



WMO STATEMENT AT SBSTA 50

17 June 2019, Bonn, Germany

World Meteorological Organization

Contributions of Science to Paris Agreement Implementation

Mr Chairperson,

Distinguished delegates,

The World Meteorological Organization (WMO) along with its co-sponsored bodies, the Global Climate Observing System (GCOS) and the World Climate Research Programme (WCRP), continues working to increase the relevance of the information provided to the Parties to the UNFCCC. GCOS further develops the observing system with regard to improving the scientific understanding, and providing clear information to inform adaptation. Observations support monitoring and prediction of the climate system, and understanding of future impacts. On the other hand, WCRP plays a unique role to improve the predictability of the climate system, and our understanding of the extent of human influence on climate.

For 25 years, WMO has continued preparing an annual statement on the state of the global climate based on authoritative sources. The statement tracks the behavior of key indicators of the state of the global climate system—temperature, greenhouse gas atmospheric concentrations, and indicators of the state of the oceans and cryosphere. It also contains scientific information to enhance understanding of the occurrence of extreme weather and climate events and the degree to which they can be attributed to human influences on the climate. The WMO Statement on the State of the Global Climate in 2018, released by the United

Nations Secretary General in March 2019, shows a striking record warming recorded from 2015 through 2018, a continuous upward trend in the atmospheric concentration of the major greenhouse gases, an increasing rate of sea level rise and the loss of sea ice in both northern and southern polar regions. The global temperature in 2018 was 1°C above pre-industrial levels. Ocean surface waters in a number of ocean areas were unusually warm in 2018 and sea level continues to rise at an accelerated rate. Global mean sea level for 2018 was around 3.7 mm higher than in 2017 and the highest on record. An update for 2019 is being prepared for the September United Nations Climate Action Summit.

According to the latest WMO Bulletin on Greenhouse Gases (GHGs), in 2017, the CO₂ concentrations reached new highs, with a global average of 405 parts per million (ppm). The time remaining to achieve commitments under the Paris Agreement is quickly running out. WMO has initiated a proven approach for verification of the concentration of GHGs through atmospheric measurements by establishment and operation of a national or regional/multi-national GHG observing network combined with inverse modelling and analysis. This system, the “Integrated Global Greenhouse Gas Information System” (IG3IS), provides robust flux estimates that can be used to verify emission estimates from a greenhouse gas inventory. IG3IS and associated WMO good practice methodological guidelines for atmospheric measurements and analysis methods have been incorporated into the draft 2019 Refinement of the IPCC Guidelines for National Greenhouse Gas Inventories.

A Memorandum of Understanding (MoU) has been entered into between the UNFCCC Secretariat and WMO for collaboration on annual reporting on GHG concentrations, the state of the global climate, climate services for adaptation planning, observations-based tools for improved national greenhouse gas emission estimates, regional collaboration for supporting adaptation and mitigation action, and cataloguing high impact hydrometeorological events. Implementation of this MoU facilitates assistance to the Parties, particularly developing countries, on request, in support implementation of the Convention, the Koto Protocol and the

Paris Agreement and provides organizational support and technical expertise to the climate negotiations and institutions as well as facilitation of the flow of authoritative information.

WMO is strengthening its collaboration with other United Nations partners, to help them access and use relevant science in support of Parties efforts to implement the Paris Agreement. In response to the growing health-sector impacts from extreme weather, climate change and air pollution, WMO and the World Health Organization (WHO) have agreed to accelerate joint actions which will promote the alignment of relevant policies and raise awareness of health co-benefits of climate change mitigation, as well as the damages caused by climate-related health impacts. WMO and WHO will develop programmes and mechanisms that build capacity, particularly in vulnerable and high risk regions, to generate and apply scientific evidence for policy- and decision- making and improve the co-development, delivery, access to and use of data and tailored information products on weather, climate, water, and air pollution hazards to health.

With regard to supporting adaptation and resilience in climate-sensitive sectors more broadly, Decision 11 adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (11/CMA.1) invites WMO, through its Global Framework for Climate Services (GFCS) to facilitate the development and application of methodologies for assessing adaptation needs and to regularly inform SBSTA about its activities aimed at improving the availability and accessibility of comprehensive climate information, including observational data. In response to this decision, WMO is preparing a "State of Climate Services" report documenting the current status of climate information and associated services in relation to Parties priorities identified in their NDCs and NAPs. Information included in, and underpinning the report will provide WMO and other international organizations and Parties with intelligence for targeting investments in hydro-meteorological systems and associated services for adaptation and resilience.

In response to the Paris Agreement call for “Strengthening scientific knowledge on climate...in a manner that informs climate services and supports decision-making (Article 7, paragraph 7 (c))”, WMO is providing expert services to the Green Climate Fund (GCF) to facilitate the generation and use of climate information and science in decision-making. This collaboration aims to enhance the climate science basis of GCF funded activities, to strengthen the quality, effectiveness, and value of GCF funded projects on the basis of objective, scientific, and climate data-driven conclusions and analysis. The project will facilitate the formulation of technical capacity development at the country and local level(s) to support climate science basis provided for a National Adaptation Plan or a GCF project in the country context; and expand understanding and knowledge of climate rationale requirements and preparation within each region.

At COP 24, WMO and the GCF signed an MoU that expands this cooperation to include strengthening integrated global-regional-national operational hydrological and meteorological systems and associated climate information services, providing GCF-accredited entities with information and technical support, and aligning and leveraging GCF-funded hydrological and meteorological investments. To support Parties’ institutional capabilities, WMO encourages the establishment of National Framework for Climate Services (NFCS) as a key institutional mechanism to coordinate, facilitate and strengthen collaboration among national institutions and other key stakeholders for implementation of the GFCS. So far around 30 countries have established such frameworks. An NFCS ensures that the entire value chain for the production and application of climate services is addressed systematically with the involvement of all relevant stakeholders in a coordinated manner.