

Promoting Secondary Resource Utilisation in Construction Sector – Towards Resource Efficiency in Indian Cities

evelopment Alternatives organised a webinar on 29 June 2020 to further the discourse towards mainstreaming Resource Efficiency and Circular Economy in the Construction Sector especially in the rapidly growing cities in India. The findings of a study on 'Analysing Resource Flow in Indian Cities' was discussed, recommendations were made for policy action and incorporation of Material Flow Analysis (MFA)-Life Cycle Assessment (LCA) techniques in the construction sector. The possibilities for innovation in the sector informed the deliberations at the webinar.

As part of the European Union's Resource Efficiency Initiative (EU-REI) in India, the study on 'Analysing Resource Flow in Indian Cities' with a focus on the construction sector in Ahmedabad and Bhubaneswar was undertaken from 2018-2020. The study aimed at understanding the flow and consumption of material resources for construction in two cities to assess the potential of replacing their ever-increasing use with secondary (wastederived) resources. It carried out a Material Flow Analysis (MFA), of the residential construction sector in Ahmedabad and Bhubaneswar. MFA is a component of Life Cycle Assessment (LCA) which is a globally recognised tool for environmentally responsible industrial practice.

Zeenat Niazi, Vice President, Development Alternatives introduced the study and moderated the discussion. In her keynote address, Henritte Faergemann, First Counsellor, Head of Section, Environment, Transport,



Urbanization, Energy & Climate Change, European Union Delegation to India presented the roadmap adopted by European Union (EU) called the Green Deal. It aims towards just distribution of resources, the transformation of EU into a modern resource-efficient economy, and achieving no net emissions of greenhouse gases by 2050 in Europe. She further stressed on the importance of introducing climate law to turn political commitment into a legal obligation. Climate law will be focused on interim steps, new targets post 2030, and investing more in environment friendly innovative technologies. Following her, Dr Ashok Khosla, Chairman, Development Alternatives emphasised on adopting innovative technologies, reusing industrial, mining and CND waste in buildings. DA's green building leads as a great example, as it has been constructed by reusing 40% of mining and industrial waste. He further stressed on the importance of innovative designing of cities that are equitable, resource-efficient, and livable.

Post the keynote addresses, the city reports for Ahemdabad and Bhubaneshwar and a Sector Policy Brief to enhance resource efficiency of the construction sector in India were released. While Dr Rachna Arora, Deputy Team Leader, EU-REI, discussed the overall objectives and rationale of the study, Pankaj Khanna, Expert, Development Alternatives and Martina Prox, MFA Expert, IFU- Hamburg presented and discussed the findings of the study.

The presentation and analysis of findings were succeeded by a panel discussion 'Towards Mainstreaming Resource Efficiency in the Construction Sector'. As the first panelist, Martina Prox, spoke of the urgent need to think of waste differently and work towards designing wastage out of our systems. She directed attention towards new ways of designing cities that are more liveable based on flexible and agile design strategies, use of data and assessment models to grasp the present and future scenarios and shorter innovation cycles.

Dr Dieter Mutz, Team Leader, EU-REI focused on the importance of national-level plans and policies to trickle down effectively to the local city level and to individual citizens to make a real difference in the resource efficiency and circular economy sphere. While he commended India for its local level resource efficiency achievements, he stressed that the next phases should be focused on larger stakeholder dialogues, interinstitution cooperation to incorporate more people and spread the message wider. Dr Soumen Maity, Assistant Vice President, Development Alternatives emphasised that technologies and solutions being worked on at DA, are looking at 100% utilisation of waste with the necessary technology to segregate and effectively utilise this waste, such that products developed display high strength and durability, and can be used as replacements for environmentally damaging materials in use in the construction sector currently. At last, Zeenat Niazi, Vice President, DA summarised the discussion and concluded the webinar.

