

## MENA Regional Webinar Series on QA/QC, Inventory Work Plans, and Data Management

# Institutional arrangement for national inventory systems (NIS)

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30 April, 2025



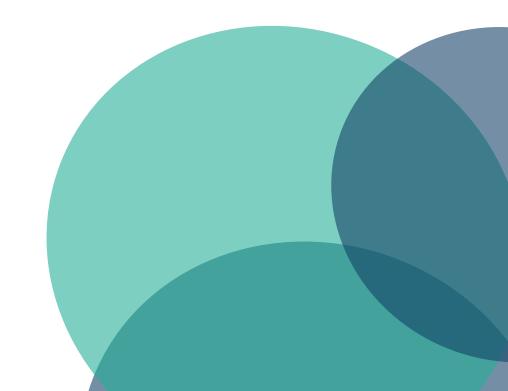


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## What are Institutional Arrangements?



- Institutional arrangements are the policies, systems, and processes that organizations use to legislate, plan, and manage their activities efficiently
- Institutional arrangements also help in coordinating institutions to coordinate with others to fulfil their mandate effectively.
- There is no one-size-fits-all model for institutional arrangements.
- Need to be designed and tailored based on national circumstances.

## **Background**

#### From the existing MRV arrangements to the ETF



## Relevant provisions in the MPGs- GHG Inventory Chapter (I)

Each chapter of the BTR needs to report in a section on national circumstances and institutional arrangements

Chapter II. National inventory report of anthropogenic emissions by sources and removals by sinks of GHG

- Each Party <u>should</u> implement and maintain national inventory arrangements.... national inventory arrangements can vary by Party depending on their national circumstances and change over time.
- Each Party <u>shall</u> report on the following functions related to inventory planning, preparation and management:

(a) Its national entity or national focal point with overall responsibility;

(b) Its inventory preparation process, including division of specific responsibilities of institutions;

(c) Its archiving of all information for the reported time series, all documentation, including QA/QC,

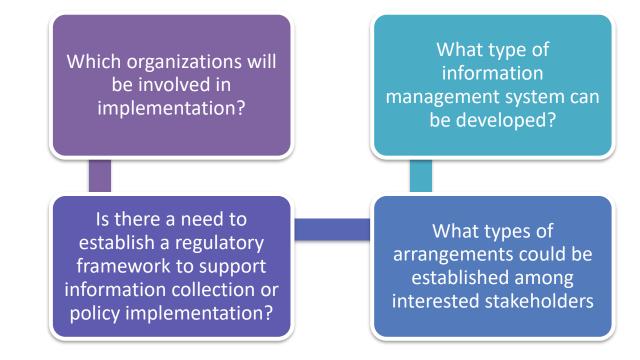
(d) Its processes for the official consideration and approval of the inventory.



#### Guidance from the MPGs



When establishing institutional arrangements, Parties will need to ask themselves fundamental questions about how they will implement the Paris Agreement.





## Why do we need a Strong institutional arrangements?

Strong institutional arrangements are vital to enabling countries to provide a <u>reliable</u>, <u>consistent and continuous</u> flow of data and information



Enhanced reporting requirements are met Quality of reports is continuously improved



National decision makers are informed on the progress on climate action and level of climate ambition



Decision makers are equipped with the evidence they need to choose the right course of action and secure investments



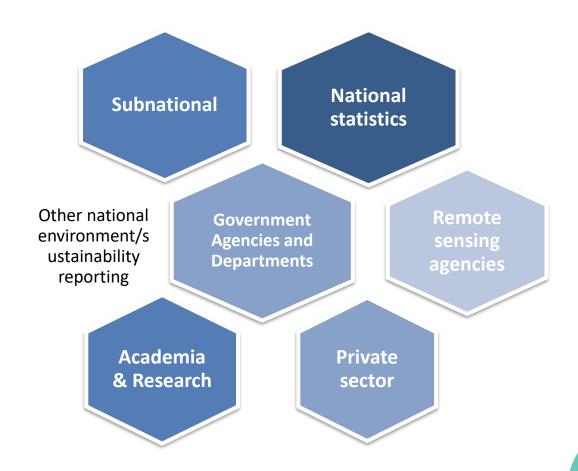


Strong institutional arrangements



#### Why we need Institutional arrangements?

Institutional arrangements include the interactions between all organizations that are involved with the GHG inventory inputs, compilation processes, and outputs. .





## Step-by-step guide to setting up and adapting IA

#### Phase 1: Scoping

- Clarify the scope and objectives
- Form a picture of the existing national system elements

#### Phase 2: Identifying key stakeholders, organizational mandates

- Find a champion
- Establish high-level coordination
- Map the proposed arrangements

#### Phase 3: Developing systems, processes, agreements to maintain data flows

- Develop an implementation plan
- Develop the legal framework
- Put in place structures for long-term success

#### Phase 4: Reviewing and improving

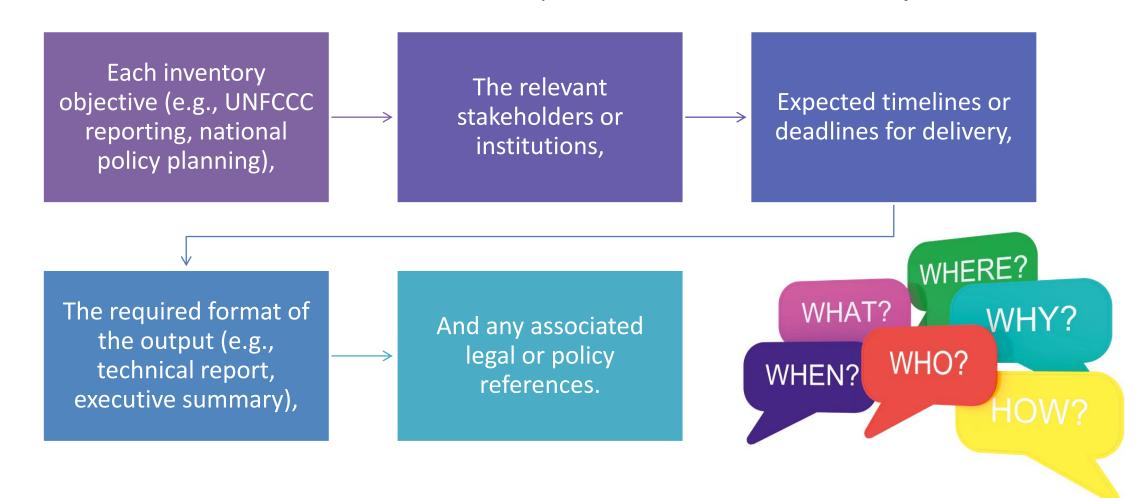
Allow for the evolution of arrangements, systems and processes



#### **Establishing objectives**

Defining the objectives of the inventory could help to identify what inputs, capacities and outputs are required by stakeholders, as well as roles and responsibilities, scope of work and timelines of the inventory cycle.

• Include information in a tabular format that compiles basic information of each objective



# UK GHG inventory objectives

Objective	Gases	Sectors and categories	Geographical resolution	Temporal resolution of estimates	Time series span	Reporting frequency	Reporting formats
UNFCCC: Annual Reporting	CO2, CH4, N2O, Fluorinated gases, Precursors (SO2, NOx, CO, NMVOC)  CO2, CH4, N2O, Fluorinated gas	Energy, IPPU, AFOLU, Waste	UK + Overseas Territories	Annual estimates	Yearly values from 1990 until two years prior to current calendar year	Annual	NIR and CRF
National Statistics Environmental Accounts							Environmental Accounts
EU Monitoring Mechanism Regulation			Regulated installations within mainland UK				NIR and CRF
National Carbon Budgets			UK				Carbon budget
UNFCCC: Biennial Report			UK + Overseas Territories			Biennial	CRF: Summary Table 2
UNFCCC: National Communication						Every four year	
UNFCCC: Nationally Determined Contributions						5 years	CRF: Summary Table 2

#### Structuring of arrangements

Illustrative example of GHG inventory institutional arrangements structuring

#### **Steering Committee**

GHG inventory users and data providers engaged in steering the GHG inventory work programme

- The system structure diagram can help to understand and formalize the roles and responsibilities of the institutions involved.
- A diagram can provide an overview of the structure that is easy for the reader to understand.

