

Climate change statistics and relation to policies

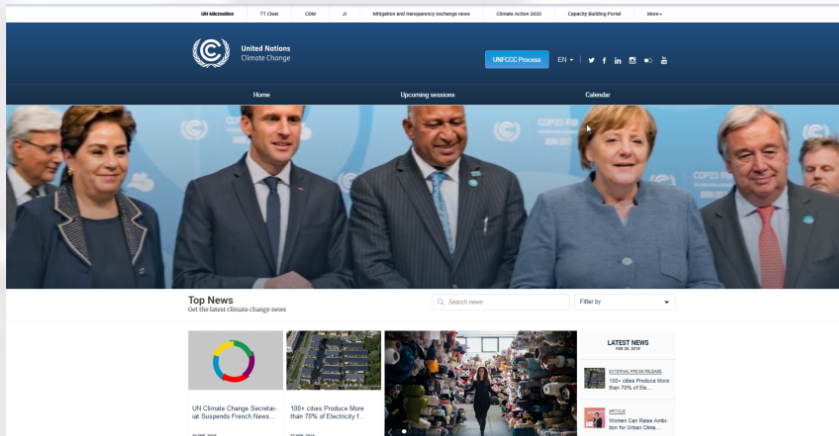
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Workshop on Environment Statistics and Climate Change Statistics for the CARICOM Region, Nov. 2019



UNFCCC

- UNFCCC - United Nations Framework Convention on Climate Change, 1992
- Kyoto Protocol, 1997 & Doha Amendment, 2014
- Paris Agreement, 2015



"We are in deep trouble with climate change, as it is running faster than we are and we must catch up sooner rather than later before it is too late."
Dec. 2018 (COP24)

"It is absolutely essential that countries commit themselves to increase what was promised in Paris because what was promised in Paris is not enough"
UN Secretary General, Antonio Guterres, Aug. 2019



Mandates

- Intergovernmental negotiations
- Constituted bodies
- Technical expertise
- Analysis of info & data
- Transparency - reporting, review and multilateral consideration
 - Inventories of GHG emissions
 - Biennial Transparency Reports
- Nationally Determined Contributions (NDCs)
- Adaptation Communications



