



2 million tons of waste managed in a more sustainable way, and more than that, the paradigm shift through access to knowledge

ProteGEEr is a technical cooperation project between Brazil and Germany to promote sustainable and integrated management of municipal solid waste (MSW), preserve natural resources and reduce energy use and greenhouse gas (GHG) emissions.

The project is implemented by the Brazil-Germany Cooperation for Sustainable Development, through GIZ, in partnership with the National Sanitation Secretariat of the Ministry of Regional Development (MDR), and is financed by the International Climate Initiative (IKI), of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

Brazil is committed to the Global Methane Commitment, which establishes a 30% reduction in methane by 2030. In this context, the waste sector is strategic for meeting this goal.

Establishing a policy of low emissions in MSW management can bring numerous benefits to Brazilian society and also ensure a positive strategic position in international negotiations.

The project contributed to the integration of climate and waste agendas into 13 public instruments, including the National Basic Sanitation Plan.

In addition, ProteGEEr supported the implementation of the new Sanitation Legal Framework, through the establishment of collection mechanisms and the formation of inter-municipal consortia.



4 Brazilian municipalities had their landfills closed, including the coastal city of Itacaré (BA), where, two decades ago, around 30 tons of waste were deposited daily in an area located in the native Atlantic Forest. Furthermore, about **2 million tons of waste were managed in a more sustainable way, benefiting more than 9 million people in 46 municipalities, in 6 states and the Federal District (Bahia, Pará, Ceará, Pernambuco, Mato Grosso and Minas Gerais), with cycles of training and technical assistance.**

PILOT PROJECTS

5 municipalities

submitted MSW project proposals for funding with technical assistance from ProteGEEr, among them Campo Verde and Recife Metropolitan Region approved with, respectively,

R\$ 3,7 and R\$ 13,9 millions.

Acting in the Amazon

74 hours of training on technological routes, closure of landfills, billing and selective collection, with the participation of **403 people in 27 municipalities.**

46 municipalities

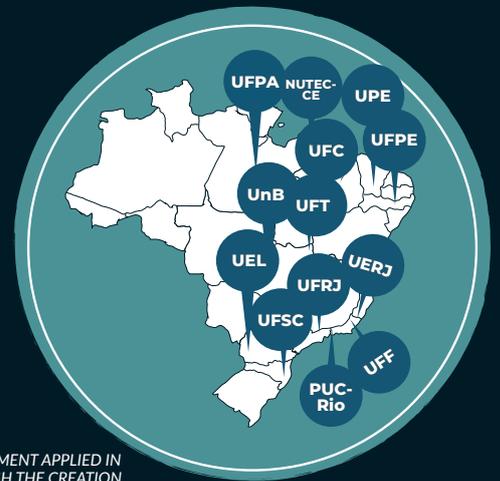
received training, technical advice and support to mobilize financial resources during the project.

Metropolitan Region of Recife (PE); COMARES Litoral Leste Consortium (CE); Convale Consortium - FEP (MG); Campo Verde (MT); Brasília (DF); Abaetuba; Ananindeua; Barcarena; Benevides; Cameté; Capanema; Marituba; Paragominas; Santa Barbara; Santa Izabel do Pará and Vigia (PA); Ilhéus and Itacaré (BA).

NETWORK OF UNIVERSITIES BRAZIL-GERMANY

13

Leading scientific institutions in the country in cooperation with the Technical University of Braunschweig in Germany, focused on the development of applied research projects and the improvement of postgraduate courses



21 APPLIED RESEARCH PROPOSALS IN THE AREA OF WASTE SUBMITTED BY THE UNIVERSITIES IN THE NETWORK - 6 QUALIFIED

10 KNOWLEDGE MODULES ON INTEGRATED MSW MANAGEMENT APPLIED IN THE UNIVERSITIES OF THE NETWORK IN BRAZIL, THROUGH THE CREATION OF THE TEACH4WASTE PLATFORM (/TEACH4WASTE.COM/)

E-LEARNING COURSES ON INTEGRATED MSW MANAGEMENT

COURSE 1 FUNDAMENTALS AND KEY PREMISES FOR SUSTAINABLE MSW MANAGEMENT

COURSE 2 MSW TREATMENT AND RECOVERY

52,9%
Total: 447 certified (technicians and municipal managers)

47,1%
Total: 397 certified (technicians and municipal managers)

844 PEOPLE CERTIFIED IN 2021 AND 2022

348 MUNICIPALITIES REACHED IN BRAZIL

PARTICIPATION IN EVENTS

116 EVENTS WITH PARTICIPATION AND/OR ORGANIZATION OF THE PROJECT

7K PEOPLE ACHIEVED

WASTE MANAGEMENT TOOLBOX

GOOD PRACTICES IN SOLID WASTE MANAGEMENT

GUIDE FOR REDUCING GREENHOUSE GAS EMISSIONS (GHG) IN MSW MANAGEMENT

GUIDE FOR PLANNING AND IMPLEMENTATION OF SELECTIVE COLLECTION

GUIDE FOR CLOSING DUMPS - SUPPORT FOR DECISION MAKING

GUIDE FOR THE IMPLEMENTATION OF PUBLIC CONSORTIA FOR MSW MANAGEMENT

GUIDE FOR FINANCIAL SUSTAINABILITY OF MSW MANAGEMENT SERVICES

GUIDE FOR PRELIMINARY ASSESSMENT OF WASTE DERIVED FUEL (RDF) PRODUCTION

CALCULATION OF GREENHOUSE GAS EMISSIONS (GHG) IN MSW MANAGEMENT

SCENARIOS FOR ESTABLISHING TECHNOLOGICAL ROUTES AND ITS COSTS FOR MSW MANAGEMENT

FEEES OR TARIFFS CALCULATOR FOR MSW MANAGEMENT SERVICES

TO LEARN MORE, VISIT: GOV.BR/MDR/PT-BR/ASSUNTOS/SANEAMENTO/PROTEGEER

On behalf of:

