

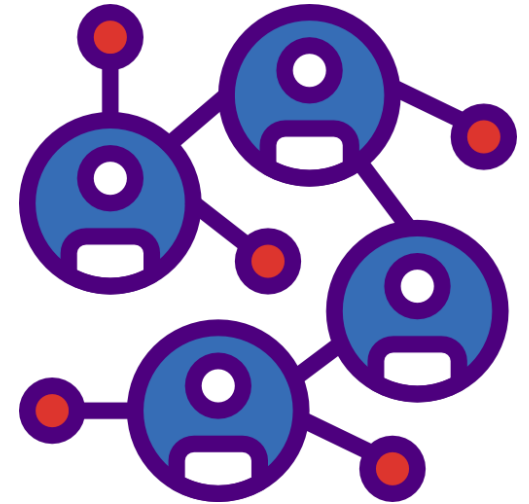
## Session: Institutional arrangements, Capacity building, Data management and coordination.

### **Presentation:**

Presentation: Elaborating and defining the responsibilities and tasks of multiple stakeholders in the Data management and coordination

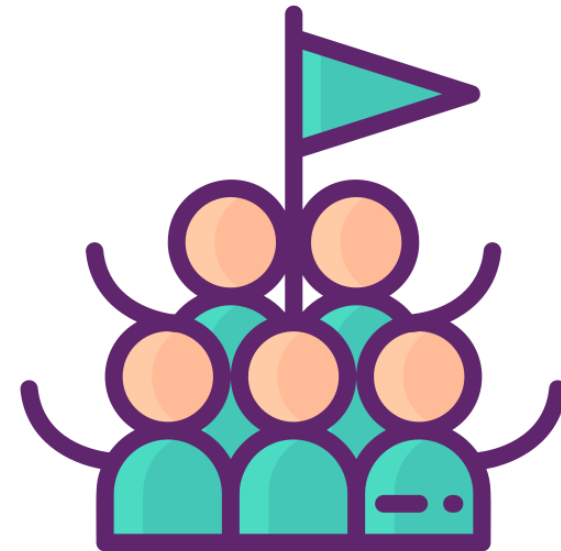
# Roles and responsibilities (1/2)

- There are many actors and stakeholders involved in the inputs, processes and results of the inventory.
- In some countries, a single organization can play more than one role.
- Understanding the interests, contributions and involvement of these actors and stakeholders can **help establish a long-term and well-functioning system**.
- Each stakeholder involved in the system may need some type of **terms of reference** to facilitate their participation, which should specify the roles and responsibilities of each party in the system framework and the timeline for carrying out their work.



# Roles and responsibilities (2/2)

- It should be made clear that while work is the responsibility of individuals, **it is the institutions/organizations that are ultimately responsible** and therefore they must ensure that staff are properly trained to ensure ongoing work.
- The process of engaging actors and stakeholders is likely to vary across sectors within the country.
- Developing and maintaining lists of stakeholders, their roles, responsibilities, and interests are fairly common, so it suggests implementing this information in a tabular format.



# Example of metadata to document stakeholders

**TABLE 1.4 (NEW)**  
**EXAMPLES OF METADATA FOR TRACKING GHG INVENTORY STAKEHOLDERS**

1.Name	2.Organisation	3.Contact	4.Mandate	5.Engagement Activities	6.Sector	7.Role

1. **Name:** stakeholders name.
2. **Organisation:** organisation affiliation.
3. **Contact:** contact details.
4. **Mandate:** mandate/terms of reference to contribute to the GHG inventory (if any).
5. **Engagement activities** (Activities that the stakeholder has been regularly involved with e.g. training, workshops, regular meetings attended, data provision etc.).
6. **Sector:** sectors/categories involved with (any particular sector or category involvement).
7. **Role:** type of involvement (e.g. as a data provider, data user, compilation expert, coordinators, data gathering, QA/QC, review, steering committee meetings, training, sectoral workshops, compilation and reporting activities, consultations, and reviews).

Data type	Organisation	Contact	Name	Mandate	Engagement Activities	Sector	Role

# National single entity

- The term is commonly used to refer to the **leading organization with the responsibility of submitting** the official inventory.
- It is often aligned or the same organization as the national focal point to the UNFCCC.
- The entity's role is usually assumed by a ministry with a mandate to administer climate change reports.
- A key role within the entity is to **oversee inventory activities**.
- A designated focal point coordinates the activities needed to ensure that products are prepared with sufficient quality to meet country commitments.
- The entity's role is sometimes delegated by a ministry to a climate change, environmental or statistical agency with the technical capacity to prepare national

# Steering Committee or Working Group

- Countries may find it useful to establish a working group or steering committee to participate in the process of approving inventory developments and estimates.
- This group includes those actors or stakeholders within the inventory approval process.
- The group may consist of actors and stakeholders **representing political decision-makers and data providers**.
- The establishment of a group or committee could provide the national entity with a space to coordinate and communicate inventory activities and ensure independent data provision and analysis.
- Finally, this stakeholder group can also be convened to support the prioritization and implementation of inventory enhancements.

# Inventory Coordinator

- This section should include a description of the inventory coordinating entity, only if this entity is different from the national entity.
- Some types of institutions that could serve as inventory coordinators include:
  - Ministries
  - National institutes or agencies
  - Private companies
  - Universities
  - Other nongovernmental organizations

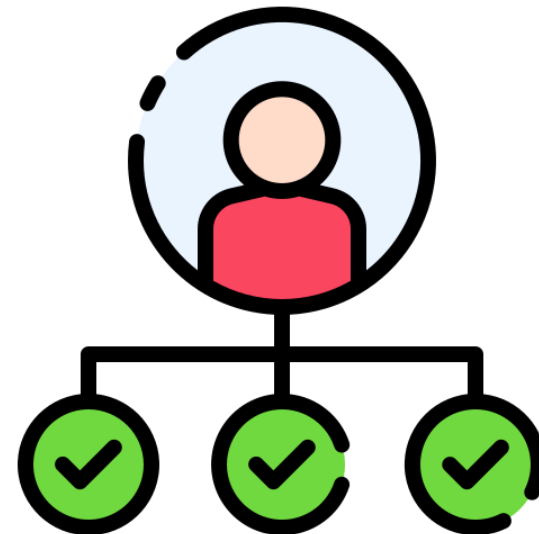


Image: Flaticon.com



# Sectoral technical equipment

- They are those teams that **develop specific sectors or categories** within the inventory.
- These teams are required to understand the requirements for inventory quality, IPCC methods, inventory processes, and national data sets.
- It is advantageous for experts to have a clear understanding of the international reporting and review processes to the UNFCCC that can be developed through participation in peer review activities.
- **Depending on national circumstances**, sectoral technical teams could be in the same national entity or in other organizations, universities, institutes or agencies.

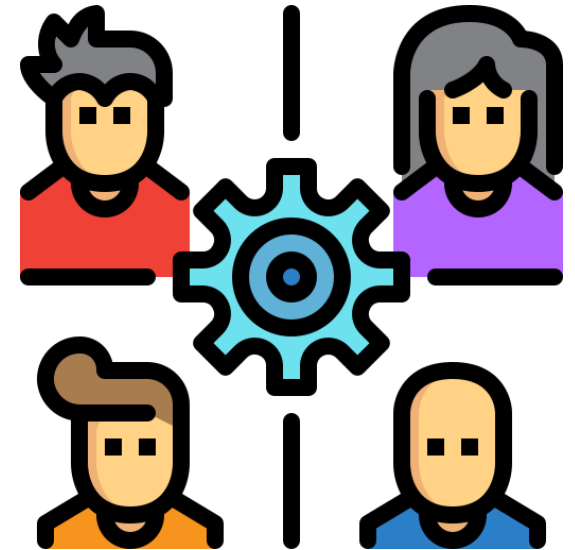


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# Data providers

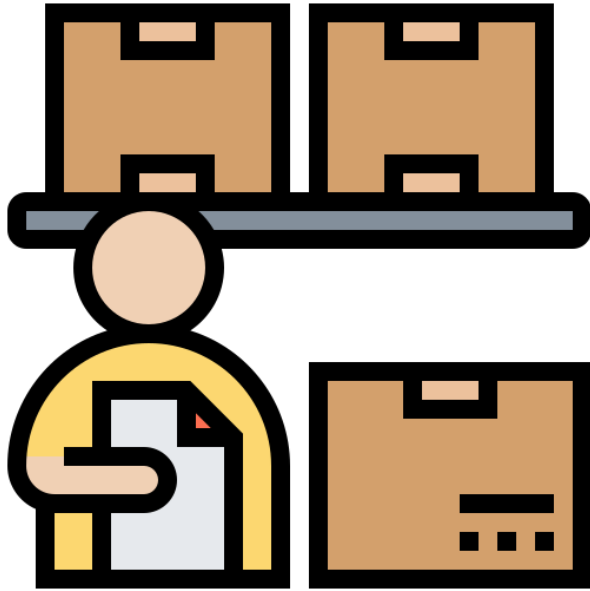


Image: Flaticon.com

- Data providers are all those organizations that **generate and provide data for inventory**, directly or indirectly.
- Their roles and responsibilities must be documented.
- Where possible, formal agreements should be established with them.
- These organizations do not have direct involvement in compiling the inventory, but given their relevance, they are of importance to the system.

