

# Draft Implementation Guidelines

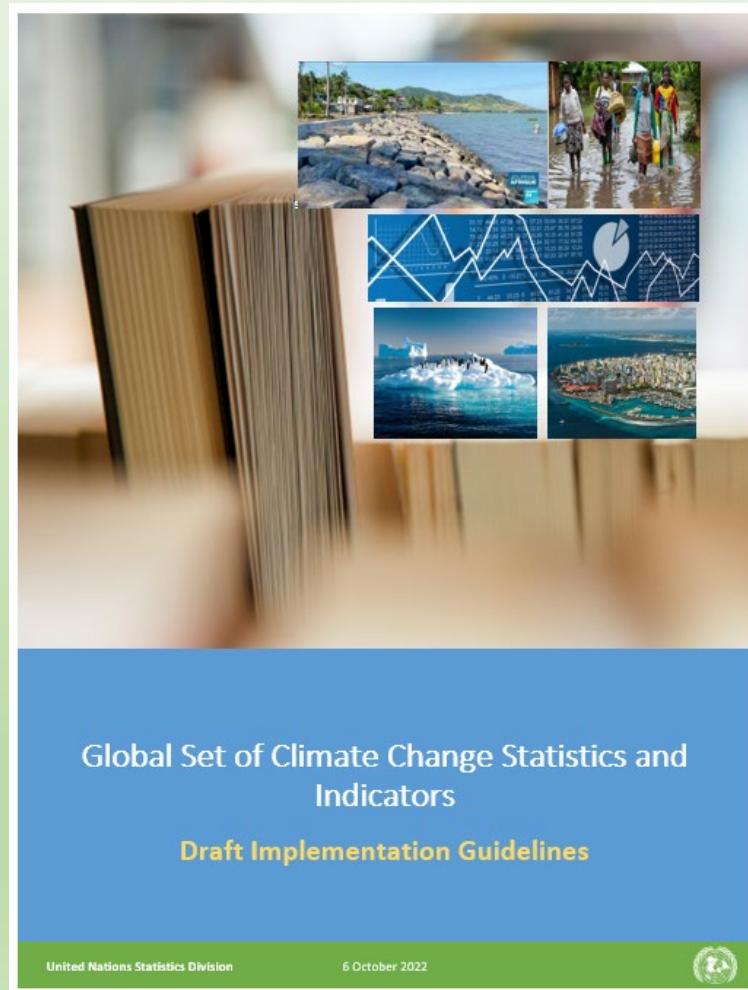
for the Global Set of Climate Change  
Statistics and Indicators

# Outline

- Contents of the Implementation Guidelines
- Understanding Climate Change
- Global Set of CC Stats and Indicators
- Role of NSOs, Focal Points, Stakeholders
- Assessment and Implementation of Global Set
- Feedback
- Questions for Plenary
- Questions for Group Work

# Draft Implementation Guidelines

(under development)

