ISAP 2021
International Forum for Sustainable Asia and the Pacific

IGES
Institute for Global Environmental Strategies

Knowledge and Technology Transfer

Reduction of Emissions from the Waste Sector

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The International Environmental Technology Centre's vision is for countries to implement sustainable solutions to environmental challenges, with focus on holistic waste management.

IETC assists countries to identify and implement sustainable technological solutions to environmental challenges

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UNEP IETC Annual Report 2020
www.unenvironment.org/ietc/report/ietc-annual-report-2020

IETC Publications:
Waste Management Outlooks and Thematic Reports

- Global, Regional and Thematic Waste Management Outlooks
- Thematic Reports
- Compendia of Technologies and Guidelines

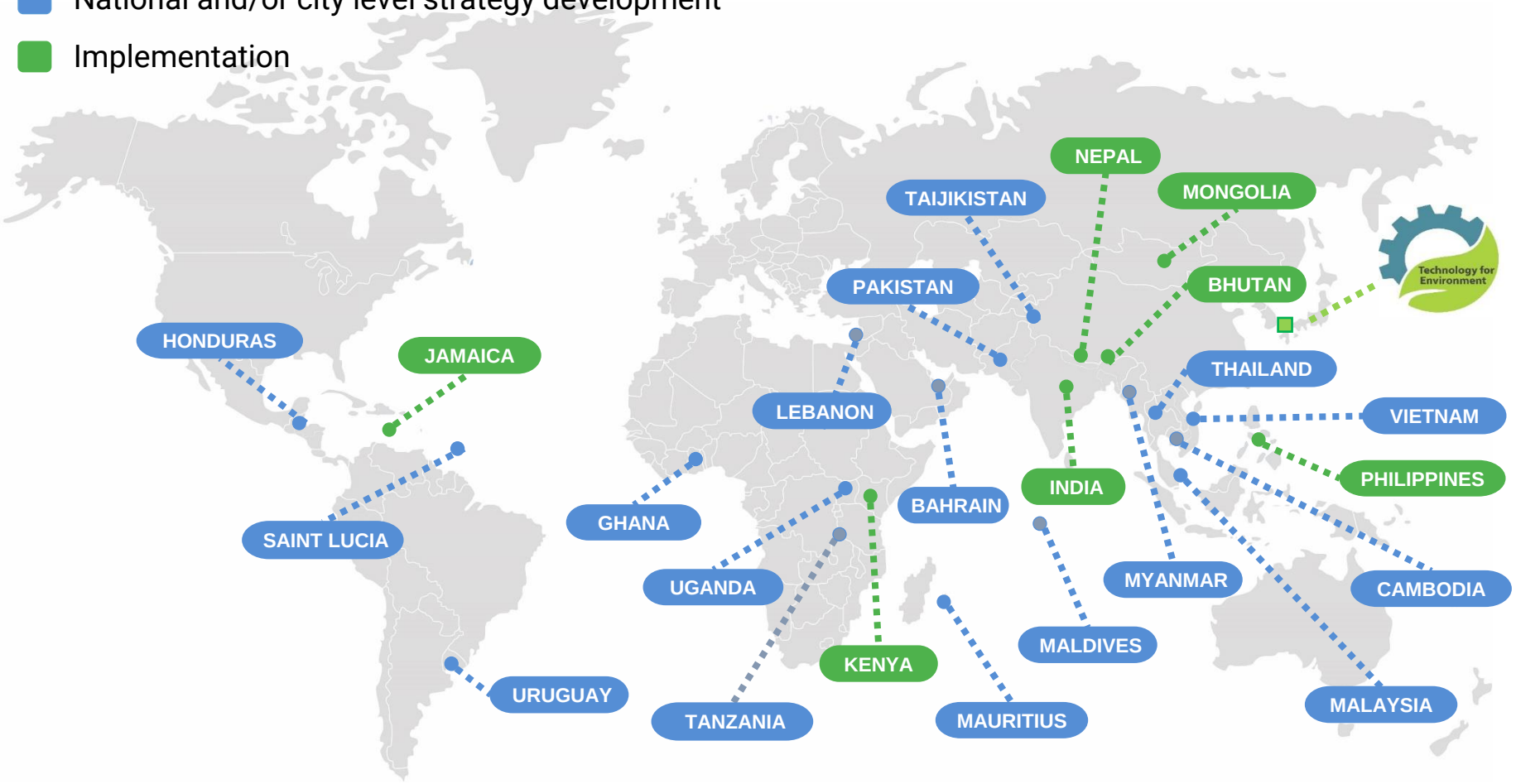
www.unep.org/publications/

Technology for Environment

IETC support to countries around the world

National and/or city level strategy development

Implementation



Many cities and countries are working with IETC to improve Waste Management Governance