UNFCCC Topics

Action on Climate and SDGs

Adaptation and resilience

Capacity-building

Climate Finance

Climate Technology

Education & Youth

Gender

Land Use

Local Communities and Indigenous Peoples Platform

Mitigation

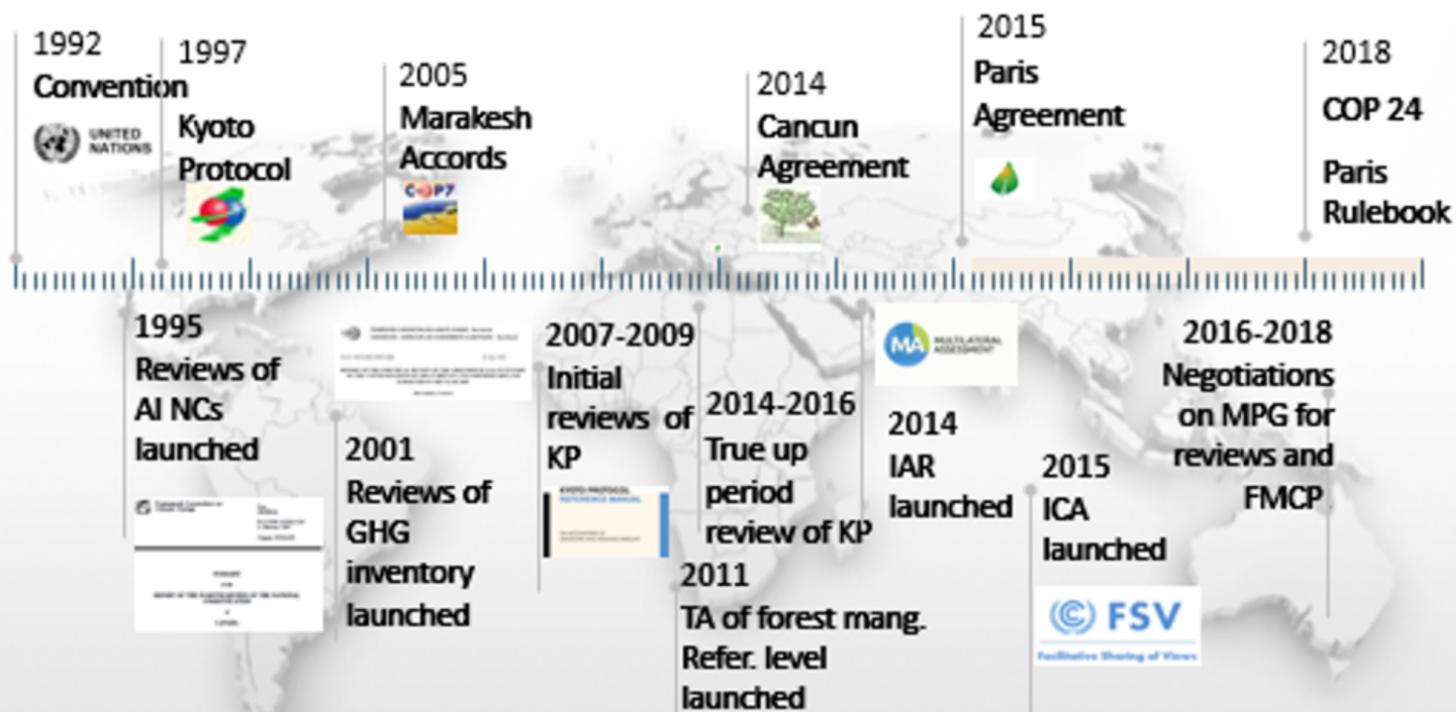
Pre-2020 Ambition and Implementation

Science

Data Interface: https://di.unfccc.int/ghg_profile_non_annex1



Negotiations & Reporting

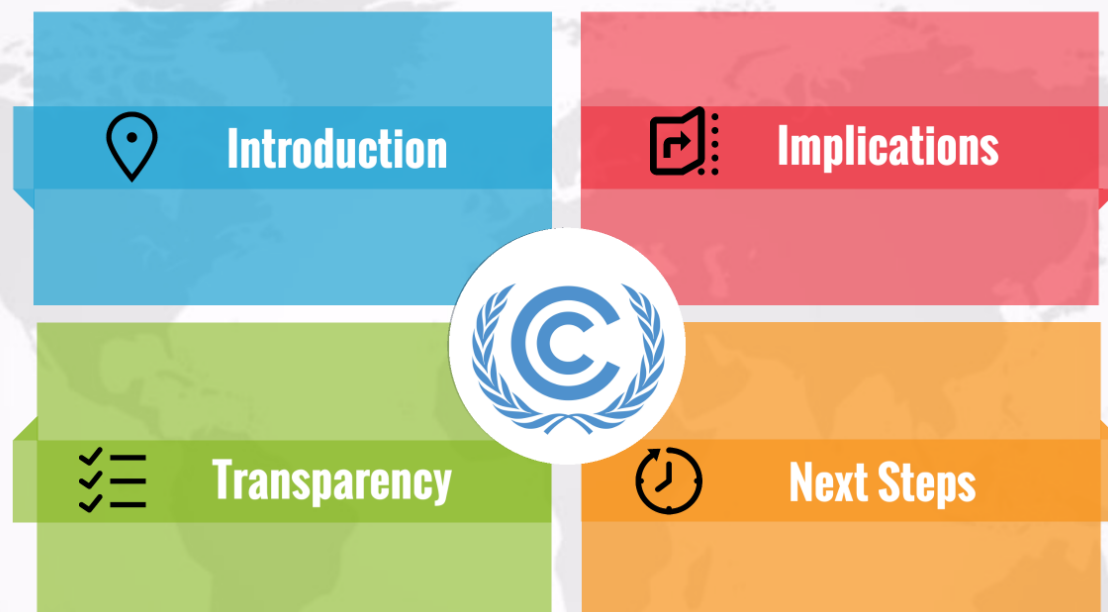




Paris Agreement Work Programme



- **Rulebook for Paris Agreement**
- **Basis** to implement Paris Agreement **consistently**
- All institutions/processes **work efficiently**
- **Balance between topics** (mitigation, adaptation means of implementation, finance, transparency)
- **Differentiation** between countries - **flexibility**
- Path for **implementation & increasing ambition**
- **2019 - scale and speed up climate action** and expect more ambitious NDCs in 2020



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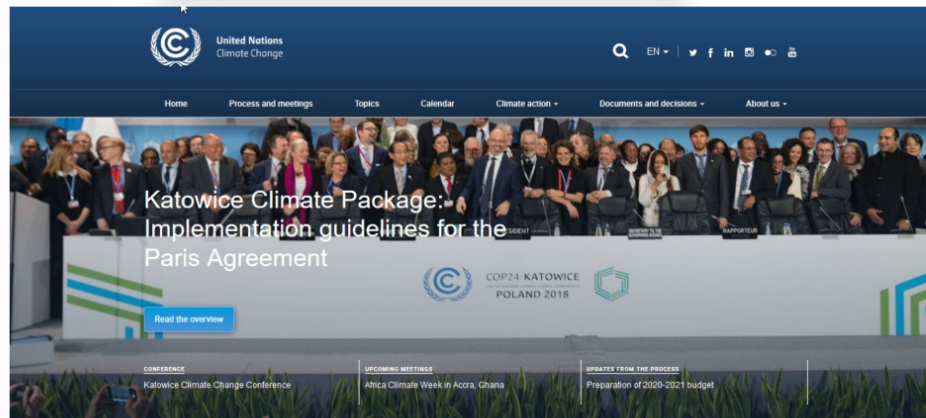
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☑☑☑ Transparency