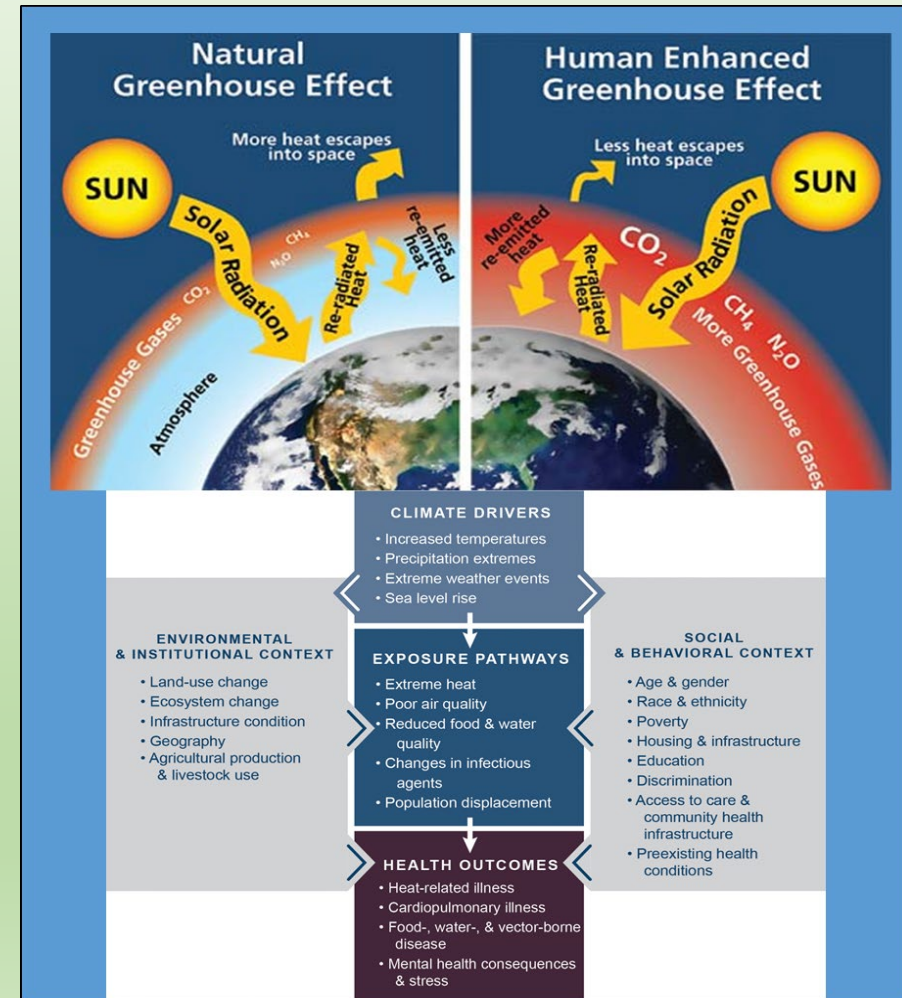


## Contents

- Acknowledgments
- List of Abbreviations
- ▲ 1. Introduction
  - 1.1. Background
  - 1.2. Rationale for the Guidelines
  - 1.3. Aims and objectives
  - 1.4. How to use these guidelines
- 2. Understanding Climate Change
- 3. The Global Set of Climate Change Statistics and Indicators
- 4. Role of NSOs, National Focal Points and key stakeholders
- ▲ 5. Assessment and implementation of the Global Set
  - 5.1 Assessment of available and needed resources - conduct a self-assessment which will prioritize t
  - 5.2 Institutional and Organizational Dimensions – mobilize resources
  - 5.3 Multi-disciplinary approach - Establish a committee/working group with relevant stakeholders
  - 5.4 Training and capacity building at national level
  - ▲ 5.5 National Institutional Arrangements
    - 5.5.1 Institution with a legal mandate for the production of statistics on climate change
    - 5.5.2 Stakeholders
  - ▲ 5.6 Production of climate change statistics
    - 5.6.1 Data sources
    - 5.6.2 Map sources of available indicators/statistics and assess them in terms of quality and utility
    - 5.6.3 Define and prioritize gaps in data and methods
    - 5.6.4 Database building
    - 5.6.5 Data Exchange Protocols
  - ▲ 5.7 Dissemination of national climate change statistics and indicators
    - 5.7.1 Publication guidelines
  - 5.8 Evaluating contribution to national policy demands and international reporting requirements

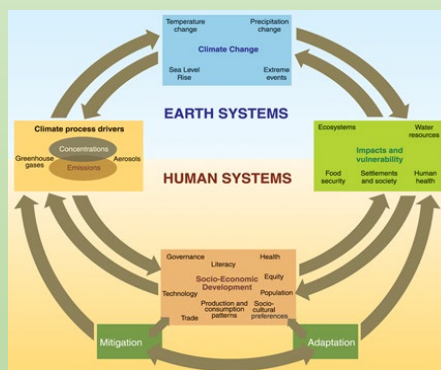
# 2. Understanding Climate Change

- *Understanding climate change processes. Source: Adapted from Land Trust Alliance (2021), How Does the Greenhouse Effect Work?, (quoted from W. Elder, NPS), available at: <https://climatechange.lta.org/get-started/learn/co2-methane-greenhouse-effect/>, and US Global Change research program, available at: <https://health2016.globalchange.gov/temperature-related-death-and-illness>*

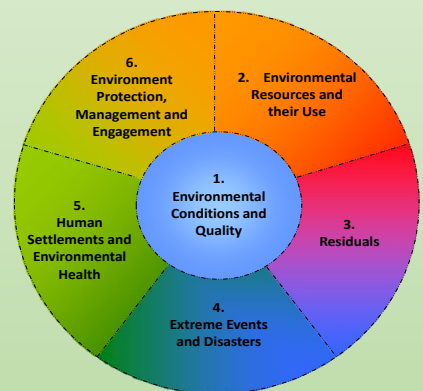


# Global Set of Climate Change Statistics and Indicators

- Given that there was no underlying framework linking the reporting requirements stemming from the Paris Agreement and the necessary statistics or indicators to support climate policy action, UNSD worked closely with UNFCCC to develop such a framework explicitly for climate change.
- The Global Set, developed in close collaboration with UNFCCC, is structured according to the IPCC framework and FDES, with a tiering system as in the FDES and the SDG indicators.



