

7th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

5-6 May 2022

UN Trusteeship Council Chamber and virtual (hybrid format), UN New York

"Science, technology and innovation for building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the 2030 Agenda for Sustainable Development"

DRAFT Annotated Programme

5 May 2022

Note: Virtual innovators booths on Whova platform staffed from 07:00 to 10:00am EDT.

Pre-event 1: Accelerating technological solutions for the SDGs - The Global Sustainable Technology & Innovation Community (G-STIC) **

(7:30-8:25; virtual only)

This pre-event will make a special contribution by GSTIC, one of the most important academic partners of the STI Forum since its inception. The session will feature key technology solutions for the SDGs and means and ways to get engaged and make a difference.

Pre-event 2: UN system work on STI for the SDGs, including outcomes of regional STI Forums and global thematic conferences **

(8:30-9:45; virtual only)

This pre-event will feature senior UN officials discussing outcomes of joint work in the IATT membership, and feature reports about the outcomes of closely associated UN commissions, forums and events, such as the Regional STI Forums of the Regional Commissions, the UN Commission on Science and Technology for Development, ITU's AI for Good Summit, the Internet Governance Forum, and of cooperating global initiatives such as GSTIC, the Global Solutions Summit, and others.

Welcome and Opening

(10:00-10:40; hybrid)

Opening Remarks

Keynote Speakers

Ministerial session: Science, Technology and Innovation for the SDGs and a sustainable recovery from the COVID-19 pandemic

(10:40-12:00; hybrid) [Live delivery and recorded videos]

It is proposed that the high-level statements and interventions consider directly addressing one or more of the following guiding questions:

Best practices for equality: Are there examples/good practices of technologies and innovations that have emerged during the COVID-19 crisis to tackle inequalities, particularly affecting vulnerable groups, including those equalizing access to good quality healthcare, education, and finance? How can these be

shared and scaled up? Would international investment in the creation of Global Public Goods, serve to foster innovation while reducing global risk and ensuring equitable access to its benefits?

- STI4SDG roadmaps: Proactive STI policy measures are needed to stimulate research efforts, focus investments, and inspire coordination. How can your national STI roadmaps or action plans be aligned regionally -and globally- towards a more cost-effective SDGs-focused STI development? How are your STI roadmaps contributing to the mitigation of global risks, including future outbreaks? How to better support innovation system (e.g., in universities) to facilitate entrepreneurship and problem-solving skills? How can the UN contribute to foment a more responsive STI4SDG ecosystem in your country?
- STI for resilience building: What are some of the most promising innovations and technologies for
 resilience building and reversing the trends of rising inequalities? How can these technologies be scaled
 up quickly to make them accessible to the most vulnerable groups and countries? How can national STI
 systems become more resilient, making their positive impacts sustainable, while mitigating the risks of
 changing patterns of globalization and accelerated technological change?
- STI toward low-carbon economies: What are the most promising ways STI can contribute to a permanent shift toward inclusive low-carbon economies within the next 1, 5 and 10 years? What capacities should be built/strengthened to achieve this purpose? What are the most important opportunities and risks to the STI system?
- Lessons learned towards SDGs 4, 5, 14 and 15: Looking back, what are some of the key lessons learned from an STI perspective on what worked and what did not work to meet the targets related SDG 4 on quality education, SDG 5 on gender equality, SDG 14 on life below water, and SDG 15 on life on land? Taking into consideration the methods that did not work to meet the SDG targets, how could these barriers be overcome in the near future?

Opening Remarks

Ministerial statements

Special event 1: Global research cooperation, funding, and partnerships * (12:15 – 13:15; hybrid)

This special event will explore the status of global research cooperation and funding - especially in the Global South - to support the achievement of the SDGs. It will consider the short-term context of the pandemic and how it has highlighted the need for national capacity in STI while also showing how crucial arrangements for global collaboration are for responding to global crises and achieving the SDGs. A conversation among key R&D actors from public and private sectors will explore how to better share knowledge, how to work on joint funding proposals and projects, and how to strengthen collaboration and build new partnerships. The conversation will also include research funders to discuss the way forward.