- **Enhanced Transparency Framework (Art. 13 PA)**

- builds mutual trust & promotes effective implementation
- has built-in flexibility considering Parties' different capacities
- builds upon collective experience of current MRV
- facilitative, non-intrusive, non-punitive



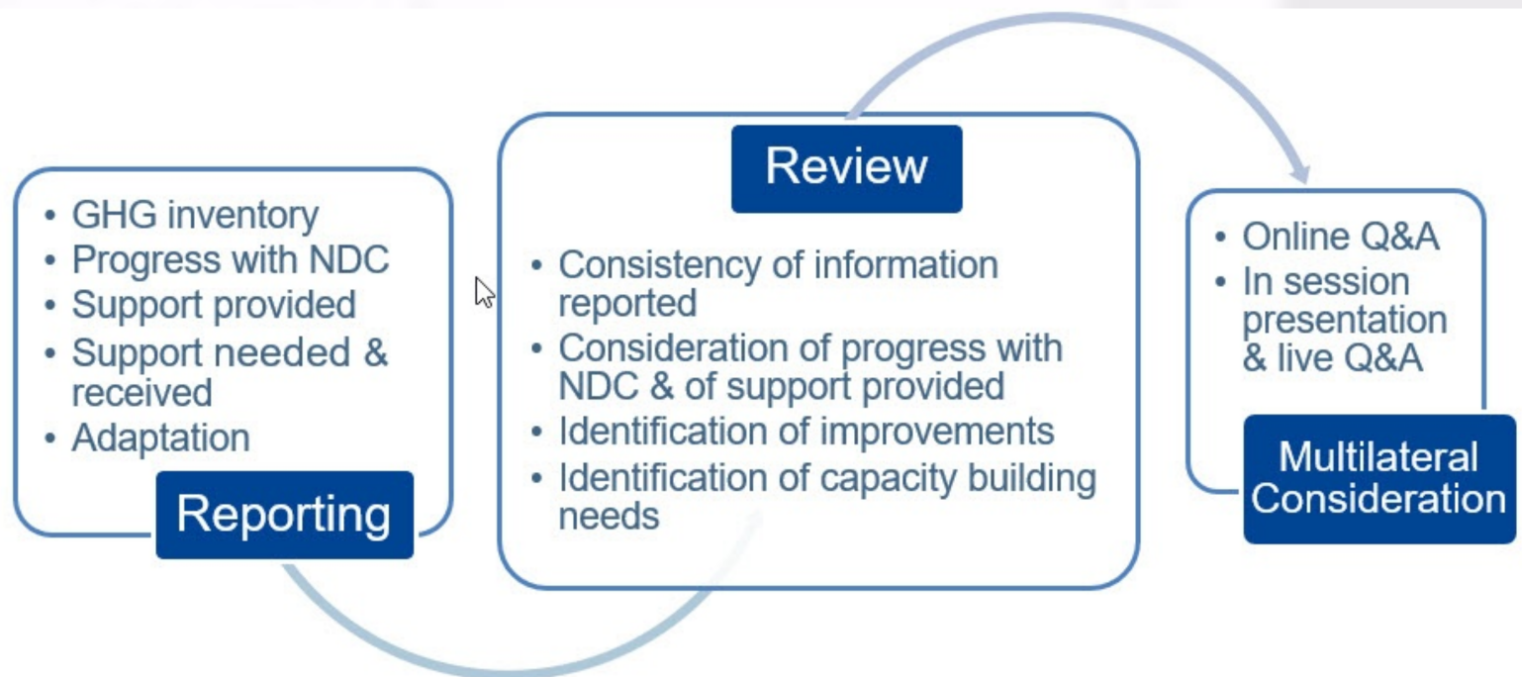
- 1. Transparency of action** - incl. tracking progress of NDCs and adaptation actions
- 2. Transparency of support** - aggregate financial support provided and received

☑☑☑ Transparency

- **Modalities, procedures and guidelines (MPGs) for enhanced transparency framework (ETF) of action and support:** reporting information under Article 13; technical expert review; facilitative multilateral consideration of progress
- **Transitional arrangements,** including dates for final BRs and BURs, first BTRs, and guidance on streamlining the operation of current MRV
- **GEF to support developing countries** in preparing their BTRs, including through the Capacity-building Initiative on Transparency



≡ Transparency



✓✓✓ Global Stocktake

Global Stocktake (Art. 14 of PA) - provides for a periodic evaluation of the implementation of Paris Agreement to assess the collective progress towards achieving long-term goals; to be implemented in a comprehensive and facilitative manner, considering mitigation, adaptation and the means of implementation and support.