IPCC, 2007, Fourth Assessment Report

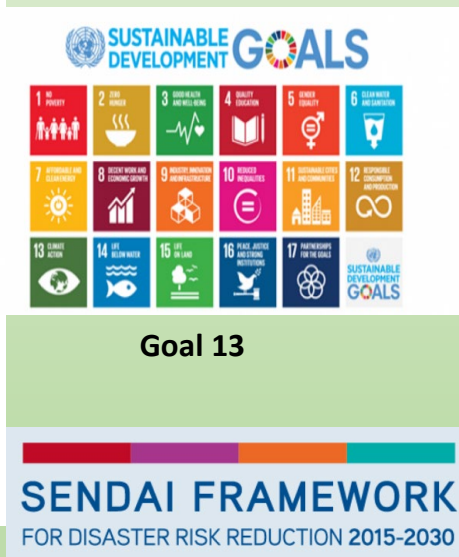


Framework for the Development of Environment Statistics (FDES 2013)

Relevant chapters of the Manual of the BSES  
[https://unstats.un.org/unsd/envstats/fdes/manual\\_bses.cshml](https://unstats.un.org/unsd/envstats/fdes/manual_bses.cshml)

Climate Process Drivers					
Sub-component 1.3: Environmental Quality			Sub-component 1.3: Emissions to Air		
1.1.1 Air quality			1.1.1 Emissions of greenhouse gases		
			1.1.2 Consumption of ozone depleting substances		
Climate Change Evidence					
Sub-comp. 1.1.2 Physical Conditions			Sub-comp. 4.1.3 Natural Extreme Events and Disasters		
1.1.1 Atmosphere, climate and weather			4.1.1 Occurrence of natural extreme events and disasters		
1.1.2 Hydrographical characteristics					
Climate Change Impacts and Vulnerability					
Sub-comp. 1.1: Physical Conditions		Sub-comp. 1.3: Land Cover, Ecosystems and Biodiversity		Sub-comp. 4.1: Natural Extreme Events and Disasters	
1.1.2 Physical characteristics		1.1.3 Marine water quality		4.1.2 Impact of natural extreme events and disasters	
1.1.4 Soil characteristics		1.2.1 Land cover		5.1.3 Housing conditions	
		1.2.2 Ecosystems and biodiversity		5.2.3 Vector-borne diseases	
		1.2.3 Forests		5.2.4 Health problems associated with excessive UV radiation exposure	
		2.3.1 Land use			
Mitigation and Adaptation					
Sub-comp. 2.2: Energy Resources		Sub-comp. 6.1: Environmental Protection and Resource Management Expenditure		Sub-comp. 6.2: Environmental Governance and Regulation	
2.2.2 Production, trade and consumption of energy		6.1.1 Government environmental protection and resource management expenditure		6.2.2 Environmental regulation and instruments	
		6.1.2 Corporate non-profit institutions and household environmental protection and resource management expenditure		6.2.3 Participation in MEAs and environmental conventions	
				6.3.1 Preparedness for natural extreme events and disasters	

FDES cross-cutting application (Chapter 5) links climate change and environment statistics based on the IPCC Framework



# 4. Role of NSOs, Focal Points, Stakeholders

**National statistics offices** have a key role in the self-assessment tool

**National focal points** collaborate with the NSO

- National statistics offices
- Ministries of environment
- Other government ministries and agencies
- Academia
- NGOs
- Private sector
- Other stakeholders

# 5. Assessment and Implementation of the Global Set

## Self-assessment

### **5.1 Assessment of available and needed resources – conduct a self-assessment which will prioritize the nationally relevant indicators and statistics**

- Prioritize the statistics and indicators and statistics to the country;
- Part of a multi-stakeholder consultation and discussion process;
- Highlight any efforts needed to advance the collection of CC stats and indicators in order to support the country's climate policy objectives;
- Develop national programme or national action/ implementation plan.

# 5. Assessment and Implementation of Global Set

## Mobilize resources

### 5.2 Institutional and organizational dimensions – mobilize resources

- Set up an institution with a legal mandate;
- Identify the national institutions involved in the production of statistics related to climate change;
- Set up multidisciplinary technical committees;
- Identify funding sources and develop funding proposals based on the self-assessment outcomes and prioritization of future work.