Waste and Climate Change Project

Objective:

Strengthen the capacity of policy makers **to achieve Nationally Determined Contribution** focusing on the reduction of Greenhouse Gases (GHGs) and Short-Lived Climate Pollutants (SLCPs) emissions **from the waste sector**

1 Policy

2. Selection of Technology/Piloting

3. Access to financing

4. Outreach/Awareness raising

Countries:

Implementing through partners in Bhutan, Mongolia and Nepal.

WWF

The Asia Foundation

LEADS
LEADERSHIP FOR ENVIRONMENT & DEVELOPMENT NEPAL

Funder :

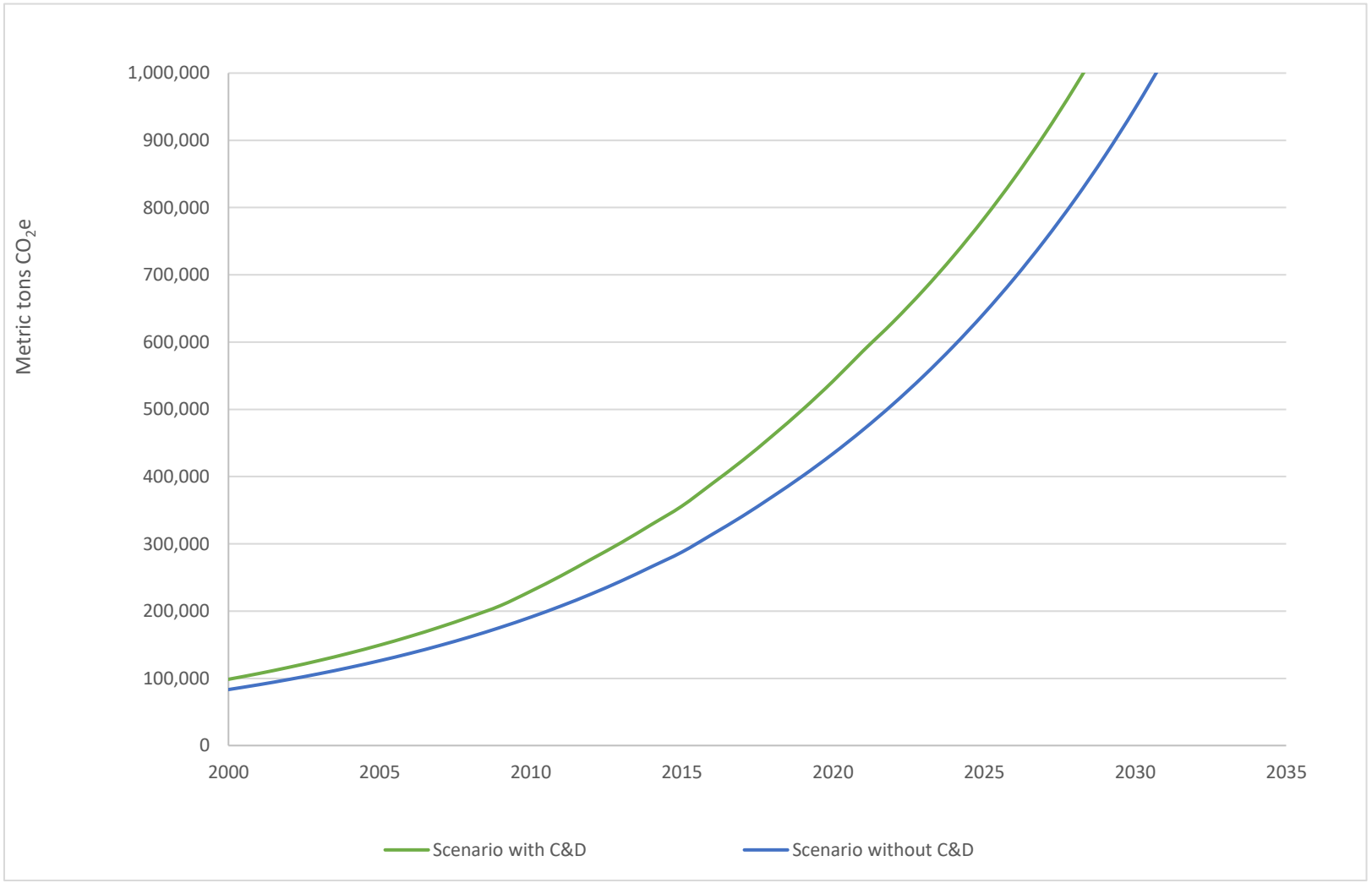
The Federal Ministry for the Environment,
Nature Conservation, and Nuclear Safety of Germany (BMUB).