# Dataset and its flows

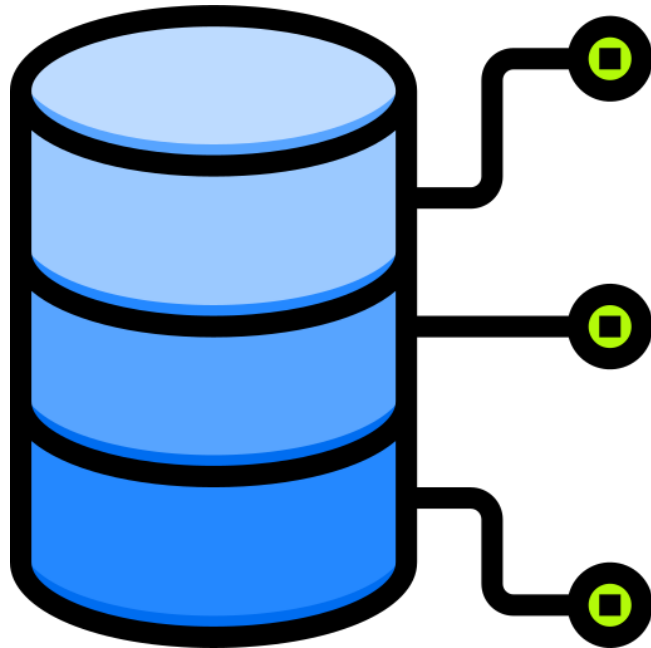
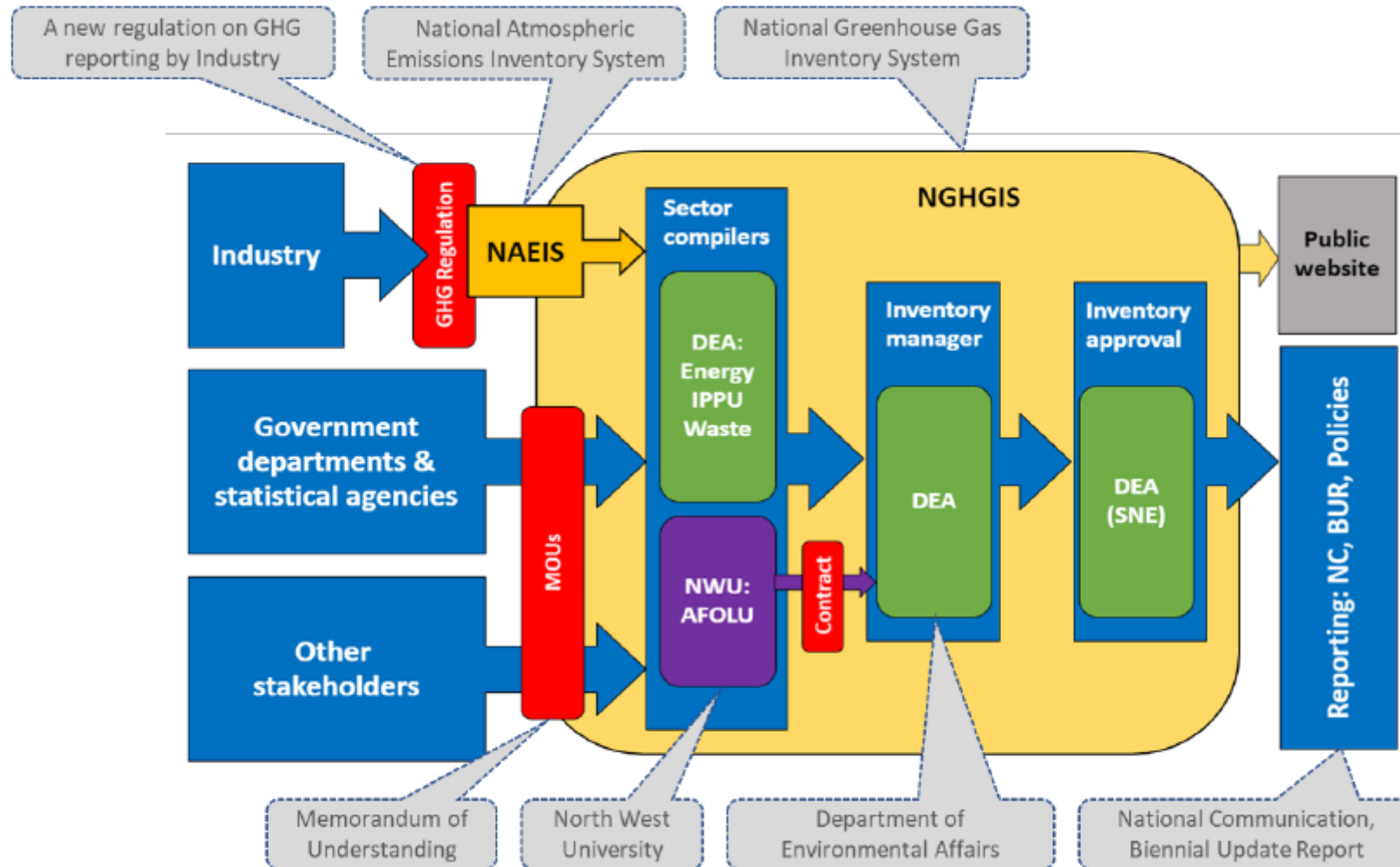


Image: Flaticon.com

- There are numerous datasets for inventory development and many data providers that provide them.
- A [diagram of the data flow](#) from the initial data collection to the final report should be included, in addition to the documents and data providers most important to the inventory compilation process.
- More detailed data flows for specific data sets, sectors or categories can help [document the process, improve transparency and build institutional memory](#).

# Example of South Africa Data Flow Diagram



# Data Collection

## Data sets

- Data sets were collected by different means.
- Some data sets were available in the public domain and some data sets were requested and collected via email.
- No formal arrangement exist between DFFE and data providers.

