



# TESTING A COST-EFFECTIVE MODEL FOR “ZERO WASTE” IN INDONESIAN COMMUNITIES

**B**andung, the capital city of Indonesia’s West Java province, generates 1,600 metric tons of waste per day. Of that amount, 20% is uncollected, and of the waste that is collected, only 11% is treated, while the rest ends up in landfills.<sup>1</sup>

USAID’s Municipal Waste Recycling Program (MWRP) funded the Global Alliance for Incinerator Alternatives (GAIA) to partner with local NGO Yayasan Pengembangan Biosains dan Bioteknologi (YPBB) to work with Bandung City’s environment office to improve waste management. The partners are promoting “Zero Waste” in the Coblong district of Bandung.

## PROMOTING A COMMUNITY-BASED “ZERO WASTE” MODEL

GAIA/YPBB promotes a zero-waste approach to waste management that emphasizes responsible production, consumption, reuse, and recovery of materials, ultimately reducing the amount of waste that is incinerated, sent to landfills, or leaked into the air and water. The “Zero Waste” model requires partners to mobilize community participation and secure local government support. GAIA/YPBB collected data indicating that 68% of waste in the Coblong district is recyclable or compostable. The data suggest that changes in household waste handling behavior could help minimize waste ending up in the city landfill. GAIA/YPBB has conducted extensive research on collection efficiency, issued waste perception surveys, and performed brand audits. These activities help program leaders unearth local knowledge about waste separation, assess willingness to pay fees for solid waste management (SWM) services, and determine stakeholder roles in SWM.

GAIA/YPBB is conducting door-to-door educational campaigns at households, businesses, and schools in the Coblong district to teach the fundamentals of waste separation. To date, the campaign has resulted in 50% of Coblong households separating waste and 22 Coblong communities being introduced to the “Zero Waste” model. GAIA/YPBB is also helping to set up material recovery facilities and is coordinating its work with the city government’s waste collection services to avoid a recurring scenario in which communities stop separating waste if they hear municipal garbage collectors mix waste for incineration or final disposal at landfills. MWRP monitors stakeholder compliance through a network of community leaders and facilitates enforcement of local regulations via city environment officers.

## SCALING UP EFFICIENT SOLID WASTE MANAGEMENT AND RECYCLING ACTIONS

Targeted communities are expected to have functioning, scalable SWM and recycling programs by the end of the grant period, governed by a ten-year SWM plan for Coblong district. The forthcoming plan includes organic waste composting and materials recovery facilities to store recyclable materials before these materials are serviced by the city waste collection services. GAIA/YPBB will share “Zero Waste” project results in the Coblong district with other communities in Bandung through exchange visits. As a result of YPBB’s work, MWRP is measuring the effectiveness of the “Zero Waste” model already being implemented in the Philippines,<sup>2</sup> as a cost-effective way for municipalities and the private sector to manage household solid waste and reduce plastic waste leakage.

<sup>1</sup> World Bank, 2019. *Indonesia Improvement of Solid Waste Management to Support Regional and Metropolitan Cities Project*.pdf.

<sup>2</sup> Filipino Barangays-Leading the Way in Zero Waste Models, 2017. *Global Alliance for Incinerator Alternatives*. <https://www.no-burn.org/filipino-barangays-leading-the-way-in-zero-waste-models>.

### HIGHLIGHTS

- **22 Coblong district communities introduced to the “Zero Waste” model to reduce the amount of waste that is incinerated, sent to landfills or leaked into the environment.**
- **Nearly 50% of Coblong district households are practicing waste separation.**

**PROJECT:** Building and Sharing Zero Waste Models in Selected Asian Communities | **DURATION:** April 1, 2019 – May 31, 2021 |

**IMPLEMENTER:** Yayasan Pengembangan Biosains dan Bioteknologi (YPBB) | **LOCATION:** Bandung, Indonesia | **BUDGET:** \$69,141