Supported by:
Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

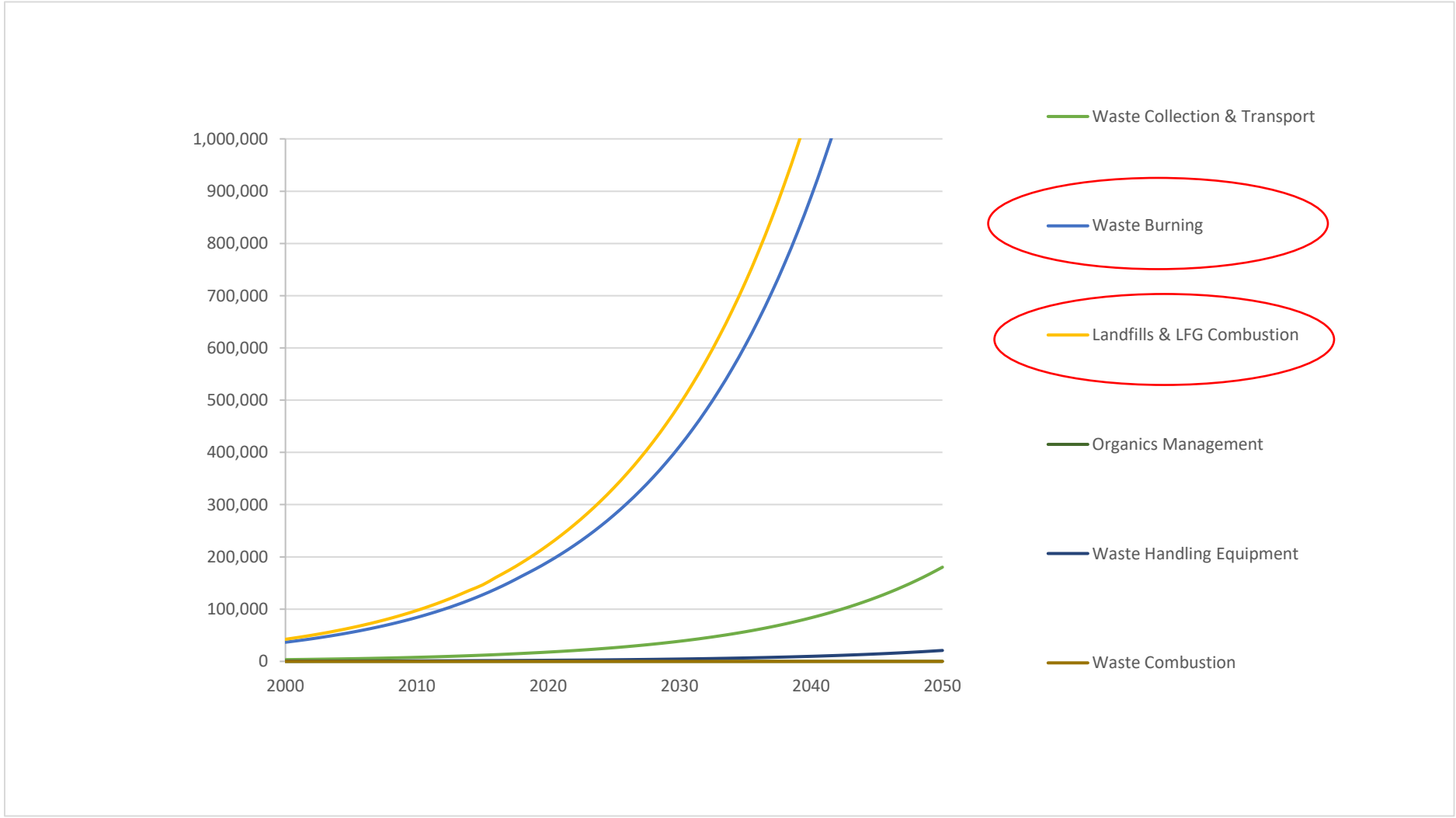
Total emissions estimations in Ulaanbaatar city

