

27th session of the Conference of the Parties (COP 27)
High-Level Segment, Sharm El-Sheikh, Egypt, November 2022

Bureau international des poids et mesures /
International Bureau of Weights and Measures

Dear Delegates,

It is my privilege to speak for the first time at this conference following the admission of the BIPM – the International Bureau of Weights and Measures as an observer to the COP.

The BIPM is the intergovernmental organization through which more than 110 States and Economies act together on matters related to measurement science and measurement standards. Today, the BIPM is the custodian of the International System of Units the SI and the international timescale UTC.

The BIPM plays a coordinating role for the network of 250 measurement laboratories in 110 states worldwide that work to ensure long term stable and equivalent measurements. This includes the standards for all applications; I will give just three/two examples:

- the standards that contribute to high-quality earth observation and the monitoring of climate variables, meeting the requirements for representative measurements of surface air temperature with accuracies of 0.1 K.
- the standards that contribute to the development of emission measurements to support the effectiveness of mitigation strategies, that meet the requirements for CO₂ measurement data quality objectives of 0.1 µmol/mol in 420 µmol/mol, and
- the standards that support the addition of renewable energy sources to national energy grids whilst retaining security of supply, that requires time dissemination in modern smart grids with accuracies better than 1 µs.

In September this year, the BIPM held a workshop with the World Meteorological Organization involving more than one thousand scientists from around the world. The output of the workshop will be a set of recommendations on the key technical challenges that the metrology community should tackle to support global climate mitigation and adaptation activities.

Thank you.

Dr Martin Milton,
Director of the BIPM