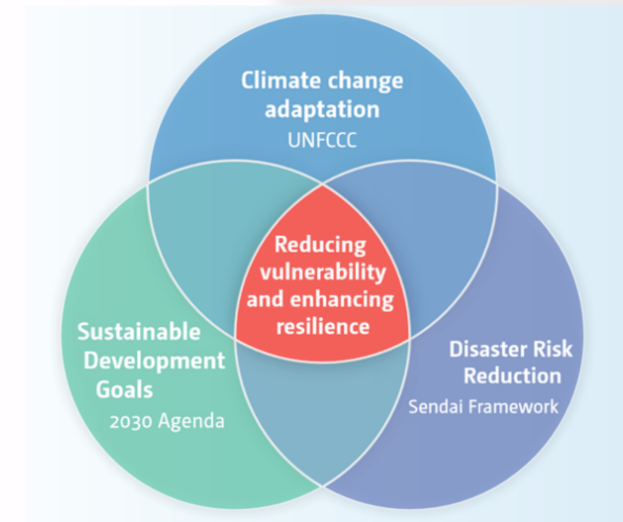
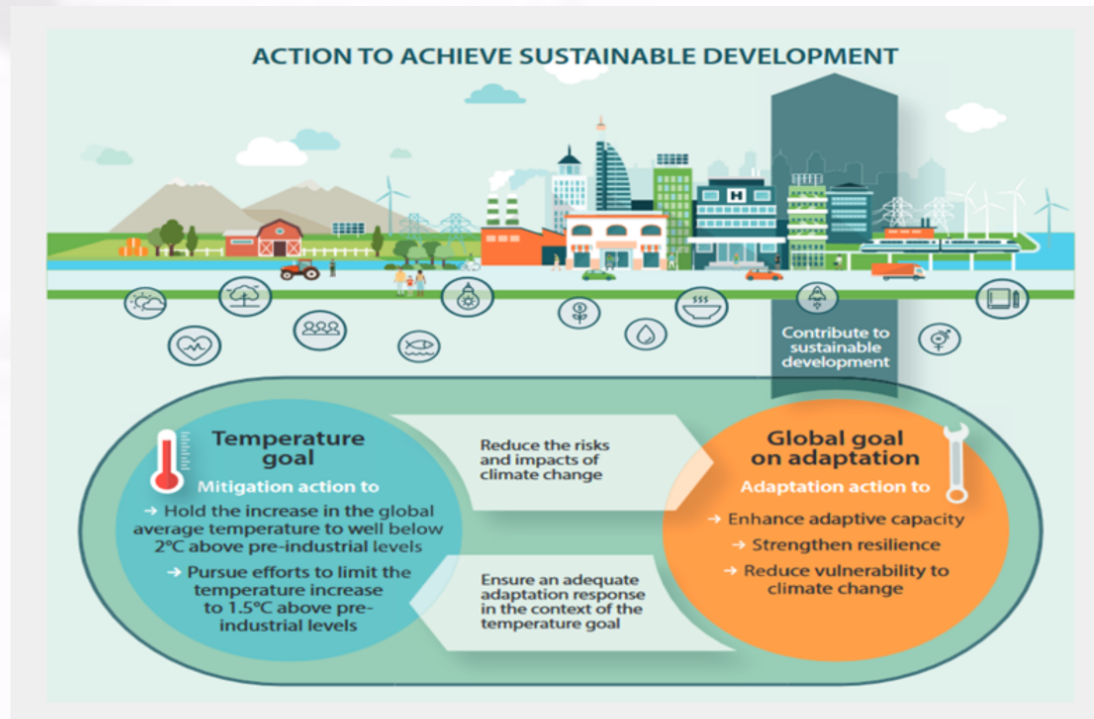
First Global Stocktake - 2023

3 components:

- (a) Information collection and preparation
- (b) Technical assessment, taking stock of the implementation of PA
- (c) Consideration of outputs



