**Waste: Sector Lead Roles and Responsibilities**

In implementing institutional arrangements for the National Greenhouse Gas (GHG) Inventory, it is important to communicate responsibilities to all contributing staff. This document describes the major responsibilities for the **Waste Sector Lead**, whose primary role will be to manage and coordinate development of GHG emission estimates in the Waste sector.

This document is part of EPA’s [Toolkit for Building National GHG Inventory Systems](http://ledsgp.org/resource/greenhouse-gas-inventory-system/?loclang=en_gb#ghg-toolkit) (“Toolkit”), which key members of a national inventory team may use to design and develop a sustainable inventory system. In addition, it complements EPA’s *Templates for Creating a National GHG Inventory System Manual*, also within the Toolkit. Specifically, the Waste Sector Lead is encouraged to use this template in conjunction with Template 2: Institutional Arrangements.

## The Waste Sector Lead Should Understand:

* the specific responsibilities of the Waste Sector Lead, including a clear understanding with its immediate supervisor/organization and the National Inventory Coordinator (NIC) on their role in producing the Waste GHG estimates for the inventory,
* the expected and required deliverables and timeline for the submission of each deliverable,
* the estimated amount of time necessary to complete the tasks of the Waste sector,
* the budget, as institutional arrangements and national circumstances dictate, such as the funds allocated by your immediate supervisor or the NIC to develop the Waste sector GHG estimates, and how these funds may be utilized in support of developing and documenting the Waste estimates, and
* the IPCC Guidelines for this sector, including default methods, data sources, basic QA/QC, uncertainty assessment, and reporting procedures.

##  Waste Sector Preparation

* Review the Consultative Group of Experts’ (CGE) materials related to the Waste sector. [[CGE Materials](http://unfccc.int/national_reports/non-annex_i_natcom/training_material/methodological_documents/items/349.php)]
* Review the Waste section of the IPCC Guidelines to understand the default methods, data sources, basic QA/QC, uncertainty assessment, and reporting procedures. [[2006 IPCC Guidelines](http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html)]
* Review the UNFCCC guidance materials for additional information. [[UNFCCC Guidance](http://unfccc.int/national_reports/non-annex_i_natcom/guidelines_and_user_manual/items/2607.php)]
* Review the Waste section of the previous National GHG Inventory and other reports relevant to national GHG estimates for this sector. Reviewing the Waste section from other country’s GHG inventory reports can also be informative.
* Understand which categories in the Waste sector were identified as key categories in the previous inventory.
* Review the EPA’s *Templates for Creating a National Greenhouse Gas Inventory System Manual* and additional Toolkit materials available on the GHG Inventory Capacity Building portal. [[EPA Toolkit for Building National GHG Inventory Systems](http://ledsgp.org/resource/greenhouse-gas-inventory-system/?loclang=en_gb#ghg-toolkit)]
* Use software packages, if applicable, that are relevant and useful for this sector ([IPCC Inventory Software](https://www.ipcc-nggip.iges.or.jp/software/index.html) or relevant country-specific software used in compiling previous inventories for this sector).
* Be familiar with the role of the GHG inventory in UNFCCC reporting processes (e.g., National Communication (NC), etc.).

## Waste Sector Responsibilities and Activities

* Review the [*IPCC Guidelines*](http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html) *for National Greenhouse Gas* Review the *2006* [*IPCC Guidelines*](http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html) *for National Greenhouse Gas Inventories* and previous IPCC Guidelines, if applicable, such as *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories.*
	+ Understand the GHG categories that are sources in the Waste sector.
	+ At minimum understand the Tier 1 methodologies, data needs, and other requirements for developing GHG estimates for the Waste sector, and become familiar with those for Tier 2.
* Collaborate with the NIC to manage the Waste sector budget and develop a Waste sector-specific work plan and schedule that coincides with deliverables acknowledged in the overall National Inventory Schedule.
* Develop and implement a Waste sector-specific plan for archiving all relevant information and materials, in coordination with the archiving coordinator and adhering to any existing archiving guidance materials for your national inventory (see EPA’s Template 6: Archiving System).
* Oversee the establishment of arrangements between Waste sector data collectors and data suppliers.
	+ Collaborate with the NIC to record the institutional arrangements for the Waste sector in EPA’s Template 2: Institutional Arrangements.
	+ If required, develop agreements such as Memoranda of Cooperation (MOC) with necessary organizations (e.g., Ministry of the Environment, Department of Waste Management, universities) to assist with activities required by the Waste Sector Lead (e.g. data collection, generating GHG estimates), as appropriate (see EPA’s Memorandum of Cooperation template).
	+ Develop Scopes of Work (SOW) to issue to engage contractors, and/or sector experts. Manage the work being carried out under these contracts to ensure it is meeting the requirements and needs of your GHG inventory sector (see EPA’s Scope of Work template).
* Coordinate with the Energy Sector Lead to determine whether there is energy generated from waste incineration, and if so, whether that will be included in the Energy sector.
* Consider potential improvements identified in the previous inventory for this sector. Assess whether to implement improvements based on the contribution to overall national emissions (by conducting a Key Category Analysis) and availability of resources (see EPA’s Key Category Analysis tool and its accompanying document, Template 5: Key Category Analysis).
* Oversee development of GHG estimates from all categories in the Waste sector.
	+ Determine the most appropriate IPCC methodology to be used to estimate GHGs for each category in accordance with decision trees.
	+ Oversee choice and/or development of emission factors.
	+ Document all data collection arrangements, methodologies, and assumptions, including use of expert judgment.
	+ Complete the relevant tables in EPA’s Template 3: Methods and Data Documentation.
* In consultation with the QA/QC coordinator (who should be identified in EPA’s Template 2: Institutional Arrangements), convene Waste sector working group to review calculations and perform initial Quality Assurance/Quality Control (QA/QC).
	+ QA includes review procedures conducted by personnel not involved in the inventory development process (e.g., experts not involved with estimate development, the public, other relevant agencies, non-governmental organizations, universities, etc.).
	+ QC includes routine reviews implemented by the inventory development team to measure and control the quality of the inventory as it is prepared (e.g., sector leads and supporting experts involved with estimate development).
	+ Ensure that QA/QC procedures are consistent with the general and sector-specific procedures described in EPA’s Template 4: QA/QC, which you should be able obtain from the NIC.
* Coordinate the response to comments received from QA (external) reviews of the Waste sector GHG estimates and update the inventory if necessary.
* Review the final Waste sector GHG estimates and the narrative describing the assumptions, methodologies, and results.
* Oversee the development of the uncertainty analysis for the Waste sector.
* Identify any improvements needed for subsequent inventories, related to activity data, emission factors, methodologies, or other components of developing the estimates. Document these improvements in the relevant tables in EPA’s Template 3: Methods and Data Documentation, and discuss them with the NIC for prioritization in the overall inventory improvement plan (Template 7: National Inventory Improvement Plan).