#### **Single National Entity (SNE):**

Government Ministry or agency responsible for the work programme, outputs and reporting

#### Management/coordination:

Compiling reporting material, managing workplans and supporting data gathering and compilation experts. Management of general QA/QC and improvement function.

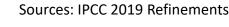
# Compilation (sector) experts: Energy, IPPU, Agriculture, Forestry and Other Land Use and Waste).

Note: Sub-divide into separate boxes if expertise is in different organisations/institutions

#### **Data Providers:**

A summary of the data providers and the datasets.

Reference the detailed list of data providers.



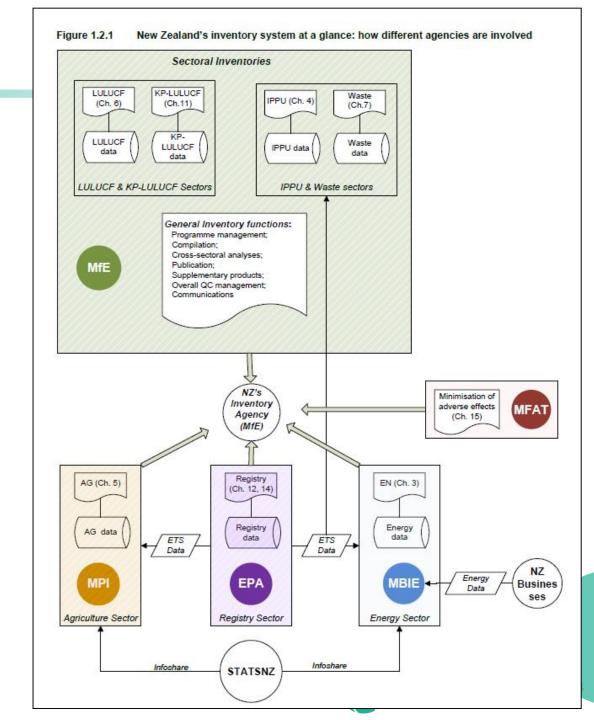
#### Structures of national systems

In general, national systems require:

- □ Coordinating organization
- **□** Implementing organizations

Systems can be structured in a variety of ways:

- ☐ Centralized / decentralized / mixed
- ☐ Internalized / outsourced
- ☐ Single entity / multiple entities
- ☐ Integrated / separate



Ö Greenhouse Wellington: Ministry for the Environment the nventory 1990-2021

#### Structures of national systems

# Institutional Arrangements - Example Ghana

(Climate Change Unit, EPA - UNFCCC Focal Point) Inventory Compiler (Climate Change Unit, EPA) Lead, Uncertainty Management Lead, QA/QC Lead, Documentation & Archiving (Dept. of Statistics, University of Ghana) (Environmental Data and Information Dept. EPA (Dept. of Mathematics, KNUST) Waste Sector team **Energy Sector team** IPPU Sector team AFOLU Sector team Lead, Energy Sector Lead, IPPU Sector Lead. Waste Sector Lead, Land Built Environment Dept. MID, EPA REDD+ Secretariat, FC Energy Commission Mobile Combustion Mineral, Metal Solid Waste Disposal Lead, Agriculture **Environmental Quality** Industry CSD. Ministry of Agric Built Environment. Dept., EPA Climate Change Unit, Dept., EPA **EPA** Stationery Wastewater Member, Land ODS, HFC Combustion, Energy Manufacturing Industry RMSC, FC Commission Consumption Dept, EPA Incineration and Open Ozone Unit, EPA Member, Land Fugitive Emission, FRNR, KNUST Petroliuem Dept., EPA Built Environment, Dept. Others MID, EPA Member, Livestock **Biological Treatment of** Mobile combustion, Animal Research Soild waste Ministry of Transport Zoomlion Ghana Limited Electricity Cross-cutting issues, Member, Aggregated Generation. Climate Change Unit., Sources, UN-INRA Volta River Authority Member, Land CERSGIS, Legon Data Exchange Member, Land FORIG, SNV Data Exchange Data Exchange Data Exchange Public (Ghana Statistical Service), Private data owners or providers and international data sources (FAO, IEA, UN-STAT, OECD, World Bank, UNIDO, WRI & UNFCC)

