



Intervention of the World Meteorological Organization to the SDGs in focus session titled **"SDG 7 and interlinkages with other SDGs – Affordable and clean energy"** at the High-Level Political Forum 2023, under the auspices of ECOSOC. 10.00AM Wednesday 12 July 2023, New York.

Weather, water and climate services are crucial for sustainable energy and the global energy transition to achieve net zero.

Energy systems are markedly affected by more frequent and intense meteorological and hydrological events and are increasingly exposed to vagaries of weather and climate. As renewable energy sources grow as a proportion of our overall energy mix, the vulnerability of energy systems to weather, climate and water fluctuations increases further, in terms of dictating clean energy availability, the efficiency of energy operations, and in driving energy demand.

Weather and Climate Services for energy are vital for supporting energy systems. They are crucial for informing site selection for wind, solar and hydro systems, and they support daily operations, week-to-week planning, multi-year resource and risk management, and the multi-decadal design of future energy systems.

Yet last year's WMO State of Climate Services report, focusing on Energy, showed that less than 50% of Members provide tailored weather, climate and water products for the energy sector. Those that do exist need to be better tailored to end users. Improved observational networks and data sharing are also required.

The report also showed there is a huge opportunity for Africa to close the gap in the global need for renewable energy. Africa is home to 60% of the best solar resources globally, yet only 1% of installed PV capacity.

WMO has recently launched Regional State of Climate Reports in Latin America and the Caribbean, and in Europe. Latin America and Caribbean have untapped potential of hydro, solar and wind resources. In Europe less than 50% of Members provide monthly to seasonal climate predictions.

These reports show the huge untapped potential in regard to climate services for energy which can boost the achievement of SDG7.

Weather and climate information can provide useful support to energy management decisions and relevant policymaking.

To achieve SDG7, it is clear that energy policies need to improve the resilience of energy systems to climate change and promote the transition to net zero, including by scaling up weather, water and climate services.