

Climate change statistics and indicators

United Nations Statistics Division

Background

The United Nations Statistics Division (UNSD), in response to increased demands for climate change statistics and indicators, prepared, in collaboration with the Economic Commission for Europe (UNECE), the Secretary-General's Report on Climate Change Statistics (E/CN.3/2016/15) for the 47th session of the Statistical Commission (New York, 8-11 March 2016).¹ Prior to this, in 2008, UNSD organized two conferences on climate change and official statistics, in Oslo and in Seoul, at which the statistical implications of the emergence of climate change in the policy realm, the related challenges and the road ahead were discussed. In subsequent meetings and workshops, UNSD has produced documentation and training materials describing the interlinkages between climate change and environment statistics, using the Framework for the Development of Environment Statistics (FDES) (<https://unstats.un.org/unsd/envstats/fdes.cshtml>) and other relevant sources. Chapter 5.3 of the FDES contains statistical information to guide countries; it identifies and describes the many environment statistics needed to provide information about climate change, organized in the sequence of climate change events based on the Intergovernmental Panel on Climate Change (IPCC) framework.

Given the importance of climate change statistics and its relationship to environment statistics, the Environment Statistics Section of UNSD has developed a knowledge platform dedicated to climate change statistics at <https://unstats.un.org/unsd/envstats/climatechange.cshtml>. It is being populated on an ongoing basis.

The Statistical Commission at its 47th session in March 2016, *inter alia*, welcomed the Secretary-General's Report on Climate Change Statistics and urged countries to develop and strengthen environment statistics, which are necessary for the effective monitoring of key aspects of climate change. Further, the Statistical Commission recommended that countries use the FDES 2013 to guide the development of climate change statistics and indicators, given the close interrelationship between environment statistics and climate change statistics, and urged the international statistical community to expand its regional, sub-regional and national capacity-building efforts in climate change statistics, in line with the Paris Agreement, adopted by the parties to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015, and the 2030 Agenda for Sustainable Development. The Commission also noted the link between climate change and disaster reduction and requested that the Sendai Framework for Disaster Risk Reduction 2015-2030 be considered in the development of climate change statistics and indicators. **Finally, the Commission requested UNSD to review the set of climate change-related statistics and indicators being developed by UNECE and consider it as a basis for developing a global set of climate change statistics and indicators, applicable to countries at various stages of development.** The report of the Commission,

¹ <http://unstats.un.org/unsd/statcom/47th-session/documents/2016-15-Climate-change-statistics-E.pdf> (available in all six official UN languages).

which includes the decisions on climate change statistics can be found at:

<http://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-statistical-commission-E.pdf> and is available in all six official UN languages.

The UN-ECE set of climate change-related statistics and indicators was endorsed by the Conference of European Statisticians plenary session in June 2017 as an initial list. Based on the mandate of the 47th session of the Statistical Commission, UNSD, which is a member of the UN-ECE Task Force on a set of key climate change-related statistics and indicators, is: (i) pilot testing the UN-ECE set of indicators with countries to assess its applicability for developing countries, in particular to consider areas of concern such as adaptation/vulnerability; and (ii) discussing the set of indicators in various fora, including the Expert Group on Environment Statistics, of which UNFCCC is a member (https://unstats.un.org/unsd/envstats/fdes/fdes_eges.cshtml), and regional and national capacity building workshops.

The UNSD Pilot Survey on Climate Change-related Statistics and Indicators is ongoing but has already demonstrated the need to develop: (i) new or additional indicators to reflect situation in developing countries; (ii) a process on how to identify/modify the indicators based on both existing global processes (e.g., incorporating indicators identified in adaptation and mitigation plans being submitted to UNFCCC) and regional and national policies, priorities and processes; and (iii) a systematic process for a full consultation at national level to involve all stakeholders.

In order to globalize climate change statistics and indicators UNSD is:

- (i) currently analyzing the results of the ongoing Pilot Survey;
- (ii) developing a work plan as part of the Secretary General's Report on Climate Change Statistics to be presented at the 49th session of the Statistical Commission (New York, 6-9 March 2018);
- (iii) planning to expand the mandate of the EGES to cover more aspects of climate change statistics and indicators, given the very close relationship of this work to environment statistics;
- (iv) going to review the current UN-ECE list of indicators with a view to their modification prior to a Global Consultation on Climate Change Statistics and Indicators planned for 2018-2019;
- (v) planning to develop an inventory of related work on climate change statistics by partner organisations;
- (vi) exploring ways to strengthen the relationship between UNFCCC, IPCC and UNSD, and engaging the wider statistical community;
- (vii) inviting UNFCCC to provide inputs to the Secretary General's Report on Climate Change Statistics for the 49th session of the Statistical Commission;
- (viii) planning to organize a Side Event on Climate Change Statistics at the 49th session of the Statistical Commission;
- (ix) providing inputs to UNFCCC towards the policy process through the open call for submissions under the Paris Agreement work programme; and
- (x) providing inputs to UNFCCC through the call for submissions on indicators for adaptation and resilience. UNSD also intends to collaborate with UNFCCC in their Adaptation Committee's upcoming meeting "to exchange views on national adaptation goals/indicators and how they relate to indicators/goals for sustainable development and for disaster risk reduction in the context of the Sendai Framework for DRR 2015–2030" expected to take place in 2018.