

## PARTNERING WITH CITIES TO REDUCE OCEAN PLASTICS THE MUNICIPAL WASTE RECYCLING PROGRAM | INDONESIA

## THE CHALLENGE

Each year, eight million metric tons of plastic pour into the world's ocean. This global crisis is exacerbated by poor waste management systems of rapidly urbanizing coastal cities in developing countries. Research shows that Indonesia contributes as much as 1.29 million metric tons of plastic waste to the ocean annually, making it the world's second largest polluter<sup>1</sup> by total mass of mismanaged plastic debris.

The Government of Indonesia is pursuing national-level strategies and policies for solid waste management (SWM) and is implementing a national action plan to address ocean plastic pollution. Local governments, though, often lack the funding needed to implement city-level initiatives. As the fourth most populous nation in the world and a nation with a massive coastal population, Indonesia represents a critical opportunity to confront the challenge of ocean plastic pollution.

**IAKARTA** 

## THE U.S. GOVERNMENT APPROACH

The 2018 Save our Seas Act encourages U.S. agencies to work with countries that discharge the largest amounts of solid waste into the ocean. Stopping pollution at the source is the most effective way to address this challenge to reduce the impact of plastic waste pollution on national and global economies.

The Municipal Waste Recycling Program (MWRP), a five-year (2016-2021), USAID-funded initiative, works in Indonesia, the Philippines, Sri Lanka, and Vietnam to reduce land-based sources of ocean plastic pollution. The Program provides grants and technical assistance to local organizations to improve SWM and increase waste recycling.

In Thousand Islands, an MWRP grantee is developing integrated SWM on small islands and is piloting bulk convenience stores that avoid plastic packaging.

In metro Jakarta, an MWRP grantee is working with local governments to implement regulations to reduce plastic bag use in stores and markets.

In Bandung, an MWRP grantee is piloting "zero-waste" sites in 20 neighborhoods in the densely populated Coblong district to expand functional and cost-effective SWM systems.

In Semarang, an MWRP grantee is promoting public-private partnerships between 54 bank sampah (waste banks), 6,500 households, and private corporations to increase recycling.

In Sorong City, an MWRP grantee is strengthening 96 community waste banks to incentivize the collection of plastic waste, resulting in 15 metric tons of plastic waste recycled per month.

In Gowa Regency, an MWRP grantee is adapting Makassar City's successful bank sampah model to improve SWM through a system of 40 waste banks in Gowa.

In Denpasar, an MWRP grantee is organizing 200 volunteers to create more efficient operations through crowdsourcing geospatial data on recyclables and solid waste collection, as well as ocean plastic pollution.

## IMPACTS OF THE MUNICIPAL WASTE RECYCLING PROGRAM IN INDONESIA

With an investment of \$1.4 million by the U.S. government, seven MWRP grantees are innovating local approaches to improve SWM in Indonesia. Grantees work to scale up urban coastal recycling across Indonesia. MWRP and its grantees are reducing ocean plastics by:

Partnering with the Private Sector: Grantees develop linkages between community bank sampah (waste banks) and private sector recyclers to strengthen local capacity to manage plastic waste. In Semarang, an MWRP grantee launched a public-private partnership between local authorities, 54 local waste banks that are serving 6,514 households, and companies, including the major food manufacturing company PT Indofood. The partnership with PT Indofood specifically focuses on increasing recycling of low-value plastics, such as noodle wrappers, to reduce plastic waste leakage into the city's waterways. In Thousand Islands, an MWRP grantee is expanding recycling services by connecting the informal sector to recycling companies. The MWRP grantee, with the private sector, is also promoting bulk sales in stores where customers can refill reusable containers with daily household products to reduce plastic packaging waste, which is especially important on small islands where the first step is to reduce the volume of plastic waste that must be managed.

Bolstering Sustainability and Self-Reliance: MWRP works with local municipalities to ensure long-term sustainability in recycling and SWM. In Sorong City, an MWRP grantee is supporting more than 100 waste banks and is expanding recycling collection crews to increase citywide coverage, which has resulted in 15 metric tons (MT) of plastic waste instead of 7 MT now being recycled each month. MWRP provides the city government with technical assistance to implement financially sustainable, fee-based solid waste collection services. In Metro Jakarta, an MWRP grantee is helping local governments create regulations to reduce

Divers Clean Action is always inspired and aspires to achieve locally-led solutions... After we do the trainings to the waste collectors, to the households' managers or households' moms and the [waste management] department itself, we are trying to make sure the capacity of recycling is increasing day by day and how they can be connected as well to the recycling industry back on the mainland. From 20%, we can increase it up to 50% in just one year.

- Swietenia Puspa Lestari, Founder and Executive Director of Divers Clean Action, a USAID grantee



Swietenia Puspa Lestari, Founder and Executive Director of the USAID grantee Divers Clean Action, speaks with children in a local community about ways to reduce, reuse, and recycle plastic to keep it from entering the ocean.

reliance on single-use plastics in stores and markets.

Developing Scalable Models: MWRP identifies, pilots, and applies best practices and innovative approaches in SWM. With MWRP support, Gowa Regency in the province of South Sulawesi is adapting Makassar City's successful bank sampah model of inclusive, effective waste management to meet local needs. Lessons learned are helping Gowa establish 40 new waste banks with technical assistance from an MWRP grantee. In Bandung, the West Java province capital, an MWRP grantee established zero-waste pilot project sites in 20 densely populated urban neighborhoods by conducting door-to-door information and education campaigns among households, businesses, and schools to teach the basics of segregation at source to reduce the amount of waste incinerated, sent to landfills, or discharged into the ocean.

Innovating Using Geospatial Data and Technology: MWRP harnesses innovative technology to confront the challenge of ocean plastic pollution. In Denpasar (Bali), an MWRP grantee engaged 200 volunteers to gather community-level data combined with geospatial information to create a crowdsourced model of the solid waste ecosystem. This model guides strategies to improve city waste management and ongoing community outreach efforts.

I. Jambeck, J.R. et al. (2015). Plastic waste inputs from land into the ocean. Science 347(6223), 768-771. doi: 10.1126/science.1260352