Adaptation

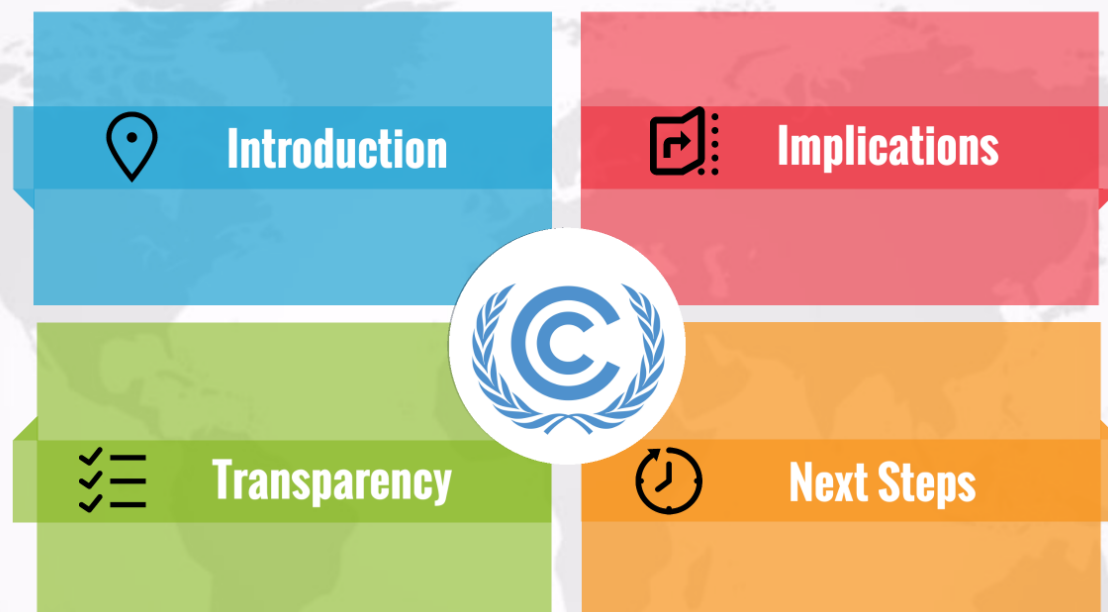


SUSTAINABLE DEVELOPMENT GOAL 13

Take urgent action to combat climate change and its impacts*



UNFCCC is the primary international, intergovernmental forum for negotiating the global response to climate change



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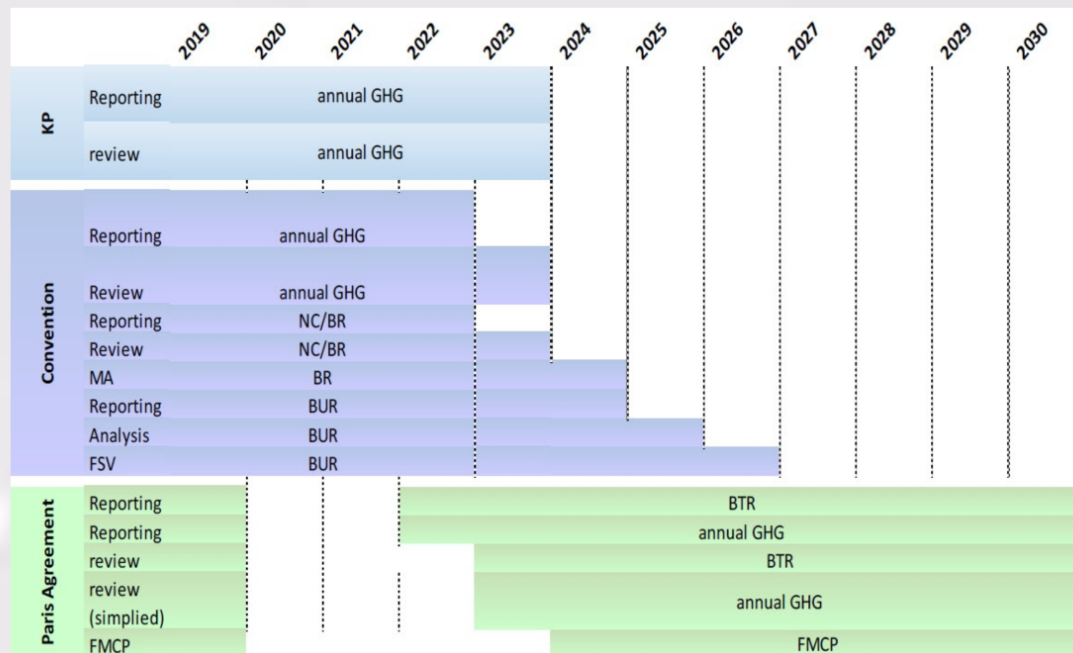
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Reporting and Review

