

National statistical offices and climate reporting

Malgorzata Cwiek

Secretary to the UNECE Steering Group on Climate Change-
Related Statistics

UNECE Statistical Division

30 September 2021



UNECE



UNECE and the Conference of European Statisticians (CES)



United Nations Economic Commission for Europe (UNECE)

- One of five UN **regional commissions**
- Includes **56 member States** in Europe, North America and Asia
- Part of the **UN Secretariat**

Conference of European Statisticians (CES)

- **One of the oldest international bodies** on statistics
- Founded in 1953; stems from the first Conference of Statistics held under the League of Nations in 1928
- **Steered by the CES Bureau**, composed of Chief Statisticians from 8 countries and 6 international organizations
- In 1991 developed and adopted the **Fundamental Principles of Official Statistics**



UNECE work on climate change-related statistics

Objective

To make official statistics more useful for climate analysis and policy and promote involvement of national statistical offices in GHG inventories

Methodological work

- [CES Recommendations on CC-Related Statistics](#) (2014)
- [CES Recommendations on the role of official statistics in measuring hazardous events and disasters](#) (2019)
- [CES Core Set of CC-Related Statistics and Indicators](#) (2020)
- [In-depth review on the role of the statistical community in climate action](#) (2020)

Sharing knowledge and good practices

- Annual **Expert Fora for Producers And Users of Climate-change Related statistics** since 2012
- [2021 Expert Forum](#) from 31 August to 3 September
- UNECE [good practices wiki](#)
- [Tools and resources](#) facilitating the implementation of recommendations

Capacity development

On environmental statistics for the SDGs in **EECCA countries** incl.:

- SDG 13
- CES Core Set of CC-Related Statistics and Indicators
- **Energy and air emissions** statistics and accounts

In 2020, EFTA/UNECE **Webinars on Climate Change-related Statistics** for EECCA countries

Led by the CES **Steering Group** on CC-Related Statistics



UNECE Steering Group on Climate Change-Related Statistics

Members

- **National statistical offices** of Netherlands (Chair), Canada, Italy, Kyrgyzstan, Mexico, Russian Federation and United Kingdom
- European Environment Agency, Eurostat, FAO, International Energy Agency, UNFCCC Secretariat, UN ECLAC, Bennett Institute for Public Policy and Midsummer Analytics

Main activities

- **Guiding the activities** in climate change-related statistics under the Conference of European Statisticians (CES)
- Overseeing **methodological work**
- **Sharing good practices** and improving coherence of GHG inventories and official statistics
- **Collaborating with international organizations** active in measuring climate change
- Identifying areas for **further work**

Links to [all SG resources](#)
and the [wiki space with good practices in CCRS](#)

CES Recommendations on Climate Change-Related Statistics



UNECE

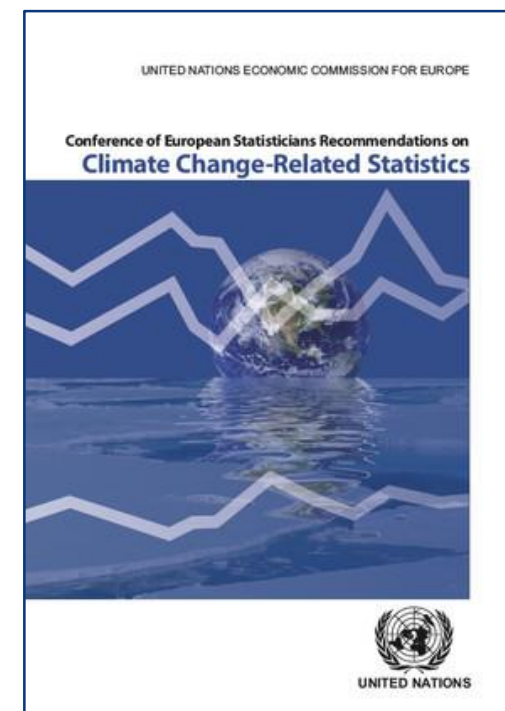


Mandate and background

- **Task Force on Climate Change-Related Statistics:** Canada (Chair), Finland, Italy, Mexico, Norway, Qatar, the United Kingdom and international organizations (e.g., EEA, Eurostat, DG Clima, IPCC, FAO, UNFCCC and the WMO) established by the CES Bureau in 2011

Objectives

- To improve the **contribution of the statistical community** to the work on **GHG reporting** under the Kyoto Protocol
- To **improve existing official statistics** for the purposes of climate change analysis building on the **key competencies of official statisticians**
- Focused on data relevant for climate change analysis but **not scientific or meteorological data**



Endorsed in 2014 by more than **60** countries and international organizations.

