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Workshop with informal waste pickers, Bacolod City

GERMAN GOVERNMENT AND FEDERAL STATES PROGRAMME
BUND-LÄNDER-PROGRAMM (BLP)



Federal state - partner country
Hesse - Philippines

Title
ECOWAVE – An integrated initiative for e-waste management and the empowerment of women in the informal waste sector in Bacolod City, Philippines

In cooperation with the GIZ programme
Reduce, reuse and recycle to preserve marine biodiversity

Financing arrangements
BMZ contribution 244,070 EUR
Hesse contribution 159,374 EUR

Duration
01.08.2025 - 31.12.2026

Responsible ministry
Hessian Ministry of Economics, Energy, Transport, Housing and Rural Affairs

ECOWAVE:
Sustainable recycling of e-waste and empowering women in Bacolod City

Local situation

E-waste is one of the fastest-growing waste streams worldwide – driven by technological change, short product lifecycles and rising consumption. E-waste also poses a growing environmental and health problem in the Philippines.

In Bacolod City, e-waste is largely processed informally or semi-formally by junk shops and scrap dealers. These businesses are important players in the local recycling ecosystem, but are so far largely unregulated. They primarily purchase from households and informal collectors – many of whom are women – and pass the material on to wider regional recycling networks. A significant amount ends up alongside household waste at the municipal landfill in Barangay Felisa, where informal collectors recover metals and plastics under precarious conditions – without protective equipment, technical facilities or social protection.

Furthermore, there are insufficient concrete strategies and knowledge on how to handle and dispose e-waste properly, and how to extract valuable materials and recirculate them.

This project helps to achieve the following Sustainable Development Goals (SDGs):



“Many people, particularly women in the informal sector, rely on waste-related activities for their income. With ECOWAVE, we aim to strengthen these livelihoods while improving environmental management through practical and collaborative approaches.”

Dr. Katharina Raab
University of Kassel



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Operational planning at La Consolacion College Bacolod (LCCB)

Cooperation arrangements

The cooperation partner in Hesse is the Hessian Ministry of Economics, Energy, Transport, Housing and Rural Affairs. The Hessian Ministry of Agriculture and the Environment, Viticulture, Forestry, Hunting and Homeland provides support on specific issues relating to waste management. The implementation partner is the University of Kassel.

Partners on the Philippine side are the Bacolod City Council, the municipal waste management office and, for technical and scientific cooperation, a consultancy team appointed by the City Council. The implementation partner is La Consolacion College Bacolod (LCCB).

Furthermore, the German company Minimise GmbH provides advice on the treatment and recovery of e-waste.

What we are doing - and how

E-waste is both a risk and a resource: on the one hand, devices contain substances that are harmful to health and the environment, such as lead and mercury. On the other hand, they are made up of economically valuable secondary raw materials such as copper, aluminium, gold and recyclable plastics, the recovery of which can make an important contribution to resource conservation and the promotion of circular value creation.

The project creates new, sustainable employment opportunities along the e-waste value chain. The target group comprises informal waste pickers in the city of Bacolod, with a focus on women. The aim is to enable them to acquire knowledge about the safe handling of e-waste and to generate an income.

The city of Bacolod benefits from improved e-waste recycling through a reduced environmental impact and a skilled workforce in waste management. This benefits the city’s residents, who benefit from a cleaner environment.

The project is based on the results of the predecessor project ‘Assessment and management of plastic waste flows and leakages in Bacolod City, Philippines’.

Useful links

- Further information on the BLP:
<https://www.giz.de/en/worldwide/132983.html>
<https://bund-laender-programm.de/en>
- GIZ programme “Reduce, reuse and recycle to preserve marine biodiversity“:
<https://www.giz.de/en/expertise/climate-environment/biodiversity>