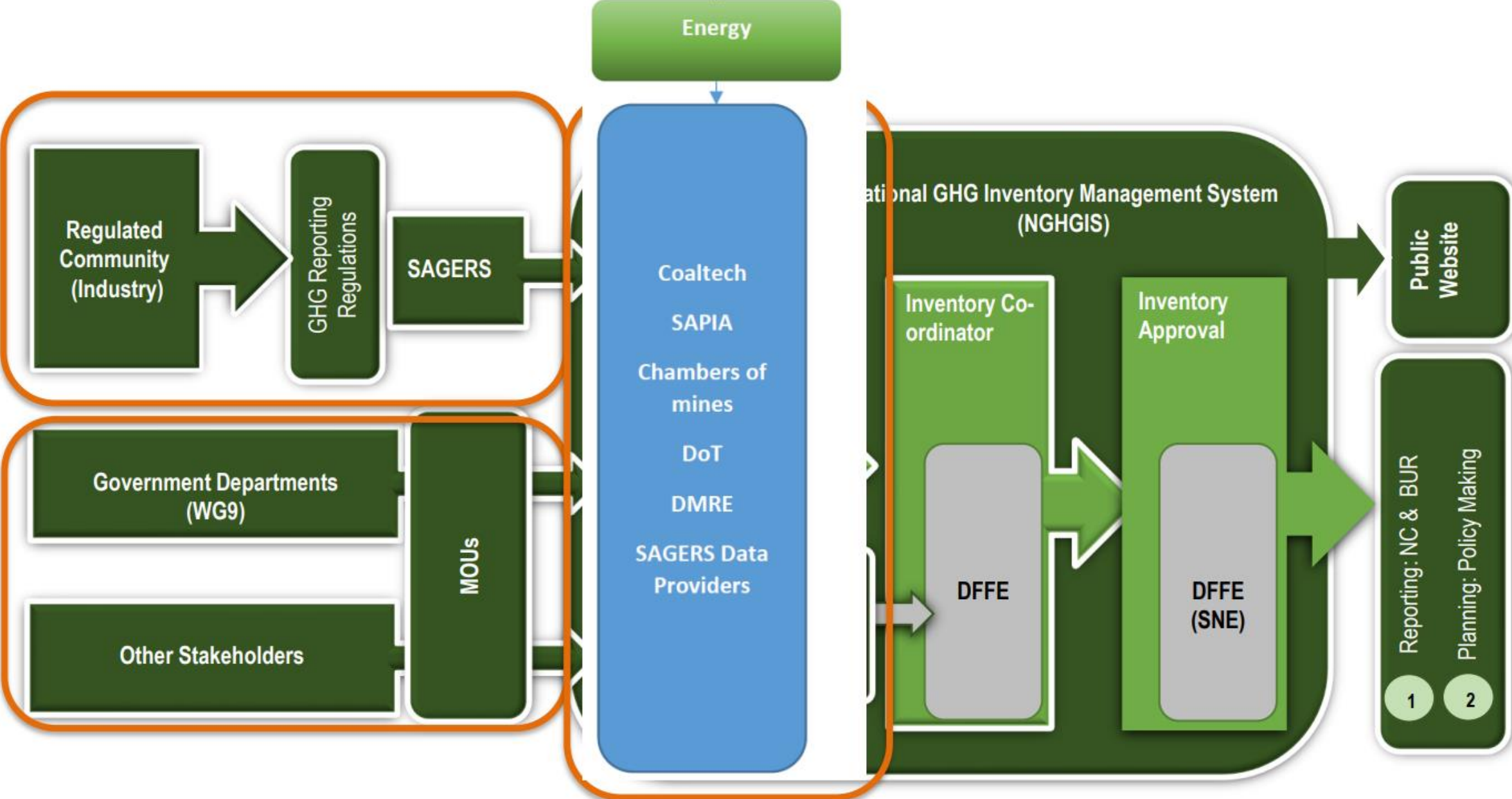
## Data format

- Most data sets were provided as activity data relating to the underlying emission activity (for example kWh saved by energy efficiency measures) however some data sets were provided as tCO<sub>2</sub>e saved by the mitigation action in question.

## Assessment

- The evaluation of the selected climate mitigation actions focused on quantitative assessments, where data sets were available, and also included high-level qualitative assessments of the associated co-benefits (non-greenhouse gas impacts).
- IPCC methods were used to estimate emissions.

