



Towards Resource Efficient Management of Plastic Wastes

Date: 15th February, 2018

Time: 11.00 am – 12.30 pm

Venue: Jacaranda, India Habitat Centre, Lodhi Road, New Delhi

Plastics: Mainstay of Modern Societies

Global production of plastics has grown rapidly since the middle of the previous century, culminating in some 311 million tonnes produced in 2014 – a twentyfold increase from 1960 levels. Given the importance of this material for production and consumption systems of modern societies, it is estimated that global annual production reaches a staggering 1.2 billion tonnes by 2050. The largest part of plastics on the market (to some estimates more than 90%) are produced from fossil feedstock, causing CO₂-equivalents of approximately 400 million tonnes of greenhouse gas (GHG) emissions in 2012. If this trend continues, production of plastics could account for 20% of global oil consumption and 15% of global carbon emissions by 2050¹.

A significant fraction of plastic waste is generated due to its versatile and widespread application as packaging material of which a mere 14% is collected for recycling at a global scale. Overall, it is estimated that 95% material value is lost to the economy after a short single-use phase, representing economic losses of 80 to 120 billion USD annually. Despite the economic implications, plastic pollution has also become a severe threat to the well-being of global marine ecosystems: if business-as-usual continues, it is projected that by 2025 there will be one tonne of plastics for every three tonnes of fish in the oceans with the accumulated weight of plastics matching that of fish by 2050².

Against this backdrop of developments, concerted global actions are needed in order to meet countries' obligations under the Paris Agreement and the UN global sustainable consumption and production (SCP) agenda.

Indo-European Efforts for Management of Plastic Waste

In India, per capita consumption of plastics amounts to some 12.8 million tonnes annually. Due to the country's highly dynamic market environment, processing volumes of plastics

¹ http://ec.europa.eu/smart-regulation/roadmaps/docs/plan_2016_39_plastic_strategy_en.pdf



are expected to grow by a compound annual growth rate (CAGR) of above 10%³. To tackle the growing amounts of plastic waste in both urban and rural areas, the Government of India has issued the new Plastic Waste Management Rules, 2016. A core feature of this legislation is Extended Producer Responsibility (EPR) according to which producers are mandated to establish collection systems for generated wastes in close collaboration with State Urban Development Departments⁴. While some progress has been achieved, further implementation requires international collaboration to enhance domestic capacities and learn from international best practices.

In the European Union, the transition towards a new plastics economy was recently initiated by the publication of a new European Strategy for Plastics in a Circular Economy on January 16th 2018. As part of this strategy, the EU has developed a vision for “a smart, innovative and sustainable plastics industry” which is optimised along the entire lifecycle (including design, production, reuse, repair, and recycling) and helps cut greenhouse gas emissions and dependence on imported fossil fuels. Further, the Strategy seeks to promote sustainable production and consumption patterns of plastics among EU citizens, governments and industries by proposing a comprehensive set of policy measures which foster collaboration both at the European level and in the international arena⁵.

Private Sector Initiatives and the Role of the Informal Sector

While policies can set the framework conditions for the transition towards a circular and resource efficient plastics economy, involvement of the private sector is a key success factor and must not be neglected. Recently, during the 2018 World Economic Forum in Davos, eleven leading brands, retailers and packaging companies committed to work towards 100% reusable, recyclable or compostable packaging by 2025, representing a combined volume of more than six million tonnes of plastic packaging per year⁶. Such initiatives are complemented by actions of individual companies where (e.g.) Nestlé has committed to avoid some 140,000 tonnes of packaging from 2015 by the end of 2020 and has steadily increased the share of packaging materials from renewable source to currently 35%⁷.

As for India, the involvement of informal sector in plastic waste management remains crucial. On the one hand, collection of plastic waste has emerged as a major livelihood strategy for the country’s poor; on the other hand, the sector is able to achieve very high collection rates, thus increasing the efficiency of the waste management ecosystem as a whole and contributing to the diversion of wastes from landfilling. Despite the important

³ <http://ficci.in/spdocument/20872/report-Plastic-infrastructure-2017-ficci.pdf>

⁴ <http://pib.nic.in/newsite/PrintRelease.aspx?relid=138144>

⁵ http://eur-lex.europa.eu/resource.html?uri=cellar:2df5d1d2-fac7-11e7-b8f5-01aa75ed71a1.0001.02/DOC_1&format=PDF

⁶ <https://newplasticseconomy.org/news/11-companies-commit-to-100-reusable-recyclable-or-compostable-packaging-by-2025>



contributions of informal waste collectors (so-called *Kabadiwallas*), they often lack the capacities to protect themselves from volatile market prices. Yet, the rise of information technology can make valuable contributions in leveraging the role of informal sector.

About this Session

This session is organised as part of the European Resource Efficiency Initiative (EU-REI) which aims to support the implementation of the UN global sustainable consumption and production (SCP) agenda in India. Within this context, the thematic track will cover the following questions:

- What are Indian and European consumption levels of plastics, its main applications and resulting environmental impacts?
- What are the implications of the new EU Strategy for Plastics in a Circular Economy for Indo-European collaboration?
- How can the private sector contribute to reducing generation of plastic waste and close material loops at the end of life?

