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INEOS views on the UN Global Plastics Treaty

INEOS, alongside the trade association Plastics Europe[1], supports the need for a holistic global approach to combat plastics pollution through fostering sustainable consumption and establishing circular plastics economy by 2040.

The solutions brought forward by Plastics Europe focus on

i. promoting circularity and sustainable production and consumption,
ii. having an application-based approach to identify problematic and avoidable applications which pose a risk to health and/or the environment (material neutral), and
iii. establishing a financing mechanism that creates the right drivers for circularity.

In INEOS we believe plastics are irreplaceable materials for many applications and enablers for a sustainable future. Plastic materials are versatile, and the same material can have a wide range of applications in different industry sectors such as packaging, building & construction, automotive, electrical & electronics, and many others. Capping the production of primary plastics or banning certain types of plastics without thoroughly assessing the entire product life cycle and usage impact of alternative materials can lead to negative consequences in terms of carbon footprint and resource consumption.
Across INEOS businesses significant progress has been made to support the objective of the EU Green Deal and the Paris agreement, and our teams continue to work to make the transition from a linear to a circular plastics system a reality.

INEOS have set ambitious targets to incorporate recycled material into our polymers and ensure our polymer products are 100% recyclable by 2025. We are on track to exceed these targets and have made a new pledge to incorporate at least 850,000 tonnes of recycled and bio-sourced material per annum into our polymers by 2030. INEOS is also committed to reducing its greenhouse gas emissions in accordance with the Paris Agreement and has a companywide GHG management system in place to reduce emissions to net zero by 2050.

INEOS Inovyn – European leader of PVC manufacturing

PVC is an intrinsically low-carbon plastic[2] is an extremely durable and cost-efficient material which can be recycled several times at the end of life without losing its essential properties.

[1] Plastics Europe position paper

[2] :57% of PVC molecular weight is chlorine derived from common salt; 5% is hydrogen; and 38% is carbon.

PVC is used in building and construction (around 70% of PVC produced), where PVC helps make housing affordable and buildings energy efficient. It is also used in critical sectors such as pipes for the supply of drinking water or the transport of energy (hydrogen). Its durability, chemical resistance, low maintenance costs and affordability have made PVC the plastic material top choice when it comes to flooring, wall covering and other key elements of hygienic healthcare facilities. PVC is the single most used polymer for plastics-based medical devices used in hospitals.
PVC has the longest history of recycling amongst plastics and a very advanced level of mechanical recycling. For over 20 years, sustainability commitments by VinylPlus[3] have made PVC safer, more sustainable, and more circular in Europe. Through these efforts, the EU PVC industry has recycled 8,1 million tonnes of PVC since 2000, saving 16,2 million tonnes of CO2 emissions. Close to 30% of PVC waste, which equals 800 000 tonnes, is recycled yearly in Europe.
Whilst PVC can already be widely mechanically recycled, to reach full circularity, chemical recycling is being developed. Project Circle sees INEOS Inovyn develop advanced recycling technologies such as chemical recycling to treat PVC from various post-consumer waste streams. This will allow for the inclusion of recycled materials into our product range.
In 2021 we announced our long-term commitment to Net Zero by 2050 whilst committing to a 33% reduction in carbon emissions by 2030. To reach carbon neutrality INEOS Inovyn has developed sustainability Roadmaps for all its sites.
As a member of the Nordic Plastic Pipe Association, through 2024 INEOS Inovyn will participate in a project to develop and pilot a collection scheme for plastic pipes for the Norwegian infrastructure market, i.e., practical piloting of systems for collecting, sorting and processing plastic pipes. The project will propose how a comprehensive value chain for the pipe industry can be implemented.
INEOS Inovyn and INEOS O&P have a joint roadmap to reduce greenhouse gas emissions by 150-170,000 tonnes by 2030, a reduction that represents 1/3 of current emissions.

Operating 15 production sites in eight countries, INEOS Inovyn is a wholly owned subsidiary of INEOS Group Limited and employs approximately 4,300 people. Sales were 5.1 billion euros in 2022.

INEOS Olefins & Polymers Europe - major European producer of polyolefins

At INEOS Olefins & Polymers Europe, we produce a wide range of polyolefins which are used in numerous applications to enable, enhance and protect modern day life; for example, helping to ensure food stays fresh for longer, cars become lighter, and energy and utilities can be safely transported into people's homes and businesses. However, we recognise and share concerns about the impact of plastic pollution and greenhouse gas emissions. We are taking concrete action across the value chain to drive emissions down to net zero and create a circular economy where valuable raw materials stay in use, rather than go to landfill, incineration or leak to the environment.

To support the transition to circularity and sustainable production and consumption, INEOS O&P Europe has the following initiatives in emission reduction and circularity.

