



# CIRCULAR ECONOMY SOLUTIONS PREVENTING MARINE LITTER IN ECOSYSTEMS (CES)

## CONTEXT

India is one of the largest plastics producing countries worldwide, and one of the largest generators of plastic waste with over 9 million tonnes of which about 600,000 tonnes of plastics ending up in the oceans, each year. This contributes to a global problem: today, plastics make up 80% of all marine debris from surface waters to deep-sea sediments. To this day, the global cumulative production of plastic since 1950 equals about 8.3 billion metric tonnes and by 2050, the amount of plastic being produced globally is estimated to quadruple, at which point it is projected that there will be more plastic than fish in the oceans (Source: R. Geyer, J. R. Jambeck, K.R. Law, Production, use, and fate of all plastics ever made, Sci. Adv. 3, e1700782).

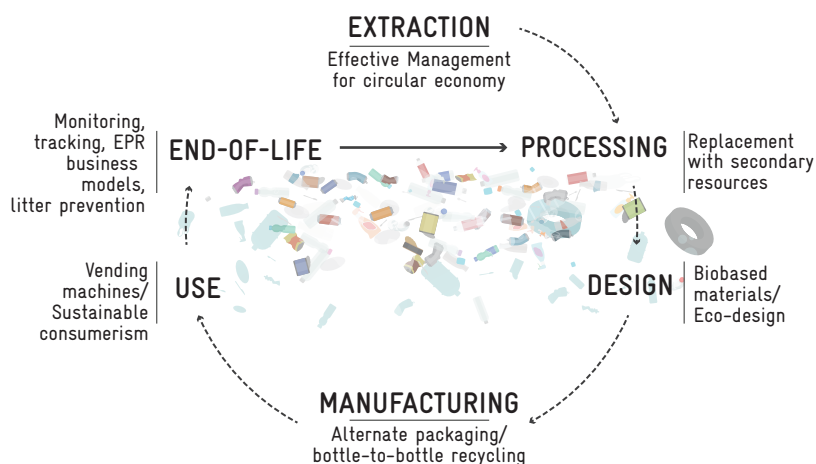
The oceans not only host a substantial biodiversity and sustain nearly half of the global primary production, they also serve to increase economic growth of many countries through ecotourism and fishery resources management. About 2.4 billion people (around 40% of the world's population) live within 100 km of coastlines. These numbers underline the importance of sustaining the marine environment as sustenance for billions of people worldwide.

Due to the negative effects of plastics on maritime ecosystems, as well as being a considerable accelerator of climate change, there is urgent need to reduce plastic waste and its consumption along the entire value chain and to foster Circular Economy Solutions.

## PLASTIC WASTE - A BUSINESS OPPORTUNITY FOR CIRCULAR ECONOMY

Plastic packaging in a business-as-usual scenario will lead to a material value loss of 113 billion euros till 2030 (Source: Strategies for Sustainable Plastic Packaging in India, FICCI, 2020). Of plastic packaging in the market worth 156 billion euros, only 43 billion euros value is recovered. The enormous loss of Euro 113 billion due to insufficient collection or recycling creates opportunities to return plastic waste into the value chain by setting up efficient Circular Economy Systems, creating a win-win situation for the economy and the environment.

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**€113bn**  
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Ministry of Environment, Forest and Climate Change

Implemented by

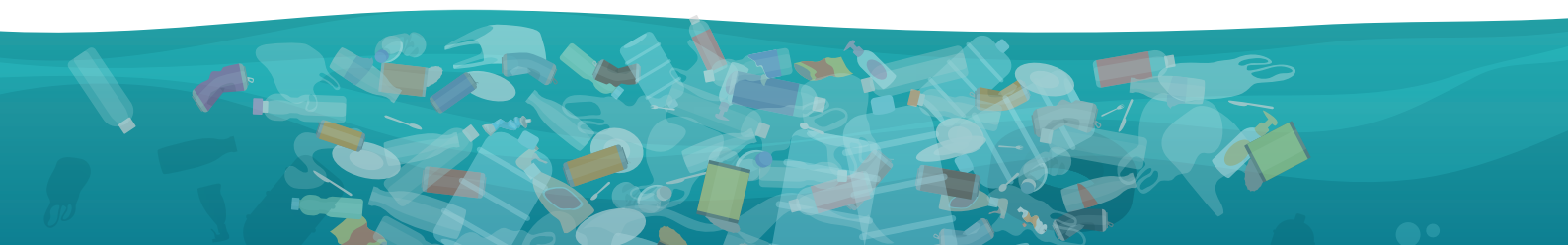
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On behalf of:



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany



## PLASTIC WASTE – NATION’S CALL

Aware of the growing concern, the Government of India announced the ambitious target of phasing out single-use plastics by 2022. Moreover, the Indian national framework on plastic waste management aims at the implementation of Extended Producer Responsibility (EPR) and third-party monitoring mechanisms. India’s private sector is also taking initiative: some of the country’s largest fast-moving consumer goods companies have declared the launch of a packaging waste management entity to step up recycling and collection rates.