# 5. Assessment and Implementation of Global Set

## Establish committee

### 5.3 Multi-disciplinary approach – establish a committee/working group with relevant stakeholders

- Constitute or expand a technical working group (TWG);
- National Statistical System (NSS);
- Legal mandate.

# 5. Assessment and Implementation of Global Set

## Training

### 5.4 Training and capacity building at national level

- To provide the key points for participants to understand the tools and mechanisms;
- To learn of the experiences of countries when implementing a national set of climate change statistics and indicators;
- Training can be done either by operating manuals/technical guides in the language(s) used in the country, through regional, national/sub-regional workshops, country visits/study tours, through bilateral consultations or online training.

# 5. Assessment and Implementation of Global Set

## Arrangements

### 5.5 National institutional arrangements

- Institution with a legal mandate for the production of statistics on climate change;
- Capacity and finance to ensure longevity of the project;
- identification, selection and involvement of relevant stakeholders;
- Ensure the security and long-term implementation, development and production of statistics.

# Institution with a legal mandate for the production of statistics on climate change

A national (or focal) institution with legal mandate will perform the following functions:

- Set up a department/service or division in charge of climate change statistics;
- Develop a legal framework of collaboration with other institutions (Ministry of the Environment, meteorological institute, research institutes, etc.) with a view to sharing statistics on climate change;
- Submit a budget proposal to the government or partners for capacity building or training of staff and stakeholders;
- Coordinate the implementation of the national set of statistics and indicators on climate change;
- Validate the reports from the technical working group to the national technical committee before being submitted to the higher hierarchy (National Statistics Council).

# 5. Assessment and Implementation of Global Set

## Production of statistics

### 5.6 Production of climate change statistics

- Sources of data on climate change
- Map sources of available indicators/statistics and assess them in terms of quality and utility
  - EGES: this is to be clarified further in the course of piloting CISAT, focal institutions are to be identified at the very start, yet data sources may differ.
- Define and prioritize gaps in data and methods
- Establish data collection processes
- Build database of CC stats and indicators
- Establish Data Exchange Protocols

# 5. Assessment and Implementation of Global Set

## Dissemination

### 5.7 Dissemination of national climate change statistics and indicators

- Various compendia
- Online
- Databases
- NEIS
- Stakeholders (direct)/Requests
- Establish publication guidelines

# 5. Assessment and Implementation of Global Set

## 5.8 Evaluating contribution to national policy demands and international reporting requirements

### Evaluation

- How can one evaluate the contribution to national policies/strategies/plans?
- User surveys

How many of these organisations have access or are given access to the data?

- UNFCCC
- Regional and international organisations

# Feedback on implementation guidelines

<b>Feedback on Implementation guidelines received from (as of 23 October)</b>	
<i>Region (M49)</i>	<i>Country Name</i>
Asia	Armenia
Europe	Hungary (nothing to add)
Africa	Cabo Verde
Africa	Mauritius
Africa	Tanzania
International organization	UNEP
Consultant	ECLAC



# Questions for plenary

- Does a decentralized NSO system (as in Mauritius) help in climate policy making, implementation and reporting processes?
- Are there many countries whose NSOs have the mandate to produce official climate statistics?
- What can be recommended as good practices, for example working in national committees, etc.?

# Feedback, Questions

Group Work

# Questions for group work

- Have we chosen the key steps in the implementation process (add more, modify)?
- Review national examples and discuss what would be the best practice
- Establish or expand knowledge of environment focal points in various agencies(focal institutions)

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Steps	Task/Event	Year 1			Year 2			Year 3		
Step 1	Complete the self-assessment	█								
Step 2	Mobilize resources / Initiate request for technical support	█								
Step 3	Establish a Committee or Technical Working Group (TWG) or expand an existing one	█								
Step 4	Provide training and capacity building		█							
Step 5	Establish an institution with a legal mandate		█	█						
Step 6	Identify stakeholders and make institutional arrangements		█	█						
	Designate desk officers/core team		█	█						
	Designate National Thematic experts		█	█						
	Develop ToRs		█	█						
	Hire staff/consultants			█	█					
	Improve IT backbone and all resources			█	█					
	National inception meeting/workshop			█						
Step 7	Map the data sources			█						
Step 8	Define gaps and prioritize work on methods and data collection			█	█	█				
Step 9	Data collection/database building			█	█	█				
	Establish data exchange protocols				█	█				
	Compilation of statistics				█	█	█			
	Preparation of data analysis				█	█	█			
	Draft a report							█	█	

- Is this the right order?
- Should it be just a list to be adapted to national situation?
- Are there key steps missing?

