



Statement by the Secretary-General of the World Meteorological Organization
On the occasion of the International Conference
“The Global Climate Challenge: Dialogue of Government and Business”
Moscow, 17 November 2015

On 9 November 2015, the World Meteorological Organization (WMO) released its Greenhouse Gas Bulletin for 2014. The amount of greenhouse gases in the atmosphere reached yet another new record high, continuing a relentless rise which is fuelling climate change and will make the planet less hospitable for future generations.

Between 1990 and 2014 there was a 36% increase in radiative forcing – the warming effect on our climate – because of long-lived greenhouse gases such as carbon dioxide, methane and nitrous oxide from industrial, agricultural and domestic activities.

This information, which is possible thanks to the observations of the WMO Global Atmosphere Watch, is consistent with the assessment and baseline scenarios of the Fifth Assessment Report produced by the Intergovernmental Panel on Climate Change (2013/2014), and the most recent reports by WMO on the state of the global climate. Decade after decade, global temperature increases on land, on sea surface and in the deep ocean, which stores about 93% of the extra heat resulting from human activities.

Since the 1980s, permafrost temperatures have increased in most regions due to increased surface temperature and changing snow cover. Ocean and permafrost warming may cause hydrate instability and release of methane into the atmosphere, accelerating global warming and thus affecting infrastructures built on the permafrost.

The destabilization of the climate system is leading to more frequent and/or more intense extreme weather and climate events: floods, storms, heat waves, droughts, high waters. The cost that these events are imposing on our societies is already extremely high. If in the last thirty years we have been able to reduce losses of lives thanks to improved early warning systems, the economic losses are growing very fast.

The climate system is further affected by major events linked to climate variability. A strong El Niño event, which is causing extreme weather around the world, is expected to strengthen further by the end of the year. Severe droughts and devastating flooding being experienced in different parts of the world bear the hallmarks of this El Niño, which is one of the strongest in the last fifty years.

The situation that the current generation is facing, and even more that future generations will have to face, is simply unsustainable. The collective effort made by the international community to adopt unanimously the seventeen Sustainable Development Goals for 2030 may be in vain if the root causes of climate change are not seriously considered and addressed. We have to act now to drastically reduce greenhouse gas emissions if we are to have a chance to keep the increase in temperatures and the consequences of climate change to manageable levels

Both the public and the private industry are pivotal in fostering and leading the transition to the green economy that can drive our way from the baseline scenarios to the mitigation scenarios that can contain temperature increase within 2°C above preindustrial levels. A variety of instruments will have to be employed, from the increased use of renewable energies to the development of new technologies, from investments in the drivers of sustainable development to economic and regulatory mechanisms.

In any case, the need for reliable and actionable information based on climate scenarios will increase. The investments made in land, atmosphere and ocean observations will have to be maintained and strengthened, at the national and regional levels. WMO Regional Climate Centres will play a key role in this, including through the Node on Long-range Forecasting for North Eurasia, provided by Roshydromet.

The ability to convert data from observations into usable information will have to be enhanced and human capacities will have to be further developed. Initiatives such as the Global Framework for Climate Services, led by WMO on behalf of the UN System, represent a critical tool to enable adaptation based on climate scenarios in different sectors: agriculture and food security, water resources management, disaster risk reduction, health, renewable energy, climate-smart cities...

Future climate change is happening already today, as the WMO series of weather forecasts for the year 2050 is showing, including the one prepared by Meteo TB. Indeed, the global climate challenge concerns us all and will only be won through the urgent, bold and concerted effort of governments, the business sector, the civil society and the scientific community.
