



**WORLD FEDERATION OF ENGINEERING ORGANIZATIONS
FÉDÉRATION MONDIALE DES ORGANISATIONS D'INGÉNIEURS**

UN STI Forum May 5-6, 2022

Thematic Session 6 - Delivering on SDGs: Next Steps for the TFM and its partners

Written Statement

It is my privilege as the Co-Chair for the Science and Technological Community Major Group (STC MG) and Chair of the World Federation of Engineering Organizations (WFEO) which represents the professional engineering institutions of the world in some 100 nations, with more than 30 million engineers; the only global platform that enables sharing of engineering best practices and solutions through its membership and through established partnerships with other global organizations. I am also here as the Past President of the American Society of Civil Engineers (ASCE).

We understand Technology Facilitation Mechanism (TFM) was launched to support the implementation of SDG's. Technology when available can be a huge asset as was proven during the recent pandemic. Experience has shown us how majority of the global economy, leave alone daily existence for many has become depended on technology and tools. However, as engineers who use and create the technology and tools daily to solve real life challenges, we also appreciate how the implementation of the SDGs can become significantly impacted by both having access or lack thereof to technology and the tools. Lack of technology or tools (due to affordability) have had a huge impact on a major sector of the human population specifically those disadvantaged and or in isolated remote communities. It has had its impact on the global economy, education, health care etc.

By 2050 the world's population is projected to reach 10 billion and there will be four times as much infrastructure on the planet as it exists today. The world will spend trillions on technology and infrastructure each year as it drives national economies, acts as a job-multiplier, and provides basic products and essential services such as water, food, energy, mobility, and communication. Continue to invest in sustainable and resilient technology and infrastructure; making improvements to what we have while we continue to explore new technologies. Need to embrace and promote the concept of evaluating the triple bottom line namely social, economic, and environmental impacts of any future undertaking. In addition, need to evaluate the whole life cycle costs rather than just the upfront cost of any undertaking. For example, when engaged in discussions about renewable energy including electrification, one needs to evaluate the impacts of mining for materials to support such an undertaking versus consuming less energy by optimizing the need for the projected 10 billion people that will inhabit this planet that we have come to call home.

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TFM was meant to facilitate multi stake holder collaboration and partnerships through sharing of information, best practices etc. We need to have global cooperation; good, transparent governance; and inclusive policies in place to make available the technology and tools for all.

The TFM and the IATT should work more closely with the STC MG and WFEO to better understand the distinct roles of science and engineering in creating and delivering technology. With COVID, scientists led in discovery - finding the vaccine and in complementary fashion, engineering led in manufacturing and distribution of the vaccine. We ask for your continued support in establishing confidence in scientists and engineers to develop sustainable and affordable technologies and infrastructure to enhance the quality of life.

The IATT call for input from the broad science and engineering community should be expanded and the STC MG is ready to assist. Engagement of the entire science and engineering community including the next generation of scientists and engineers namely, students are critical to accelerating progress on the SDGs successfully.

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