# Can you suggest the appropriate funding sources?

## **Direct**

- GCF
- GEF
- GIZ
- Conservation International?

## **Indirect**

- Paris21

1)

Do you have a similar or better figure illustrating the key stakeholders?

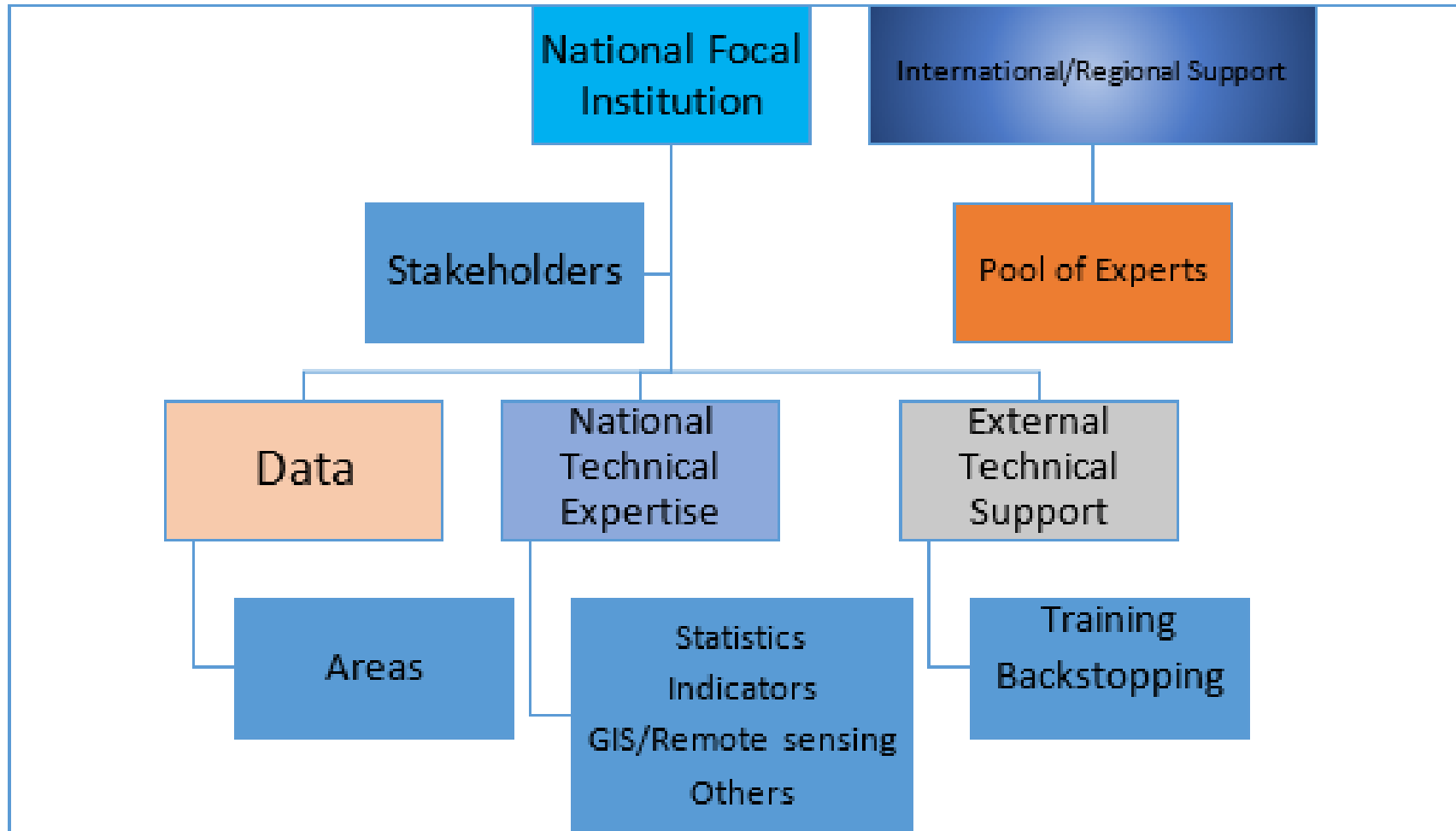


Figure 4: Stakeholders

2) Do you have a similar or better figure illustrating the key stakeholders? (UNEP)

