



Webinar on Business models for fostering recycling and material recovery infrastructure

September 3, 2020, 14:00 -16:00 Hrs (IST)

Concept Note

Background

The increasing resource consumption in India that has accompanied its robust economic growth has led to an increase in the extraction of primary raw materials by about 420% between 1970 and 2010, dominated by the extraction of abiotic materials (minerals and metals). India's material demand in 2010 was the 3rd largest in the world, after that of China and the United States, with a consumption of about 7.2% of globally extracted raw materials in that year. A study from UNEP in 2016 indicates that consumption rates in India in 2015 may have already overtaken those of the USA. If current trends continue, India's material requirements are projected to be 15 billion tonnes by 2030 and 25 billion tonnes by 2050, with fossil fuels, metals and minerals accounting for the biggest increases (Dittrich, 2015).

European Union's Resource Efficiency Initiative (EU-REI) for India aims to support India in the implementation of the United Nations global Sustainable Consumption and Production (SCP) agenda by way of adapting international standards and best practices in business on resource efficiency and fostering efficient and sustainable use of natural resources. The project is working towards creating a dialogue on the need for resource efficient approaches in India among key government and non-governmental organisations, businesses, students, media and the general public.

One of the topics being studied in this project is the role of resource efficiency and circular economy-based business models in converting effective use of resources into more efficient business practices. It is extremely important in this context to understand how the commercial and financial incentives can be aligned with environmental and social outcomes.

Fostering recycling and material recovery infrastructure-Role of business models

Companies across the globe are switching from the current linear model of economy to a circular one owing to the fact that circular economy (CE) models reduce the extraction of primary raw materials, increase the use of secondary materials, generate less waste and encourage shared consumption, which are considered to be the key tenets of a CE model. In other words, CE business models modify the pattern of product and material flows through the economy. One of the key components of circular approach across the value chain is resource recovery for industrial symbiosis. The emergence of the resource recovery models is based on the fact that these models recycle waste into secondary raw materials, thereby diverting waste from final disposal while also displacing the extraction and processing of virgin natural resources. The production of raw materials via recycling, rather than from non-renewable natural resources can have a reduced impact on greenhouse gas emissions. Apart from



environmental benefits, the economic benefits are immense. The opportunities for value creation from waste resources which would otherwise be irretrievably lost can lead to cost savings or cost recovery. However, there are several implementation barriers and bottlenecks for effective implementation of these models especially for developing and emerging countries like India. These challenges range from economic factors like high initial investment costs and relatively low prices of virgin natural resources, to organizational barriers such as misplaced incentives, risk aversion and short-sightedness in investment decisions. Especially in the context of developing economies, these challenges pertain to economic, informational asymmetries, institutional and policy related, social, behavioral and technological.

The impending National Resource Efficiency Policy (NREP), 2019 of India seeks to create a facilitative and regulatory environment to mainstream resource efficiency and resource recovery across all sectors by fostering cross-sectoral collaborations, development of policy instruments, action plans and efficient implementation and monitoring frameworks. One of the guiding principles of the NREP includes the creation of sustainable business models which will be beneficial to the cause of environment protection and restoration. Innovative business models based on resource recovery are also imperative for the fostering resource efficiency aspects among the small and medium enterprises (SMEs) in India. The NREP emphasizes on increased research and development for resource recovery and other circular business models. The potential of aluminium waste is noteworthy and is emphasized by the NREP. However, establishing the business case for resource recovery requires inter-disciplinary collaboration, and sustained effort to complete and translate business cases into measurable impacts through changed practices.

Issues for Discussion

With this background, the forthcoming webinar on “**Business Models for fostering recycling and material recovery infrastructure**” that is being organized by The Energy and Resources Institute (TERI) under the EU-REI project aims to have a discussion around some of the key inhibitors and enablers for business models that foster recycling and material recovery infrastructure

- Imperatives for Infrastructure creation and Finance
- Formalization of informal sector into recycling and material recovery infrastructure- Key consideration
- Residual waste and Material Recovery Infrastructure- Challenges and Opportunities
- Technology –availability, access, adaptability
- Public private partnership: Building strength and tapping networks
- Markets and trading for scrap
- Role of resource recovery-based business models in post COVID era-Building Resilience and pushing forward a Circular Economy

Besides a discussion with experts and stakeholders on these issues, the Webinar will also give an opportunity to hear the policy perspectives from India and EU on the topic. The discussion at the Webinar with policy makers and experts, will provide inputs that would be integrated in designing a framework for developing resource recovery business models.