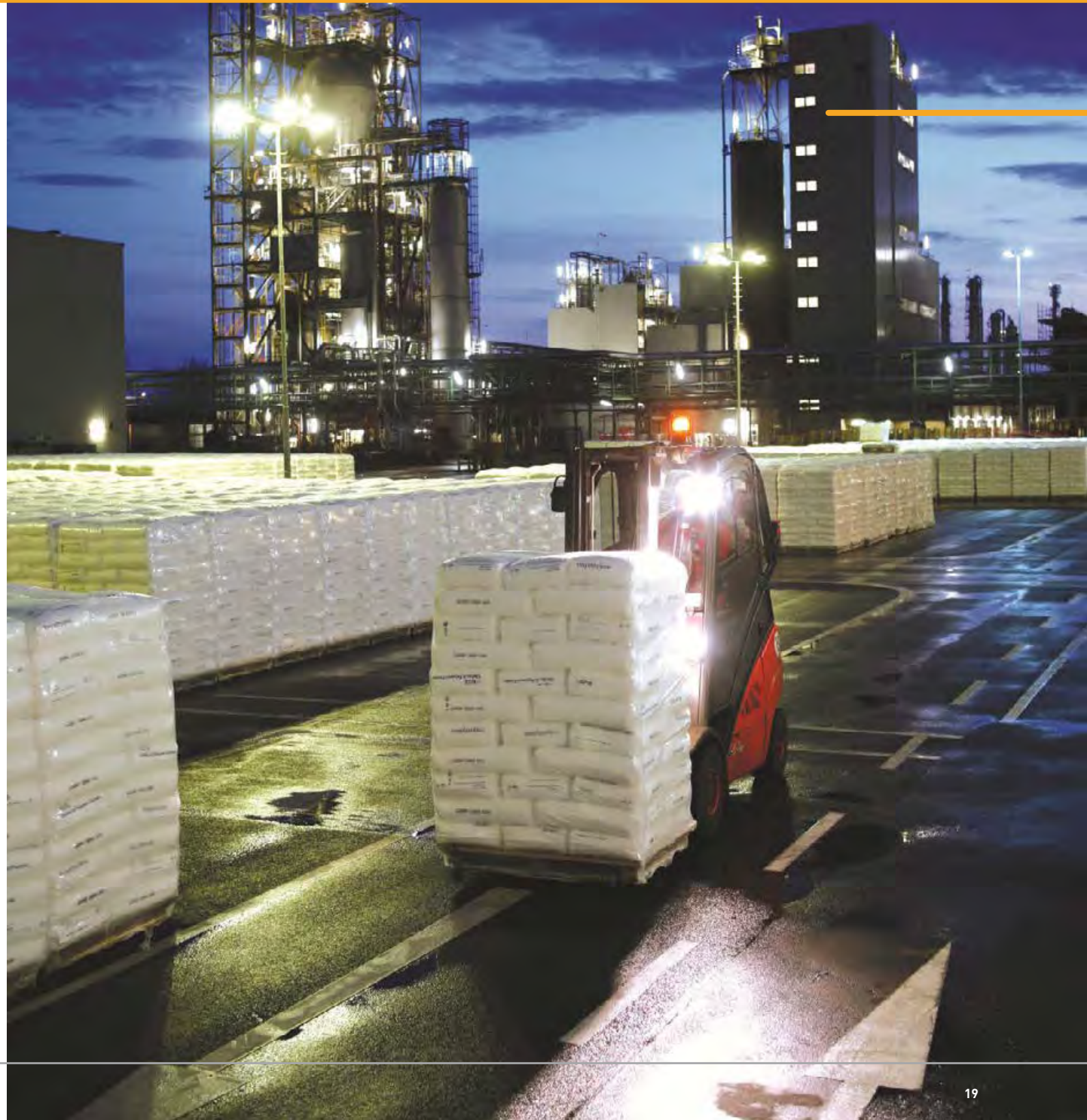
### **INEOS and Hyundai Motor Company cooperate on driving the hydrogen economy forward.**

Opportunities explored by Hyundai and INEOS include production and supply of hydrogen as well as new hydrogen applications, technologies and business models. [Read more...](#)

DECEMBER 2020

### **INEOS receives Gold sustainability rating from EcoVadis.**

The INEOS overall sustainability score puts us in the top 4% of companies in the sector; particular recognition was given to our environmental performance. [Read more...](#)







2.0 IMPROVING THE SUSTAINABILITY OF OUR BUSINESS AND OPERATIONS



# OUR APPROACH

This report displays our commitment to sustainability. It highlights our activities and data.

Publishing 2019 data from across all our sites on GHG emissions, energy, water and waste provides a

baseline against which to measure our performance and progress in the future.

INEOS has developed a science base to calculate carbon footprints and prepare consistent emission reduction roadmaps. The INEOS science base is a robust method for emissions accounting in carbon dioxide-equivalent (CO<sub>2</sub>-eq) terms aligned with the Greenhouse Gas Protocol. The data collection is managed centrally through the climate and energy network (CEN), using a shared online platform. Our report is in line with the Global Reporting Initiative (GRI) guidelines. Furthermore, we have completed the CDP climate change survey in order to gain external validation for our initiatives.



“ We have a clear, achievable roadmap to effectively contribute to a reduction of emissions from our sites in Antwerp. This includes changing to green power and clean heat, reusing hydrogen and CO<sub>2</sub>, further investment in electrification and, where appropriate, switching to recycled or bio-feedstock.

**HANS CASIER**  
CEO, INEOS Belgium



## As we enter what may be the most significant period ever for the chemical industry in terms of sustainability, INEOS is determined to play its role in building a more sustainable future.

An energy transition is underway, calling for a joined-up, holistic approach in how to move away from fossil fuels such as oil and gas towards alternative energy sources such as solar, wind, nuclear, hydrogen and biomass.

This transition is going to take time and will need a sustainable platform.

- Chemistry is our business, and our chemical products and processes will play an essential part in this transition.
- Climate change and the circular economy is the cornerstone of our strategy and we remain focused on an innovative approach to recycling and renewables.

### We have ambitious targets and a strategy based on six key pillars:

- 1. Excellence in safety, health and the environment**
- 2. Climate neutrality:** helping to minimise our own carbon intensity and deliver a net zero emission economy by 2050
- 3. Circular economy:** maximising the reuse and recycling of our products
- 4. Valuing our people:** ensuring an equal opportunity environment in which a diverse team of people can develop, flourish, and help deliver the innovations we need
- 5. Working with our communities:** enhancing the communities in which we operate
- 6. Governance:** sustaining the highest standards of ethics and compliance



INEOS subscribes to Corporate Social Responsibility (CSR) assessments by EcoVadis, a trusted provider of business sustainability ratings. In 2020 INEOS received a Gold EcoVadis score for our Europe AG businesses, demonstrating an advanced management system for environmental issues; ethics, labour and human rights; and sustainable procurement. INEOS Styrolution and INEOS INOVYN obtained a Platinum and Gold medal respectively.

**Read more...**

**INEOS Europe:**

[INEOS receives gold sustainability rating from EcoVadis](#)

**INEOS Styrolution:**

[INEOS Styrolution awarded Platinum rating by EcoVadis for its advanced sustainability performance](#)

**INEOS INOVYN:**

[EcoVadis 'Gold Merit' award for Corporate Social Responsibility | INEOS INOVYN](#)



To reach its ambitions, INEOS also joins forces with numerous European and international associations and partnerships as corporate, chairing or active member. We are signatory to several sector commitments and abide by a wide range of charters, pledges, and voluntary agreements through our active participation.

**Corporate memberships:**

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

**Industry charters, such as:**

- **Cefic** sustainability charter
- **PlasticEurope** voluntary agreements
- **SCS** - Styrenics Circular Solutions: led by INEOS Styrolution
- **VinylPlus:** leading role by INOVYN
- **PCEP** - Polyolefins Circular Economy Platform: INEOS O&P member
  - PCEP voluntary commitments
  - PCEP recycled PO pledge
- **CPA** - Circular Plastics Alliance
- **ECHA** - European Chemicals Agency charter on REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
- **Cefic** product charters, e.g.
  - OSPA - Oxygenated Solvents Producers Association, glycol ethers charter
- **Operation Clean Sweep**



## 2.1 EXCELLENCE IN SAFETY, HEALTH AND THE ENVIRONMENT



At INEOS, safety, health and the environment are the top priority for everyone who works for the company, whether

employees or contractors, as well as for site visitors. Collectively and individually, we are committed to ensuring the highest levels of safety, health and environmental care across our operations, and through our product stewardship we ensure product safety to protect people and the environment from harm.

We promise we will never compromise our SHE standards to increase profit,

**Our goal is zero injuries and product spillages, to be achieved through rigorous application of best practices and a positive safety culture in which we believe all accidents are preventable.**

gain commercial advantage, reduce production costs or for any other reason.

Our drive to continuously improve our SHE performance includes a relentless focus on monitoring and reducing emissions to water, air and soil, optimising resource, energy and water usage; and improving waste disposal practices.

Each business unit reviews its health and safety performance monthly at board level, and the chief executive of each of INEOS' businesses has ultimate accountability for performance.

### *Material topics covered:*

- **SHE & REACH**
- **Management standards**
- **Waste management**
- **Water management**

Additionally, the shareholders of INEOS are updated on SHE performance monthly at business executive committee (Exco) meetings, quarterly at functional Exco meetings and annually through our letters of assurance, which require each business to provide an annual report of the operational and financial status of each site.

“ Safety is the conscious management of risk. Anything else relies on luck and we don't rely on luck.”

### **SIMON LAKER**

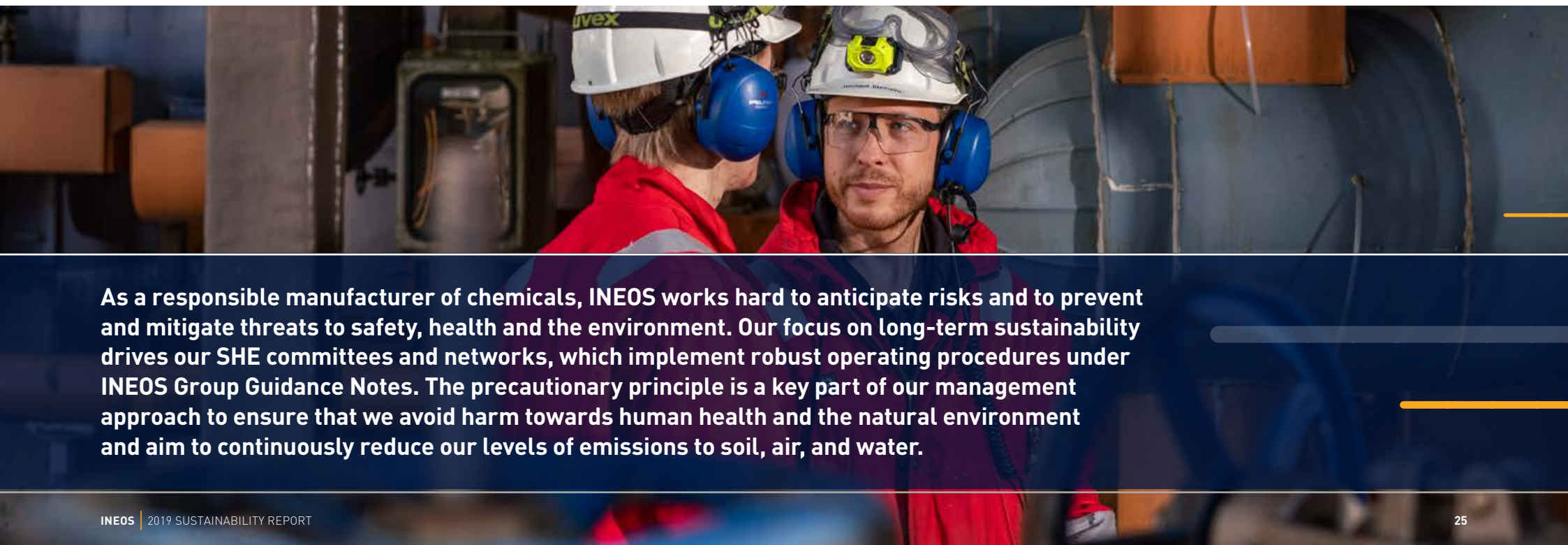
Group Operations Director  
INEOS Group

Our approach to SHE meets and exceeds legislation. Safety targets are reflected across all businesses through our Code of Conduct and applied through our executive teams. SHE is an area that cuts across all INEOS businesses.

Although our safety record already ranks among the best in the industry, we believe there is always room for improvement. Our aim is to prevent all accidents and product spillages.

**In our approach to SHE, we apply three broad principles:**

- 1** We believe excellence in safety, health and environmental 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. On a yearly basis, this amounts to an average of 30 hours of training per employee. 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.