Total emissions estimations in Ulaanbaatar city with and without construction and demolition (C&D) waste



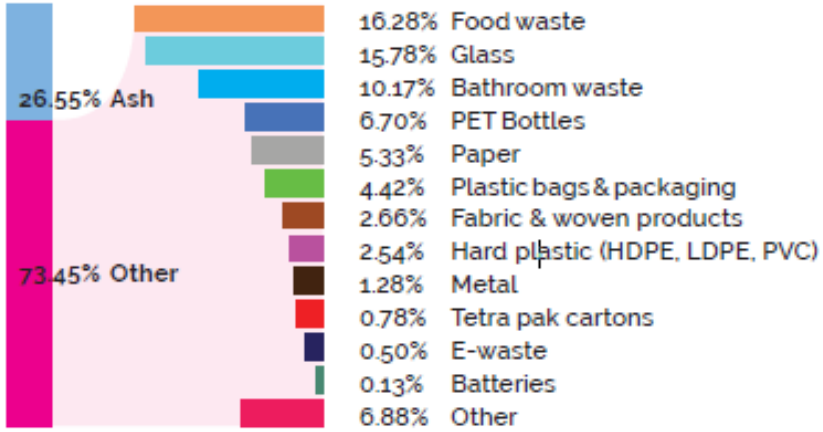
Sources of GHG and SLCP emissions in Ulaanbaatar city

Sources of GHG and SLCP emissions in Ulaanbaatar city



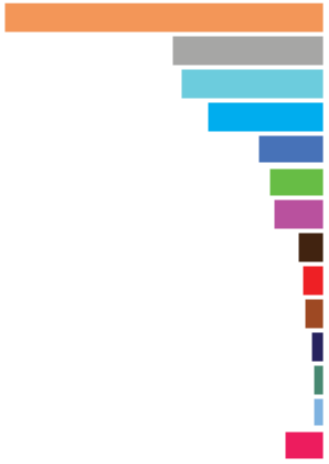
Ulaanbaatar City's Waste Composition

Figure 8: Waste composition in ger area households (summer)



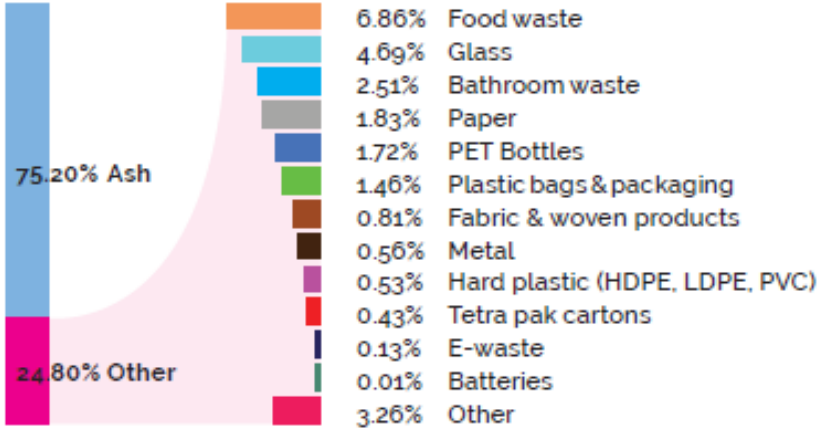
16.28%	Food waste
15.78%	Glass
10.17%	Bathroom waste
6.70%	PET Bottles
5.33%	Paper
4.42%	Plastic bags & packaging
2.66%	Fabric & woven products
2.54%	Hard plastic (HDPE, LDPE, PVC)
1.28%	Metal
0.78%	Tetra pak cartons
0.50%	E-waste
0.13%	Batteries
6.88%	Other

