

## **SUMMARY**

Project STOP works with cities to create effective waste management systems that eliminate leakage of plastics into the ocean. Rather than building traditional linear systems where waste is collected and simply disposed at landfill, STOP also aims to create circular systems where the majority of hard-to-recycle waste is recycled into new products and the resulting economic value lowers the financial burden of the waste system on the city.

Circular waste systems not only increase the efficient use of resources, they permanently reduce ocean plastic leakage while opening social and economic benefits for communities. Furthermore, the STOP team supports cities with technical expertise and skills transfer, funding and sustained implementation support. Insights and approaches are shared globally, magnifying impact.

Launched in 2017, our first city partnership is in Muncar, a coastal fishing community located in Banyuwangi, Indonesia. With minimal services in place, the majority of citizens are forced to dump their waste directly into the environment. Muncar was chosen as the first STOP location due to the seriousness of the challenge, coupled with strong leadership and environmental commitment at national, regency and local levels.

# THE CHALLENGE: OCEAN PLASTIC IN INDONESIA

An estimated 80% of marine debris comes from land-based sources, with roughly 50% originating from just five Asian economies: China, Indonesia, the Philippines, Vietnam and India.<sup>2</sup> As economic growth has increased in these countries, so has plastic consumption, which has outpaced the development of effective solid waste management systems. Current estimates show that just 45-50% of Indonesia's urban solid waste is collected, with significant variation in performance among cities.3 The country currently consumes more than 6 million tons of plastic every year and is estimated to leak around 1 million tons per year into the water.4 As a result, plastics and poor waste management have contributed to reduced tourism and fishing productivity, and negatively impacted community health.

In response, the Indonesian government has announced a bold commitment to reduce Indonesia's ocean plastic levels 70% by 2025 and created a Marine Debris Action Plan. Delivery of its commitment relies on a rapid acceleration of waste management systems at the city level, combined with system-level policy, innovation and circular material design approaches. Project STOP aims to support achievement of this commitment, by aiming to leapfrog traditional linear take-make-dispose models toward cleaner, circular solutions where waste is recycled.

<sup>&</sup>lt;sup>1</sup> "Stemming the tide: Land-based strategies for a plastic-free ocean," Ocean Conservancy and McKinsey Center for Business and Environment, Sept., 2015.

<sup>&</sup>lt;sup>2</sup> Jenna R. Jambeck et al., "Plastic Waste Inputs from Land into the Ocean," Science 347, no. 6223 (2015): 768–71, doi:10.1126/science.1260352.

<sup>&</sup>lt;sup>3</sup> Indonesia Marine Debris Hotspots Rapid Assessment, World Bank, 2018.

<sup>&</sup>lt;sup>4</sup> Ministry of Environment and Forestry; Jenna R. Jambeck et al., "Plastic Waste Inputs from Land into the Ocean," Science 347, no. 6223 (2015): 768–71, doi:10.1126/science.1260352.

#### PROJECT STOP OBJECTIVES

The four objectives of Project STOP are:

- Zero leakage of waste into the environment by ensuring collection services are available to all households and businesses, through increasing pick-up points, sorting facilities and staff.
- Create more circular systems that increase the value generated from waste.
- Achieve economic sustainability
- Benefits for the local community by creating new jobs in the waste management system and reducing the impacts of mismanaged waste on public health, tourism and fisheries.

Project STOP also targets wider impact on government policy and industry practices and seek to support other practitioners and communities working on this issue.

## **HOW PROJECT STOP WORKS**

Project STOP uses a "system-enabler" approach in which a team of experts in waste management, recycling, financing and education help a city design and implement a low-cost waste management system in which all households and institutions benefit from collection, and plastics are kept out of the environment. The team supports cities with investment, technical

expertise, waste system design, project management, skills transfer, behaviour change and recycling/reprocessing valorisation.

Project STOP does not own the waste nor operates collection, sortation, recycling, treatment or landfill business. All profits from the sale of recyclables or the processing of organic waste are kept by the local community and used to cover collection and sortation worker salaries and operating costs of the system. Our aim is to design a low-cost system that can capture as much value from waste as possible, so the financial burden on residents for collection is as low as possible. The many existing local initiatives (and informal waste pickers) are supported and integrated into the business model.

### **PARTNERS**

Co-founders: Borealis, SYSTEMIQ.

Strategic partners: Borealis, SYSTEMIQ, Norwegian Embassy, NOVA Chemicals, Nestlé, Alliance to End Plastic Waste, Borouge and Siegwerk.

Supporting & technical partners: Schwarz Group, Sustainable Waste Indonesia (SWI), Veolia and HP.

Government partners: Indonesian Ministry of Environment and Forestry and the Banyuwangi Regency; the Coordinating Ministry of Maritime Affairs, BAPPPENAS and the Ministry of Public Works play a supportive role.



## Strategic Partners













With the collaboration and support of





Supporting and technical partners





















