Updates on the UNECE work in climate change-related statistics

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Eighth Meeting of the Expert Group on Environment Statistics
14 October 2021

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Content

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Background

Recent work:

1. UNECE/CES Set of Core Climate Change-Related Statistics and Indicators
2. Collection of case studies on climate change adaptation
3. 2021 Expert Forum for Producers and Users of Climate change-Related Statsitics

Next steps

UNECE and 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

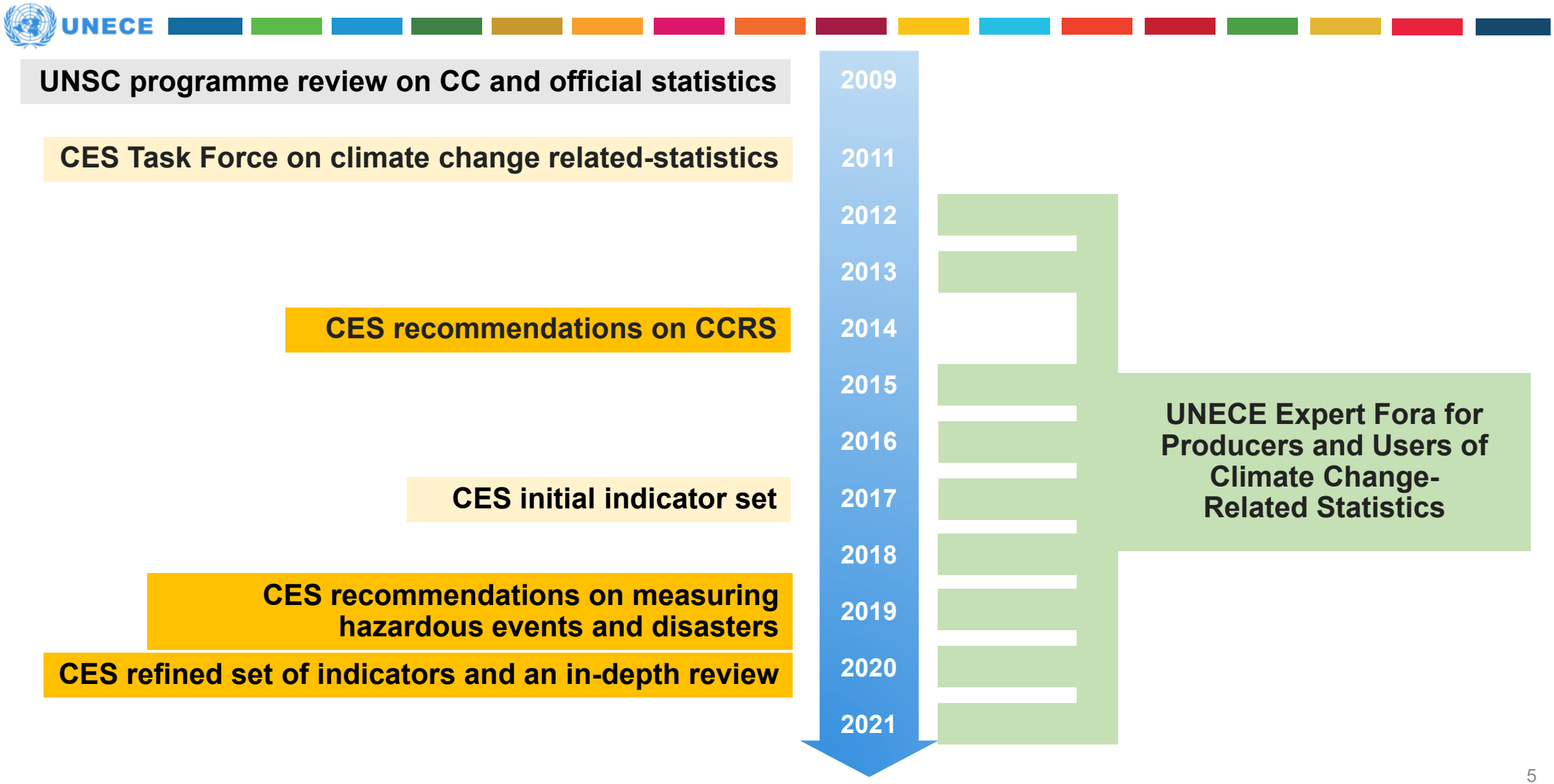
On environmental statistics for the SDGs in **EECCA countries** incl.:

