

Infrastructure for sustainable cities

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Infrastructure is critical to achieving the UN 2030 Agenda and the Sustainable Development Goals (SDGs). Accelerating urbanization means that by 2030, most of the World's population will live in cities and according to the UN by 2050 almost 70% will live in cities. A 2018 report by the United Nations Office for Project Services (UNOPS) "Infrastructure Underpinning Sustainable Development" categorizes infrastructure as networked (transportation, water, energy, etc.) and non-networked (buildings, schools, hospitals, etc.) noting that no infrastructure is truly standalone and goes on to make the case that infrastructure impacts all of the SDGs.

The UN will complete its first complete review of the SDGs in 2019 with a Summit in September 2019 where member states will decide on next steps to accelerate achievement of the SDGs. The Technology Facilitation Mechanism (TFM) was established with the expectation that science and technology would play an important if not deciding role in achieving the SDGs. A special task force will present its 2019 Global Sustainable Development Report (GSDR) which will be available for deliberations during the 2019 reviews.

The WFEO participates at the UN as part of the Science & Technology Major Group (STC) with the International Science Council. The SCT works closely with the other major group and stakeholder group but is the only non-governmental group focused on science and technology.

What has the engineering profession learned about infrastructure and the SDGs since implementation began in January 2016? More broadly, what have we learned about the contributions of science & technology to achievement of the SDGs? What should the engineering profession do over next five years to accelerate achievement of the SDGs as a profession and in cooperation with the science community and other major groups and stakeholders?

The purpose of this paper is to review contributions by the engineering profession to achievement of the SDGs so far focusing on infrastructure and cities and open the way to expanded engagement of the global engineering profession in accelerating achievement of the SDGs.