Inventory Approval and Submission

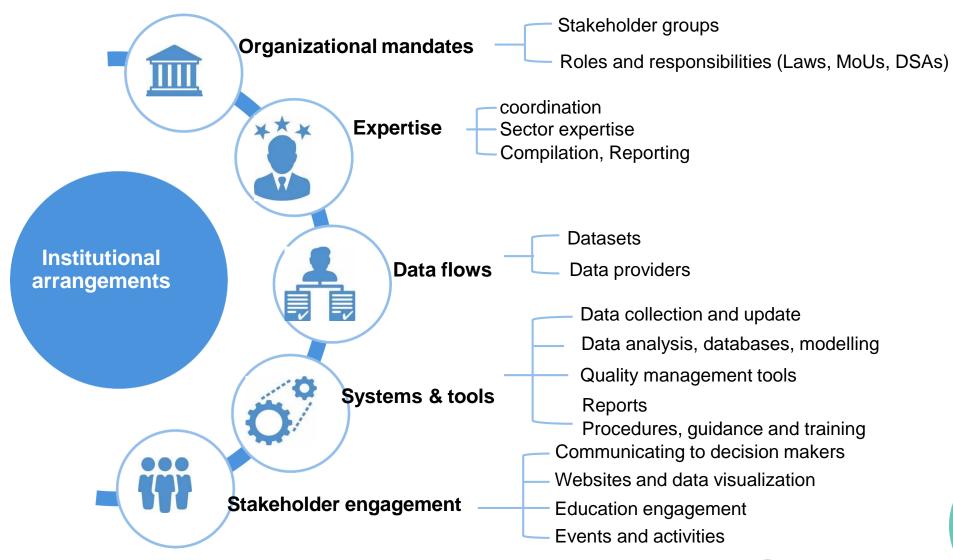
MESTI (Minister)

National Designated GHG Inventory Entity (Environmental Protection Agency – Executive Director)

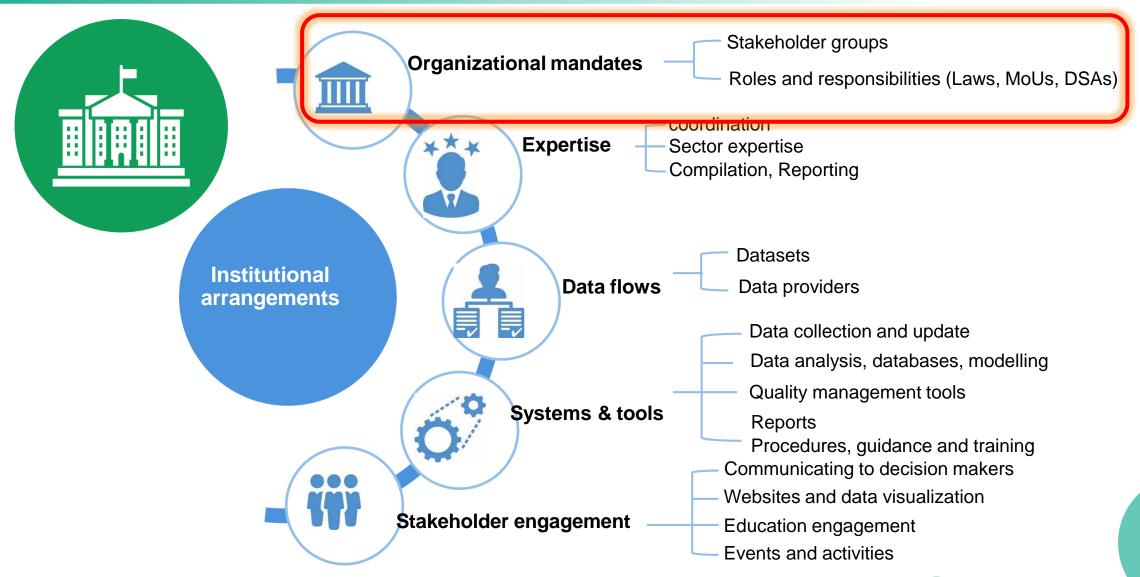
Inventory Coordinator

Source: Ghana's Fifth National Greenhouse Gas Inventory 2021 National Greenhouse Gas Emissions Report May