CES Recommendations on Climate Change-Related Statistics (2)



UNECE



Three groups of recommendations

1. On supporting greenhouse gas inventories
2. On other climate change-related statistics (than GHG inventories)
3. On statistical infrastructure

1. On supporting GHG inventories

- NSOs should **improve data and statistics required for GHG inventories**
- NSOs, especially Annex I Parties, should **proactively reach out** to agencies responsible GHG inventories
- Ideally, NSOs should be considered **official institutions** in the national systems of greenhouse gas inventories
- The international statistical community should take **an active role in contributing to the global GHG inventory system**

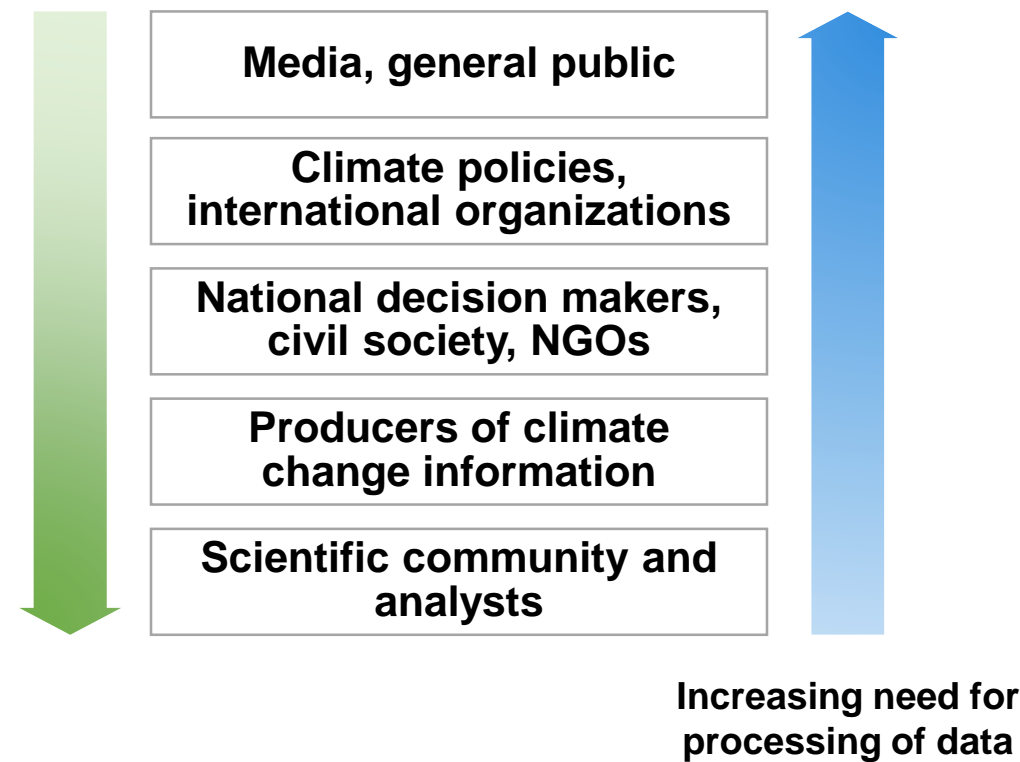
CES Recommendations on Climate Change-Related Statistics (3)



2. On other climate change-related statistics

- **Access** to existing statistics should be improved
- The **usefulness of existing statistics** for climate change analysis should be improved by **reviewing and improving** data collection systems
- **Development of new statistics can be considered**, where needed e.g. impacts, vulnerability and adaptation

Increasing complexity and detail of data needs



CES Recommendations on Climate Change-Related Statistics (4)



3. On statistical infrastructure

- Existing classification systems, registers, **definitions**, frameworks, **products and services** need to be reviewed
- Statisticians should gradually **develop new partnerships, expertise and ability** to adopt new methodologies
- **Organizational changes may be needed** in NSOs, the national statistical system and the national system for greenhouse gas inventories

See here all the [Recommendations on Climate Change-Related Statistics](#)

Several **practical resources** are **included in the annexes**, e.g. United Kingdom's tool for reviewing sectoral details, methodologies and data sources of the greenhouse gas inventories

In-depth review of the role of the statistical community in climate action



Process

- Paper prepared by the Steering Group with inputs from the 2019 Expert Forum
- In-depth review carried out by the CES Bureau in February 2020
- **Outcomes consulted with all CES members and endorsed by the Chief Statisticians in 2020**

Conclusions

- Statistical community can play a key role but it should **engage much more actively**
- Work on the **implementation of the CES Recommendations must continue**
- NSOs can propose to **include the topic of climate change in the statistical programmes**
- NSOs could do more to improve the **data timeliness and frequency**
- **Resources are scarce**, so the statistical community should focus **where it can bring most value**
- Common thinking on the challenging areas is needed, for example on **measuring climate change adaptation**
- Statistical community needs to **communicate more directly with users and engage more closely with research organizations**

[Link to in-depth review paper](#)