Lunch break

(13:10 - 15:00)

Opening Ceremony for virtual Innovation exhibit and women in STEM – Engagement with innovators and eminent women scientists and engineers **

(13:15 – 14:55; virtual only)

A launch event featuring keynotes by women leaders in science and innovation will be followed by engagement with the winners of several UN-sponsored innovation competitions. This engagement may be in the form of lightning talks and/or a virtual tour of the exhibition and opportunities for audience questions and discussion. The winners will explain their cutting-edge initiatives and share insights from their experience developing, implementing and scaling their innovations to accelerate progress on the SDGs.

Note: Virtual innovators booths on Whova platform are staffed from 07:00 to 10:00 am EDT on 5 May.

Thematic session 1: Science, technology and innovation at the COVID-19 conjuncture (15:00-16:00; hybrid)

This session will explore lessons from the COVID-19 pandemic for a better science-policy-society interface, a resilient, sustainable and inclusive recovery, and rapid solutions for global challenges. It will consider how science can prepare for a future with pandemics, extreme weather, and other risks and build toward long-term resilience. The discussion will be based on recent STI trends, outlooks, and socio-economic impacts, and the role of STI in the recovery from COVID-19. It would feature emerging science and technology, discuss what it means for development perspectives and explore options for the way forward. It could also highlight key issues of the science-policy-society interface. South-South cooperation and research funding to support inclusive STI progress

that is aligned with the SDGs will also feature in the discussion. The discussion will build on related discussion at the end of March in the UN Commission on Science and Technology for Development.

Thematic session 2: Innovations in education: towards quality access and common good

(16:00-17:00; hybrid)

This session will look not only at promising technology and organizational solutions and trends, but also look at what has been achieved and what challenges remain in terms of increased access and quality of education worldwide. This session will emphasize equity issues, including gender equity, as well as economic disparities. It will examine advancements of digital learning and education technologies (ed-tech) to address learning during school closures due to COVID-19. It will also discuss best practices and innovative solutions to help tailor new tools with an equity lens to ensure that technologies serve to narrow rather than wide existing disparities. Lastly, the session will discuss the ways in which new technologies, collaborative and inclusive teaching models, and innovative pedagogical approaches can serve to transform education systems overall to better equip students for the future job market, as well as to prepare the next generation to address economic, social, and environmental issues towards a more sustainable future.

Special event 2: Reflections by the 10-Member-Group of High-level Representatives *

The Secretary-General's 10-Member Group of High-level Representatives of scientific community, civil society, and private sector is tasked with supporting the Technology Facilitation Mechanism, including the STI Forum. Group members work closely with the IATT and guide the work of the TFM. In this session, the 10-Member-Group will present and discuss a joint statement on vision and high-priority actions for the SDGs until 2030 and beyond.

(17:15 - 18:15; hybrid)

6 May 2021

Roundtable 1: Lessons from national science-policy advice **

This roundtable - in cooperation with the ISC and INGSA - will discuss lessons-learnt from the practice of providing science advice to national governments in the context of the pandemic. It will make suggestions on how to improve cooperative actions for a better science-poly interface among governments, the UN system, stakeholders including the scientific community, and the private sector. It will outline the implications of more responsive science advice mechanisms on public trust in science and technology

(08:45-09:45; virtual only)

Thematic session 3: Global, national, and local innovation ecosystems (10:00-11:00; hybrid)

The session will showcase various local, national mission-oriented innovation approaches by governments and start-ups and specific good practices and proposals, in particular to support innovation and technology adaptation and furthering the SDGs. The challenges of structuring an effective organization at the national and local levels, prioritizing the tasks, empowering people to engage in mission innovation and securing sustainable funding will be addressed. It will discuss specific policy proposals, including the proposal of a network of Banks of Ideas and Funds for Innovation supported by Ethical Councils.

Thematic session 4: Global digital public goods, digitalization, artificial intelligence, and connecting the world by 2030

(11:00-12:00; hybrid)

This session will focus on global digital public goods, the role of pervasive digitalization and artificial intelligence trends, and what it will take to fully connect the world, its people and things. The session will showcase examples and good practices of digital public goods innovations that have emerged during the COVID-19 pandemic to tackle inequalities, including those equalizing access to good quality healthcare, education, and finance. It will explore the means and ways to achieve universal access to a critical level of digital technologies and infrastructures as a matter of urgency, as well as how digital cooperation could accelerate progress to the SDGs. The conversation aims at considering specific pathways for achieving universal access to connectivity, data and AI infrastructure, while touching upon key governance, justice and equity issues. It will also aim at building on the proposals for

how to improve digital cooperation made in the Secretary-General's report Our Common Agenda which was made available as part of his vision on the future of global cooperation and reinvigorating inclusive, networked, and effective multilateralism. In addition, the spotlight will also be on how the Technology Facilitation Mechanism can address the unique STI challenges faced by the developing countries in these areas.