Tackling the issue, a joint project has been initiated by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) in partnership with the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, implemented by GIZ India.

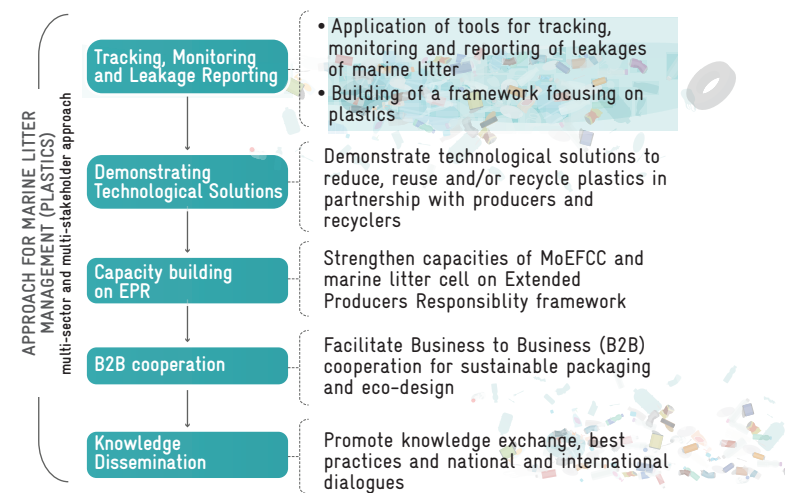
## PROJECT OBJECTIVE AND OUTCOMES

The project aims at demonstrating technological solutions in river and marine ecosystems to close material cycles of marine litter using resource efficient and circular economy approaches, in collaboration with civil society, public and private partners. A key component of the project is the

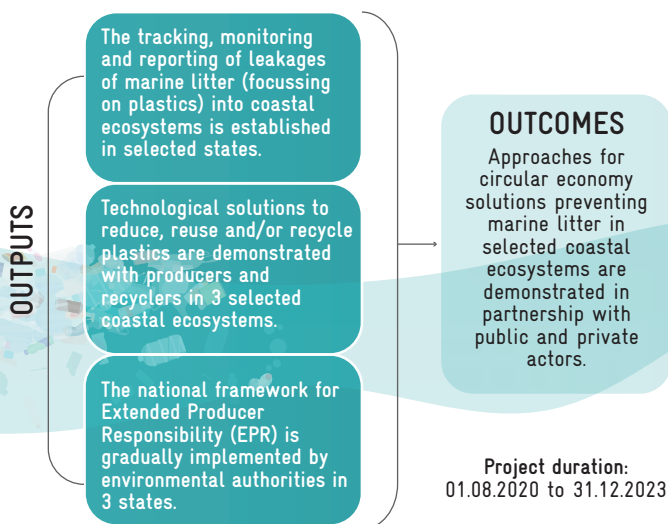
implementation of demonstration projects with focus on establishing a business case for innovative recycling technologies. The project targets plastic waste reduction through collaborations with the private sector, including development of alternative packaging materials to avoid single-use plastics.

Overall, the project will support the Central Pollution Control Board (CPCB), Department of Environment and State Pollution Control Boards (SPCBs) to prevent and monitor plastic waste from leaking into marine and riverine ecosystems and enable effective compliance of EPR as part of the Plastics Waste Management Rules, 2016.

## ACTIVITIES



Locations: Selected sites in the states of Kerala, Tamil Nadu and Uttar Pradesh



## ADDITIONALITY: IDEAS AND INNOVATION FOR ACTION

Advanced, innovative technologies and solutions are needed to find efficient measures. The project brings together modern digital technology solutions (like drone monitoring, tracking and monitoring apps and clean-up technologies) with riverine, coastal as well as lake ecosystems to demonstrate new methods and close material loops by fostering reduction, reusage and/or recycling of plastics. In close cooperation with producers and recyclers, the project aims to push for litter prevention measures and circular economy solutions.

Published by:  
Deutsche Gesellschaft für  
Internationale Zusammenarbeit  
(GIZ) GmbH

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As at May 2022

GIZ is responsible for the content of this  
publication  
On behalf of the German Federal Ministry for  
the Environment, Nature Conservation,  
Nuclear Safety and Consumer Protection  
(BMUV)

Commissioned by	German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)
Nodal Ministry	Ministry of Environment, Forest and Climate Change (MoEFCC)
Lead Implementing Agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	August 2020 – December 2023

Partner states

