



UN 2023 Water Conference Side Event

The Role of the Science and Technology (S&T) Community on the Pillars for Accelerating Progress and Transformative Actions on SDG 6

March 23, 2:00 pm EST, virtual side event

Organized by:

World Federation of Engineering Organizations (WFEO) and the
International Science Council (ISC)

Background on the event (one paragraph)

Traditionally, society has advanced after technological innovations have occurred, but today, as with climate change, changes are happening first and mitigation and/or adaptation technology is lagging behind. Therefore, we need disruptive changes that will allow us to achieve the SDG 6 targets. For this, the technical and scientific community role is vital, both in terms of providing data and information to support decision-making and the adoption of policies and practices for more efficient and sustainable water governance and management; supporting capacity development for improved water resource management; as well as driving innovation and supporting the development and application of improved technologies for water use, recycling and conservation, and efforts to reduce excessive costs for water access. The side event aimed at highlighting the latest and best scientific knowledge, key initiatives and innovations of the Scientific & Technical community within the five pillars – financing, data and information, capacity development, innovation and governance – that will lead to accelerated and transformative action on SDG 6 in the second half of the International Decade for Action “Water for Sustainable Development”.

Water Action Agenda

[Water and Engineering | Department of Economic and Social Affairs \(un.org\)](https://www.un.org/departmentofeconomicandsocialaffairs/waterandengineering/)

Key Issues discussed

- Engineering institutions' role in the SDG6 global acceleration framework.
- Hydro-environment research and engineering: bringing together sectors and accelerating system-wide solutions towards the SDG's.
- Strategies for a Resilient and Sustainable City – Advancing SDG #6: A Case Study of Sydney Water Corporation, Australia.
- Bringing socioecological considerations in innovation and technology solutions for just water action

Key recommendations for action

Science and engineering are present both in the work themes of the objectives of the Decade and in the topics of the five interactive dialogues of UN-Water 2023 Conference.

Without diminishing the importance of good governance and financing which are essential for reaching water targets, it is important to recognize that engineering and the institutions that represent make an equally valuable contribution to the implementation of the necessary changes in the field of water.

Water engineering is a multidisciplinary profession involving the combined skill and collaboration of many subdisciplines of engineering (civil, environmental, mechanical, chemical, agricultural, electrical and electronical engineers among others).

Engineering has changed a lot in a short period. To address SDG-6 goals and targets, engineers have expanded their thinking beyond strictly technical solutions, focusing more on environmental and social aspects (socioecological considerations in innovation and technology solutions), such as, “Do No Significant Harm” principle, gender-sensitive planning, human-rights-based approach, and leaving-no-one-behind, among others. Facing present and future water-related challenges (population growth, climate change, sea level rise, droughts, floods, etc.), engineers' capacity today goes far beyond traditional solutions providing the best response (grey, green and/or blue) to each specific case. With particular attention to sustainability, circularity, and resilience of water sources. Thus, contributing to a sustainable, intelligent, and inclusive development.