- 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 work on climate change-related statistics



UNECE Steering Group on Climate Change-Related Statistics

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Members

- **National statistical offices** of Netherlands (Chair), Canada, Italy, Kyrgyzstan, Mexico, Russian Federation and United Kingdom
- Eurostat, FAO, International Energy Agency, OECD, 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

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1. UNECE/CES Set of Core CC-Related Indicators

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What and when

- **2014**: Creation of the CES Task Force, chaired by Italy
- **2017**: Initial 39 core indicators
- **2020**: Final **44 core indicators endorsed by CES:**
  - Drivers (9) – Mitigation (8) – Emissions (9) – Adaptation (5) – Impacts (13)
  - 27 SEEA-based, 8 SDG and 4 from Sendai Framework
  - >36 indicators with inputs from UN-FDES
  - **Metadata** (with contextual indicators and possible disaggregations) and **Implementation Guidelines**
- **2021:** Official publication
- Continue to collect experiences for future review (5 years)

1. UNECE/CES Set of Core CC-Related Indicators (2)

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Main purposes of the CES indicators

- Paint the **big picture** in an internationally comparable way
- Respond to main policy questions
- Develop a set that is resilient and remains relevant

Indicator selection criteria

- **Relevance** in the UNECE region
- Methodological **soundness**
- **Data availability**
- Priority given to **SEEA-based** indicators

Final report, **Implementation Guidelines** and **Metadata** available for download and use

2. Case studies of measuring climate change adaptation

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Background

- **Challenge** of measuring climate adaptation – highly **context-specific**, **variable** in time and **interconnected**
- Urgent need for improvement – **what we can do together** to support the work in national context? In 2020, countries already indicated some statistical activities related to climate change adaptation
- A small **group created under the Steering Group**: Italy (lead), Mexico, Netherlands, UNFCCC, UNSD, UNECLAC, Midsummer Analytics and UNECE

Proposal to move forward following a practical, bottom-up approach:

- **Collecting examples of approaches relevant in various contexts using a common template for case studies**
- **Structured** but **flexible** without the aim to harmonize
- Using **keywords** to tag examples

2. Case studies of measuring climate change adaptation (2)

UNECE

Part 1: Description of the statistical activity

- **Output (with an example); relevance for adaptation; conclusions and the way forward**
- **Stakeholders and partners**

Part 2: More details

- **E.g., on data sources used, coverage, links to methodologies and bibliography**

Part 3: Keywords

- **Thematic area:** e.g., agriculture, energy, poverty, population, health, …
- **Characteristics of the geographic area:** e.g., mountain, coastal, urban, rural, …
- **Type of statistical product or activity:** e.g., indicator, linking data, data analysis, …
- **Adaptation approaches**: e.g., “green”, “blue”, “grey”, …
- **Concepts covered/measured:** exposure, vulnerability, adaptation measures, impacts
- **Hazard type covered e.g.,** multiple, meteorological (e.g., flood, drought), environmental (e.g., sea-level rise), biological (e.g., waterborne diseases), …

Part 4: Contact details

All countries are invited to provide case studies using the template

3. 2021 Expert Forum for Producers and Users of CCRS

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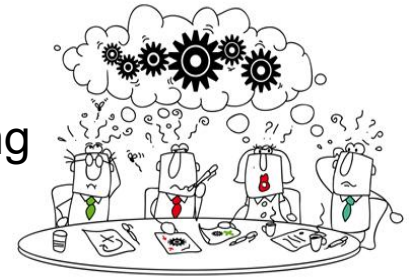
9th Expert Forum since 2011

a **platform** for sharing **experience**, discussing concepts and **measurement issues**, and identifying areas for practical guidance