Involvement of NSOs in GHG inventories



Survey conducted in 2016

- The survey sent to all countries that participate in the CES work: 71 national statistical offices (NSOs) and 63 institutions responsible for emission inventories.
- Responses from 48 national statistical offices and 35 institutions responsible for GHG inventories

Overview of the situation

- Both NSOs and inventory institutions considered that **NSOs have a clear role and tasks in support of the inventory compilation**. 60 per cent of NSOs state that their country has a national working group on greenhouse gas inventories which includes the national statistical office.
- **There is a wide array of institutional arrangements for the collaboration of NSOs and inventory institutions – from NSOs being responsible for the compilation of inventories to providing data for a limited number of emission sources.** Some countries have a strict legal basis for the cooperation, while others cooperate on an ad hoc basis. Several countries report having a National Climate Change Committee overlooking the processes.

[Report with survey results](#)

Involvement of NSOs in GHG inventories - examples



Examples

- **Statistics Finland's** Greenhouse Gas Inventory unit is responsible for the preparation and reporting of Finland's national GHG inventory.
- **Statistics Norway** compiles emissions to air. The Norwegian Environment Agency, on behalf of the Ministry of Climate and Environment, is responsible for this reporting.
- **Statistics Netherlands** provides data for GHG inventories and has an active role in their compilation. See more in the 2014 CES Recommendations.
- **STATEC Luxembourg** is the main data provider to produce annual air emission (including GHG) inventories.
- **ISTAT** produces information on the environment, energy, construction, housing and transport, tourism, agricultural and urban environment and other relevant basic information. The Institute for Environmental Protection and Research (ISPRA) produces additional environmental statistics and is responsible for all aspects of national inventory requirements, reporting and quality management.

Benefits of involving NSOs in GHG inventories



- NSOs have the qualifications to **review and assess the usefulness of classification systems, registers, definitions and statistical frameworks** and **can help evaluate the feasibility of meeting new data needs** and avoid creating overlapping data systems - particularly helpful in the first stages of GHG inventory compilation
- NSOs are a key data provider and coordinator of the national statistical system so they **can facilitate access to relevant data** across the whole system and make sure that **inventory calculations use existing data as much as possible**
- Once inventory data are released a fuller picture of emission trends can be drawn by **linking socio-economic data provided by NSOs with the emissions data**
- NSOs adhere to fundamental principles and are committed to using sound, transparent and commonly agreed methodologies so they are well placed to **contribute to the GHG inventory review phase** by engaging in dialogue on statistical issues, data properties, discrepancies and quality.

Adapted from: [Note on NSO entry points to the GHG inventory system](#) (SGCC, 2015)

Potential new opportunities for involvement of NSOs under the Paris Agreement and its Work Programme



UNECE

- Reporting of climate data and information under the **Enhanced Transparency Framework**
 - A **formal role** in the institutional arrangements of the Enhanced Transparency Framework
 - Producing **statistics needed for GHG inventory**
 - Producing **indicators for tracking progress** made in implementing and achieving NDCs
 - Producing statistics on climate change **impacts and adaptation**
 - Producing data on **support provided, mobilized, needed and received**
- Producing statistics needed to **inform the public and build awareness**
- Producing statistics needed for **national climate policymaking** (beyond role in the reporting/providing data for the reporting), e.g., for national adaptation plans or monitoring energy transition.
- Producing statistics that can be used for **the Global Stocktake**
- **Ensuring coherence** between SDG, Sendai framework and Paris Agreement reporting

The 2021 Expert Forum concluded that embedding the PA reporting requirements in official statistics will enhance the countries' readiness to participate in the ETF in a sustainable manner

But: more work in collaboration between the statistical and policy communities is needed

Useful resources



- [CES Recommendations on Climate Change-related Statistics](#) (December 2014)
- [Climate Change-Related Statistics in Practice](#) (August 2021)
- [CES Set of Core Climate Change-Related Indicators and Statistics Using SEEA](#) (August 2021)
- [Reporting on climate data and information under the Paris Agreement: A potential opportunity for national statistical offices to get involved](#) (UNFCCC, June 2021)
- [In-depth review on the role of the statistical community in climate action](#) (February 2020)
- [What do national statistical offices \(NSOs\) need to know about greenhouse gas \(GHG\) inventories?](#) (June 2018)
- [Road maps to improve climate change-related statistics](#) [Word](#) [Russian](#) (March 2017)
- [Leaflet summarizing the CES Recommendations](#) also in [Russian](#) (October 2016)
- [Making the case for greater involvement of national statistical offices in measuring climate-change related statistics](#) (February 2016)
- [How national statistical offices can support greenhouse gas inventories?](#) (September 2015)

And more on the page with [all SG resources](#)
and the [wiki space with good practices in CCRS](#)

Thank you!

Malgorzata Cwiek (cwiek@un.org)
Statistician

UNECE Statistical Division

Date 27 September 2021

