

## **WMO Secretary-General Prof Petteri Taalas opening statement to the IPCC Working Group II contribution to the Sixth Assessment Report (*check against delivery*)**

I would like to congratulate you all for this great work and what IPCC has been achieving for the Sixth Assessment report round.

The IPCC Working Group 1 report was a very influential report which influenced the work of the Glasgow COP26 meeting in November. The previous special report, especially on 1.5°C had a very high impact and that was a game changer. Earlier our thinking was that 2°C would be enough as an ambitious climate change target. After that, 1.5°C became the desired outcome of climate mitigation work for the coming years.

From these previous reports, the message from the physics community was very clear. What we have seen happening so far and what is expected to happen during the coming decades and centuries, especially when it comes to melting of glaciers and sea level rise which is unfortunately going to last much longer than earlier estimated.

The impacts of climate change are already very visible. We have seen them happening worldwide. That was understood by heads of state at Glasgow. There was not a single head of state who questioning the scientific facts. The message has been passed and the message has been heard.

It is clear that we have especially vulnerable areas of the world, especially in tropical latitudes and developing world, especially Africa, Southern Asia and the Pacific islands are very vulnerable when it comes to climate change. These impacts are already visible worldwide.

WMO published last year a report on disaster statistics for the past 50 years and we demonstrated that 4.5 billion inhabitants of this planet have experienced a major weather-related disaster during the past 20 years. There has been a drop in casualties thanks to improved early warning services but we have seen dramatic increases in economic losses.

One of the most recent disasters has hit developing countries. In Madagascar, Batisirai was Category 4 and had severe impacts on the economy and human well-being.

We have to be careful how we communicate these facts. We have to separate impacts from natural variability to impacts from climate change.

I have often been using the analogy of sports. At the moment we have the Winter Olympic Games in China where we have high performing athletes. If you give them doping substances, then they perform even more effectively. That is what we have done to the atmosphere. We have been doping the atmosphere. Our doping has been the use of fossil fuels and that has already led to an increase in disasters and their human and economic impact and biospheric impact.

The problem has been understood. Glasgow conference was the 2<sup>nd</sup> most successful conference after Paris. But the 1.5°C target is barely alive. The work needs to continue. The next COP27 in Sharm-el-Sheik will be hosted by Egypt and the following COP by UAE. We hope to hear more pledges at those conferences. We are working for such a goal. The next COP will have a more Africa flavour. It is the most vulnerable continent.

Besides mitigation it is highly important to pay attention to adaptation. We expect the growing trend of disasters will continue until at least 2060s and sea level rise and melting of glaciers for much longer as we have already exceeded 420 ppm of carbon dioxide.

Of course if we had carbon removal techs we could change the big picture, but so far that's not the case.

Climate change impacts are related to economy, food security, infrastructure, the biosphere and health.

We are also talking about mental health. Part of the mental health challenge is apocalyptic fears among young generations. We have to be careful how we communicate the results of our science and tipping points and whether we talk about the collapse of the biosphere and disappearance of mankind. We must be careful about that and not to cause too much fear among young people. The fear should be targeted towards decision makers not towards the young people.

We have to adapt to climate change. That means droughts, flooding, tropical storms, heatwaves, water shortages, coastal inundation.

From the WMO side we are paying attention to Multi-hazard Early Warning services and the ability of our members to forecast the impacts of disasters, which is quite often missing, especially in our less developed country meteorological services.

We have created financing mechanism for financing enhancement of observation systems. We have major gaps in African countries, Caribbean islands, which means that is an obstacle for climate adaptation. We have to invest in the basic observing system. We have a financing mechanism for early warning services, for CREWS, and we thank the donor countries. We have a new water and climate coalition to pay attention to water shortages. In Geneva we have joined forces with UNDRR to form a centre of excellence on climate change and disasters. We are working together with financing institutions like World Bank, European Union, UNDP, Green Climate Fund, to allocate more finance to early warning services.

Today we will have a UN meeting on sustainable development goals. Many of the SDGs are in danger because of the impacts of climate change, especially we have challenges with SDG6 related to water.

We are proud to be the host organization of IPCC. We have done a great job. I would like to thank TSU and heads of the support units and authors and the Chair. I would like to thank the Secretariat, the Vice Chairs and Co Chairs.

I would like to wish you a most successful conference.  
Thank you