Bureau ↓ International des ↓ Poids et ↓ Mesures A message from the Directors of the BIPM and the BIML





Dr Martin Milton Director of the BIPM



Mr Anthony Donnellan Director of the BIML

World Metrology Day - 20 May 2024

We measure today for a sustainable tomorrow

Metrology, the science of measurement and its application, has always been at the forefront of technological and scientific advancements. Its impact can be seen in all aspects of society and it is omnipresent in our lives.

This year, the theme for World Metrology Day is **sustainability**. Accurate measurements are the basis of environmental research and policymaking because they enable us to understand and tackle complex environmental challenges such as climate change, pollution, and resource depletion. The theme of sustainability encourages us to explore how metrology contributes to improving our lives every day. For example, accurate and reliable measurements enable better monitoring of environmental parameters, better assessment of the impact of human activities, and the development of strategies that promote ecological balance. Metrology empowers us to make informed decisions, whether by quantifying carbon emissions, measuring waste, or monitoring natural habitats.

Metrology plays a critical role in carbon accounting, which can cover a wide range of activities including the accurate measurement, calculation, monitoring, reporting, and auditing of pollutants. Carbon accounting schemes and other regulatory measures for safeguarding the environment require reliable data, based on the accurate measurements of pollutants potentially present in the environment at part per billion levels. Metrology is also of key importance because it supports the Sustainable Development Goals (SDGs) and the efforts of the United Nations in achieving sustainable global development:

- fair and transparent trade based on legal metrology serves to improve economic conditions for us all and assists in reducing poverty;
- reliable and comparable test results are important in order to improve our health and well-being;
- effective climate action must be based on measurement technologies that quantify emissions and essential climate variables as well as monitor the effectiveness of mitigation strategies;
- measurements are essential in order to develop and monitor the technologies that ensure we have access to affordable and clean energy; and
- industrial innovation and infrastructure depend on accurate measurements for a wide range of parameters.

The theme for World Metrology Day in 2024 underscores the pivotal role that metrology plays in all these cases and reminds us of our collective responsibility to safeguard our planet.

This year also marks a new chapter in the promotion of World Metrology Day following the Resolution adopted by the 42nd Session of the UNESCO General Conference in November 2023 to grant official recognition by UNESCO to its celebration on 20th May each year. This will provide new opportunities to promote metrology, and aligns with UNESCO's mission to construct a better world through science and education.