

# Report of the Science and Technological Major Group to the HLPF on Contributions to Implementation of the SDGs

## Opening Statement

Achieving the 2030 Sustainable Development Goals (SDGs) will only be accomplished with a strong involvement of the Science and Technological Community (STC).<sup>1</sup> Each of the STC partners provides strong leadership to marshal the global engineering and science community to achieve the SDGs in concert with others and is committed to translating the SDGs into functional activities compatible with society and the environment.

Turning the words that define the 17 SDGs into actions that achieve them requires STC expertise to research, plan and implement cost-effective, feasible solutions in collaboration with policy and decision-makers as well as international and national financial institutions. Science and engineering are complementary with engineering translating the findings of science into actions by developing and applying technology to the benefit of, and service to the whole of society.

## Summary Statement

This summary statement draws from the 2016<sup>2</sup> and 2017<sup>3</sup> STC Position Papers prepared for the HLPF, a WFEO working paper on the SDGs<sup>4</sup>, the 2016 Global Sustainable Development Report<sup>5</sup>, and recent contributions to the Technology Facilitation Mechanism (TFM).

## Good practices to highlight

The first good practice to highlight is the methodology developed by ICSU in collaboration with a number of other international and national scientific organizations to systematically identify and score interactions across the 17 SDGs and their targets using a common methodology. This methodology is outlined in the 2017 STC Position Paper and the full report is available on the ICSU web site.<sup>6</sup>

A second practice to highlight is the WFEO Code of Practice for Sustainable Development.<sup>7</sup>

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<sup>1</sup> STC members are ICSU, ISSC, and WFEO

<sup>2</sup> 2016 Thematic Report

[https://sustainabledevelopment.un.org/content/documents/10115STCMG%20position%20paper\\_FINAL\\_rev25042016.pdf](https://sustainabledevelopment.un.org/content/documents/10115STCMG%20position%20paper_FINAL_rev25042016.pdf)

<sup>3</sup> 2017 Thematic Report

<https://sustainabledevelopment.un.org/content/documents/15010HLPF2017STCMG.pdf>

<sup>4</sup> WFEO ENGINEERS FOR A SUSTAINABLE POST 2015

<http://www.aees.org/sites/default/files/WFEOENGINEERSFORASUSTAINABLEPOST2015%20V1.6.pdf>

<sup>5</sup> 2016 Global Sustainable Development Report

[https://sustainabledevelopment.un.org/content/documents/2328Global%20Sustainable%20development%20report%202016%20\(final\).pdf](https://sustainabledevelopment.un.org/content/documents/2328Global%20Sustainable%20development%20report%202016%20(final).pdf)

<sup>6</sup> ICSU A GUIDE TO SDG INTERACTIONS: FROM SCIENCE TO IMPLEMENTATION

<https://www.icsu.org/cms/2017/05/SDGs-Guide-to-Interactions.pdf>

<sup>7</sup> WFEO Code of Practice for Sustainable Development <http://www.wfeo.org/sustainabledevelopment/>

This Code is a guide for incorporating sustainable development considerations into all aspects of engineering practice. It is presented as a model code to be adapted for use in all countries and in all engineering fields.

A third practice is the WFEO Code of Practice on Climate Change Adaptation.<sup>8</sup> This Code complements the WFEO Code of Ethics and the Code of Practice for Sustainable Development. It provides guidance to engineers to consider the implications of climate change in professional practice and to create a clear record of the outcomes of those considerations (SDG 9).

A fourth practice is the organization by ICSU of the meeting “*Supporting Science for the Sustainable Development Goals Towards a Global Forum of Research Funding Agencies, Foundations and Development Agencies*” held at UN HQ on 12 May 2017, just prior to the Second Multi-Stakeholder Forum.<sup>9</sup>

A fifth practice is the role played by ICSU, ISSC and WFEO in fostering gender equality (SDG 5) in Science Technology and Innovation, as exemplified by WFEO activities on “Women in Engineering”, and the partnership between ICSU, ISSC and GenderInSITE on a gender lens in international research.

A sixth practice is the attention placed by the scientific community on the issues of big data and open data – a key issue related to monitoring progress of the SDGs. In this context, it is important to recall the international accord “Open Data in a Big Data World<sup>10</sup>” developed by ICSU, ISSC, IAP-The InterAcademy Partnership and TWAS-The World Academy of Science for the advancement of science in developing countries.

### Lessons learned

Despite the speed and global reach of communications tools, the challenges to engaging the global STC around the SDGs at all levels are formidable. The STI Multistakeholder Forum is an effective once-a-year event that focuses STC on the SDGs but the STC must find ways to expand collaboration and outreach between events with the goal of informing and encouraging activities and participation by the STC at all levels - local to global. The online platform of the TFM should help.

The active engagement of scientists in the High Level Political Forum on Sustainable Development (HLPF), in the Commission on Science and Technology for Development (CSTD) and in key United Nations Conferences (including Habitat III, UN Ocean Conference) has also been a catalysing force in mobilizing the scientific and technological community in fostering interdisciplinary research and the science-policy bridging at both the international and national

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<sup>8</sup> WFEO Code of Practice for on Principles of Climate Change Adaptation for Engineers  
<http://www.wfeo.org/climatechangeadaptation/>

<sup>9</sup> ICSU Supporting Science for the Sustainable Development Goals  
[https://sustainabledevelopment.un.org/content/documents/13636UN\\_partnership\\_in\\_Global\\_Forum\\_of\\_Funders- concept\\_note\\_and\\_programme.pdf](https://sustainabledevelopment.un.org/content/documents/13636UN_partnership_in_Global_Forum_of_Funders- concept_note_and_programme.pdf)

<sup>10</sup> <http://www.science-international.org/>

levels. This is reflected also in the key role of scientists in contributing and drafting key UN publications such as the Global Sustainable Development Report (GSDR).

### Reflections

Target 4.7 is to *ensure that all learners acquire the knowledge and skills needed to promote sustainable development*. Much has been done but more needs to be done to accelerate the infusion of sustainable development into tertiary and continuing education for the STC. There are many potential side benefits to doing this and these need to be fully explored and exploited. This is a potential STC contribution to the 2019 HLPF.

### **Conclusions**

The STC has been and continues to be a strong supporter of the SDGs and their implementation in order to support UN Member States and other Members of Civil Society. The global leadership of the STC is working to strengthen existing multi-stakeholder collaborations and develop new ones in order to bring all the strengths of the STC to bear on achievement of the SDGs, also within the context of the upcoming World Science Forum (Jordan, 7-11 November 2017) and the World Engineering Forum (Italy, 26 November – 2 December 2017)