#### Key Components of Institutional Arrangements



#### 1. Organizational mandates



## Roles and Responsibilities in the GHG Inventory System

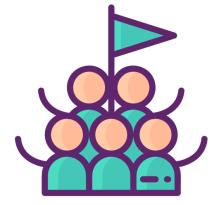


Image: Flaticon.com

## Multiple Actors Involved

Many stakeholders providing inputs, processing data, and using results.

single organization may perform multiple roles

## Importance of Clear Roles

Understanding stakeholder interests, contributions, and level of involvement

Clear **ToR** are needed to define roles, responsibilities, and timelines for each entity.

# Institutional Responsibility

While specific individuals carry out tasks, institutions remain accountable.

Institutions must ensure trained staff and continuity of work.

# Sector-Specific Approaches

The process for engaging actors and assigning responsibilities may differ by sector.

# Tracking Stakeholders: stakeholder table

Organizations, Roles and responsibilities, Points of contact

Legal mandates or agreements, Timelines and outputs

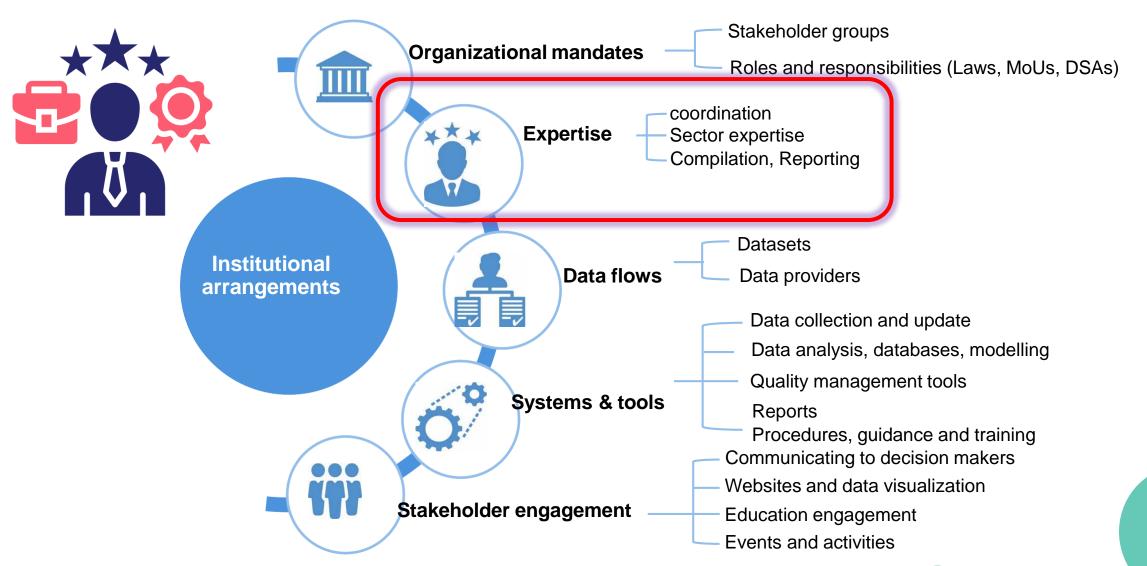


#### Example of metadata for tracking GHG inventory stakeholders

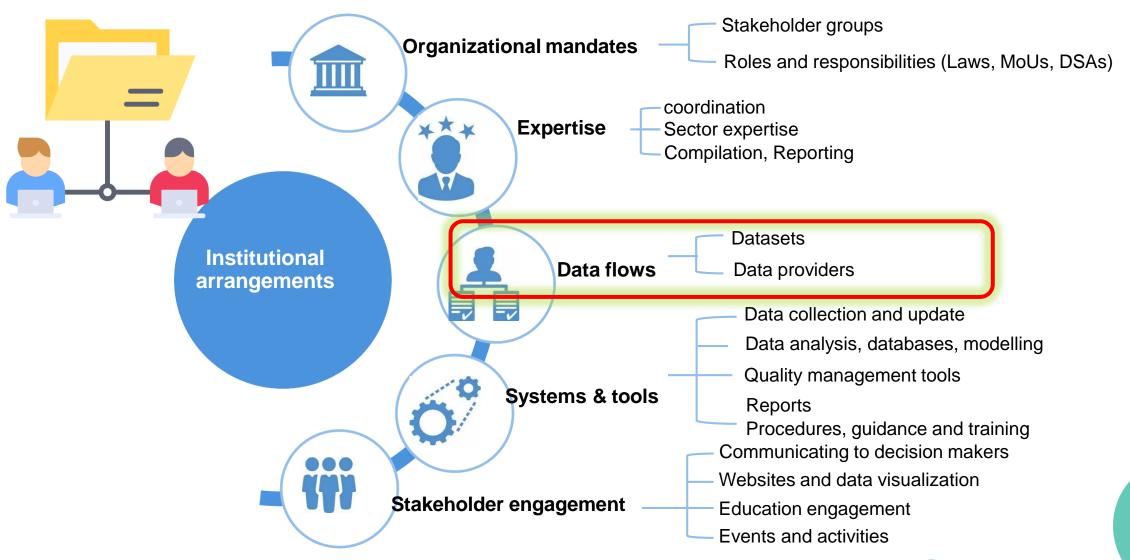
2. Organization 7. Role 1. Name 3. Contact 4. Mandate 5. Engagement 6. Sector activities 1. Name: stakeholders name. 2. Organisation: organisation affiliation. 3. Contact: contact details.

- 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.

