



WFEO Declaration on Climate Emergency

The World Federation of Engineering Organizations (WFEO) is the peak body for engineering globally, bringing together national engineering institutions from some 100 nations and representing more than 30 million engineers. The members of WFEO are the main national and regional professional engineering institutions of the world. WFEO is a member of the United Nations Scientific and Technological Community Major Group and has an official Associate status with UNESCO.

Considering that:

The crises of climate breakdown are the most serious issues of our time. Our major infrastructure systems of transport, energy, water, waste, telecommunications and flood defences play a major part, accounting for a vast portion of energy-related carbon dioxide (CO₂) emissions whilst also having a significant impact on our natural habitats.

Our primary purpose has always been progressing and enhancing the societal well-being. While we have seen major improvements to practice over the last 20 years, for everyone working in the construction and infrastructure industries, it has now become clear that meeting the needs of our society without breaching the earth's ecological boundaries will demand a paradigm shift.

Together with WFEO Member Organisations, Associates and Partners in engineering, we will all need to commission and design buildings, cities and infrastructure systems as indivisible components of a larger, constantly regenerating and self-sustaining system in balance with wider society and the natural world. We are committing to strengthen our working practices and to create engineering outcomes that have more-positive impacts on the world around us.

Accordingly, we declare that we will strive to:

1. Continue to raise awareness of the climate emergency and the urgent need for action amongst WFEO National Member Engineering Organisations and WFEO Partners, all stakeholders within the National Members and with Governments.
2. Extend the sharing of knowledge and research to these ends on an open source basis to promote and incentivise capacity building in the areas of climate change mitigation and adaptation.

3. Strive for an engineering community where a diverse and inclusive membership can work collaboratively towards innovative climate mitigation strategies, engaging women and young engineers in particular to combat climate change.
4. Support developing countries on engineering knowledge in climate change mitigation and adaptation best practice, promoting climate change education at different level and all kinds of engineering education.
5. Use our global influence and connections to gather evidence to illuminate the effect of climate change on women and disadvantaged groups worldwide, and seek to use this information to ensure that no one is left behind.
6. Apply, and further develop, climate mitigation and adaptation principles as key measures of our industry's success, demonstrated through rating systems, awards, prizes and listings.
7. Upgrade existing built infrastructure systems where possible for extended use as a more carbon-efficient alternative to demolition and new build when that is the most efficient solution for whole-life carbon and inclusive social outcomes. Accelerate the shift to circular economy principles and low embodied carbon materials in all our work.
8. Include, as part of the basic scope of all our work, life cycle costing, whole-life carbon modelling and post-construction evaluation, to optimise and reduce embodied, operational and user carbon and other resource uses.
9. Adopt more regenerative design principles in practice with the aim of providing engineering design that produces complete infrastructure systems that enable society to make the necessary changes to match the goal of becoming net zero economies by 2050.
10. Increase current levels of collaboration between UNFCCC, WFEO and its members, associates and partners, and all other professionals involved in the design and provision of complete infrastructure systems to further reduce waste during construction and operation of assets.
11. Work with our members, associates and partners in making this commitment real.

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Prof Gong Ke, WFEO President



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