

CONFERENCE OF EUROPEAN STATISTICIANS

Approved

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Item IV(b) of the Provisional
Agenda

**CLIMATE CHANGE-RELATED STATISTICS:
PROGRESS REPORT AND UPDATED TERMS OF REFERENCE**

Prepared by the Secretariat

*This note provides a progress report on the work carried out in 2014-2018 by the UNECE Steering Group on climate change-related statistics. The updated terms of reference for the Steering Group are presented in the annex. **The Bureau approved the progress report and the updated terms of reference for the Steering Group.***

I. BACKGROUND

1. In April 2014, the Conference of European Statisticians (CES) endorsed the *CES Recommendations on climate change-related statistics* to improve the usefulness of existing official statistics for climate analyses and greenhouse gas (GHG) inventories. The Conference supported organizing regular expert meetings for producers and users of climate change-related statistics with the participation of key partners involved in the measurement of climate change.

2. In October 2014, the CES Bureau established the Steering Group on climate change-related statistics for the initial period of four years, to guide the implementation of the CES Recommendations and advance international work in the area. Norway (Nina Holmengen) chaired the Group until June 2018. Since then, the new chair is Luxembourg (Olivier Thunus). The members are: Italy, Kyrgyzstan, Mexico, the Netherlands, Russian Federation, Directorate General for Climate Action of the European Commission, the European Environment Agency, Eurostat, the Food and Agriculture Organization of the United Nations (FAO), the International Energy Agency (IEA), the United Nations Statistics Division, United Nations Framework Convention on Climate Change (UNFCCC) and Midsummer Analytics. The Steering Group regularly reports to the CES Bureau on all activities on climate change-related statistics, including on the outcome of expert meetings.

II. WORK CARRIED OUT BY THE STEERING GROUP

3. Since 2014, the Steering Group has provided guidance to the countries on the implementation of the CES Recommendations on climate change-related statistics. The work has been carried out in close collaboration with the DG for Climate Action of the European Commission, EEA, Eurostat, FAO, IEA, UNSD and UNFCCC.

(a) Steering CES activities in climate change-related statistics

4. **Expert Fora.** Since 2014, the Steering Group has organized four annual Expert Fora for producers and users of climate change-related statistics serving as a platform for collaboration, sharing ideas and experience, discussing concepts and measurement issues, and identifying areas for development of practical guidance. The fora have created new contacts and close collaboration among national statistical offices and other statistical agencies, agencies responsible for greenhouse gas emission inventories and other data producers, but also provided a direct channel for coordinating work with the climate community, including Intergovernmental Panel on Climate Change (IPCC) and UNFCCC.

5. In 2016, the Steering Group developed a narrative *Making the case for greater involvement of national statistical offices in measuring climate-change related statistics* to demonstrate the value of official statistics for climate change analysis and distributed it to national and statistical offices of international organizations participating in the work the Conference of European Statisticians.

(b) Advising methodological work in climate change-related statistics

6. The Steering Group has provided guidance to two task forces:

(a) **Task Force on climate change-related statistics and indicators** (chaired by Italy – Angelica Tudini), which developed the initial set of key climate change-related indicators endorsed by CES in June 2017 and is now continuing the work to refine the initial set of indicators as well as develop methodologies, data sources and guidance for implementation. The Task Force is planned to finish its work in 2020.

(b) **Task Force on measuring extreme events and disasters** (chaired by Italy – Angela Ferruzza), which focuses on the role of national statistical offices in measuring extreme events and disasters and disaster response, and promotes harmonized measurement approaches, concepts and definitions for assessing progress towards the 2030 Sendai Framework for Disaster Risk Reduction. The work of the Task Force will be discussed in detail under agenda item IV (c) of the October 2018 CES Bureau meeting.

(c) Sharing good practices and improving coherence of GHG inventories and official statistics

7. The Steering Group has **established a network of experts** involved in climate change-related statistics. Information about the work is also communicated to the heads of national statistical offices through CES. Using these channels, the Steering Group informed the statistical offices about the CES recommendations, progress with the Paris Climate Change Agreement and the negotiations on the data requirements, and of possibilities to engage with IPCC on the methodological development of greenhouse gas emission inventories, e.g. to improve their coherence with official statistics and increase the use of existing data from statistical systems in the inventories.