# Data Collection and Sources – 2020 Energy Sector Inventory



# Data Collection and Sources – 2020 Energy Sector Inventory

## Fuel Combustion

### GHG Reporting Programme:

- Fuel combustion data
- Tier 3 emissions data

### Other/Studies/Models:

- Fuel Consumption Study
- DMRE Energy Balance

## Fugitive Emissions

### GHG Reporting Programme:

- Production data
- Tier 3 emissions data

### Other/Studies/Models:

- SAMI
- FAO

## CO<sub>2</sub> transport & storage

NE – Not Estimated

# Energy Sector GHG Inventory Improvement Plan

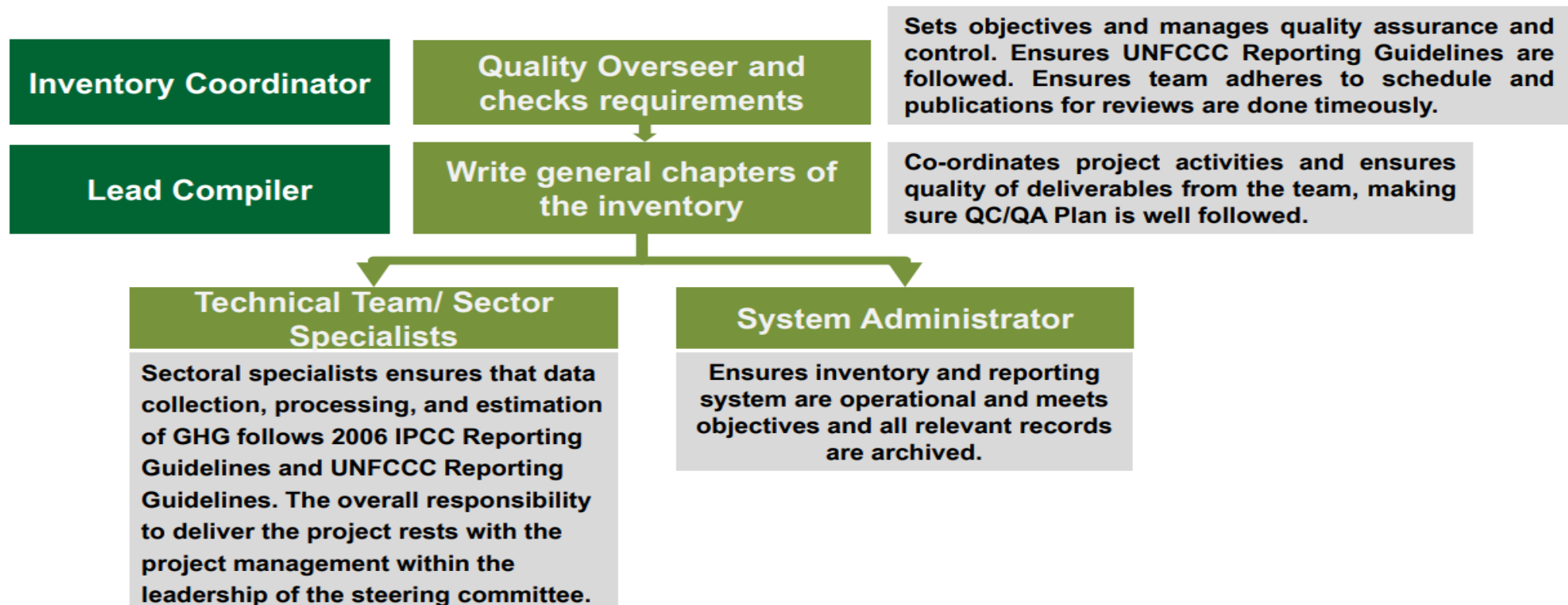
## *Outstanding Tasks*

	PRIORITY	REASON
Fuel combustion data for the further disaggregation of 1A2	Medium	Accuracy
More activity data on non-energy fuel use	Low	Accuracy
Emissions from spontaneous combustion of coal seams	Low	Completeness
CH <sub>4</sub> emissions from abandoned mines	Low	Completeness
Investigation on pipeline transport	Low	Completeness
Investigate ground activities at airports and harbours	Low	Accuracy
Update of the VKT study, including segregation of on-road/off-road	Medium	Accuracy
Segregation of military energy use	Low	Accuracy
Incorporate emissions from biogas	Low	Completeness
CO <sub>2</sub> transport and storage	Low	Completeness