>130 participants from 39 countries and 25 organizations

4 virtual sessions and 27 speakers

- **Setting the scene**
- Measuring climate **change vulnerability and adaptation**
- **Carbon footprint** and consumption-based emissions
- **Good practices** in producing, disseminating and using climate change-related statistics

Organized by the CES **Steering Group on Climate Change Related Statistics**

All documents available on the meeting website in English and Russian

Recent work

Climate Change-Related Statistics in Practice 2021

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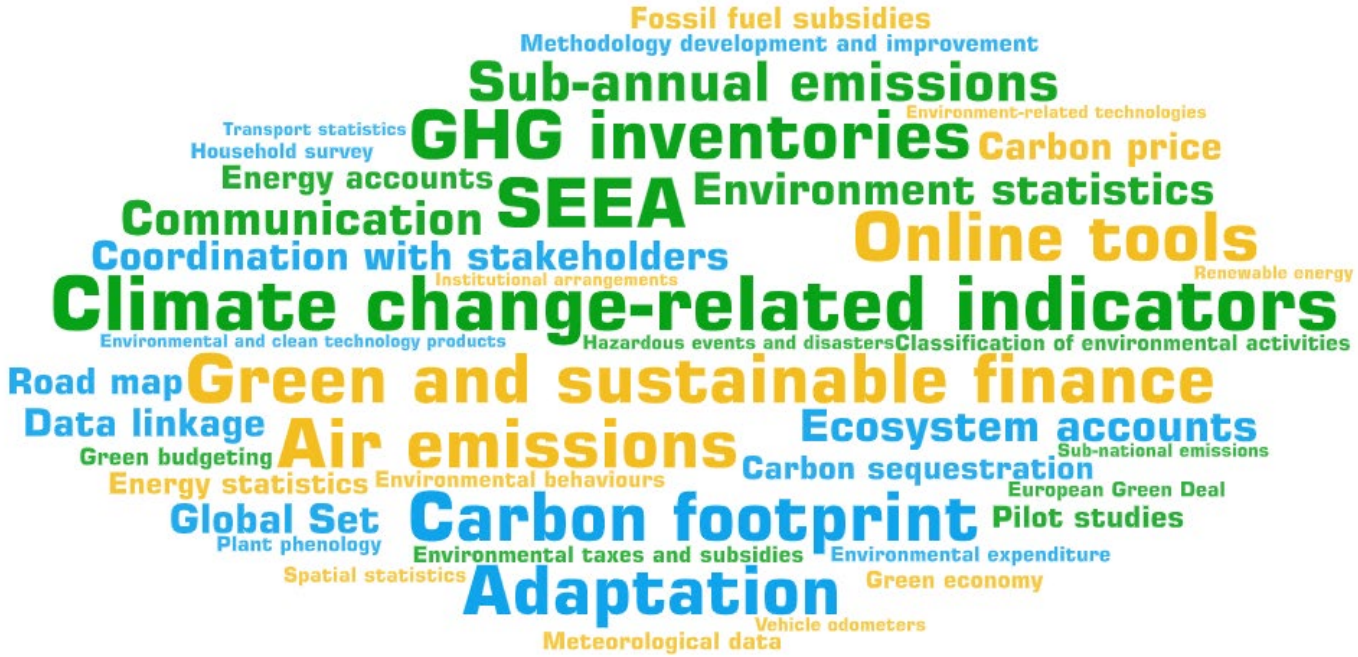
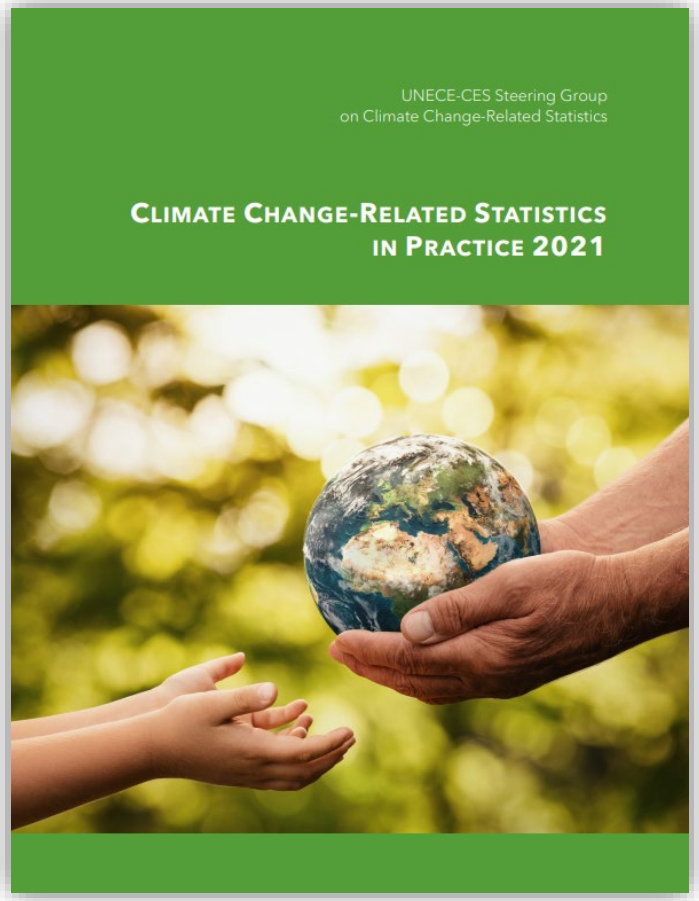
- **Regional summary**
- **Achievements and plans** of 23 countries and 4 organizations