**As a responsible manufacturer of chemicals, INEOS works hard to anticipate risks and to prevent and mitigate threats to safety, health and the environment. Our focus on long-term sustainability drives our SHE committees and networks, which implement robust operating procedures under INEOS Group Guidance Notes. The precautionary principle is a key part of our management approach to ensure that we avoid harm towards human health and the natural environment and aim to continuously reduce our levels of emissions to soil, air, and water.**



To make our approach clear, we have summarised our safety philosophy into what we call the **INEOS 20 Principles**, which address the safety of both people and plant operations.

### 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** Process hazards are systematically identified, risk assessed, reviewed and managed.
- 7** All assets must be subject to periodic inspection designed to ensure their integrity and the reliability of their protective systems.
- 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.

Performance against these principles is audited regularly on every INEOS site. Opportunities for improvement are logged and actioned in short-term and longer-term plans.

These principles are supplemented by our **Life Saving Rules**, set out in one of the INEOS Group Guidance Notes (IGGNs). These are mandatory rules and must never be broken.

### 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 unauthorised person to enter the defined danger zone where objects can fall.

These seven simple but crucial life-saving rules were put in place to make every effort to avoid safety and health incidents.

Anyone found to be breaking any of these INEOS Group 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 employment, whether they are an employee or a third-party worker.

We also have a 'near miss' reporting system, which is actively encouraged across all businesses, sites and employees, designed to identify, report and learn from issues or circumstances that could lead to unsafe conditions.

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 standards and practices across safety, health and environmental performance. These are set out in more than 30 INEOS Group Guidance Notes (IGGNs), which



cover, for example, rules for permits to work, equipment inspection, and change management.

All employees have access to the IGGNs through company intranets. Learning from any incident is communicated across the company through a system of alerts. Businesses apply the guidelines in line with their operational needs and configuration. Each year, site managers and operations directors sign off the Letters of Assurance for each of their manufacturing sites.

IGGNs meet and exceed ISO health and safety standards across the company.

“ Huge improvements have been made over the years, as can be seen by the safety performance, but there are a few critical activities that are so important that any breach will result in instant dismissal. These are the life saving rules.

**JEFF SEED**  
Group SHE Director  
INEOS Group

## 2.1.1 INEOS' health and safety performance

Over the past decade, the INEOS approach to safety has resulted in a fivefold decrease in the injury rate among employees and contractors. When it comes to safety, health and environment, we treat employees and contractors alike, which is why we report on their combined performance when working on our sites. In 2020 our OSHA (Occupational Safety and Health Administration) recordable injury rate of 0.17 injuries per 200,000 hours worked for employees and contractors combined is "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.

Safe handling and containment of our chemicals and products is of critical importance to us. To monitor our performance, we have developed a measure to give us early warning of any risks and opportunities to improve. Each of the materials we use has a maximum legally permitted level at which its leakage into the environment is tolerated. However, leakage of materials to that level is extremely rare.

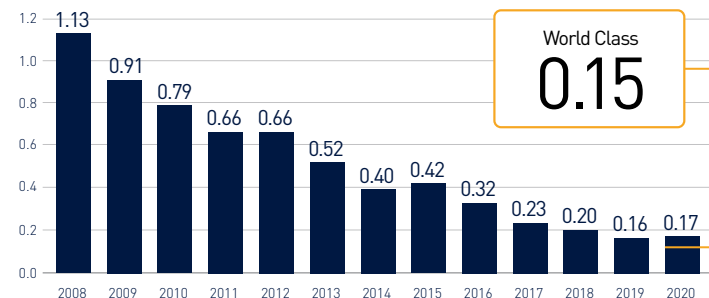
Our processes, operating procedures and working practices are all

designed to secure containment of all products and raw materials. The loss of containment of any materials is extremely rare but each has a level that is legally reportable to the authorities. We closely monitor all systems and we have internal reporting systems that trigger full internal investigation and reporting where there is any loss of containment that is 10% of the reportable level. We call these LOC 10's.

By sustained focus and continuous improvement, over the last eight years we have reduced the frequency of these minor losses by over a factor of four. Additionally, in 2020, zero fatalities were reported across all INEOS sites.

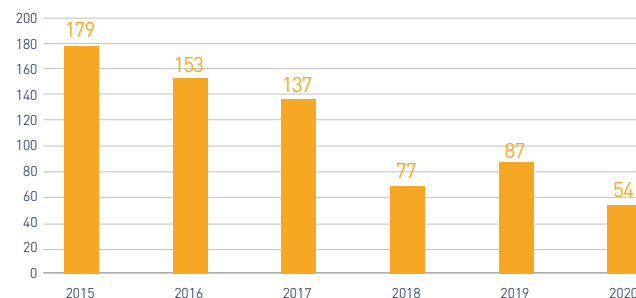
### INEOS Safety Performance

OSHA Recordable Rate per 200,000 hrs  
Employees + Contractors



### INEOS Environmental Measure

LOC 10  
OSHA Recordable Rate per 200,000 hrs





## 2.1.2 Responsible care and product stewardship

Over and above our own SHE rules and guidelines, INEOS is a signatory to the International Council of Chemical Associations' (ICCA) Responsible Care Global Charter.

Signing the charter is part of our commitment to strengthening chemicals management systems,



safeguarding people and the environment, and working towards sustainable solutions through our value chain.

By following the guidelines and measures of Responsible Care® we commit to safely conducting our business in an ethical and environmentally responsible manner and providing the foundation for development and capital investments.

INEOS also 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 our customers to ensure they have the information, procedures and facilities to receive, store, and use products safely.

We are also working towards implementing our very own INEOS Supplier Code of Conduct (SCoC). A procurement team has been pulled together across all businesses to ensure global coverage. Our SCoC will be discussed in detail in the next sustainability report.

## 2.1.3 Compliance with REACH

In line with its SHE culture, INEOS is committed to fulfilling the REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) obligations. They ensure that companies manage the risks associated with their products and provide customers with the information they need to handle them in a safe and sustainable way.



INEOS often goes beyond REACH in the stewardship we apply to our products across all markets. The INEOS approach to product stewardship is managed by a company-wide REACH network and includes the following:

- A global management system to deliver excellence in product stewardship and meet required local, regional and business-specific standards.
- Continual improvement of products to avoid potential problems before they become human or environmental hazards.

- Hazard identification systems that take advantage of available information.
- Risk-based process for identifying, understanding and prioritising concerns and managing chemicals in commerce.
- Risk reduction measures, including limitations on use or even phase-outs of specific uses of chemicals where unacceptable risks are not otherwise manageable in a manner that is appropriate for the risks and mindful of the benefits of a particular chemical in the context of its use.
- Transparent flow of information throughout the value chain (e.g. suppliers, manufacturers, customers, waste vendors, etc.), so that manufacturers and users can understand and manage risk and provide meaningful and relevant information to their respective stakeholders.
- Public availability of hazard, exposure and risk information.

## Case study: Product stewardship efforts pay off

INEOS Nitriles is a good example of the way INEOS approaches product stewardship across the Group. The business carries out a comprehensive technical and safety audit of each potential customer before deliveries commence.

This check ensures that equipment, safety protocols and procedures meet our stringent standards, and we work

together to be sure deliveries can be safely received, stored and handled.

Our safe handling guides and training videos help customers maintain the highest safety standards and our specialist technical teams are on hand to offer advice and support.

To ensure safe transport of our products, all Nitriles customers

must use approved logistics service providers. We also audit safety standards at all the major transport hubs that our products pass through, such as ports, terminals and warehouses.

INEOS Nitriles also holds product stewardship conferences in the US and in Europe, bringing customers together to review the latest

developments in safety. These conferences are held at the request of sales representatives from any country.

During such events, customers can be invited to take a tour of the nearby INEOS facility to see safety work in action, therefore adding real value to our ongoing partnership with them.







## Operation Clean Sweep®

INEOS is a signatory of Operation Clean Sweep (OCS) a voluntary stewardship programme of the Plastics Industry Association (PLASTICS) and the American Chemistry Council.

INEOS applies this commitment to achieve zero pellet, flake and powder loss across its sites and supply chain. INEOS is committed to keeping this material out of the marine environment.

Actions are taken across our polymer plants to prevent pellet loss on all our sites, especially in wastewater streams.

INEOS continuously improves its performance by installing pellet containment measures such as filters, water separators, extractors, air blowers, and rumble strips. It also demands training of truck drivers and hauliers and includes clauses in supply chain contracts to commit to the Clean Sweep principles.

### **The 6 commitments of OCS in Europe**

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

- 1.** improve worksite set-up to prevent and address spills,
- 2.** create and publish internal procedures to achieve zero industrial plastic material loss,
- 3.** provide employee training and accountability for spill prevention, containment, clean-up and disposal,
- 4.** audit performance regularly,
- 5.** comply with all applicable state and local regulations governing industrial plastics containment,
- 6.** encourage partners (contractors, transporters, distributors, etc.) to pursue the same goals.

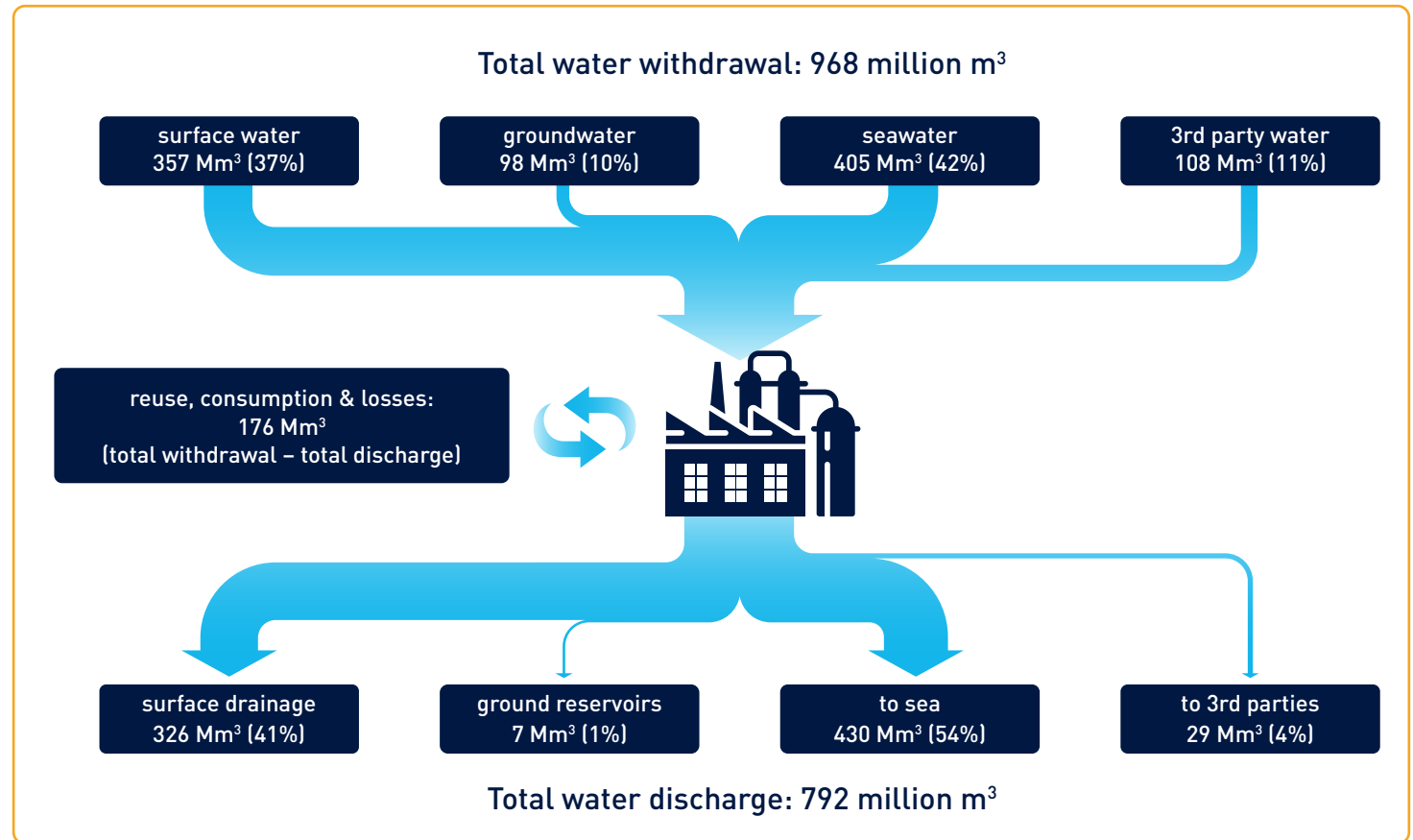


## 2.1.4 Water management and use

INEOS ensures that water sourcing, treatment and discharge complies with international and local regulations and has extensive measures in place to monitor, manage and minimise water use. This protects the natural environment and helps secure the safety, health and wellbeing of our employees and people who live and work close to our sites.

