

Global to Urban Scale Carbon Measurements Workshop

The International Bureau of Weights and Measures (BIPM), Sèvres France, will be hosting a Workshop on Global to Urban Scale Carbon Measurements on 30 June to 1 July 2015, with the goal of identifying requirements for advanced measurements, standards, reference data, and instrument comparisons for a complete global monitoring system for greenhouse gases and the verification of emission inventories. The deadline for registration and submission of abstracts for the workshop is 28 February 2015.

For more information on the event, please see the website for details:

<http://www.bipm.org/en/conference-centre/bipm-workshops/carbon-measurements/>



Developing Standards for PV Technologies under Realistic Conditions

Solar photovoltaic (PV) products are sold according to their output power as measured under standardised artificial conditions. However, real-world climate conditions differ significantly from these laboratory conditions, resulting in current efficiency metrics making inaccurate estimates of actual energy generation. "Towards an energy-based parameter for photovoltaic classification" (PhotoClass) is a €3.6M European-funded project that will tackle these issues by developing and promoting standards for rating PV products under realistic climatic conditions. Over the next three years the project will bring together NMIs, universities, testing labs and manufacturers and will lead to a more financially and technologically efficient industry.

For more information please visit the project website: <http://photoclass.ptb.de>



Improving Traceability & Uncertainty for EO & Climate

NPL recently led and completed an EU 'European Metrology Research Programme' (EMRP) project on 'Metrology for Earth Observation and Climate' (MetEOC). This project developed a range of novel calibration standards, methods and bespoke instruments to improve the traceability and uncertainty in EO and climate data. The project also took the first steps towards evaluating uncertainty and traceability in algorithms/models and associated 'in-situ' bio-geophysical validation data. These challenging, latter themes are key drivers for the follow-on project MetEOC-2, recently started and also led by NPL, which focusses strongly on full 'end-to-end' traceability of Essential Climate Variables (ECVs). The projects coordinate European NMI efforts to support traceability needs for remote sensing programs and links to other internationally coordinated (e.g. WMO/CEOS) projects.

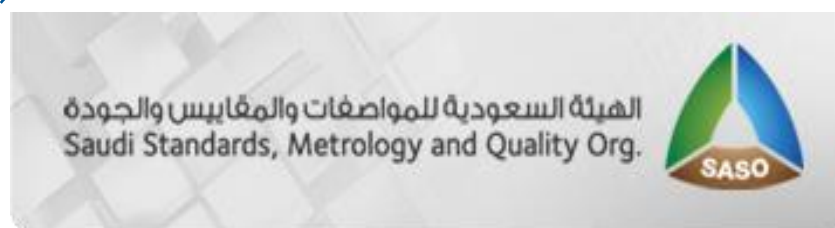
Please visit the website for more information: <http://www.meteoc.org/>



Reducing Air Pollution in Saudi Arabia

The transportation sector is estimated to contribute 23% of worldwide CO₂ emissions and is a principal source of air pollution. The road transportation sector in Saudi Arabia has been growing rapidly at a rate of 7% per annum. Thus, Saudi Standards, Metrology and Quality Organization (SASO) established multiple standards to curb the growth in fuel consumption and greenhouse gas emissions. Chiefly, the development of a

fuel economy standard for incoming light-duty vehicles, addressing both used and brand new to be effectively applied from 1 January 2016. This standard is based on Corporate Average Fuel Economy (CAFE) concept for new vehicles, which requires automotive manufacturers to meet an average fuel economy target for manufacturer's full fleet rather than for each specific model. The standard also sets minimum fuel economy limits for imports of used vehicles. It is anticipated that these Saudi Fuel Economy Standard will substantially curb local fuel consumption and air pollution, demonstrating the determination of the Saudi government to tackle threats facing our environment.



NIST gives Greenhouse Gas Measurement update at COP 20

Climate scientists attending the United Nation's COP 20 meeting in Lima, Peru, last December had the opportunity to hear an update on international recognition of advanced greenhouse gas measurement capabilities from the U.S. National Institute of Standards and Technology. James Whetstone, Special Assistant to the NIST Director for Greenhouse Gas Measurements, gave an update during an event on "Understanding the Carbon Emissions of Cities" at the U.S. Center on 5 December 2014. Dr. Whetstone and colleagues spoke about the [Megacities Carbon Project](#). Learn more about the event [online](#).



Call for your inputs

The Centre for Carbon Measurement at NPL is delighted to be collating and distributing this Low Carbon and Climate Science newsletter to NMIs around the world. We would like to hear from anyone who has a news story they would like to share with the community. Whether it is an event, a project, or just a way of communicating capabilities and possible collaboration opportunities. Please contact matt.whitney@npl.co.uk for more information.