Link to the document

Selected conclusions of the 2021 Expert Forum

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Session 1: Setting the scene

- **Data supply side**: a **data revolution** has been unfolding. Big data analytics, artificial intelligence, the internet of things etc. bring a quantum leap in climate-related data.
- **Data demand side**: a **massive transformation of the economy is needed to avoid the worst consequences** of climate change and biodiversity loss. This transformation should influence planning for statistics
- Recognizing and **embedding requirements for the reporting under the Paris Agreement in official statistics** will enhance the countries' institutional arrangements and readiness to participate in the ETF

Session 2: Measuring climate change vulnerability and adaptation

- Measuring adaptation and vulnerability is **a considerable challenge** due to contextual and subjective factors
- Methodological work is needed on aggregating metrics; developing and agreeing on concepts and methods
- There is a need to **experiment, adopt iterative approaches and provide practical solutions** starting from available statistical information. Collaboration between practitioners, policy makers, researchers and statistical offices is needed
- More case studies describing contexts, tools and methodologies are needed. The Expert Forum **invited countries to share their work** using the template developed by the Steering Group

Selected conclusions of the 2021 Expert Forum - cntd.

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Session 3: Carbon footprint and consumption-based emissions

- Based on national experiences, environmentally **extended multi-regional input-output (EE-MRIO) modelling is the best approach** to calculate the carbon footprint of a country.
- Expert Forum **encouraged countries to start activities on producing carbon footprint and consumption-based emissions** and share their experience on the UNECE good practice wiki and through the Expert Fora

Session 4: Good practices in producing, disseminating and using CC-related statistics

- National implementation of the CES Indicator Set demonstrated that **most of tier I and II and some of the tier III indicators are feasible for NSOs with well-established environmental statistics programs**. Environmental accounts based on the SEEA framework can provide data for about one-third of the indicators.
- Cross-sectoral coordination and international guidance on priorities are needed to advance **linking environmental, economic and social information** and maximize the value of existing data.
- **Systematic use of climate-related indicators is essential** to gain feedback on the relevance of the indicators and improve the related statistics and accounts.

SAVE THE DATE: Next Expert Forum planned for 29-30 September 2022

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Next steps

Planned work for 2021/2022

- Collection of adaptation case studies using the template
- Collection and dissemination of good practices, including producing CC indicators
- New Task Force on the role of NSOs in achieving national climate objectives
- Next Expert Forum – 29-30 September 2022 in Geneva (TBC)

Key resources

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- CES Recommendations on Climate Change-related Statistics (December 2014)
- Climate Change-Related Statistics in Practice 2021 (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!

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14 October 2021

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