# South Africa: Roles and responsibilities GHGI

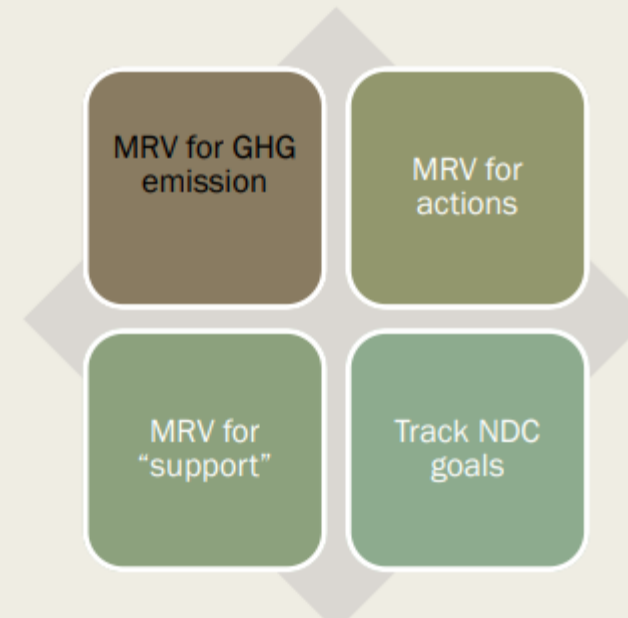
## Inventory Development & Maintenance *Roles & Responsibilities*



# Ghana's Domestic MRVs

National plan to put in place and operate an “integrated national system” for:

- ✓ Continuous data measurements & collection on
  - GHG emissions (in place)
  - mitigation actions (new)
  - climate support (new)
  - track progress of NDC targets (new)
- ✓ Preparation & compilation
- ✓ Domestic disclosure and international reporting
- ✓ Technical and “policy” review (verifications)



# Agreements with data providers

- A **data provision agreement** defines what data, from whom, to whom and when will be provided for inventory compilation. Ideally, it is organized between the national entity and the data providers.
- An agreement can be **beneficial for both the inventory compilers and the data providers themselves**, ensuring data provision in the future.
- An agreement can help data provider organizations by **establishing a formal recognition** that can promote allocation resources within the same organization to deliver high-quality data on time.
- There are many formats of agreements. Where national laws exist for the provision of data, they may be referred to. Where data provision is less formal, agreements may act as an informal agreement between the parties.

## **Government structure relevant to MRV**

- Overall government structure (brief overview), preferably with a figure or chart
- Roles and responsibilities for climate change issues within the government, e.g. responsibilities for the definition and/or implementation of climate change-related strategies and policies.
- Approaches for cooperation of the government institutions related to climate change

## Domestic MRV arrangements for compilation and submission of National Communications and BURs on a continuous basis

- Description of domestic MRV arrangements, including roles, responsibilities and processes for the overall coordination, compilation and submission of National Communications and BURs on a continuous basis (Details related to the **GHG inventory, MRV of mitigation actions and MRV of support received**)
- Recent and proposed changes to the responsibilities and processes
- How the cooperation between institutions involved has been formalized (e.g., memoranda of understanding)
- Whether the above **structures and processes have been set up to work** on a continuous basis and how this is ensured
- A brief description of the **overall quality assurance and quality control processes**
- Documentation and archiving of **data** related to the compilation of **National Communications and BURs**
- Overlaps and interactions between different institutions and MRV processes (e.g., for the GHG inventory, MRV of mitigation actions, MRV of support). For **example, processes where the same institutions are involved in several of the tasks, or whether there is data exchange** and alignment between the GHG inventory and MRV for mitigation actions, etc.
- Plans to further develop and improve the overall MRV system and the institutional arrangements