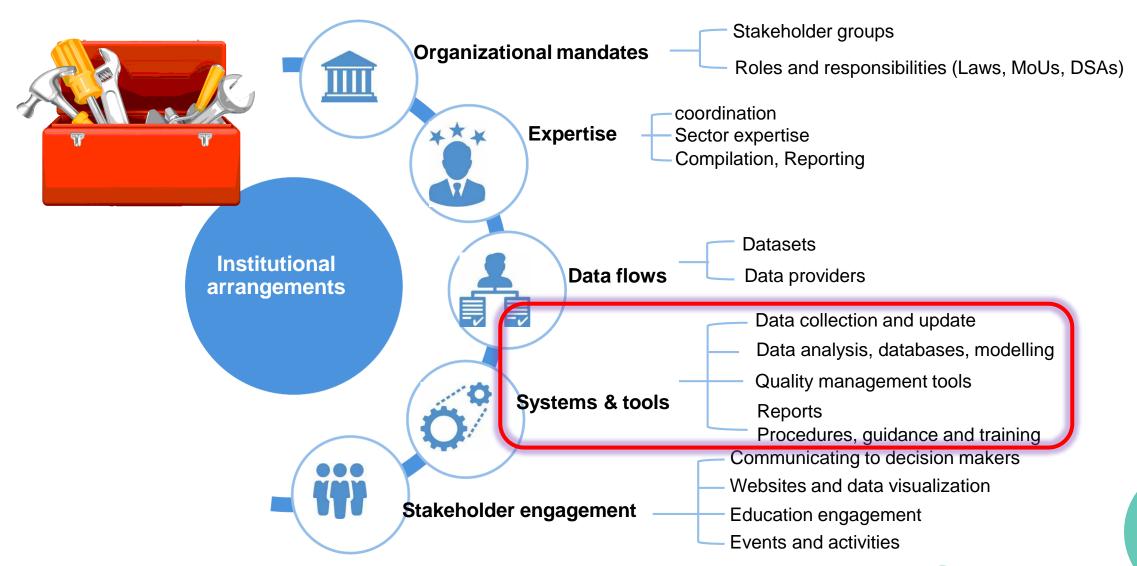
## 2. Expertise



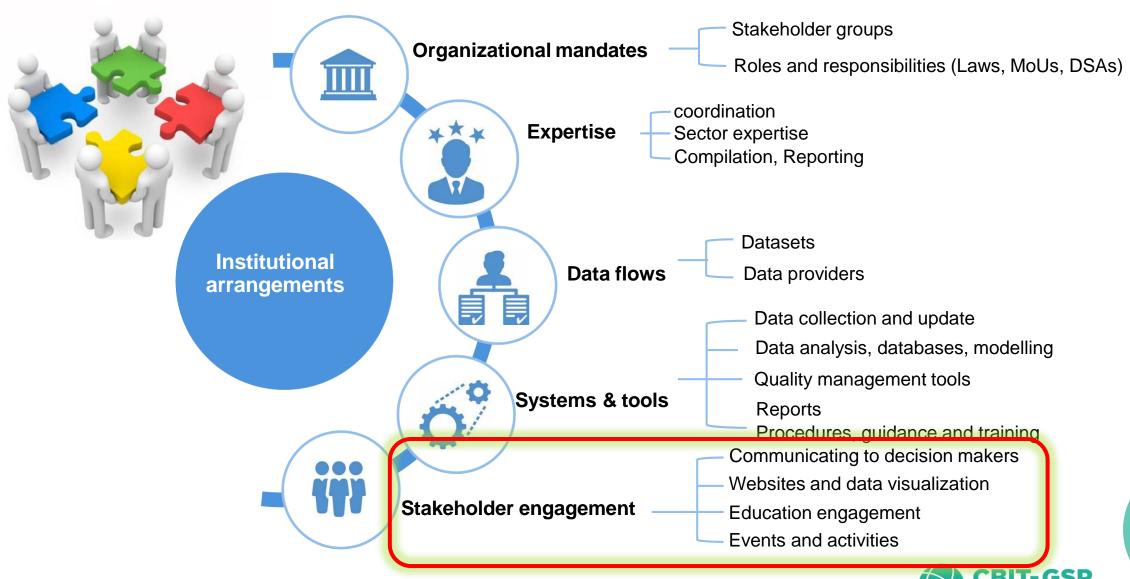
#### 3. Data flows



#### 4. Systems & tools



#### 5. Stakeholder engagement



#### Benefits of strong institutional arrangements at the National level



Timely and sustainable international reporting



Informing policies, plans, strategies and programs



Political buy-in



