World Ocean Summit Insight Hour

Plastics and circularity—closing the plastics loop

December 9th 2021
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Key takeaways

**Ambitious targets have been set for recycled content in plastic products.** Achieving them will depend on multi-stakeholder collaboration and enabling regulation.

**The information for product life-cycle analysis is available.** Interpreting it and taking action reduces those products’ environmental impact.

**Chemical recycling complements but does not replace mechanical recycling.** Achieving a circular economy for plastics will take a holistic approach involving multiple stakeholders and tools.

**Designing for recyclability is crucial.** Optimising the design of products and packaging can reduce waste and harm while enabling increased recycling and reuse.

**Circularity goes beyond the value chain.** Manufacturers, retailers, brand owners, policymakers, consumers, NGOs, academia, converters, waste collectors and recyclers must work together to ensure plastics return to the start of the loop.
European plastics producers are committed to the Circular Plastics Alliance target of using 10m tonnes of recycled plastics in European products by 2025. They support the European Commission’s intention to set up a mandatory recycled content target for plastics packaging and have recently called for a 30% target by 2030. Reaching these targets will take collaboration between policymakers and the value chain, along with an enabling policy framework.

Given the importance to the health of our oceans of reducing waste from discarded plastics, on December 9th 2021, as part of the lead-up to the 9th World Ocean Summit next March, Economist Impact convened a panel of leaders in the making, consumption, recycling and regulation of plastics to discuss how a circular economy for this material can be achieved. Moderated by Melanie Noronha, a senior editor at Economist Impact, and sponsored by Plastics Europe, “Plastics and Circularity: Closing the Plastics Loop” examined how new technologies and practices can transform recycling and speed progress towards ambitious targets.
Delivering the benefits of plastics without the environmental impact

Benny Mermans, vice-president of Plastics Europe and vice-president for sustainability at Chevron Phillips Chemical, began by observing that the plastics industry is committed to reducing both waste and its carbon footprint. To support the transformations involved, “we need policy and regulation which promotes and incentivises investment in innovation and infrastructure along the value chain,” he said.

In March 2020 the European Commission (EC) adopted the new Circular Economy Action Plan as part of the European Green Deal. This follows the European Union (EU) Directive on Single-Use Plastics, enacted in 2019, which aims to reduce the impact of certain single-use plastic products on the environment. Florika Fink-Hooijer, director-general for environment at the EC, noted how the directive has produced visible change in daily life and addressed the problem of litter in the oceans.

Feliks Bezati, global circular packaging director at Mars, spoke about how his firm can control packaging and maximise the potential for reuse and recycling through design. For the infrastructure to collect and process used packaging, though, businesses depend on local authorities. Vanya Veras, secretary-general of Municipal Waste Europe, described her organisation’s work to facilitate good waste collection that complies with regulation.

“Waste will always find the cheapest route. So we must find ways to facilitate correct action.”

Vanya Veras, secretary-general, Municipal Waste Europe
A multi-pronged approach to achieving circularity

Advanced technologies may further progress in recycling within the plastics industry and related value chains. New chemical methods will add to the tools available in a multi-pronged approach to achieving 100% recyclability or circularity.

Mr Bezati spoke of how despite Mars’s efforts to optimise its packaging for recycling, in some areas the desired progress is not yet possible. Mars is committed to using 30% recycled material in packaging by 2025, but cannot currently find sufficient food-grade material. Municipalities can play a role in making recycled plastics more available by promoting better collection and sorting, as Ms Veras explained.

“If we wanted to close the loop, we cannot do it with mechanical recycling. And this is why we need chemical recycling, even if it might use more energy or be more expensive.”

Feliks Bezati, global circular packaging director, Mars
Collaborating on solutions and protocols

Strong collaboration on achieving circularity in the use of plastics is emerging—and essential. The plastics industry faces a huge challenge as it transitions to a circular economy, said Mr Mermans of Plastics Europe. Though significant progress is being made, “we are at the foothills of the circular economy,” he said, and the organisation must continue working with policymakers and every member of the value chain.

The Circular Plastics Alliance, an EC initiative launched late in 2018 that has so far brought together around 300 signatories, is a prominent example of the necessary collaboration. Ms Fink-Hooijer acknowledged the alliance’s target of using 10m tonnes of recycled plastic by 2025 is ambitious, and described how billions of euros in investment is going into the required sorting and recycling capacity.

“Industry is ready to embark. There’s a lot of innovation going on, but they need regulatory predictability.”

Florika Fink-Hooijer, director-general for environment, European Commission

Ms Veras of Municipal Waste Europe reinforced the need for investment in sorting capacity, which is best done at a local level to enable greater quality control and the efficient use of funds. Investment in recycling, however, can be focused on centres of excellence to achieve economies of scale and justify investment in expensive technology.

Information-sharing is also an important area of collaboration, and there are indications it is happening effectively. Lack of information is not a problem in life-cycle assessments that gauge the environmental impact of products at Mars, said Mr Bezati, and pursuit of a circular model is already leading towards lower carbon emissions.
Priorities in the move to a circular economy

To conclude, Ms Noronha asked panellists what stakeholders in the use of plastics should prioritise as they move towards a circular economy. Mr Mermans of Plastics Europe noted the imperative to balance the time needed for new innovations and technologies to mature with the urgency of moving quickly to improve sustainability.

“Science and innovation is the DNA that has cut across our industry for over 100 years. We are well equipped to respond to the sustainability challenge.”

Benny Mermans, vice-president, Plastics Europe

Speed was also important to Mr Bezati of Mars, who considers that circularity in plastics is important to conserve resources because Europe is not a major oil producer. Ms Veras of Municipal Waste Europe reiterated the need to collaborate, as a circular economy inherently involves multiple participants relying on each other, while Ms Fink-Hooijer also returned to the idea that achieving a circular economy for plastics must involve multiple stakeholders and tools. “It’s not just about one [piece of] legislation or one target or one technology,” she said. “We need a comprehensive view.”