We report on process and cooling water. By definition, process water comes into contact with our product and can be either reused or sent to an on-site or off-site wastewater treatment facility. Cooling water does not come into direct contact with the product; therefore, no organic contamination occurs. If a separate discharge point exists, it can be released directly into a river or sea, without further treatment by a wastewater facility. Regardless of regional differences, the use and discharge of process and cooling water are strictly monitored by quantity and quality.

Water withdrawal and discharge are heavily regulated, and it is anticipated that requirements will become even stricter as policymakers seek to address chemicals in the environment as well as global water scarcity. We closely monitor data from all INEOS production sites to optimise our water strategy.



- We track our water footprint and implement best practice, such as recycling water in closed cooling systems, harvesting rainwater, using seawater, and recovering solvents from wastewater.

- We investigate and implement opportunities to treat and reuse wastewater on-site. Where this is not possible, we send wastewater to an external wastewater treatment facility or seek industrial symbiosis.

Several measures, such as closed-loop water systems and procedures to reuse process water or condensates onsite or at neighbouring production plants, are standard practice at INEOS sites.

### Monitoring and preventing groundwater contamination

Local and national regulations on groundwater contamination are strictly followed across all INEOS sites.

*For example:*

- at our sites in Germany an initial state report (AZB) has to be prepared in accordance with the European Industrial Emissions Directive (IED), to define the reference state of the groundwater and assess the current state of specific substances,
- legislation to handle hazardous substances in water is in place to outline the actions in case of contamination,
- our sites in Belgium follow the Flemish legislation which requires the monitoring of groundwater on a regular basis,
- our US sites, groundwater monitoring is performed to detect any potential contamination issue if a site has a permitted disposal facility on-site.

To prevent groundwater contamination, strict measures are in place at all INEOS sites.

*For example:*

- installing storage tanks and loading/unloading facilities in bunds,
- using impervious floors, kerbing and bunding,
- building process units on concrete with dedicated sewage facilities.

In case of leaks, we have direct actions and procedures in place. Remediation is according to the rules stipulated by the authorities and in the INEOS IGGNs.

### Equipment and technology upgrades

Reducing water consumption is one of INEOS' targets as an essential element in the design and retrofit of our plants.

*For example:*

- in Hull (UK), one major water consumer is the cooling tower. An online system has been put in place to analyse the composition of the product and minimise the slowdown in the cooling tower,

- other water reduction examples include the use of reverse osmosis for make-up water in cooling water systems (Doel, Belgium), reduction of cooling water by optimising the osmosis plant (Rosignano, Italy) and substituting water jets (Marl, Germany).

### Wastewater reuse

INEOS is working to reduce its water footprint, contributing to responsible water care. One of the most efficient ways of doing so is reusing process water. Due to the nature of chemical processes, wastewater is nearly always contaminated, but the INEOS sites are optimised to cascade wastewater streams until no further use is possible.

*For example:*

- purifying process water in the ethanol recovery and recycling back into other processes (Hull, UK),
- minimising wastewater treatment by recycling process water (Doel, Belgium),
- caustic soda dilution using wastewater (Gladbeck, Germany),
- feeding process purge water into cooling towers (Feluy, Belgium).

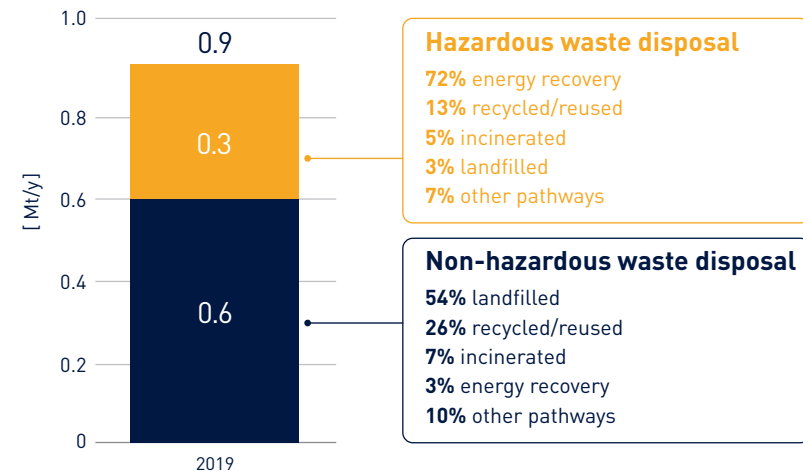


## 2.1.5 Management of waste

INEOS has an extensive list of measures in place to monitor and manage pollution, hazardous materials and waste. This protects the natural environment, in compliance with national regulations, and helps secure the safety, health and wellbeing of our employees and people who live and work close to our sites.

- We track INEOS' waste footprint and implement best practices to prevent loss of containment (e.g. minimising plastic pellet loss at our sites under the Operation Clean Sweep initiative).
- We investigate and implement opportunities to derive value from waste and by-products at our sites (by internal reuse or exporting it as a raw material for third parties to reuse) and have developed tools to facilitate industrial symbiosis (e.g. at Hull (UK) as a result of the European Horizon 2020 project [EPOS](#)).
- We work to reduce end-of-life waste associated with our materials, setting recyclability and recycled content targets (e.g. investing in advanced recycling technologies).

### Waste generated across all businesses worldwide



# 4 R's



Reducing, reusing and recycling waste is standard practice across our business and sites. When onsite recycling or reuse is not possible, by-products are often reused by third parties. Remaining waste that cannot be reused 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 CLIMATE: HELPING TO DELIVER A NET ZERO EMISSION ECONOMY BY 2050



INEOS is taking concrete actions to create meaningful and measurable near and long-term reductions to its greenhouse gas

(GHG) footprint. At the same time, we are positioning ourselves to take advantage of new opportunities offered by this evolving energy and climate environment. We are pursuing the following initiatives:

- continuous energy optimisation of our current operations,
- acquisition of renewable energy sources to run our operations,
- development of clean hydrogen as a fuel,
- use of recycled and bio-based feedstocks instead of fossil-based feedstocks,
- development of new recycling technologies to produce polymer products containing recycled plastic,
- capture and use or storage of carbon dioxide (CO<sub>2</sub>),
- investment in new assets to create a step change in reduced emissions.

Each INEOS business applies a consistent and scientific methodology to roadmap each of its sites.

### *Material topics covered:*

- **Climate change**
- **Circular economy**
- **Hydrogen economy**
- **Carbon neutrality**
- **GHG emissions management**
- **Energy management**
- **Sustainable procurement**



Best practice in each category, for example: GHG reduction measures, clean technologies, innovation in recycling and circularity, is shared across all INEOS businesses through our climate and energy network.

The group-wide network engages at all levels in the company. It is led by a dedicated team which coordinates emissions, energy, resources, waste and water data from across INEOS.

INEOS monitors emission data and reports greenhouse gas and other air emissions on an annual basis according to internationally recognised standards to track its progress.



## 2.2.1 GHG emissions

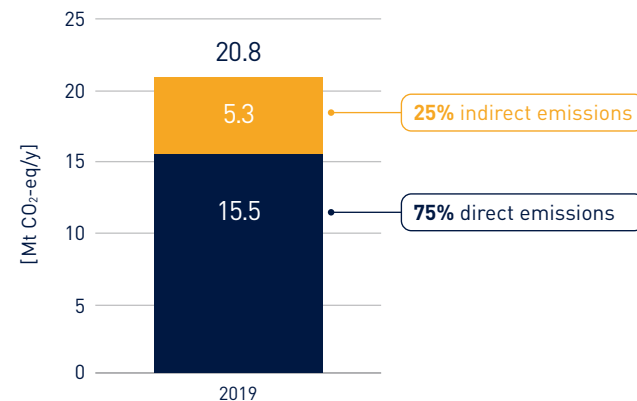
Using the INEOS science base, our 2019 GHG footprint is 20.8 Mt CO<sub>2</sub>-eq (including CH<sub>4</sub>, N<sub>2</sub>O and HFCs). This is broken into 15.5 Mt CO<sub>2</sub>-eq direct emissions (scope 1: 75%) and 5.3 Mt CO<sub>2</sub>-eq indirect emissions (scope 2: 25%; excluding 1 Mt CO<sub>2</sub>-eq of exported steam and electricity to third parties). When only considering production sites, INEOS' carbon footprint consists of 13.2 Mt CO<sub>2</sub>-eq direct and 4.8 Mt indirect emissions; therefore a total of 18.0 Mt compared with the Group 20.8 Mt CO<sub>2</sub>-eq footprint. The reduced figure excludes refining, exploration and production of oil and gas, trading and shipping and pipeline activities and is used to calculate intensities based on products manufactured.

Accordingly, this indicates that 2.8 Mt CO<sub>2</sub>-eq can be allocated to the INEOS businesses IOG, ITS, FPS and the JV Petroineos (50% INEOS).

The INEOS science base and emission data are used by INEOS sites and businesses in setting their plans for 2030, as they develop scientifically based roadmaps. To meet the emission targets, our sites and businesses will apply a range of approaches, including fuel and feedstock switching, process optimisation, carbon capture solutions and offsetting.

We have also started to develop an INEOS-wide science base on scope 3 emissions and are looking to report them in the future.

### GHG footprint



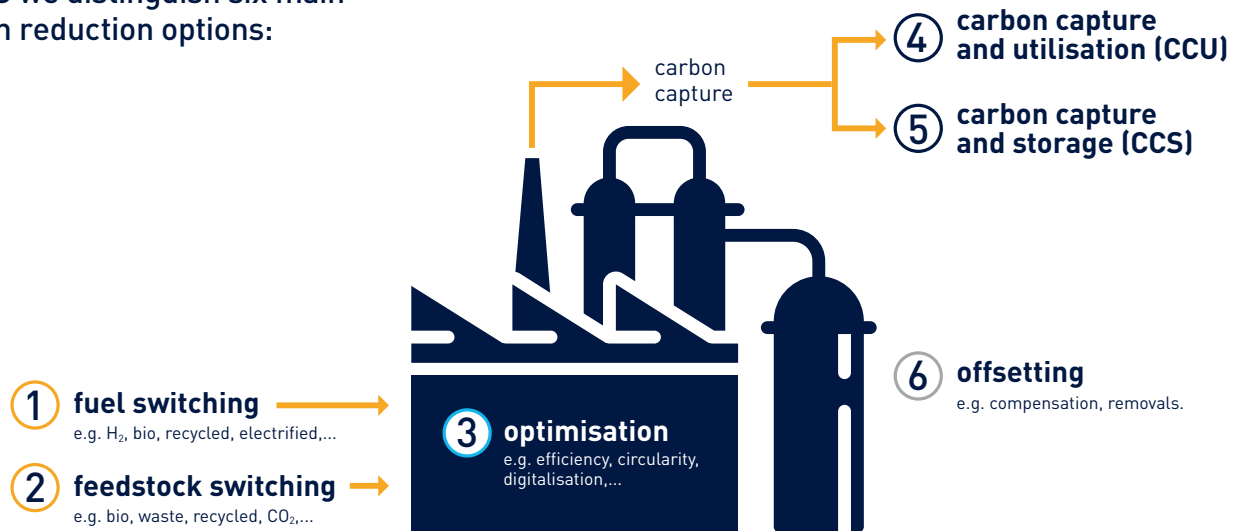
# net zero by 2050

## 2.2.2 Our pathways and roadmaps

Solid environmental data collection and a fixed reference year play an important role in defining emission reduction pathways and setting priority targets at INEOS sites when drawing up 2030 and 2050 roadmaps.

We will reduce like-for-like GHG emissions by 10%, by no later than 2025, based on our 2019 emissions. We are investing over three billion euros over the next five years to reduce our footprint further. Our site roadmap initiative and 2030 investment plans, aim to drive down our GHG emissions to set realistic and achievable targets towards net zero by 2050.

At INEOS we distinguish six main emission reduction options:





### 2.2.3 Continuous energy optimisation

Continuous improvement in efficiency and reduction of energy use and carbon emissions is standard practice across INEOS. Our sites sign up to energy management systems such as ISO 50001, EMAS in Europe, ESOS in the UK and EBO in Flanders, and have regular energy audits in compliance with our IGGNs. Our approach supports a cleaner environment, reduces our energy use, and makes our business economically more sustainable.

Projects vary widely: from finding new ways of improving process efficiency to innovative solutions for heat integration or more selective catalysts for our processes.

#### Monitoring progress

Each INEOS site is measured against previous emission years, other production sites in the business, and its profile in a country. Emissions data for each business are compared against all INEOS businesses. The data also makes it possible to compare sites and units, suggest reduction pathways, prioritise at source or end of pipe solutions, set targets and track roadmap progress.

Each site monitors and reports carbon and energy data in compliance with local rules.

