

February 16-18, 2022













# Plastics and Circular Economy: Making EPR Workable

17th February, 10:00 - 11:30 am (90 minutes)

## About the World Sustainable Development Summit (WSDS)

The World Sustainable Development Summit (WSDS) is the annual flagship Track II initiative of The Energy and Resources Institute (TERI). Instituted in 2001, in 2021, the Summit series marked 20 years in its journey of making 'sustainable development' a globally shared goal. Over the past two decades, the Summit platform has pioneered conversations by bringing together governments, scholars, corporates, youth groups, thought leaders, and civil society representatives from across the world.

The present state of planetary health and humanitarian crises calls for revisiting the agenda around global action and equity. The 21<sup>st</sup> edition of the WSDS is being held under the umbrella theme of 'Towards a Resilient Planet: Ensuring a Sustainable and Equitable Future' from 16th to 18th February 2022 in a virtual format.

#### **Background Note**

One of the major innovations of the past century has been the introduction and wide adoption of plastics for several day-to-day applications that previously relied on traditional materials like metal, glass, or cotton. Plastics have revolutionized many industries for several different reasons like; they resist environmental degradation over time, are economical and widely available, and are produced with wide variety of material properties that allow adaptation to many different applications.

While plastics are affordable, convenient leading to their applications across all sectors in the economy making it indispensable in our daily lives, there are however reasons to worry because of its growing threat to the ecology. Such

threats largely arise due to often irresponsible attitudes of consumers while disposing end of life plastics leading to their mismanagement. The situation is further complicated by the inadequate capacity in the system for managing them leading to water and soil pollution. According to estimates by CPCB India on an average generates nearly 26000 tonnes of plastics wasted per day. There has been serious thinking particularly among the policy makers to ensure that these products are produced, consumed and disposed more responsibly. It is in recognition of these problems, the global community has come together to address the problem of plastic pollution. India too is not behind in this front; therefore while hosting the **2018 World Environment Day** occasion, India announced 'Beat Plastic Pollution' as the theme for the event, indicating the country's commitment towards reducing plastic usage and turning to circular plastic economy.

The India Australia Research Collaboration for Reducing Plastic Waste is an initiative in that direction. Six organizations from the two countries (TERI, CSIR-NEERI, DA from India; and UNSW, UTS and CSIRO from Australia) have come together with the ambition to enable innovation across the plastic supply chain through research and industry collaboration. It is to lay a foundation for circular economy transition by identifying the size of the issue, creating a roadmap, by engaging with industry and government stakeholders to drive change in plastic supply chain and demonstrate on ground innovation through a series of demonstration projects.

## **Approach**

It is three year research exercise with different activities including metric and data development, technological interventions across different stages of value chain, identification of opportunities across different sectors and among different stakeholders like policy, industry and community and on ground demonstration of projects.

During the first year of research, TERI had developed the material flow of different polymers in various production and consumption sectors including agriculture, auto motives, construction, electronics, household appliances etc. The activities awaiting the second and third year include development of a broad structure of roadmap, identification of practical action and inputs from stakeholders for bridging gaps at policy, civil society and industry levels to achieve the ultimate goal of circularity in plastic supply chain.

#### **Expected Outcome**

This thematic track aims to bring key stakeholders, to provide new thinking, perspectives and expectations that can be appropriately taken up in upcoming research activities. It will also help the engaged organizations to further understand their individual roles in the years ahead. The track is expected to bring out insights on measures that are to be taken in those areas which has so far lacked in literature and initiatives.

## **Key Questions**

- 1. How can circularity be incorporated, primarily in upstream activities of the plastic value chain?
- 2. Can we say there is a data-initiative mismatch along the plastic value chain? (The upstream activities have data but lacks initiatives while downstream activities are data scarce but most initiatives are towards plastic recycling)
- 3. What is the role of individual stakeholders (government, industry, community) towards plastic circular economy?
- 4. What are the supporting infrastructures that are critical in getting used plastic packaging wastes back for recycling?
- 5. What are the motivational factors that will influence consumers effectively participate in brand owners initiative towards greater EPR compliance?