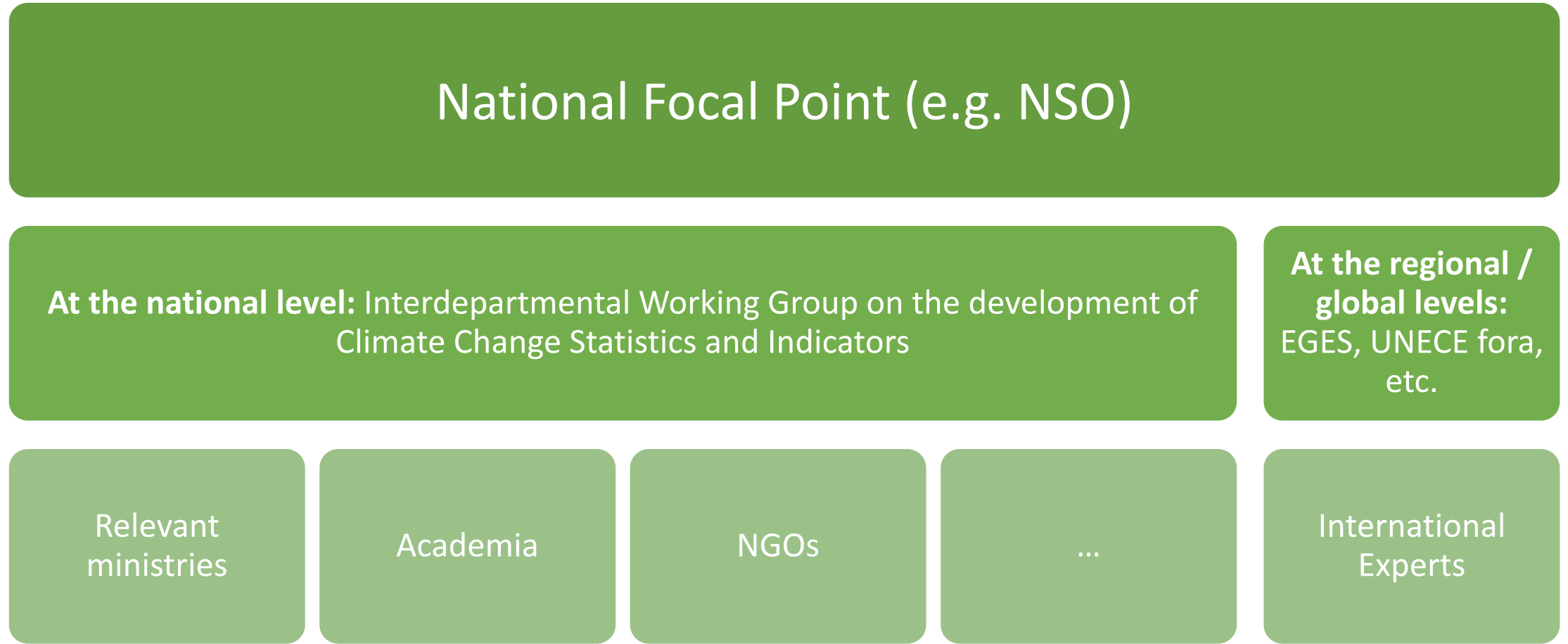


Figure 4: Stakeholders

# Could we propose a better example of quality assurance, what criteria apply to define set of data as official statistics, in particular when such data derives from alternative sources?

- ✓ **Survey design**, in which the methodology to select the sample from stakeholders, approach to select the sample, the adequate sample size and the method through which the survey will be organized are defined.
- ✓ **Survey tools** development with the focus of the study, objectives translated into measurable factors that contribute to that focus are elaborated by experts in the measurement sciences namely climate change statistician.
- **Survey execution** using the survey tools (paper or computer-assisted personal interviewing (CAPI)). A pilot survey must first be conducted to test both the tools and the survey procedure before the actual survey is conducted. Once field testing has been completed, the survey is conducted and the data are collected, coded and processed

## Suggestions from EGES:

- Experts fora, Producers and Users Meetings can be useful to support quality assurance of new data sets.



# Can you provide more examples of how to assess contributions and effectiveness to policy decisions?

- One way to determine the usefulness of the indicators is through a **user survey**.
- As well as ascertaining how the data is used and its efficacy, there may be opportunities to discover new data and data sources for future additions to the database.

Can experts propose some narrative examples of cases that require official statistics to monitor national climate strategies/plans?