A combination of metering, sampling and analysis is used to achieve a 'top tier' level of compliance. Site monitoring plans are verified according to local standards through environmental permitting as well as impact assessments by INEOS site management teams or local authorities.

#### Improvement actions in place

INEOS' global carbon and energy footprint is presented in half-yearly CEO meetings and results in climate and circular investment planning for each business. Based on 2019 data, a site-based action plan has been drawn up to reduce GHG emissions and improve circularity in the short and longer run.

#### Process optimisation

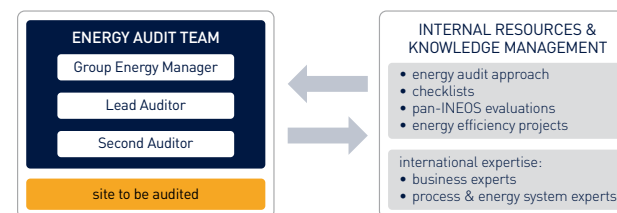
At INEOS, carbon and energy performance is driven by process efficiency. Site optimisation plans are made and discussed on a regular basis and result in typical reduction measures.

*For example:*

- efficiency of power plants,
- optimisation of steam networks,
- recovery and reuse of off-gasses in utilities,
- reduction of flaring,
- cooling automation,
- advanced process control (e.g. distillation columns),
- catalyst improvements.

Site actions that enhance energy performance (e.g. heat integration) often also result in decreasing GHG emissions.

#### Energy audit preparation & on site workshops



### Energy mix

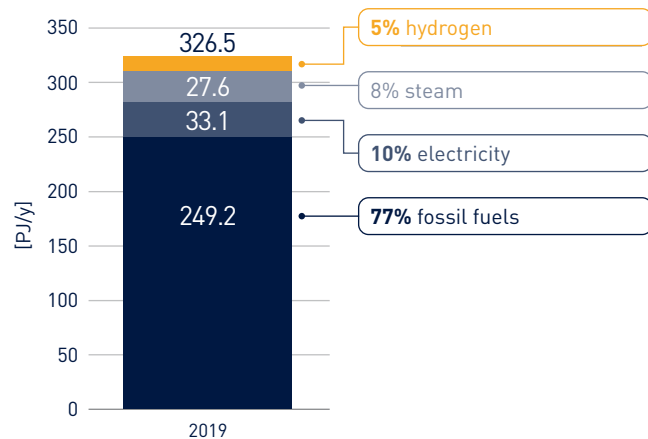
Each INEOS business and site has identified and implemented opportunities for improving the share of renewables in their energy mix.

Energy sourcing is a key driver of emissions reduction and has a significant impact on our carbon footprint. INEOS collects and analyses energy data for each site, business and company-wide, thus providing a comprehensive overview of energy use across INEOS. These systems enable detailed energy

management and planning through process optimisation and fuel switching. Energy reduction and substitution measures are a key part of the roadmaps for each INEOS site.

The energy intensity value per tonne of product manufactured at our production sites (excluding refining, exploration and production of oil and gas, trading and shipping and pipeline activities) stood at 6.51 GJ/t in 2019. Energy intensity per tonne of product sold in 2019 was 7.99 GJ/t.

### Energy footprint





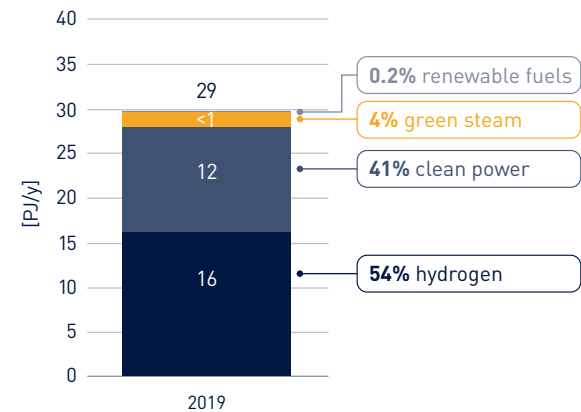
## 2.2.4 Clean energy sources to run our operations

Most INEOS sites use clean energy according to the local electricity mix, some via own investments in green power (wind turbines, solar panels), though biomass or landfill gas as fuel for power plants (Chocolate Bayou), by purchasing bio-based steam (Doel) or by refuelling with H<sub>2</sub> (Köln). Some sites have invested in electrical site cars to promote low-carbon energy sources. INEOS plans to engage in power purchase agreements (PPA) and carbon contracts for difference (CCfD).

INEOS is exploring opportunities to apply increased use of wind and solar power coupled with electrification to enable us to substantially reduce emissions towards our goal for 2050.

The use of renewables in the INEOS fuel mix is also covered in our energy footprint. These include zero carbon energy sources such as hydrogen (5%) and clean power (4%).

### Clean energy consumption breakdown





## 2.2.5 Development of clean hydrogen as a fuel

INEOS actively participates in innovation projects with a focus on fuel and feedstock switching to save energy use and carbon emissions. The development and implementation of new industrial tools and technologies are also a priority.

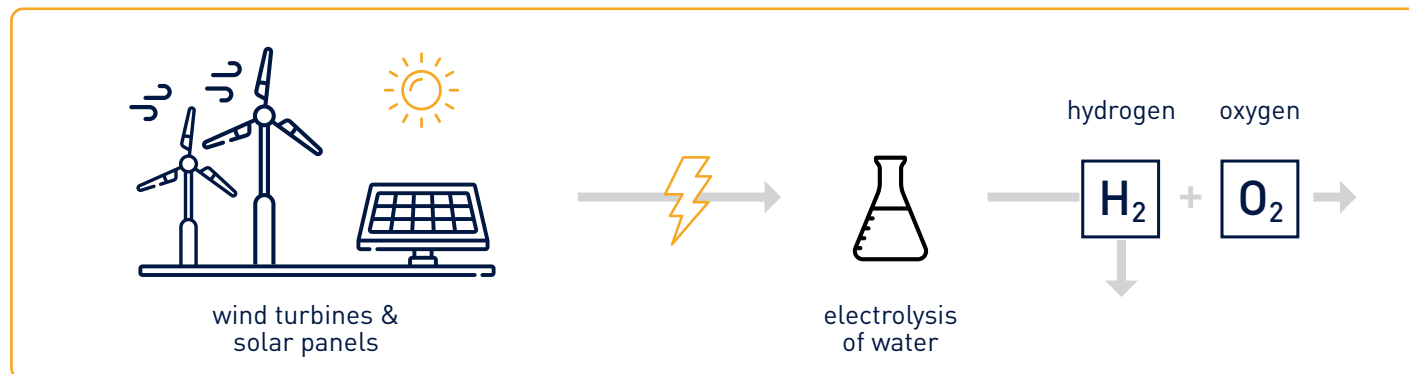
Like many governments around the world, we believe that hydrogen will be a key element for the transition to a zero carbon economy.

We are already Europe's largest developer and operator of electrolysis technology in our chemicals business, and have H<sub>2</sub> storage infrastructure. The two combined can help buffer the intermittency of renewable energy.

We also have the advantage that we can kickstart the transition using our existing hydrogen, which is a co-product in our current processes.

INEOS makes enough hydrogen each year to fuel 300 million miles of heavy goods vehicle travel. This is the equivalent of 12,000 trucks circumnavigating the world.

Clean hydrogen will provide zero emission power for industry and homes and meet the growing demand for hydrogen fuelled vehicles.



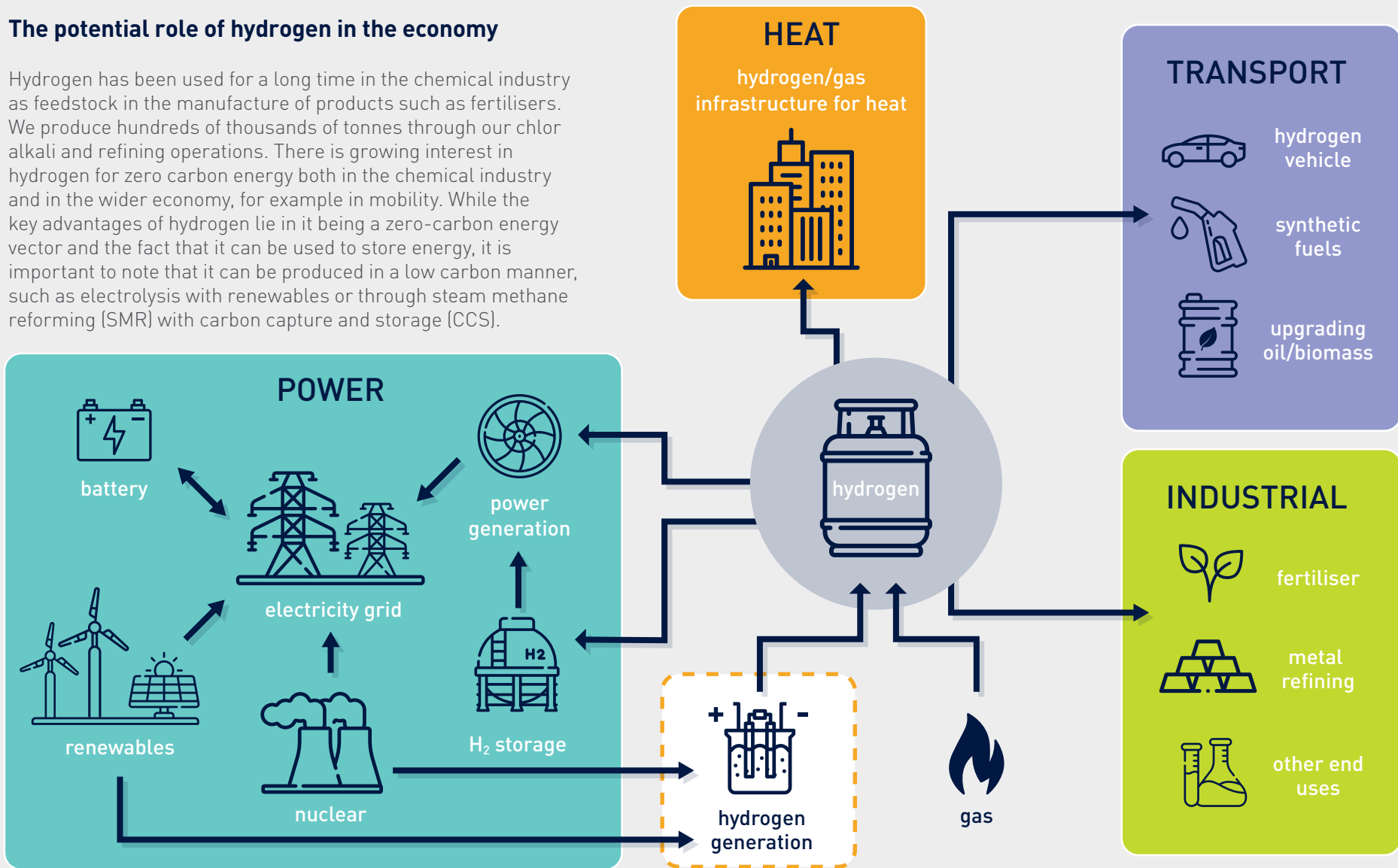
“INEOS is uniquely placed to play a leading role in developing new opportunities for hydrogen, driven by emerging demand for affordable, low-carbon energy sources, combined with our existing capabilities in operating large-scale electrolysis.”

**GEIR TUFT**  
CEO  
INOVYN



### The potential role of hydrogen in the economy

Hydrogen has been used for a long time in the chemical industry as feedstock in the manufacture of products such as fertilisers. We produce hundreds of thousands of tonnes through our chlor alkali and refining operations. There is growing interest in hydrogen for zero carbon energy both in the chemical industry and in the wider economy, for example in mobility. While the key advantages of hydrogen lie in it being a zero-carbon energy vector and the fact that it can be used to store energy, it is important to note that it can be produced in a low carbon manner, such as electrolysis with renewables or through steam methane reforming (SMR) with carbon capture and storage (CCS).