- **Biennial Transparency Reports**
- **National GHG inventory report**
- Info to track progress of **NDC**
- Info on **impacts** and **adaptation**
- Info on financial, technology transfer and capacity-building **support provided and mobilized** by developed countries
- Info on financial, technology transfer and capacity-building **support needed and received** by developing countries
- Technical expert **review**
- Facilitative, **multilateral** consideration of progress





Process and Methodology

All countries shall report on their:

1. **national entity** with overall responsibility for the national GHG inventory
2. **GHG inventory preparation** process, incl. division of responsibilities by institutions to ensure activity data collection, choice of methods and EFs in accordance with IPCC
3. archiving of info for **entire time series**, incl. QA/QC
4. processes for **official consideration/approval**

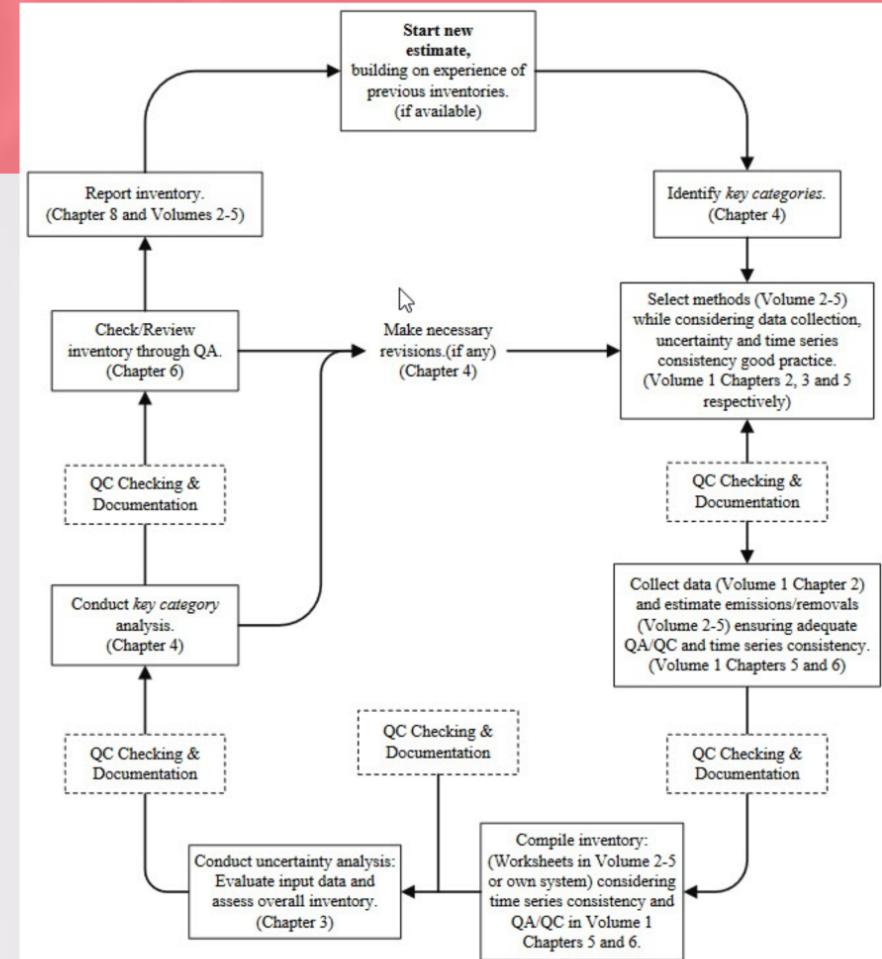
All countries shall or should:

- use the **2006 IPCC Guidelines** & new versions
- use same methods and a **consistent** approach
- use surrogate data, extra/intra-polation, other IPCC techniques to **estimate missing values**
- quantitatively estimate and qualitatively discuss the **uncertainty of data**
- report **seven gases** CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃; developing countries that need flexibility **can report at least first 3 gases** plus any of the others if included in their NDC or previously reported

& other requirements

2006 IPCC Guidelines

- **Anthropogenic emissions** - only include GHG emissions resulted from human activities
- **Territory principle** - include GHG emissions taking place within national territory and offshore areas over which the country has jurisdiction
- **Inventory year and time series** - estimates for the calendar year during which GHG emissions occur
- **Sectors** - Energy; Industrial Processes and Product Use (IPPU); Agriculture, Forestry and Other Land Use (AFOLU); Waste; Other (e.g. indirect emissions)
- **Key principles** - Transparency, Accuracy, Completeness, Consistency, Comparability