8. **Contribution to IPCC guidelines for national greenhouse gas inventories.** The Steering Group invited national statistical offices and the network of experts of climate change-related statistics to participate in the expert review of the 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories in 2017-2018. These guidelines

will define the future requirements of greenhouse gas emission inventories, including the use of source statistics. While the final texts are not yet published, the drafts show many references to “official statistics” as a preferable data source and the refined guidance includes a new chapter on the institutional set up referring to the national statistical office as a member of the national inventory system and as a possible inventory agency.

9. **Wiki platform.** At the request of the Expert Forum, the Steering Group set up a wiki platform with good practices in climate change-related statistics. The wiki contains good examples presented at the Expert Fora so far, and other examples on how to implement the *Recommendations on climate change-related statistics*. Sharing good practices has helped advance work across countries. For instance, good practices were presented on the measurement of extreme events and disasters (e.g. by Armenia, Brazil, Ireland, Italy, Mexico and Turkey) and the compilation of quarterly emission estimates (e.g. by the Netherlands and Sweden).

(d) Identifying and advancing areas that require further methodological work

10. The Steering Group conducted a survey on priorities of international work in climate change-related statistics. To address the highest priorities not covered by the active task forces, the Steering Group prepared a paper on *What national statistical offices need to know about greenhouse gas inventories?*. The survey and feedback received during the Expert Fora have also allowed to identify new work areas such as adaptation statistics and indicators, geo-referenced climate indicators (considered at the 2018 Expert Forum) and climate change accounts within the SEEA framework.

(e) Follow up on implementation of the CES Recommendations

11. **A survey of NSOs.** At the request of the CES Bureau to monitor the impact of CES Recommendations in countries, the Steering Group conducted a survey of national statistical offices and GHG inventory agencies to review progress towards the implementation of CES Recommendations in developing data for inventories, other climate change-related statistics and the statistical infrastructure. Based on the results of the survey, the Steering Group compiled a “*Report on countries’ progress and challenges in developing climate change-related statistics*” (2017), which serves as a basis for planning the contents of the Expert Forum, capacity development and other activities. The survey indicated that there is high demand for increased support from international organizations to develop guidelines and streamlined methodologies, as well as facilitate exchange of experience among countries.

12. **National road maps.** To guide the countries in the implementation of the CES Recommendations, the Steering Group has provided support to countries preparing their national road maps on developing official statistics for climate change analysis. The Steering Group developed a sample road map with a tool for prioritizing national actions to improve data and statistics for climate analysis in line with the CES Recommendations. Several countries have shared their progress and success stories at the Expert Fora, including Armenia, Canada, Finland, Kazakhstan, Kyrgyzstan and Slovenia.

13. **Capacity development and training.** The Steering Group has discussed how to enhance training possibilities for national statistical offices, and has agreed that its members (e.g. UNFCCC, IEA, FAO, EEA etc.) open the current training courses to statisticians, and use the materials prepared by the Steering Group to develop new training materials and modules. Additional funding would be needed to organize capacity development activities in

this area. In 2019, the Steering Group will organize jointly with IEA a pilot workshop on energy statistics and climate change.

(f) Collaborate closely with international organisations active in measuring climate change

14. **Collaboration with other involved organizations.** The **Expert Fora** have particularly enhanced collaboration with international organizations active in measuring climate change, through **sessions on priority topics** selected each year that have been organized jointly with the main international players active in the selected area. For example, in 2015, the special session on measuring extreme events and disasters was organized with World Meteorological Organization (WMO) and United Nations International Strategy for Disaster Reduction (UNISDR), and as a result, WMO joined the Task Force. In 2016, the session on strengthening energy statistics for analyzing climate change was organized jointly with the International Energy Agency (IEA). In 2017, the special focus was on climate change in agriculture and forestry, organized jointly with FAO, while the keynote speech on the importance of using official statistics for climate analysis was delivered by NASA Goddard Institute for Space Studies.