## 2.2.6 Capture, utilisation or storage of carbon dioxide (CO<sub>2</sub>)

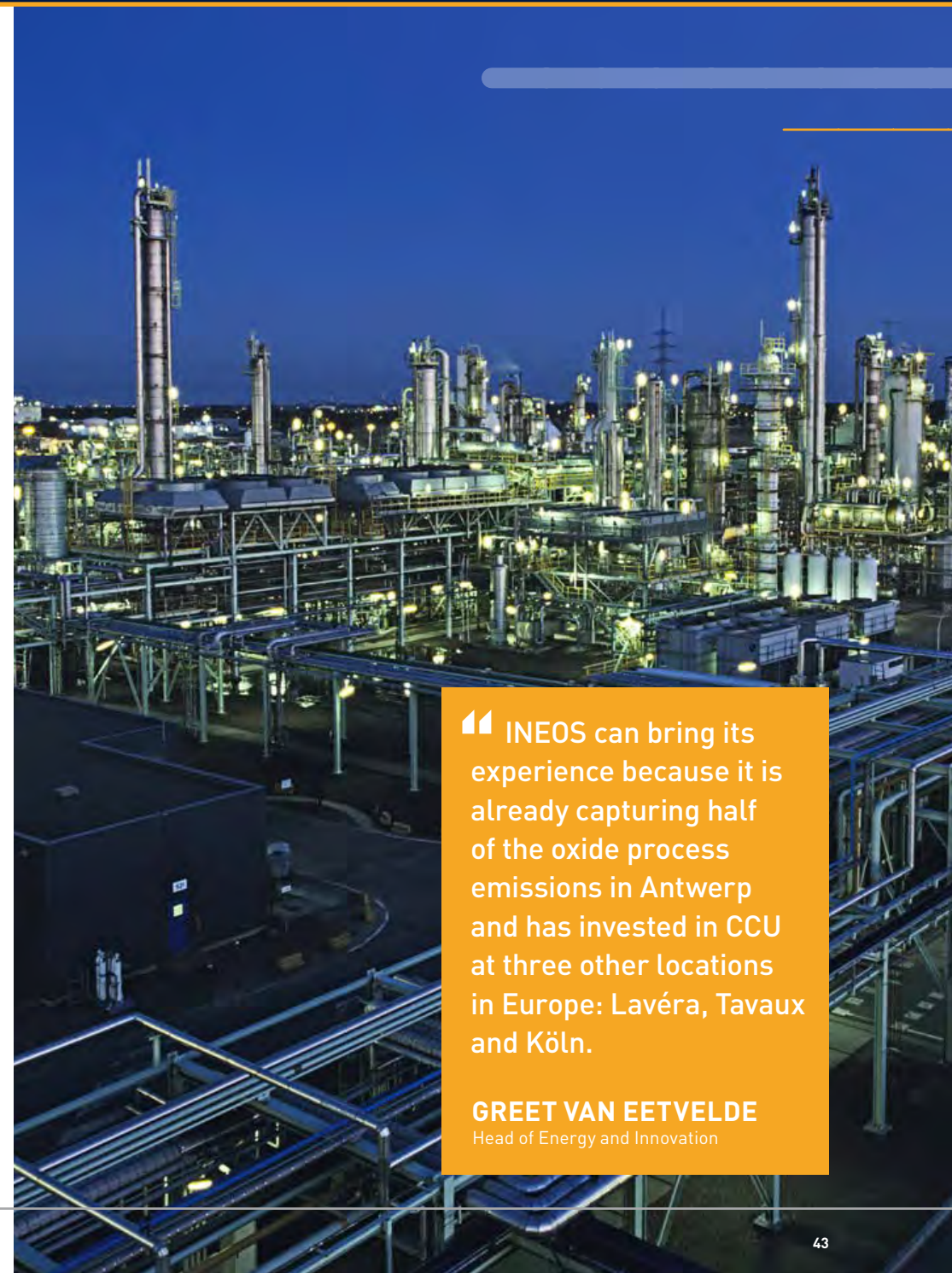
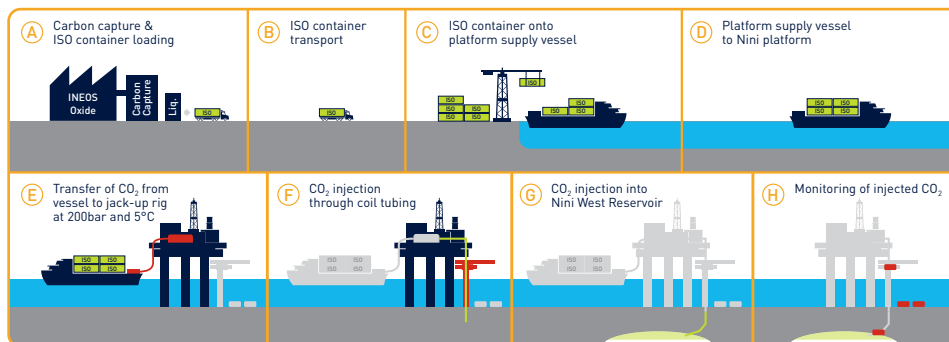
Although INEOS' vision is to cut emissions at source, we recognise that carbon capture and storage (CCS) will still play an important role in mitigating GHG emissions in the short run, and utilising captured carbon (CCU) in the long run. Indeed, we already operate carbon capture at several INEOS sites.

For the last decade, INEOS has been capturing GHG emissions at plants in Antwerp (Belgium), Lavéra (France) and Köln (Germany), removing over one million tonnes of CO<sub>2</sub> – equivalent to the annual emissions from 100,000 cars. We are also leading the Greensand pilot project in Denmark where we plan to repurpose our depleted oil field to a long term CO<sub>2</sub> storage facility.

Our ultimate goal is to capture carbon dioxide and derive value from it. We are working with partners in the port of Antwerp to build a demonstration plant to make clean fuel from captured carbon dioxide 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 is also a partner in the [ELEGANCY](#) research project looking into CCS. It involves consortia from the UK, Norway, the Netherlands, Germany and Switzerland.

### Greensand CCS pilot



“ INEOS can bring its experience because it is already capturing half of the oxide process emissions in Antwerp and has invested in CCU at three other locations in Europe: Lavéra, Tavaux and Köln.

**GREET VAN EETVELDE**  
Head of Energy and Innovation

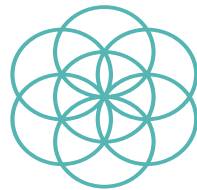


## 2.2.7 Use of recycled and bio-based feedstocks instead of fossil-based feedstocks

INEOS has already demonstrated this concept at commercial scale by feeding sustainably sourced bio-based materials into our large olefin plants in Köln, Germany. The biomass does not compete with food production; it is from a renewable residue of wood pulp processing and has been successfully converted into bio-olefins.

In 2019, INEOS Olefins & Polymers Europe announced a range of bio-attributed olefins and polyolefins.

Each step in the supply chain has been fully certified by the Roundtable on Sustainable Biomaterials (RSB) to track the renewable materials and ensure their sustainability. The final product carries an attribution



CERTIFIED BY  
**RSB**  
Roundtable on Sustainable Biomaterials  
[www.rsb.org](http://www.rsb.org)

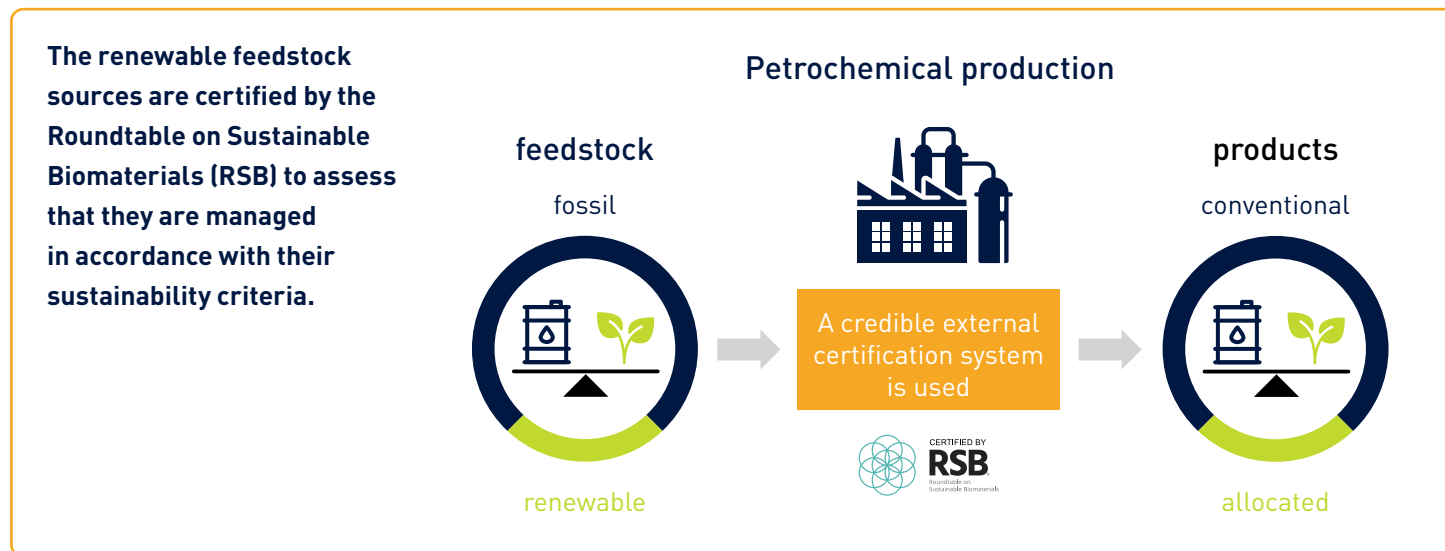
according to the displacement of fossil fuel-derived raw materials.

The RSB process also tracks and measures the GHG saving through the life cycle of the product. The INEOS bio-attributed polyolefins can be made with 100% substitution of bio-feedstock and provide significant GHG savings. It results in products which have a proven positive impact on the environment without sacrificing product performance.

“ We are very proud to have achieved RSB certification of Olefins and Polyolefins from our Köln site. Being able to offer bio-attributed olefins and polymers represents another concrete step for INEOS along the path towards a more circular and sustainable economy.

**LIZ RITTWEGER**

Business Director  
INEOS Olefins & Polymers Europe



## INEOS is cutting its carbon footprint in a variety of ways:

Action	Status/Example
<b>Continuous optimisation of current operations</b>	The INEOS BAU scenario forecasts a 10% reduction in GHG emissions compared to 2019 by 2025.
<b>Increase of clean energy sources</b>	INEOS intends to grow the share of green and clean energy sources in its utilities.
<b>Development of clean hydrogen as fuel</b>	INEOS is Europe's largest developer and operator of electrolysis technology in its chemicals business and has hydrogen storage infrastructure. We make enough hydrogen each year to fuel 300 million miles of heavy goods vehicle travel. We have the advantage that we can kickstart the transition to hydrogen using our existing production, which is a co-product in our current processes.
<b>Use of recycled and bio-based feedstocks instead of hydrocarbon feedstocks</b>	<p>INEOS is committed to achieving a more circular economy where materials are reused and recycled to the maximum extent possible. We have already set four targets for 2025:</p> <ul style="list-style-type: none"> <li>• offer a range of polyolefin products for packaging applications containing at least 50% of recycled material,</li> <li>• use on average 30% of recycled material in polystyrene packaging products,</li> <li>• incorporate at least 325 kt of recycled material in our products,</li> <li>• ensure that 100% of our polymer products can be recycled.</li> </ul> <p>We are also working with and supporting brand owners and industry groups to agree and set common industry targets.</p>
<b>Development of new recycling technologies to produce polymer products containing recycled plastic</b>	New styrenics and polyolefin products are being launched containing 50% or more of recycled material.
<b>Carbon capture and use (CCU) or storage (CCS)</b>	We are working with partners at the Port of Antwerp, Belgium, to build a demonstration plant to make clean fuel from captured carbon dioxide 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.
<b>Investment in new assets to create a step change in emissions</b>	A key example is the proposed Project ONE ethylene cracker to be built on the INEOS Antwerp (Belgium) site, which will reduce GHG emissions to set a new benchmark in Europe.



## Case study: Bio feedstocks cut carbon footprint

INEOS is exploring the use of bio feedstocks in its steam crackers to make polyolefins and polyvinyl chloride (PVC) that have lower GHG footprints.

INOVYN, INEOS' PVC business, is commercialising BIOVYN™, a green PVC made in two production sites in Europe, which it offers as 100% non-fossil-fuel attributed, owing to the use of bio feedstocks in INEOS' Köln cracker. Using a mass balance approach and third-party

certification by the Roundtable on Sustainable Biomaterials (RSB), the bio-ethylene produced in this way can be attributed to VCM and hence to the BIOVYN™ PVC.

The product is already attracting a lot of interest from customers in the automotive, flooring and pipe sectors who want to use a material to meet their end customers' green demands. It also delivers GHG savings of more than 90% compared to conventionally produced PVC.

To source the bio feedstock, INEOS has recently signed a long-term agreement with Finland's UPM Biofuels for the supply of the latter's UPM BioVerna, a sustainable naphtha substitute made from the residue of wood pulp processing. This is fed into the Köln naphtha cracker to produce bioethylene and hence a wide range of bio-attributed polyolefins as well as PVC. These can be used in a range of products, from plastic food packaging to medical items and pipes.

RSB has certified each step in the process, starting from UPM's crude tall oil residue to the bio-naphtha and then to final polymers. The agreement supports INEOS' plans to make plastics from renewable materials, significantly reducing GHG emissions and supporting a more sustainable approach to its business.

