Greenhouse gas inventories

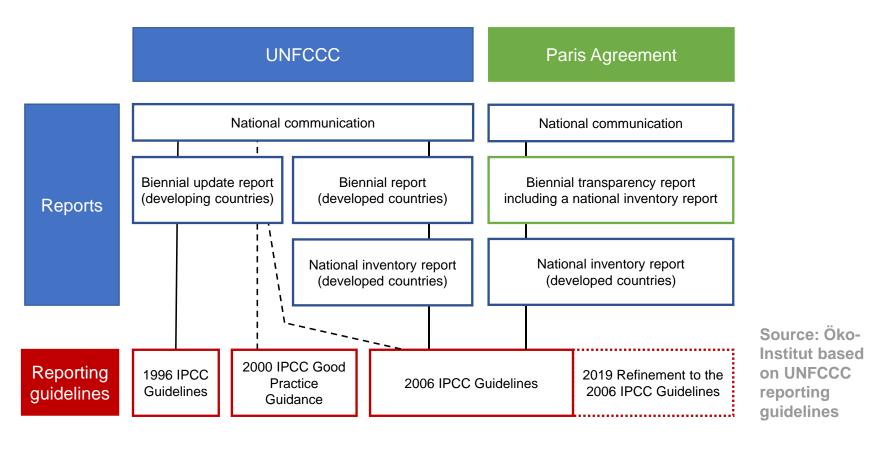
Overview of reporting requirements

Examples from the waste sector

Lorenz Moosmann



Introduction: Reports and guidelines for national greenhouse gas inventories





Contents of the National Inventory Report under the Paris Agreement



Executive summary

Cross-cutting information

Trends

Sector chapters

Indirect emissions

Improvements

TABLE 5 SECTORAL REPORT FOR WASTE (Sheet 1 of 1)		
Back to Index		
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄
5. Total waste		
5.A. Solid waste disposal		
5.A.1. Managed waste disposal sites		
5.A.2. Unmanaged waste disposal sites		
5.A.3. Uncategorized waste disposal sites		
5.B. Biological treatment of solid waste		

Source: Decision 5/CMA.3, https://unfccc.int/documents/460951

Implementation of national inventories - Example of the waste sector



Good Practices in GHG Inventories for the Waste Sector

The report is intended for GHG inventory compilers and experts involved in policy development in the waste sector, especially in developing countries.

It addresses practical aspects of GHG inventory development in general and uses examples from developing countries in the waste sector.

https://transparency-partnership.net/publicationstools/updated-good-practice-study-ghg-inventories-waste-sector



Good practice in GHG inventory development

Selected topics addressed in the 'Good practice study':

- Institutionalisation: Establish procedures and responsibilities for multiple years
- Methodological choice: Apply a key category analysis and use higher tier methods for key categories
- Time series consistency: Use IPCC methodologies to gap-fill missing data
- Quality assurance/Quality control: Prepare a QA/QC plan and continuously improve the inventory

These issues gained in importance in the preparation of Biennial Transparency Reports under the Paris Agreement



Scope of GHG inventories in the waste sector

- GHG emissions originate from the treatment and disposal of solid and liquid waste
- Emission estimates are required for four sub-categories:

Solid waste disposal

Biological treatment of solid waste

Incineration and open burning

Wastewater treatment and discharge

The 2019 Refinement to the 2006 IPCC Guidelines provides additional guidance, new methods, updated parameters, and emission factors



Selected examples from the waste sector – Solid waste disposal

The guidance contains explanations and concise examples from countries for the following topics:

- Disaggregation of population data
- Waste generation rates
- Shares of solid waste landfilled
- Waste disposed by category of waste disposal site
- Waste composition
- Recovery of landfill gas
- Recommendations for parameters and methods for emission estimation



Conclusions from the study

- The waste sector is an important source of GHG emissions.
- GHG inventories serve multiple purposes:
 - Compliance with national and international requirements
 - Awareness raising of emissions and practices in the sector
 - Input for policy development and mitigation actions
- The application of good practices in inventory preparation facilitates the reporting of inventory information and of Biennial Transparency Reports under the Paris Agreement.