Emission reduction - low carbon production

[3] www.vinylplus.eu

INEOS Inovyn

INEOS O&P Europe is investing €4bn in Project ONE to build Europe's most sustainable cracker in Antwerp, with emissions at start-up which will be one third of the average European cracker. In addition, we are investing in clean hydrogen sources and are increasingly using renewable power across our production sites. We also have a bio-based feedstock sourcing programme for use in our naphtha crackers. These initiatives enable us to offer, using attribution, lower carbon products to our customers and in turn help them meet their carbon reduction commitments.

Circularity

To enable the transition from a linear to a circular economy, INEOS O&P is focusing on: D4R (Design for Recycling), giving practical and financial support to projects such as 'Holy Grail' which use technology to improve waste sorting as well as offering mechanical and advanced (chemical) recycling solutions to our customers.

For D4R, we have invested in a new film extruder in our Brussels technology centre to enable us to work with partners to design single polymer, flexible packaging products, increasing the inherent recyclability of the products our customers place on the market. Our mechanical recycling, Recycl-In range gives customers the performance they need while using high quantities of recycled materials, suitable for non-food contact applications. Complementary to this, we offer advanced recycled, circular polyolefins derived from plastic waste which is used as a feedstock to some of our crackers. These advanced recycled polymers have the same properties as virgin polyolefins and are suitable for use in food- contact and other highly demanding applications such as medical. We are progressing projects to scale-up our advanced recycling offer significantly, as seen by the announced agreement with partners such as Plastic Energy.

Specifically, in our Norwegian operations where we produce LDPE (Low Density Polyethylene) and its ethylene building block, our plants are fed with clean hydropower. The cracker producing the ethylene is amongst the crackers with the lowest carbon footprint in Europe, with a defined roadmap to reduce even further. The industry region of Grenland where we are based has the ambition to become the first net zero industry region by 2040, ahead of the INEOS group target. These factors enable us to make products with a low environmental footprint and very often with a lower footprint than that of alternative materials.

Operating 8 production sites in six countries, INEOS Olefins and Polymers Europe is a wholly owned subsidiary of INEOS Group Limited and employs approximately 3,700 people. Sales were 9 billion euros in 2022.

INEOS Styrolution - the leading global styrenics producer

INEOS Styrolution is the world's leading styrenics supplier, with a high-performing portfolio of styrene monomer, polystyrene, ABS Standard and styrenic specialty products. With more than 90 years of innovation in materials science, INEOS Styrolution is focused on customer satisfaction with differentiated solutions that provide a competitive edge as well as investments in technology that enable closed loop recyclability for styrenics while reducing our carbon emissions.

On our way to achieving net zero emissions by 2050, we have challenged ourselves at INEOS Styrolution to save 1 million tonnes of CO2e in 2030. We also target to sell 500kt of INEOS Styrolution ECO products in 2030 and we guarantee 100% regulatory compliance with conventional and ECO products.

Our roadmap to a circular, low-carbon economy is based on the following five steps:

1. Circularity: We close the loop at the end-of-life phase of our products with appropriate mechanical and advanced recycling solutions.

2. Fuel switching: Today, a significant part of our electricity consumption is already based on renewable energy.

3. Feedstock switching: In a circular economy, waste is our new feedstock. We also offer the integration of renewable feedstock as a replacement for traditional fossil feedstock.

4. Optimisation: We have defined a programme of measures to reduce scope 1 emissions at our production facilities. The first phase of investments is taking place until 2030.
5. Carbon capture, storage and offset: Together with the INEOS Group, we are looking at new technologies such as carbon capture and utilisation as well as using increasing amounts of hydrogen in our furnaces to reduce carbon emissions. The use of carbon offsets for residual emissions is our last option.

Today, we proudly look back at the milestones we have achieved so far. We have introduced sustainable ECO solutions for all our product lines – based on recycled materials and on renewable feedstock. All these solutions offer a reduced environmental footprint, and they are drop-in solutions making it very easy for our customers to shift to the new materials without any further investment into new machinery or new production processes.

We work with partners such as Indaver, a leading European waste management company, to increase the use of recycled feedstock in our production and we have invested into mechanical and advanced recycling, which we believe will significantly reduce our carbon emissions, reduce waste, and keep these valuable materials in use for longer. We are working on a joint project with EGN and Tomra in Krefeld, Germany to recycle post-consumer polystyrene waste into food contact polystyrene. We are convinced that achieving food contact quality based on a mechanical recycling process is a game changer for food packaging.

Finally, being a member of the INEOS Group, gives us access to renewable power reducing CO2 emissions from our sites. Most of our sites in Europe have shifted to renewable electricity and we are now working to move our plants in Asia-Pacific and the Americas towards the use of renewable energy.

INEOS Styrolution applications can be found in many everyday products across multiple industries: including automotive, electronics, household, construction, healthcare, packaging, and toys/sports.

Operating 16 production sites in nine countries, the company is a wholly owned subsidiary of INEOS Group Limited and employs approximately 3,100 people. Sales were 6.6 billion euros in 2022.