[Read more...](#)

“ It is early days, and we are talking thousands of tonnes rather than hundreds of thousands of tonnes of product at the moment. But it will start to meet an evolving demand from the market for green materials.

**PETER WILLIAMS**  
Technology Director, INEOS



## 2.2.8 Reducing emissions through our supply chain

Through our cross-business supply chain network, directors and business managers meet regularly. They share best practices including how to make the most of low-carbon logistics. All our suppliers are required, through our contractual arrangements, to be as efficient as possible in providing a service on our behalf. As part of this, we continually seek fuel efficiencies. This mindset, together with efficient transport planning, helps us to maintain safety, drive costs down and improve carbon savings across our supply chain.

Our businesses generally encourage customers to co-locate on the same industrial sites or at locations that are connected, thereby creating chemical clusters, for example at Antwerp, Belgium and Houston, USA. This approach means that we can deliver product directly by pipeline. Our next preference is to use a ship or barge, then rail and, finally, road. As part of ongoing work with our transport providers, we also strongly advocate training for drivers on fuel-efficient driving.

### The main elements of our supply chain are:



responsible procurement of our raw materials,



energy and resource efficient production of our products,



safe and reliable transportation of our products to our customers.

“ INEOS is committed to operating as a responsible corporate citizen. Our mission is to be a leader in our industry and to continuously improve our performance, but in so doing we will not compromise our environmental, health, or safety standards for any reason.

### DAVID THOMPSON

CEO, INEOS Trading and Shipping and Procurement Director for INEOS Group





## 2.3 CIRCULAR ECONOMY: MAXIMISING THE REUSE AND RECYCLING OF OUR PRODUCTS



Resource conservation and waste reduction are major concerns of society and regulators today. Pressure is being brought to bear on

industrial producers to reduce their material intakes and cut waste and pollution by moving to a more circular economy.

In a circular economy, products are designed to improve recyclability so they can be recovered and reused or recycled to the maximum extent possible, reducing landfill, incineration and the demand for fossil-based raw materials.

INEOS is committed to playing its part and achieving a more circular economy.

This saves resources, reduces greenhouse gas emissions and creates opportunities for our customers and our businesses. This is especially true in those businesses with products that reach the end-consumer, such as polyethylene (PE), polypropylene (PP), polystyrene (PS), acrylonitrile butadiene styrene (ABS) and polyvinyl chloride (PVC).

The move to a more circular economy will also maximise the valuable contribution that such plastics make to society whilst minimising their environmental impact.

### Material topics covered:

- **Climate change**
- **Circular economy**
- **Waste management**

### The INEOS pledge

...use on average

**30%** recycled content in products

destined for polystyrene packaging in Europe

...incorporate at least

**325** kt/a

of recycled material into products

...deliver

**900** kt/a

vinyl recycling through our leadership of the VinylPlus programme

...ensure

**100%**

of polymer products can be recycled

...we will offer a range of polyolefin (PE and PP) products for packaging applications containing at least

**50%** of recycled material and use



2.3 Circular economy: maximising the reuse and recycling of our products | continued

INEOS is also working with, and supporting, brand owners and industry groups to agree upon and set common industry targets for recyclability and recycling.

For example, instead of using fossil-based carbon to produce polyolefins and PVC, INEOS is using UPM BioVerno, a sustainable raw material from a renewable residue of wood pulp processing. The carbon footprint of these bio-attributable materials can be up to 90% lower than conventionally made products.

Our Styrolux ECO and Styroflex ECO resins are compliant products enabling the substitution of fossil source styrene with a certified bio-attributed styrene. Over their production lifecycle, our ECO resins provide GHG savings compared to a fossil fuel equivalent.

INEOS businesses are devoting considerable effort and resources to developing ways of recycling plastics post-consumer use. But we realise that no single recycling method is sufficient to meet INEOS' targets. We are developing several different technologies in parallel, each suited to a different fraction of the plastic waste which is collected.

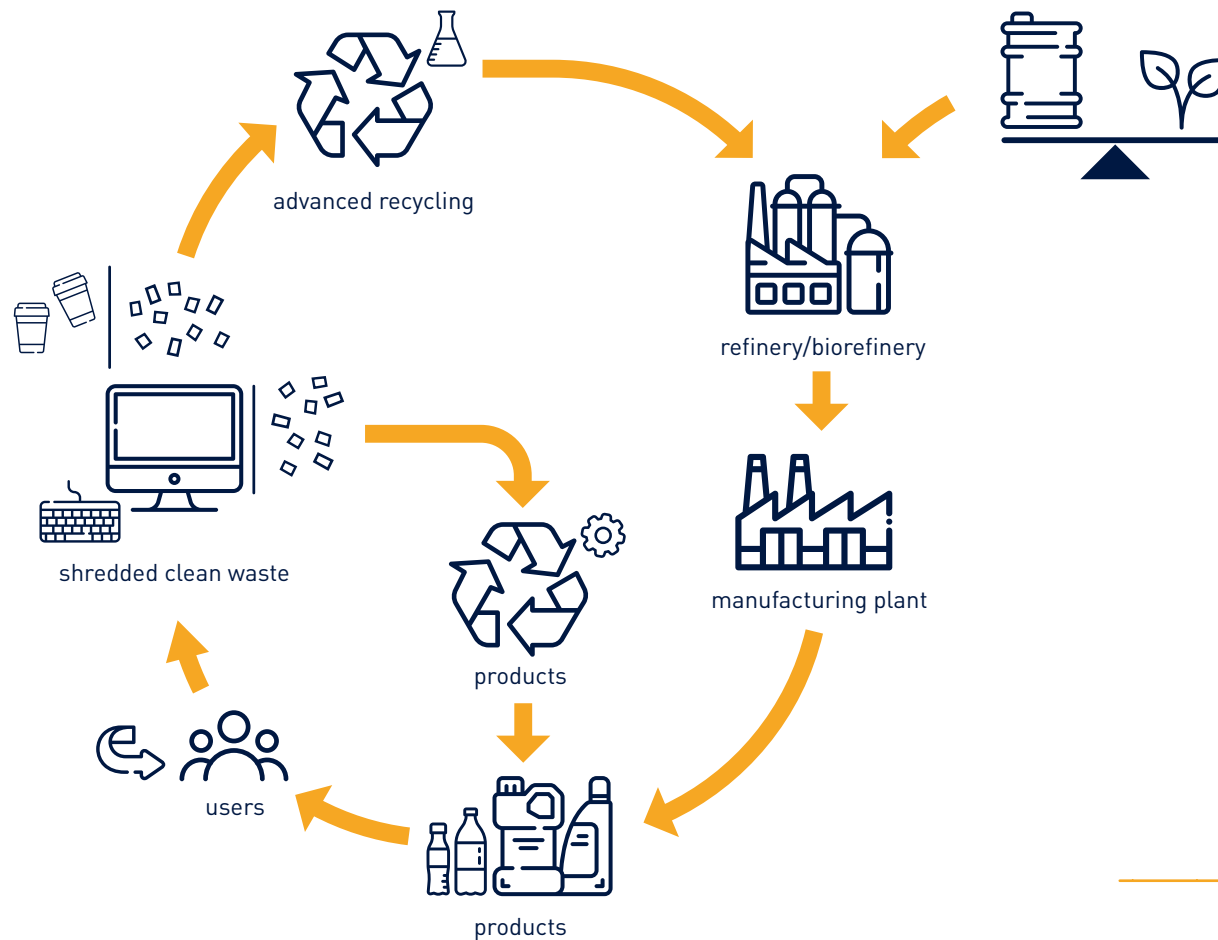
These can be broadly grouped into two categories: mechanical recycling,

where the plastic waste recovered is physically processed into reusable form; and advanced recycling, in which the waste plastic is either broken down chemically into its constituent parts for repolymerisation into new polymer,

or recovered in pure form after dissolution in a solvent.

A major focus is to combine a high performance and lower carbon footprint with easier recyclability,

and high recycled content. For example, we have developed new grades of ABS containing recycled material that still fulfil the stringent specifications required to meet demanding applications.



Our starting point for increasing recycle rates is safe and sustainable product design. We harness our skills in material science to design products that make recycling easier to do. Often this will involve designing products, and especially packaging, that consist of only one polymer but still have the performance of multi-component systems.

Product innovation is at the centre of our business. Our objective is simple: to take concrete actions now to create the new products required to lead the transition to a circular economy and a carbon neutral future.

These products deliver improved resource and energy efficiency to our customers, and so reduce the overall environmental footprint of the product in use.

Nevertheless, we realise we have to develop the technologies needed to recycle each part of the plastic waste stream that can be collected. Some is recovered as a relatively pure stream; in which case we can recycle it mechanically for reuse in a new application. However, much of the waste plastic is contaminated with food or mixed together with other materials, and for these we need advanced recycling methods.



### 2.3.1 Mechanical recycling

In mechanical recycling, plastic waste is physically processed back into pellets, without changing the basic structure of the material. This method is the quickest route to increasing recycling rates.

Across our businesses, we have already launched more than 25 new product grades that contain over 50% recycled content. Many of these contain newly developed high-performance grade products to boost properties to match the performance of virgin material.

We have, for instance, developed new polyolefin products containing up to 70% recycled polymer for a range of applications. Our INOVYN business has fostered industry recycling initiatives which have enabled about 800,000 tonnes of PVC to be recycled each year.

One of the main bottlenecks in this approach 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.

### 2.3.2 Advanced recycling

#### 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 PS back to styrene, then repolymerising it to make products identical to new 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. The resulting oil is further purified and processed, then used as feedstock in steam crackers to produce the base molecules (ethylene, propylene, butadiene, benzene) for polymer 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 to our large olefins unit in Köln, Germany. The process and resulting products have been certified by an independent accreditation body.

#### 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, as all advanced recycling techniques it is highly energy intensive and 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, applications and process knowledge together for a common purpose.





## Case study Recycl-IN polyolefins maintain quality

INEOS has launched a range of polyethylene and polypropylene products, made using a blend of very high specification virgin material with up to 70% of recyclate to produce a polymer without sacrificing final product performance. The Recycl-IN range covers rigid and flexible products for use in non-food contact applications.

INEOS Olefins and Polymers' CEO Rob Ingram said: "Plastic is a valuable

resource. So much so that we want to encourage the increasing collection and recycling of plastic materials after their initial use. Our commitment to take material from this project helps to support investment in a new, state-of-the-art recycling facility. Using our polymer expertise, we will engineer a new range of polymers to incorporate high levels of recycled plastics. These new materials will meet growing demand for increased levels of

recycled content without compromise to product performance and quality."

Recycl-IN uses post-consumer recycled plastic from a number of recycling companies, including Viridor's new state of the art recycling plant in the UK.

These Recycl-IN products mirror INEOS virgin grades and perfectly fit injection moulding and compression moulding machines.

Collaboration agreements with waste management companies and recyclers enable INEOS to source a wide range of good quality recycled plastic, helping to drive an increase in plastics recycling and the use of recycled products.



## 2.4 VALUING OUR PEOPLE



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

Our core guiding principle is to “value and respect”. INEOS encourages an entrepreneurial culture where talent can quickly rise to the top and where people are rewarded for taking the initiative, as well as for their performance. We also place a large emphasis on “healthy body, healthy mind”. 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.

That means attracting a diverse range of the highest quality candidates for

each available position, recruiting based on merit following the principles of equal opportunity.

In each of our locations, we directly recruit local talent into our operations and business. These local opportunities are supplemented by group-wide initiatives such as our Core Graduate Engineering programme and European Commercial Programme.

### *Material topics covered:*

- **Training & career management**
- **Diversity & equality**
- **Working conditions**
- **Labour unions**

“ There’s a dynamism around INEOS – a willingness, desire and ability to get things done. There is a restlessness that you see in the people; they want to strive and do the next thing, find the next idea and get better. The sense of adaptability and agility is quite extraordinary. We are one of the industry’s most entrepreneurial organisations, where everybody really cares about the tangible things we’ve done rather than about our aspirational goals.

### **BRIAN GILVARY**

Executive Chairman, INEOS Energy





## 2.4 Valuing our people | continued

The latter is designed to attract high quality candidates who wish to pursue a commercial rather than technical career.

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 them 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.

In year four, they can test their mental and physical boundaries by taking part in our IN-NAM Challenge, a seven-day adventure in the Namibian desert.

Training and development are continuous processes. From that first day of introduction, safety and job-related training is paramount throughout a career at INEOS. We are focused on enhancing professional and technical knowledge, as well as the development of their personal, 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 our

employees participate in annual appraisals with their line managers to review performance, agree targets for the year ahead and discuss their individual training and development needs.

We understand we have a duty to ensure that our decisions regarding recruitment, selection, development, and advancement of employees are based on merit, qualifications, demonstrated skills and achievements. Our remuneration strategy is to pay above market rates and to reward productivity and progress. All employees are expected to follow our Code of Conduct, act responsibly and not compromise our environmental, health or safety standards for any reason.

