

SDGs 12, 13, 17 and interlinkages among those goals and with other SDGs

The Scientific and Technological Community Major Group [1] – co-organized by the International Science Council (ISC) and the World Federation of Engineering Organizations (WFEO) – stresses the unique opportunity provided by the pandemic and its cascading crises, for game-changing climate action which must be tackled with urgency. Welcoming this session, the STC Major Group makes the following recommendations:

- 1. The UN system and Member States must strengthen partnerships with the global science and engineering community to drive transformative change in the way we design, produce and consume goods and services. There is extensive knowledge and more research being done all the time on accelerating achievement of SDGs 12 and 13 there is an urgent need to address existing scientific evidence and move from plans to action. In this regard, mission-oriented partnerships amongst governments, businesses, communities, and civil society and international organizations are critical enablers. "SDG 17 is the bedrock of the whole agenda no one actor or sector can do it alone."[2] The recent UNESCO Engineering Report emphasizes the need for partnerships and to transform engineering practice and education if we are to achieve the SDGs.[3]
- 2. The world's governments are failing to meet their commitments to limit environmental damage and are on track to fail the Paris Agreement targets to keep warming well below 2°C, and to stabilize global warming at 1.5°C. The substantial drops in greenhouse gas emissions during lockdowns caused by the global pandemic are unlikely to have any significant long-term impact on global emission trajectories. Recovery packages and financial flows must drive "just transitions" towards climate-neutral and sustainable economies. The evidence is clear today that a zero-carbon future is a much better future for humanity, across all dimensions of well-being, including the biosphere. Besides the positive impacts of decarbonization on population health, green projects create more jobs, deliver higher short-term returns on investment, and lead to higher long-term cost savings. To do otherwise would be a false economy, providing short-term fixes which would exacerbate long-term impacts.
- 3. The UN system must step up efforts to share scientific knowledge and promote best practices and lessons learned among Member States to enable accelerated progress on SDG 13 and sustainable development. The recently launched 2030 Connect, an online platform for the SDGs, is an important and potentially powerful tool for sharing knowledge, best practices and lessons learned Member States must be made aware of it and utilize it.[4] The UN should seek input for 2030 Connect broadly and the Science Technological Community is prepared to assist. In preparation for COP26, the ISC has launched Transform21, a Global Science Platform curating latest scientific knowledge aimed at supporting needed transformations to more sustainable, more resilient societies and economies.

- 4. Young scientists and engineers must be fully engaged in the Decade of Action and Delivery for Sustainable Development and at the Science-Policy-Society Interface they are amongst generations most affected by decisions and policies being made today, particularly on SDG13. WFEO's side event at the 2021 High-level Political Forum showcased national initiatives carried by young engineers contributing to sustainable development of countries and explored how engineering communities, particularly young engineers and women, can work collaboratively towards innovative climate mitigation strategies.[5] In addition, global efforts are urgently needed in capacity-building for global science leadership for the next generation. COVID-19 has impacted young scientists particularly harshly, leading to a potentially lost generation of scholars.[6] The emergence of a growing number of national young academies is an example of such developments that should be supported.
- 5. The Scientific and Technological Community Major Group emphasizes the importance of utilizing diverse knowledge and practices, from engineering and technology, through natural and life sciences, to the arts and social sciences, to help transform mindsets, leadership and action, and to craft innovative, efficient, appropriate and sustainable solutions to today's urgent challenges. A truly transformative and successful COVID-19 recovery that will shift the world onto a sustainable path must be informed by scientific knowledge and engineering solutions that are co-designed and co-developed with various stakeholders from business, policy-makers, civil society and indigenous people, among others. The ability of governments to leverage the power of science and engineering in support of a better COVID-19 socio-economic recovery and a more equitable, healthy and sustainable future will be crucial.

Concluding,

- The Scientific and Technological Community stands ready to work with the UN, all Members States, and all stakeholders to devise appropriate and implementable science and engineering-informed solutions to help decision-makers and societies recover from COVID-19 and build more equitable, climate-resilient and sustainable futures.
- We would like to take the opportunity to thank UN DESA and other UN organizations for facilitating the engagement of the scientific and technological community.
- [1] https://sustainabledevelopment.un.org/majorgroups/scitechcommunity
- [2] EGM Summary for Sessions 12,13,17 https://sdgs.un.org/sites/default/files/2021-06/2021%20HLPF%20EGM%20cross-cutting%20session%20note%2012_13_17.pdf
- [3] UNESCO UNESCO. 2021. Engineering for sustainable development: delivering on the Sustainable Development Goals. 185 pages. https://unesdoc.unesco.org/ark:/48223/pf0000375644.locale=en
- [4] 2030 Connect https://tfm2030connect.un.org/
- [5] WFEO Deploying Global Youth Capacity in UN Policy and Engineering for SDG 13 ... Sustainable Development Knowledge Platform https://sustainabledevelopment.un.org/index.php?page=view&type=20000&nr=7887&menu=2993
- [6] IAP-GYA Joint Communiqué. 2021. COVID-19 threatens to lead to a 'lost generation' of researchers.
- https://globalyoungacademy.net/covid-19-threatens-to-lead-to-a-lost-generation-of-researchers-iap-and-gya-issue-joint-communique/

The Scientific and Technological Community Major Group is coconvened by the International Science Council and the World Federation of Engineering Organizations



