WFEO Climate Stories on World Engineering Day

By Davide Stronati

Today, 4 March, is World Engineering Day for Sustainable Development, UNESCO’s annual celebration of the achievements of engineers that aims to raise awareness of the importance of engineering and technology to sustainability.

To mark the event, WFEO’s Committee on Engineering and the Environment, which is currently hosted by the Institution of Civil Engineers in the UK, has commissioned a series of Climate Stories from across the globe.

WFEO brings together national engineering institutions from 100 nations and represents more than 30 million engineers globally. ICE has been a WFEO member since the first meeting in 1968.

We asked members of the Committee on Engineering and the Environment from Australia, Canada, China, France, Kenya and the UK to share their thoughts on their country’s climate change policies and impacts and how they felt the many challenges should be addressed.

We found that our contributors’ national governments had varying levels of acceptance when it came to the causes of climate change and how they should be mitigated. For example, in Australia, some conservative groups and regional communities have a high economic dependency on resource industries favouring coal and gas so may resist targets for net-zero carbon emissions, while in China the government’s overall goal is to “have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060”.

Measures to reduce emissions also vary, from establishing independent advisory bodies in the UK, to government-imposed carbon taxes in Canada. Still, a deep-rooted recognition of the crisis is still missing in some countries, I believe, and an urgent roadmap to truly achieve policies such as net-zero emissions is yet to be published even in some of the most advanced countries.

WFEO launched its Declaration on Climate Emergency at the UN Climate Change Conference in Madrid in December 2019. It urged all member organisations to take decisive action to mitigate the causes and effects of climate change. The declaration emphasises the importance of involving and empowering the most vulnerable categories of people across the world to face this crisis, stating that nobody must be left behind.

In 2013, the WFEO Model Code of Practice for Sustainable Development and Environmental Stewardship was published. WFEO invites all member organizations to incorporate these principles into their activities and governance.
These Climate Stories demonstrate the common themes of how engineers can address extreme weather events and temperature changes, with many citing innovations and technology advances within the profession as being the main game-changers.

Possibly most fascinating aspect of these stories are the barriers that our colleagues are facing. While we may expect to hear of problems such as a lack of investment in climate-saving research and technology, it is also clear from our committee members that behavioural norms in countries such as China and Kenya, and insufficient guidance for government by industry in countries such as France, are equally as detrimental to climate action.

By regularly bringing together stories from engineers around the world and putting them side by side, it may encourage us to evaluate our own practices and solutions and inspire new thinking. We can also identify common barriers within the global engineering community and work together to overcome them by offering examples of our leading innovations and best practice.

Find all of the WFEO Climate Stories Blogs below:
Australia
Canada
China
France
Kenya
UK