## MRV system for the national GHG inventory

- Provide a description of procedures and arrangements undertaken to collect and archive data for the preparation of national GHG inventories, as well as efforts to make this a continuous process, including information on the role of the institutions involved.
- **Additional information/best practice:**
- This section *may* also address the following issues:
  - Responsibilities and processes for inventory **coordination, compilation, and submission, including the legal basis for establishing responsibilities**. Please describe where the responsible entities are found in **the government or institutional structure and, furthermore, illustrate the compilation process in detail, preferably with a figure or chart**
  - Recent and proposed changes to responsibilities and processes
  - Responsibilities for inventory sectors (e.g., Ministry of Agriculture for the agriculture sector)
  - How the cooperation between institutions involved has been formalized (e.g., memoranda of understanding)
  - Whether the above structures and processes have been set up to work on a continuous basis and how this is ensured
  - How data confidentiality is ensured
  - A brief description on **the quality assurance quality control system for the GHG inventory**, including the continuous improvement process for the GHG inventory
  - Processes for documentation and archiving of data
  - Compilation process, e.g., how do the responsible institutions work together, whether and which software tools are used for compilation and submission
  - Whether there is exchange with other Parties with regards to the **GHG inventory**
  - **Potential for improvement seen within the structure or developments planned**

# MRV system for mitigation actions

- Responsibilities and processes for the coordination of the development and implementation of mitigation actions, including domestic and internationally supported NAMAs, particularly related to their Measurement, Reporting and Verification
- How the cooperation between institutions involved has been formalized (e.g., memoranda of understanding), including responsibilities (e.g., coordination, reporting) and processes for the MRV of mitigation actions
- Recent and proposed changes for the responsibilities and processes
- The key stakeholders providing information on mitigation actions
- Existing legal requirements or guidance related to mitigation actions and their MRV
- Whether the above structures and processes have been set up to work on a continuous basis and how this is ensured
- How MRV approaches for individual mitigation actions are laid down, e.g., in a MRV plan for a NAMA, and whether there is some form of validation / approval process for MRV approaches
- Whether alignment between MRV of mitigation actions and the national GHG inventory takes place
- Which recent trainings of staff with regards to MRV of mitigation actions/NAMAs have taken place
- Whether there is exchange with other Parties with regards to MRV of mitigation actions
- The barriers and lessons learned on the institutional structures for MRV of mitigation actions

## MRV of support needed and support received

- Responsibilities (e.g., coordination, reporting) and processes for the MRV of support needed including of those involved in the GHG inventory, MRV of mitigation actions and MRV of support received and links to national budget processes
- Responsibilities and processes for the MRV of support received and any changes to these since the last BUR and/or NC report
- How support flow is ensured or double counting of activities from different donors is prevented
- Relevant definitions related to support received and support needed
- Whether the above indicated structures and processes have been set up to work on a continuous basis and how this is ensured
- How the cooperation between institutions involved has been formalized (e.g., memoranda of understanding)
- The key stakeholders providing information on support needed and support received
- Description of the process to determine which support is needed
- How support received is coordinated to ensure that support flows or activities from different donors complement each other



## **MRV of support needed and support received... continued**

- Whether a climate public expenditure and institutional review (CPEIR) or related studies were carried out and what findings with relevance for the MRV of support received were obtained
- Scope of support received that is currently covered by national MRV processes and that is included in the BUR (e.g., international public flows) and plans for increasing this scope in the future (e.g., including national public flows, international private flows)
- Existing legal requirements or guidance related to MRV of support received
- How continuity in the MRV of support received is ensured
- Which recent trainings of staff with regards to MRV of support received have taken place
- Whether there is exchange with other Parties with regards to MRV of support received
- Description on how the needs for technology and on technology support received relate to the needs identified in the respective Technology Needs Assessment of the country