Figure 10: Waste composition in apartment households (summer)



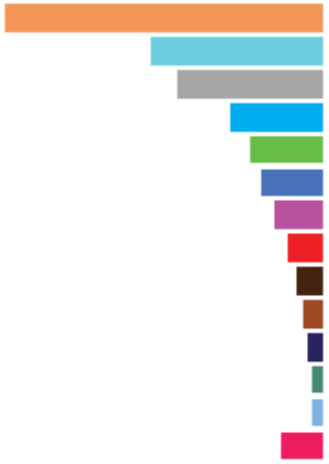
41.0%	Food waste
13.9%	Paper
13.3%	Glass
9.6%	Bathroom waste
5.3%	PET Bottles
4.4%	Plastic bags & packaging
4.2%	Hard plastic (HDPE, LDPE, PVC)
1.9%	Metal
1.4%	Tetra pak cartons
1.2%	Fabric & woven products
0.4%	E-waste
0.0%	Batteries
0.0%	Ash
3.4%	Other

Figure 9: Waste composition in ger area households (winter)



6.86%	Food waste
4.69%	Glass
2.51%	Bathroom waste
1.83%	Paper
1.72%	PET Bottles
1.46%	Plastic bags & packaging
0.81%	Fabric & woven products
0.56%	Metal
0.53%	Hard plastic (HDPE, LDPE, PVC)
0.43%	Tetra pak cartons
0.13%	E-waste
0.01%	Batteries
3.26%	Other

Figure 11: Waste composition in apartment households (winter)



36.18%	Food waste
18.34%	Glass
14.42%	Paper
8.48%	Bathroom waste
6.15%	Plastic bags & packaging
5.48%	PET Bottles
3.53%	Hard plastic (HDPE, LDPE, PVC)
2.15%	Tetra pak cartons
1.70%	Metal
1.0%	Fabric & woven products
0.12%	E-waste
0.03%	Batteries
0.0%	Ash
2.32%	Other

Technology

Support policy makers and practitioners for the selection of the Environmentally Sustainable Technology (EST) in waste sector

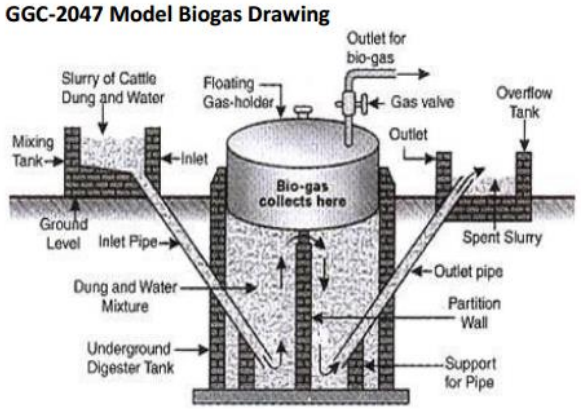
- Conduct technology assessments
- Best practices
- Set the strategic and technical criteria for decision making
- Shortlist technically and financially viable technology options

