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CONVERTING LOW-VALUE PLASTIC WASTE INTO MARKETABLE PRODUCTS

Plastic waste pollution in Manila Bay has been increasing due in large part to insufficient waste separation at source. The cleanup of Manila Bay has been identified as a priority by the Government of the Philippines, which is working on sustainable solutions to the country's waste management problems through investments and innovations. Shopping malls, which generate large quantities of plastic, can play an important role in combatting plastic waste pollution in the Philippines. With a grant from USAID's Municipal Waste Recycling Program, the Philippine Business for the Environment (PBE) is increasing waste separation, reducing dependency on single-use plastics, and increasing recycling rates in malls. This holistic approach will ultimately reduce the amount of recyclable plastic materials sent to landfills.

HIGHLIGHTS TO DATE

- **Teamed up with Sentinel Corporation**, Nestle's upcycling partner, to manufacture products from low-value plastic waste.
- **Trained Robinsons Malls management teams on waste management practices** in collaboration with national Department of Science and Technology.

BRIDGING THE GAP BETWEEN PRODUCERS AND RECYCLERS

PBE and its sub-grantees, including the Philippine Alliance for Recycling and Materials Sustainability (PARMS), are partnering with malls around Manila Bay to test the feasibility of converting low-value residual plastic waste into recycled and marketable products. Working initially with two malls owned by Robinsons Malls, a chain with more than 50 shopping centers nationwide, PBE works to improve their solid waste management efficiency and to reduce the amount of residual plastic waste leaked into the environment. PBE connects participating malls in Metro Manila to a plastic waste recycling facility nearby. The model is designed to help the shopping centers save money on their waste management fees by reducing the volume of disposed waste, while the recycling facility receives a steady stream of plastic waste feedstock. To facilitate the collection of waste, PBE, in collaboration with the national Department of Science and Technology, is implementing an information, education, and communication campaign that promotes waste separation in malls. PBE will use the test findings to produce a Mall Solid Waste Management Manual that shopping center owners and waste collectors can use as a practical guide to reduce plastic pollution.

DEVELOPING UPCYCLED PRODUCTS

PBE is introducing and testing innovations in the manufacturing of products made from low-value residual plastic waste recovered from shopping malls. PBE is training a local recycler and a local upcycler, Sentinel Corporation, on how to turn this waste (e.g., plastic bags, laminates, cups, sachets), which typically would be transported to landfills, into upcycled, marketable products, such as interlocking building blocks, parking bumpers, pallets, and bollards.

PROJECT: Mall Recovery Program for Residual Plastic Waste | **DURATION:** October 1, 2019 – March 31, 2021 |

IMPLEMENTER: Philippine Business for the Environment Inc. (PBE) | **LOCATION:** Metro Manila | **BUDGET:** \$100,000