Data Collection

- Collection of data - fundamental part of inventory preparation
- IPCC 2006 Guidelines (vol. 1, ch. 2) provides guidance on initiating and maintaining a data collection program, incl. evaluating existing sources and planning measurements & surveys

Table: Summary of most frequently mentioned challenges and needs per category per region and globally

Category		Challenges and needs	Global	AFR	AP	LAC	EE&WEO
GHG Inventory	Data	Need to address data gaps	1	3	1	1	1
	Data	Need to increase qualified technical experts and/or provide training for data management	3	1*	3	2	5
	Meth.	Need to provide technical training on tools	2	1*	2	3	2
Mitigation		Need to establish an adequate policy					

2.2.1 Gathering existing data

Although the list below is not exhaustive, it provides a starting point for possible sources of country specific data:

- National Statistics Agencies
- Sectoral experts, stakeholder organisations
- Other national experts
- IPCC Emission Factor Database
- Other international experts
- International organisations publishing statistics e.g., United Nations, Eurostat or the International Energy Agency, OECD and the IMF (which maintains international activity as well as economic data)
- Reference libraries (National Libraries)
- Scientific and technical articles in environmental books, journals and reports.
- Universities
- Web search for organisations & specialists
- National Inventory Reports from Parties to the United Nations Framework Convention on Climate Change

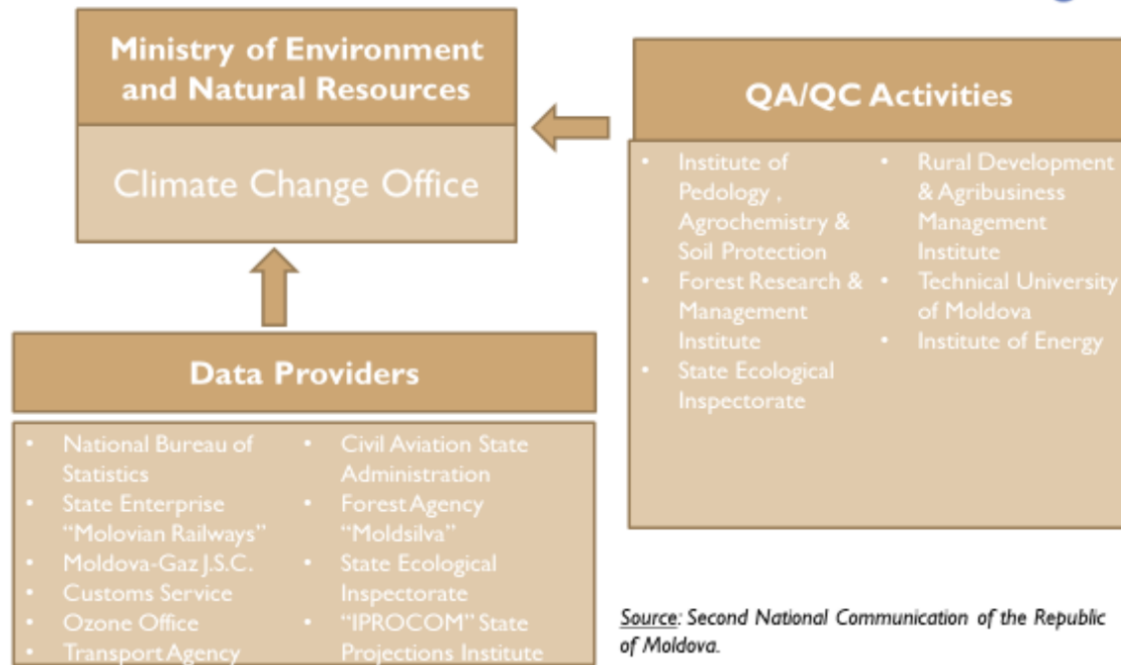
Challenges:

- Institutional capacity, framework and setup
- Timely access to financial resources
- Data availability and access, incl. procedures
- Collection of data but not in the right shape and form
- Limited legal and procedural background