Pilot selected EST

Pilot Project in Nepal and Bhutan

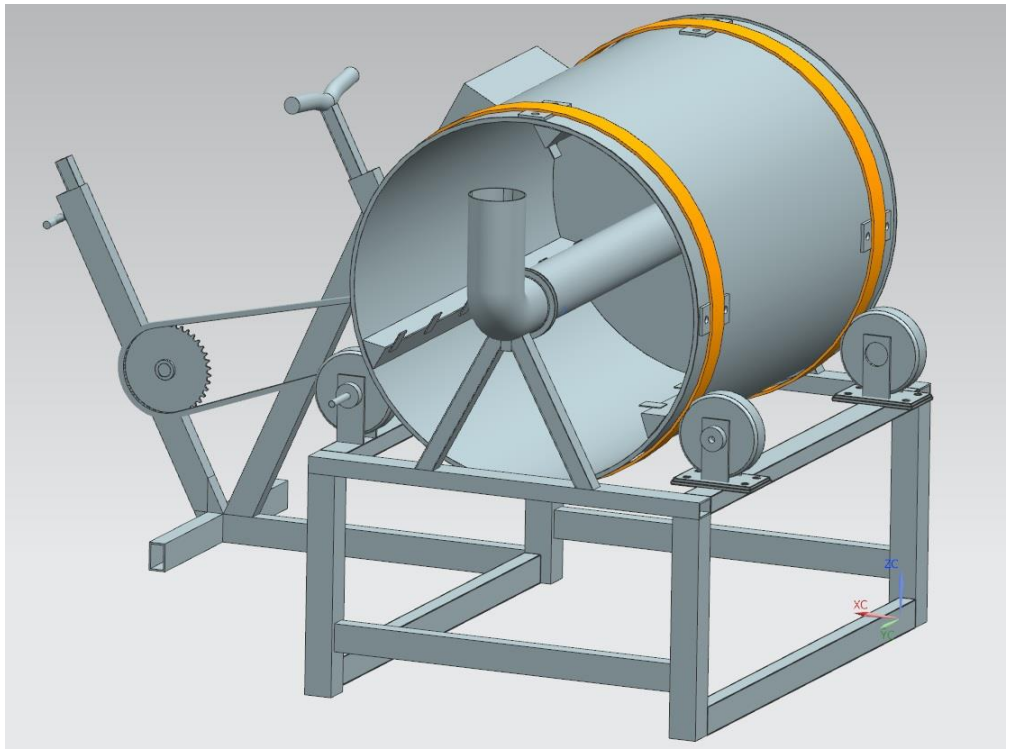
Technology transfer from neighboring country India

Nepal: Solid & Liquid Resource Management System

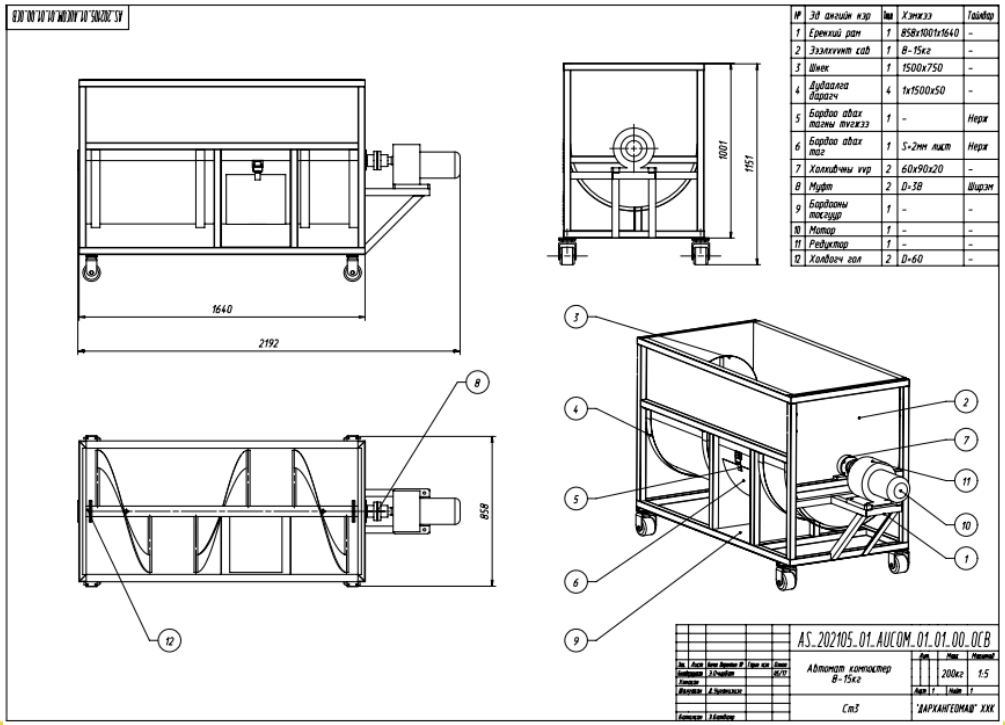


Bhutan: Biogas plant to be implemented

Pilot Project in Mongolia



- Locally designed tumbler composter and Automatic composting machine
- Operational challenges



Enabling Conditions

i) Enabling policy and legislation framework

ii) Ability to conduct proper separation at source

iii) Proper infrastructure in place such as bins, collection points/system (transport)

iv) Strong political will and support

v) Technical capacity

ご清聴ありがとうございました。

Thank you very much for your attention.

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