“ At INEOS, there’s none of that ‘big company approach’ – everyone is judged on how they do the job. People get rewarded if they perform well and everybody knows that from the start.

**TOM CROTTY**  
INEOS  
Director of Corporate Affairs





All our employees, wherever they are in the world, know that they must hold themselves up to the highest standards of ethics, integrity, openness, and accountability in the way they go about their daily business.

INEOS is a global company that values the diversity of our people. We respect the rights, values and dignity of all employees, customers, contractors, vendors, and other stakeholders.

We also facilitate reporting any concerns or grievances. Our INEOS Speak Up! policy allows employees to share any concerns anonymously, if they believe anyone acting on INEOS' behalf is behaving unethically or improperly. They can do this through our dedicated Speak Up! service, which is accessible via an independent third party online or through a 24/7 toll-free phone number.

### Diversity and equality

We value the diversity of our people and each of our employees is recognised as an important member of our team.

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

This approach to diversity and inclusion forms part of the INEOS

“ Being fit to work isn't simply about being safe. It's about being healthy, energetic, being our best, and being sharper during our working time. We're on a mission to help our employees improve their health and wellbeing, whatever their role, goals or fitness levels.

### JOHN MAYOCK

Director of Sports, INEOS Group

Code of Conduct which describes in detail the behaviours we expect of all employees, and is available to everyone.

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

These 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.

## Building the best workforce

### Universities

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



### Grad scheme

A 5-year duration graduate programme available in 4 countries

### People

**26,000**  
employees



### TuWaS!

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

### Apprenticeships

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



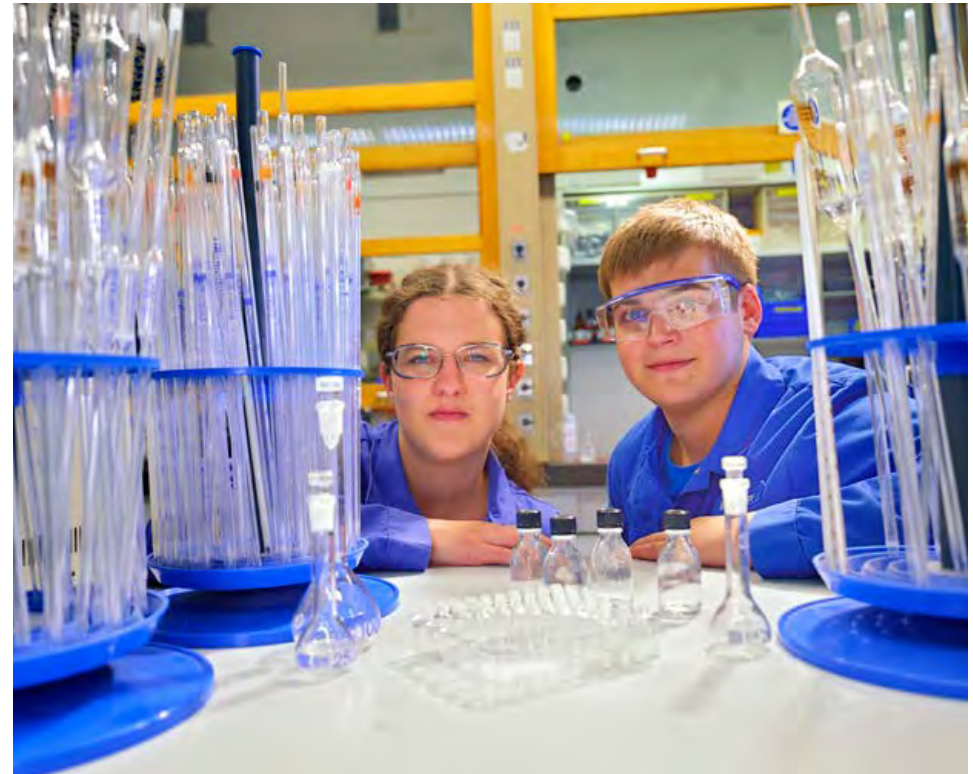
### Training and development

In-house training programmes include modern apprenticeship schemes, our PhD strategy, and ongoing training for technicians, executives and leadership teams.

INEOS operates as a federation rather than a corporation, adopting a decentralised structure and approach where each individual business is primarily responsible for developing and training employees. All sites operate an annual performance appraisal system and training/development process that help to identify requirements and then delivers these for each employee. Best practices are shared across the group and experiences and achievements compared and built upon.

Everyone has access to an online health and fitness hub, the INEOS Energy Station, which offers gym facilities and fitness classes, individual and team-based activities and challenges, as well as training and nutrition advice. This allows people to easily meet from across the business and encourages team bonding.

INEOS employees benefit from crucial infrastructure and support for their continued wellbeing, ranging from mentoring to mental health care. There is a genuine push to look after our people and support them. The way we operate and do things is quite unique – and that is what helps to find the best talent. All this attracts people who want to come in and contribute to moving INEOS forward.





## Case study: Tour de France Challenge

As Team INEOS – now the INEOS Grenadiers – completed its first Tour de France in 2019 with Egan Bernal crowned winner of the prestigious cycling race, INEOS employees around the world were gearing up for their own cycling challenge.

Emulating the efforts of the professionals, more than 2,000 INEOS employees, in teams, match the kilometres covered by the riders in the Tour de France to raise money for charity.

Each day these teams would ride the equivalent of each stage of the world-famous race, squeezing in their mileage before, or after work.

More than 25 teams did this every day for three weeks, and combined efforts totalled 625,387km – equivalent to crossing the globe 15 times.

Of all those who took part, 94% covered more than 50km, with 11% riding over 1,000km in 3 weeks. INEOS made a donation to the local charity of choice for each team that completed the challenge. Over €30,000 was raised when the initiative first launched in 2018, rising to €104,000 in 2019.

Read more...

[The Alternative Tour de France Challenge \(INCH Issue 16\)](#)

[Tour de France Challenge \(INCH Issue 18\)](#)





“ Part of the INEOS philosophy is to encourage people to take on more. One should try and maximise the number of days that are unforgettable.

**SIR JIM RATCLIFFE**  
INEOS Chairman

## Case study: INEOS IN-NAM Challenge

While other companies may offer training and team bonding exercises, INEOS' ethos has always been to push the boundaries. Grit and determination are qualities we look for in all our graduates – and we believe the best way of developing those all-important traits is by challenging them.

Each year, INEOS invites a group of graduates to push themselves to their limits and embark on an African adventure.

Over seven days, and supported by medical and fitness experts, they run, cycle and hike 325km across the Skeleton Coast, Damaraland and Kaokoveld Wilderness areas of Northern Namibia. They climb Namibia's highest peak, pass through volcanic craters and trek over a wild and unforgiving landscape.

Contrary to other employers engaged in graduate development we believe our graduates deserve more than a

simple outward-bound course. We want to do things that are different and really challenging that create a valuable life experience.

INEOS provides essential supplies for the challenge, and our graduates bring the enthusiasm and willingness to succeed. Strength, attitude, commitment and a great team ethic are all important attributes for INEOS. This journey gives our graduates the opportunity to demonstrate these qualities.

Read more...

[Out of Africa – and fit for everything! \(INCH\)](#)

Watch the video...

[INEOS graduates take on the Namibia Desert in this astounding challenge](#)



## 2.5 IN OUR COMMUNITIES



Being a good neighbour underpins our licence to operate. We are committed to the long-term sustainability of our business and to

support the communities living and working close to our sites.

We aim to help inspire the next generation of scientists and engineers, support our neighbourhoods and engage with local communities by working closely with schoolchildren and local governments.

Through our staff volunteering to support charities, the sponsorship of local sports teams, or work with schools, colleges and universities to promote science, technology, engineering and mathematics (STEM), INEOS is always looking for ways to

collaborate and contribute to a better society.

That means sharing our resources and capabilities, and ensuring we have regular and open discussions about the work we do and the products we make.

INEOS fosters collaboration with companies based around our sites,

bringing together local businesses to share resources, infrastructure and utilities, as well as offering our support at community events. This is demonstrated through our development of strong industrial clusters at our locations in Antwerp in Belgium, Köln in Germany, Lavéra in France, Grangemouth and Hull in the UK, Houston in the US and in Rafnes in Norway.

*Material topics covered:*

- **Community engagement**

We also hope to inspire the next generation of scientists and engineers by welcoming children on visits to our sites and through our employees visiting classrooms.

“ There’s a genuine desire to help society and the local communities where we operate. It comes back to this core message of why sustainability matters: it matters because of the places where you do business, the people around you and how you interact with those people. Community is part of our DNA and ethos.

**PETER WILLIAMS**

Head of Investor Relations, INEOS Group



## Case study: The Daily Mile

INEOS-supported children's health programmes have helped more than 2 million young people become healthier and more active.

Through close collaboration with Elaine Wyllie, founder of The Daily Mile, INEOS set up The Daily Mile Foundation in 2016. Elaine started the initiative at her Scottish primary school in 2012 with pupils running for just 15 minutes each day. The scheme has now spread to schools worldwide, inspiring children everywhere from France and Germany to the US and the United Arab Emirates.

The aim of The Daily Mile is to improve the physical, emotional and social health and wellbeing of children – regardless of age or personal circumstances – to create healthy habits for life. The free programme is simple for schools to implement

without need for staff training, and its impact can be transformational. It improves children's fitness, concentration levels, mood and behaviour.

A growing network of researchers around the world are studying the benefits of The Daily Mile. The emerging research has been published in many academic journals and online. Schools and teachers appreciate The Daily Mile for its ease of implementation, flexibility and adaptability to a variety of settings. The Daily Mile has also delivered benefits for children's physical and mental health and wellbeing, and learning capacities.

Read more...

[The benefits of physical activity](#)  
[www.thedailymile.co.uk](http://www.thedailymile.co.uk)







### Case study: GO Run for Fun

INEOS also supports children's health through its own children's running initiative and charity: GO Run for Fun. This has also been gathering pace in recent years and is now recognised as the world's largest children's running initiative. More than 300,000 children aged 5-10 are taking part across 400 running events in 3,000 schools across 11 countries in Europe, Asia and the Americas. INEOS sites around the world work with their local communities to set up these events.

GO Run for Fun takes children on a 6-week plan leading to a fun, short-distance running event. Since its inception, the GO Run for Fun Foundation has been supported by INEOS and its founder, Jim Ratcliffe, driven by a personal belief that promoting the health and well-being of young people is a critical responsibility for INEOS and our wider society.

Read more...

[www.gorunforfun.com](http://www.gorunforfun.com)



## Case study: TuWaS!

INEOS in Köln, Germany, has been committed to neighbourhood initiatives in the areas of children, culture, sport and humanitarian issues since INEOS acquired the site in 2005. Social responsibility at INEOS in Köln has many facets and is as diverse as our workforce. For example, our local involvement extends to promoting education in STEM subjects across 40 schools in the Rhineland since 2008. People working

at INEOS in Köln are very attached to this initiative. TuWaS! supports teachers with research-based learning for children in grades 1 to 6. The aim is to get students excited about the STEM subjects, promote teamwork and language skills and familiarise them with methodical working methods in a playful way.

TuWaS! currently offers advanced training courses on 12 scientific and

technical subjects and the associated tried and tested experimental and teaching material, adapted to the framework curriculum. Schoolchildren can work continuously over a period of up to 16 weeks on a topic from among biology, chemistry, physics and technology. The children experiment independently in small groups. They get involved in teamwork, learn to document, discuss and solve problems independently. At INEOS, we believe

that TuWaS! makes an important contribution to anchoring technology and natural sciences in schools. Schoolchildren experience up close how exciting these subjects can be and also get the opportunity to visit sites to see this in action.



2.6

# GOVERNANCE: SUSTAINING THE HIGHEST STANDARDS OF ETHICS AND COMPLIANCE



INEOS is committed to applying and maintaining high standards and operating responsibly in accordance with legal

obligations and our own Code of Conduct.

Compliance and transparency are essential to the safe and sustainable operation of our business, and we routinely conduct audits and provide training to ensure employees are up to date with the latest requirements and procedures.

Our leadership on sustainability was recognised through the achievement of Gold and Platinum awards in 2020 sustainability assessments by EcoVadis. These are detailed audits of our work on environment, labour and human rights, ethics and sustainable

procurement. Styrolution achieved a Platinum award, placing it in the top 1% of our industry. INOVYN and INEOS Europe AG achieved Gold ratings, placing them in the top 4%. We were especially recognised for our environmental performance, and to recycling and the circular economy.

Each business has dedicated compliance and legal managers responsible for ensuring group policies are followed across all operations. These include competition/anti-trust law, anti-bribery and corruption (ABC), sanctions and modern slavery.

