



DOW

**Dow is committed to accelerating a circular economy**, where most materials do not end up as waste in the environment, and we are able to create circular business models. The current reality is that 3 billion people lack access to basic waste management infrastructure, and many economies, including major ones like the U.S., struggle with gaps in waste systems. To tackle this problem and put an end to plastic pollution will require collective action by all stakeholders, including governments, the entire value chain, scientific institutions and academia, communities, and financial institutions. We need a global framework that recognizes the complexity and urgency of the issue while proposing systemic solutions to key drivers of circular systems.

# Policies and game-changers for a **circular economy**

## **1 ] National targets to drive demand and investment in circular plastics**

- Mandating higher recycling rates for plastics to ensure more plastics are recycled and stay in the value chain.
- Mandating post-consumer recycled (PCR) components or recycled content targets across products, to increase resource efficiency and de-risk investment.
- Mandating recyclability of materials to accelerate innovative product design, with recyclability in mind from the outset, while leveraging relevant design standards.

## **2 ] Extended producer responsibility (EPR)**

EPR is an environmental policy approach where the producer is responsible for a product's entire life cycle, from initial manufacturing to post-consumer stage. This incentivises and enables self-sustaining waste systems where the value chain adequately addresses the end-of-life when producing and designing products.

The research is clear that EPR not only incentivises more recyclable, recycled content, but has a proven track record of increasing recycling rates, recycling access, and recapturing lost economic value in materials sitting in a landfill. These circularity policies should be established in tandem with each other.

But not all EPRs are created equal, and their effectiveness can vary greatly. As such, countries require guidance and the sharing of best practices to develop suitable EPRs. A more harmonized EPR approach can drive certainty to achieve circular economy goals faster and at the required scale.

### **3 ] Enabling technologies and innovations**

To allow the broadest range of plastic waste to be recycled, we must support a range of proven, innovative and environmentally sound recycling technologies, recognizing:

- mechanical can and should be prioritized where possible. However, for hard-to-recycle plastics, high quality applications, or contact sensitive plastics, chemical (advanced) recycling will be needed.
- mechanical and chemical (advanced) recycling as complementary technologies that both have a role to play in scaling global recycling capabilities and addressing the global challenge of plastics waste.

Additional measures may also be necessary that support the collection and sorting regimes that will provide the waste these new industries need, such as targets on reducing landfill.

### **4 ] Incorporating life cycle assessment in decision making**

Life cycle assessments (LCAs) are independent assessments that can help us understand and compare the environmental impacts of products we use, reflecting the full footprint from a product's design to its production, use, and end of life.

In providing proper measurement, LCAs can drive evidence-based decision-making, as society transitions to lower-carbon products and services, and to avoid regrettable substitutions.

A global plastics pollution agreement should include global product design principles based on life cycle assessments – to drive the right systems, increase recycling and reuse, and encourage circularity in product designs.



## Conclusion

Addressing global plastics pollution needs a systems approach, one that includes policy, investment, and collective action by all stakeholders – governments, the entire value chain, scientific institutions and academia, communities, and financial institutions

**Each of these levers is essential to what is an interconnected system, or materials ecosystem, to eliminate plastic waste and accelerate circularity.**

Dow is playing its part and has committed by 2030 to transform plastic waste and other forms of alternative feedstock to commercialize 3 million metric tons of circular and renewable solutions annually, therefore transitioning to more sustainable production. With our innovation engine, we are also enabling our value chain to design for circularity from the outset, as part of our “close the loop” goal, a critical enabler of our “transform the waste” goal.



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