Improved access to support



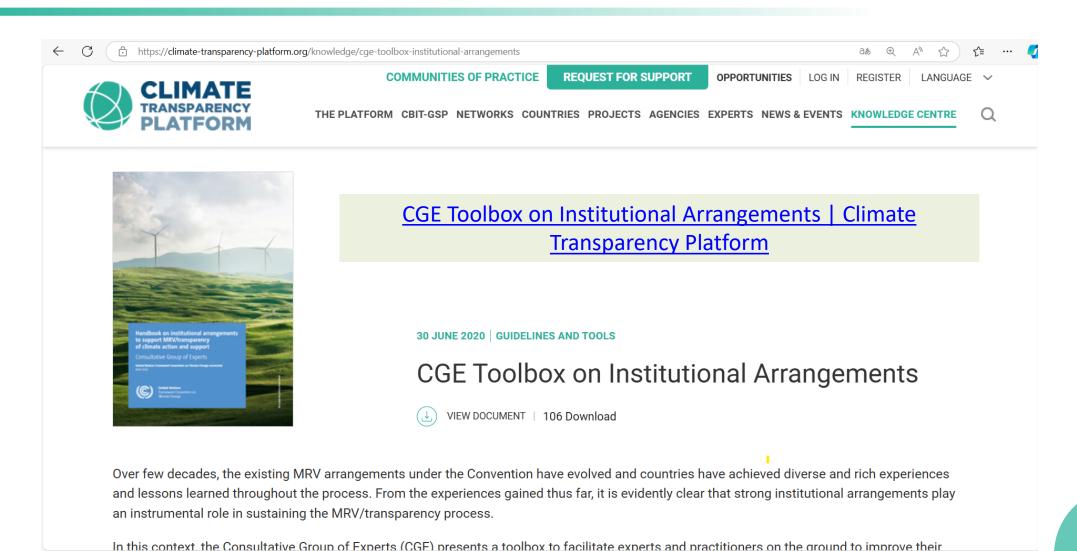
Increased awareness and engagement



National capacity-building and expertise



#### **CGE Toolbox on Institutional Arrangements**







# Thank you for your attention

# Please reach out to us for any question, comments or suggestions!



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