### *Material topics covered:*

- **Diversity & equality**
- **Ethics**
- **IT security**

“EcoVadis is increasingly a requirement for doing business. It’s a thorough sustainability analysis that doesn’t just focus on environmental issues but also on a wide range of our company’s policies and positions on everything from child labour to employee satisfaction. It’s a mark of quality. It’s helped motivate us to strive further to continue to improve performance across all our businesses.”

**GREET VAN EETVELDE**

Head of Energy and Innovation, INEOS Group





## 2.6 Governance: sustaining the highest standards of ethics and compliance | continued

All staff who could potentially be exposed to any risk also complete mandatory competition and sanctions training.

INEOS constantly monitors and evaluates changes to laws, regulations and sanctions and adjusts its procedures accordingly. Supplementary training and updated modules help to ensure compliance.

We also provide training on anti-money-laundering and prevention of terrorist funding, as well as data security to all relevant employees.

Our commercial contracts include provisions expressly prohibiting any illegal activity. Our requirements and behavioural expectations for employees and businesses are outlined in our [Code of Conduct](#) which is regularly updated and communicated to all employees and external Stakeholders. The code comprises the following sections:

- Health, safety, security and the environment.
- Competition and sanctions.
- Governance.
- Government and communities.
- Financial integrity and company assets.

- Human resources.
- Digital system use and security.
- Violations of the code.

INEOS encourages staff to report any instances of suspected malpractice to their senior manager in the first instance and offers an independent 'Speak up!' service where they can anonymously report any concerns about unethical or unlawful behaviour. No legal action was taken by employees during 2019 with regard to anti-corruption and bribery, anti-competitive or anti-trust practices.

Day-to-day management of compliance is delegated to each business executive team, but overall governance and assurance to our owners is provided by Group Treasury and Group Legal Compliance. Their remit includes:

- circulating guidance notes and regular compliance updates to the compliance managers across the businesses,
- providing free competition and commercial law helplines with external international law firms,
- maintaining a legal compliance database that contains articles, checklists, process, procedure and guidance documents and links to external resources,

- conducting compliance audits for all businesses and any new acquisitions,
- providing new employees with compliance training as part of their induction,
- hosting legal and compliance conferences to review progress, discuss current issues and promote development,
- operating a compliance network for compliance managers to share best practice.

Part of our responsibility is to ensure that we maintain a robust policy on anti-bribery and corruption, and do not engage in any unethical practices and investigate any reports of suspected violations.

Similarly, INEOS has a zero tolerance approach towards modern slavery and is committed to ensuring transparency tackling this in our businesses and our supply chains.

## 2.6 Governance: sustaining the highest standards of ethics and compliance | continued

Most of INEOS' activities are carried out in the EU and US and can be considered at lower risk of modern slavery. However, we recognise our responsibility to engage with staff and alert them to the risks of slavery, however small, across in their businesses and supply chain and to act upon them. Further information on INEOS' policy on modern slavery can be found in our [Modern Slavery Transparency Statement](#).

Our approach includes regular checks and due diligence for onboarding new suppliers; monitoring potential risks in supply chains; carrying out selective supplier audits; including due diligence regarding slavery in mergers and

acquisition activity; and protecting whistleblowers. We also provide relevant training and make our anti-slavery policy available to all employees.

We are committed to ensuring that there is no modern slavery or human trafficking in our supply chains or in any part of our business. Our 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 is not taking place anywhere in our supply chains.







# 3.0 GRI INDEX

## 3.1 General disclosures

### Organisational profile

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-1	Name of the organisation	Front cover	<a href="#">1</a>	
102-2	Activities, brands, products, and services	1.4 INEOS at a glance 1.5 Our structure 1.8 Our products and markets	<a href="#">7</a> <a href="#">8-9</a> <a href="#">12-13</a>	All our brands per business can be found on our website: <a href="#">Our Businesses   INEOS Group</a>
102-3	Location of headquarters	1.4 INEOS at a glance	<a href="#">7</a>	
102-4	Location of operations	1.4 INEOS at a glance	<a href="#">7</a>	
102-5	Ownership and legal form	1.5 Our structure	<a href="#">8-9</a>	
102-6	Markets served	1.8 Our products and markets	<a href="#">12-13</a>	All the markets that we serve can be found on our website: <a href="#">Our Markets   INEOS Group</a>
102-7	Scale of the organisation	1.4 INEOS at a glance	<a href="#">7</a>	Total capitalisation can be reviewed on our investor relations website: <a href="#">Investors   INEOS Group</a>
102-8	Information on employees and other workers	—	—	Information unavailable; we will report on this next year.
102-9	Supply chain	2.2.8 Reducing emissions through our supply chain	<a href="#">47</a>	
102-10	Significant changes to the organisation and its supply chain	1.6 Significant changes to the organisation 1.11 Sustainability highlights 2020	<a href="#">10</a> <a href="#">18-19</a>	
102-11	Precautionary principle or approach	2.1 Excellence in safety, health and the environment	<a href="#">25</a>	
102-12	External initiatives	2.0 Improving the sustainability of our business and operations 2.1.2 Responsible care and product stewardship 2.1.3 Compliance with REACH 2.1.4 Water management and use 2.2.7 Use of recycled and bio-based feedstocks instead of fossil-based feedstocks	<a href="#">23</a> <a href="#">29</a> <a href="#">29</a> <a href="#">32</a> <a href="#">44</a>	
102-13	Membership of associations	2.0 Improving the sustainability of our business and operations	<a href="#">23</a>	



## Strategy

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-14	Statement from senior decision-maker	1.1 Tackling global challenges 1.2 Views from our CEOs	<u>4</u> <u>5</u>	
102-15	Key impacts, risks, and opportunities	1.9 Determining what is material 1.10 Contributing to the UN SDGs 1.11 Sustainability highlights 2020	<u>14</u> <u>15-17</u> <u>18</u>	

## Ethics & integrity

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-16	Values, principles, standards, and norms of behaviour	1.7 Our approach, goals and key values	<u>11</u>	More information can be found in our <a href="#">Code of Conduct</a>
102-17	Mechanisms for advice and concerns about ethics	2.4 Valuing our people 2.6 Governance: Sustaining the highest standards of ethics and compliance	<u>55</u> <u>64-65</u>	More information can be found in our <a href="#">Code of Conduct</a>

## Governance

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-18	Governance structure	1.5 Our structure	<u>8-9</u>	

## Stakeholder engagement

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-40	List of stakeholder groups	1.9 Determining what is material	<u>14</u>	See disclosure 102-43 for more information
102-41	Collective bargaining agreements	—	—	Information unavailable; we will report on this in our next report. For information on our INEOS Styrolution employees: <a href="#">INEOS Styrolution 2019 Sustainability Report , p.58</a>
102-42	Identifying and selecting stakeholders	1.9 Determining what is material 1.10 Contributing to the UN SDGs	<u>14</u> <u>15-17</u>	

Stakeholder engagement | continued

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-43	Approach to stakeholder engagement	1.9 Determining what is material 1.10 Contributing to the UN SDGs	<a href="#">14</a> <a href="#">15-17</a>	<p><b>Customers</b> Methods: Direct engagement, sustainability handbook, website, customer events Topics: Strategy, performance, development, targets</p> <p><b>Suppliers</b> Methods: Direct engagement, supplier assessments, surveys, direct audits calls and emails Topics: product quality and development, SCoC, targets</p> <p><b>Employees</b> Methods: Works councils, town halls, team meetings, training modules, performance management, intranet, newsletters, 24/7 hotline, sustainability handbook, Code of Conduct Topics: CSR, performance, working conditions, labour practices, employee health and safety, targets</p> <p><b>Industry associations</b> Methods: Memberships, meetings, conferences, workshops Topics: Sustainable partnerships, industry-wide non-commercial issues, legislation, CSR, ESG, SHE, best practices</p> <p><b>Universities, scientific institutions and technology partners</b> Methods: Presentations, conferences, workshops, partnerships, press releases Topics: CSR, SHE</p> <p><b>Shareholders and investors</b> Methods: Quarterly investor meetings disclosures, weekly written updates, annual investor days Topics: strategy, economic performance, development, ESG, CSR, targets</p> <p><b>Communities</b> Methods: Website, sustainability reports, press releases Topics: Sponsorships, funds,</p> <p><b>Regulators</b> Methods: direct engagement, meetings, audits Topics: circular economy, CSR, SHE, investments, legislation, partnerships, targets, chemical industry input</p> <p><b>NGOs</b> Methods: Direct engagement, partnerships, press releases Topics: CSR, SHE, targets</p>



## Stakeholder engagement | continued

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-44	Key topics and concerns raised	1.9 Determining what is material 1.10 Contributing to the UN SDGs All chapters	<a href="#">14</a> <a href="#">15-17</a> All	See disclosure 102-43 for more information

## Reporting Practice

GRI disclosure #	Disclosure title	Chapter	Page	Comments
102-45	Entities included in the consolidated financial statements	About this report	<a href="#">2</a>	
102-46	Defining report content and topic boundaries	About this report 1.9 Determining what is material	<a href="#">2</a> <a href="#">14</a>	
102-47	List of material topics	1.9 Determining what is material	<a href="#">14</a>	
102-48	Restatements of information	—	—	Information unavailable: first year of reporting
102-49	Changes in reporting	—	—	Information unavailable: first year of reporting
102-50	Reporting period	About this report	<a href="#">2</a>	
102-51	Date of most recent report	About this report	<a href="#">2</a>	
102-52	Reporting cycle	About this report	<a href="#">2</a>	
102-53	Contact point for questions regarding the report	About this report	<a href="#">2</a>	
102-54	Claims of reporting in accordance with the GRI standards	About this report	<a href="#">2</a>	
102-55	GRI content index	3.0 GRI index	<a href="#">66-73</a>	
102-56	External assurance	—	—	Information unavailable: first year of reporting

## 3.2 Management approach

GRI disclosure #	Disclosure title	Chapter	Page	Comments
103-1	Explanation of the material topic and its boundary	1.9 Determining what is material Described in each chapter of the report	<a href="#">14</a> All	
103-2	The management approach and its components	—	All	Information unavailable: first year of reporting
103-3	Evaluation of the management approach	—	All	Information unavailable: first year of reporting

## 3.3 Economic disclosures

### Anti-corruption

GRI disclosure #	Disclosure title	Chapter	Page	Comments
205-1	Operations assessed for risks related to corruption	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">63-64</a>	More information can be found in our <a href="#">Code of Conduct</a>
205-2	Communication and training about anti-corruption policies and procedures	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">63-64</a>	More information can be found in our <a href="#">Code of Conduct</a>

### Anti-competitive behaviour

GRI disclosure #	Disclosure title	Chapter	Page	Comments
206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">64</a>	



## 3.4 Environmental disclosures

### Energy

GRI disclosure #	Disclosure title	Chapter	Page	Comments
302-1	Energy consumption within the organisation	2.2.3 Continuous energy optimisation	<a href="#">39</a>	
302-3	Energy intensity	2.2.3 Continuous energy optimisation	<a href="#">39</a>	

### Emissions

GRI disclosure #	Disclosure title	Chapter	Page	Comments
305-1	Direct (S1) GHG emissions	2.2.1 GHG emissions	<a href="#">36</a>	
305-2	Indirect (S2) GHG emissions	2.2.1 GHG emissions	<a href="#">36</a>	

## 3.5 Social disclosures

### Training and education

GRI disclosure #	Disclosure title	Chapter	Page	Comments
404-1	Average hours of training per year per employee	2.1 Excellence in safety, health and the environment 2.4 Valuing our people 2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">25</a> <a href="#">56</a> <a href="#">64</a>	
404-3	Percentage of employees receiving regular performance and career development reviews	2.4 Valuing our people	<a href="#">54</a>	

### Child labour

GRI disclosure #	Disclosure title	Chapter	Page	Comments
408-1	Operations and suppliers at significant risk for incidents of child labour	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">65</a>	We do not engage in child labour or forced labour: <ul style="list-style-type: none"> <li>• <a href="#">INEOS Code of Conduct</a></li> <li>• <a href="#">Anti-slavery Act</a></li> </ul>

### Forced or compulsory labour

GRI disclosure #	Disclosure title	Chapter	Page	Comments
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">65</a>	We do not engage in child labour or forced labour: <ul style="list-style-type: none"> <li>• <a href="#">INEOS Code of Conduct</a></li> <li>• <a href="#">Anti-slavery Act</a></li> </ul>

### Human rights assessment

GRI disclosure #	Disclosure title	Chapter	Page	Comments
412-1	Operations that have been subject to human rights reviews or impact assessments	2.6 Governance: sustaining the highest standards of ethics and compliance	<a href="#">64</a>	We do not engage in child labour or forced labour: <ul style="list-style-type: none"> <li>• <a href="#">INEOS Code of Conduct</a></li> <li>• <a href="#">Anti-slavery Act</a></li> </ul>



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