15. Most recently, in 2018, the selected topics were the development of climate adaptation statistics (organized jointly with the European Environment Agency and UNFCCC) and the use of geospatial data in climate change (organized jointly with United Nations Statistical Division (UNSD), the Group on Earth Observations and the European Space Agency). The keynote speech was delivered by the Director of UNISDR on the importance of cooperation of different expert communities, including NSOs, to reduce disaster risk in particular originating from climate-related hazards.

16. **Support by the UN Statistical Commission.** UNECE work on climate change-related statistics received broad support at the 47th (2016) and 49th (2018) sessions of the United Nations Statistical Commission. In 2018, UNECE presented the CES Recommendations, set of indicators and the road map at a side event of the Statistical Commission, and the Commission session took note of the global applicability and usefulness of the outcomes produced so far. The set of indicators developed in UNECE region is now a basis for the global set being developed by UNSD.

17. In summary, the work of the Steering Group between 2014 and 2018 resulted in important methodological outputs, building networks of experts, inter-agency cooperation and practical guidance for the implementation of climate change-related statistics. The Steering Group has contributed significantly to clarify the roles of NSOs and establish them as key-players and important data providers in the institutional environment related to climate change.

III. NEED FOR CONTINUATION OF WORK

18. Climate change continues to be high on the political agenda and can be expected to acquire even more prominence as the effects of climate change are being felt all over the world. Continued work is needed to increase data availability and quality to meet the upcoming data needs.

19. **Data requirements due to the Paris Agreement.** The Paris Agreement on Climate Change came into force in November 2016. Its implementation will have implications for

statistical offices. The Agreement introduces new data requirements for all countries, not only the developed countries as was the case with the Kyoto protocol. In addition to the greenhouse gas emission inventories, data will be needed on tracking progress on nationally determined contributions; climate change impacts and adaptation; financial, technology and capacity building support, etc. Negotiations are ongoing on how to define and operationalize the new data/reporting requirements and take stock of progress. The discussions are planned to conclude in December 2018 at COP 24. When they will be finalized, the statistical community needs to work together on implementing the requirements.

20. **Data on climate change adaptation.** The most challenging area among the upcoming requirements is data on climate change adaptation. These data are less often produced and more difficult to capture statistically. For example, in the set of climate change related indicators that the CES Task Force is currently working on, the number of indicators on adaptation (five) is less than in other areas of climate change. For all these five indicators an internationally agreed methodology still needs to be developed (they are so-called Tier III indicators). The Task Force is now continuing their work until 2020 to refine the initial set of indicators, and to identify methodologies, data sources and guidance for implementation.

21. **SDG indicators.** The work of the Task Force on the set of climate change-related indicators is also important in the context of SDGs. The global SDG indicators for SDG 13 “Climate change” do not allow tracking progress towards SDGs at country level. Among the global indicator list, only one of the eight indicators for SDG 13 is a statistical indicator¹ and is applicable to monitor progress at country level². Furthermore, five out of the eight global SDGs indicators for Goal 13 belong to Tier III where the internationally agreed methodologies are still being developed.

22. To deal with these and other upcoming challenges, developing climate change-related statistics in the region requires continued effort in coordination, methodological work, guidance for implementation, capacity building, and platforms for sharing knowledge and experience among producers and users of statistics. Given the challenges and need for further work it is proposed to extend the Steering Group’s mandate until 2023. The Group will report regularly to Bureau on achievements and new work to be undertaken. The draft Terms of Reference are provided in Annex I.

23. **The CES Bureau is invited to:**

- **comment on the progress of work;**
- **review and approve the attached Terms of Reference for the Steering Group on climate change-related statistics.**

¹ 13.1.1 ‘Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population’

² Seven indicators under SDG 13 are non-statistical and are relevant for monitoring progress only at global or regional levels. For example, 13.1.2 ‘Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030’, or 13.3.2 ‘Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology’.