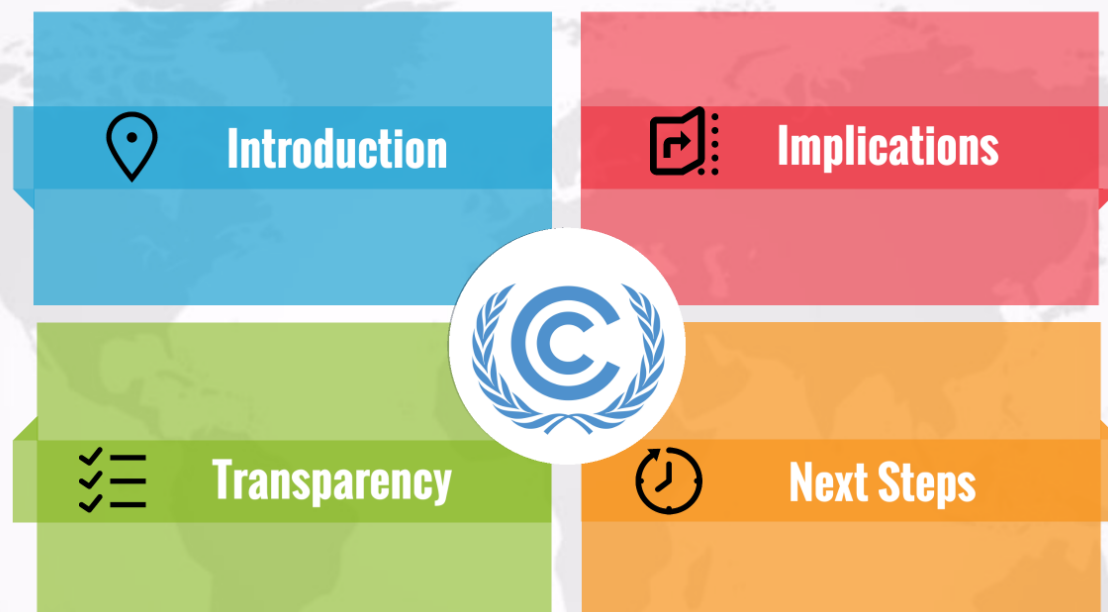


Institutional Arrangements

Model of Institutional Arrangements: MOLDOVA



- **Critical** part of the National System
- Formal or informal **institutional, legal and procedural** arrangements
- **Roles and responsibilities** in preparing the inventory, incl. the **designated agency** and other organizations/experts providing data
- Structure and **confidence** in the inventory process
- Specific to **national circumstances**



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Next Steps



Parties to develop by end 2020 (CMA.3):

- a. Common reporting tables for national GHG inventories
- b. Common tabular format tables for tracking progress towards NDCs
- c. Common tabular format tables for finance (support)
- d. Outlines of BTR, inventory document and technical review report
- e. A training programme for the technical experts

Transitional period & non-PA countries - 2 systems (MRV and ETF) in parallel

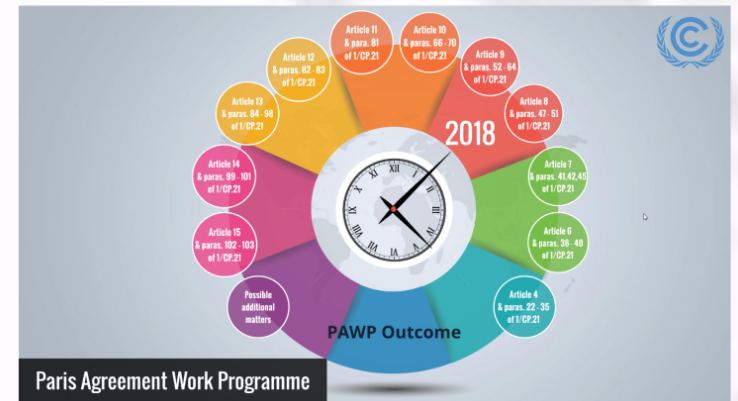
Scale-up work to **support developing countries** in implementing ETF

Transitioning the **IT infrastructure/tools, training programmes** and **guidance** to Parties to operationalize the ETF



Next Steps

- Countries submit a large **amount of data** about all aspects of national activities - **publicly available on UNFCCC website**
- Data needed from **national statistical offices** is complex and require - expertise & resources
- Understand the link between statistics and climate-change data **is key in reporting accurately**
- Enhance cooperation between **national statistical offices & national authorities** reporting climate change
- GHG inventories use official **statistical** data
- Expect an **increase of data reporting/needs**





Next Steps

UNFCCC Project: Strengthen the capacity of developing countries to prepare and manage national GHG inventories for implementing ETF

- Assist developing countries to establish sustainable national GHG inventory management systems and apply the 2006 IPCC guidelines
- **5-day in-country workshops** “Quality Assurance of National GHG Inventory Management System” - sharing of data and analysis of emission estimates
- **7.5 million EUR for 4-years** (2018 -2021) - Swedish ID Agency
- Workshops in collaboration with FAO and UNDP/UNEP
- **Countries volunteered:**
 - **2018:** Ghana, Belize, Namibia, Côte d’Ivoire, Vietnam, Benin, Nigeria, Montenegro
 - **2019:** Serbia, Trinidad and Tobago, Papua New Guinea, South Africa, Philippines, Argentina, Lebanon, Armenia





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