ANNEX I

TERMS OF REFERENCE FOR THE STEERING GROUP ON CLIMATE CHANGE-RELATED STATISTICS

I. BACKGROUND

1. Climate change represents one of the greatest challenges facing humanity today. Finding ways to allow continued economic and social development while drastically reducing emissions of greenhouse gases is a vast technical and political challenge. The global initiatives responding to this challenge, such as Paris Agreements, 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction, generate new data requirements extending from direct data on climate and greenhouse gas emissions to data on the social, economic and environmental impacts of climate change, and efforts taken to mitigate it or adapt to it.

2. These requirements, in line with the scope of climate change-related statistics defined by the Conference of European Statisticians (CES), have increased the demand for data held by national statistical offices also in areas not directly linked to greenhouse gas emission inventories. Thanks to the *CES Recommendations on Climate Change-related Statistics* and work towards their implementation, national statistical offices are now more able to contribute to the new reporting tasks. However, continued effort in coordination, further methodological work and capacity development is needed to meet the upcoming challenges in this area.

3. The present terms of reference of the Steering Group are updated for activities in the coming five years.

II. MANDATE

4. The work of the Steering Group is conducted within the framework of CES and its Bureau. The Steering Group will regularly report to the CES Bureau on the CES activities on climate change-related statistics, including on the outcome of expert meetings and task forces working under its guidance.

5. The Steering Group may identify concrete tasks or activities to support its work that could be undertaken by groups of experts (Task Forces). In such cases, after having verified the interest by a sufficient number of CES member countries and the availability of resources, the Steering Group will submit proposals to the CES Bureau for review and approval.

III. OBJECTIVE

6. The objective of the Steering Group will be to provide direction to the work towards implementing the *CES Recommendations on climate change-related statistics*, advancing the work on climate change-related statistics and promoting coherence between greenhouse gas inventories and official statistics.

7. The key tasks of the Steering Group will be to

- Steer the CES activities in climate change-related statistics and coordinate them with key international organizations active in this area; and
- Act as an organizing committee to the annual UNECE Expert Forum for producers and users of climate change-related statistics, and other related expert events that may be organised.

IV. PLANNED ACTIVITIES AND OUTPUTS

8. Building on the work accomplished to date, the Steering Group will work on the following activities and outputs:

- (a) Steer CES activities in climate change-related statistics. Organise and lead the work of the expert meetings and oversee any CES task forces on climate change-related statistics, including development of guidelines, collections of good practice and capacity building;
- (b) Provide advice on methodological work in climate change-related statistics, including addressing new areas that have been identified. Possible areas for the future work may include statistics on climate change adaptation, geo-referenced climate indicators and climate change accounts within the SEEA framework.
- (c) Continue identifying areas of climate change-related statistics that require further methodological work or where practical guidance would need to be developed;
- (d) Promote sharing of ideas and good practice as well as advance work in climate change-related statistics and improving coherence of greenhouse gas inventories and official statistics, for instance through the expert meetings;
- (e) Collaborate closely with international organisations active in measuring climate change-related statistics, and discuss the roles and responsibilities of the statistical community, greenhouse gas inventory compilers and relevant international organisations;
- (f) Follow up on countries' progress in implementing the CES Recommendations and developing climate change-related statistics.

V. TIMETABLE

9. The terms of reference of the Steering Group will be reviewed in 2023.

VI. METHODS OF WORK

10. The Steering Group will primarily work via email and telephone conferences. Informal meetings are organised on the occasion of events attended by a significant number of Steering Group members, such as the expert meetings for producers and users of climate change-related statistics or other relevant events.

11. The Steering Group consults with the UN Committee of Experts on Environmental-Economic Accounting (UNCEEA), established by the UN Statistical Commission.

VII. MEMBERSHIP

12. As of September 2018, the representatives of the following countries and organizations participate in the Steering Group: Italy, Mexico, Netherlands, Kyrgyzstan, Russian Federation, Luxembourg (Chair), Directorate General for Climate Action of the European Commission, the European Environment Agency, Eurostat, the Food and Agriculture Organization of the United Nations, the International Energy Agency, the United Nations

Statistics Division, United Nations Framework Convention on Climate Change and
Midsummer Analytics.

13. UNECE acts as Secretariat to the Steering Group.

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