Special event 3: Supporting national capacities and the Partnership in Action for STI4SDG roadmaps *

(12:15-13:15; hybrid]

This special event will discuss the path forward for the Partnership in Action, following the successful inception of the Global Pilot Programme on Science, Technology, and Innovation (STI) for the SDGs roadmaps. The session will also discuss potential support to strengthen international partnerships on STI capacity-building for SDGs achievement in the context of the Voluntary National Reviews (VNRs) and the SDG Summit 2023.

Lunch break

(13:15 - 14:45)

Roundtable 2: Emerging science, frontier technologies, and the SDGs –perspectives from UN system and science and technology communities**

(13:15 – 14:10; virtual only)

This roundtable is being organized in the spirit of General Assembly resolutions 73/17 and 75/316 which called for collecting information, analyse and disseminate the findings on the impact of rapid technological change on the achievement of the SDGs from which specific STI policies and feedback systems can emerge, as well as A/RES/76/213 which established a framework for these STI4SDGs endeavours. The event will explore the latest developments in science and technology and their current and potential future impacts on sustainable development and the SDGs. The session will explore technology convergence and the multiple technology divides, including gender digital divide, and other challenges associated with these trends related to clusters such as blockchain, biotechnology, nanotechnology, artificial intelligence and quantum technologies. A key idea for the establishment of the UN Technology Facilitation Mechanism was "to bring decision-makers closer to the pulse of scientific and technological progress", and the event will also explore the best means and ways to achieve that. In particular, the interagency task team IATT will present its report, an update to the "TFM findings on the impacts of rapid technology change on the SDGs", and science-policy briefs submitted by scientists and engineers from academia, private sector, UN systems and governments. The discussions will also build on work by CSTD on industry 4.0 and insights from the SG's Special Envoy on Technology. The event will feature focused, conversations on selected issues to be sourced from submissions by science and technology communities, for example, green hydrogen "windows of opportunity" for developing countries; human-centred STI approaches; engineering standards; anticipatory science diplomacy; science for smarter development; etc. It will allow a frank discussion of specific policy suggestions between governments, expert stakeholders, UN system and decision-makers in the private sector. Videos and/or online exhibitor booths may present UN flagship publications by IATT and 5 to 6 of the most significant policy briefs.

Note: Virtual booths on related UN flagship publications and on science-policy briefs (staffed on Whova platform from 14:10 to 15:00)

Roundtable 3: Science and technology futures and scenarios for the SDGs and beyond: what is possible and what does it take? **

(14:10-13:55; virtual only)

This roundtable will explore the latest knowledge and key insights from science and technology futures and scenarios for the SDGs and beyond. It will engage scientists, technologists, scenario analysts, and decision-makers in Governments and private sector in a discussion on what is possible to achieve and what it would take. Particular attention will be paid to the in-focus SDGs 4, 5, 14, 15 and 17 under review at HLPF 2022. All these aspects will be explored from and poverty reduction lense and means and ways to provide energy for decent living for everyone on the planet. It will further explore options for maximizing SDG synergies through circular & shared economy, and discuss latest insights from SDG pathways, resulting high-priority actions and their synergies and trade-offs across policy objectives.

Thematic session 5: Emerging carbon dioxide removal technologies for addressing climate change

(15:00-16:00; hybrid)

This session will address the growing need for carbon dioxide removal (CDR) technologies, what they are, the proposals and deployments of various technologies worldwide and our state of knowledge about these technologies. Speakers will include authors of authoritative technology reviews, CEOs and CTO's of companies, funders of research in CDRs, already existing international research and deployment communities of practice, as well as senior government officials and private sector CEOs. Speakers will highlight good practices in policy and governance at global regional and national levels, including a range of interactions with other SDG aspirations. In particular, the session aims to discuss the types of CDR technologies and partnerships needed to reach net-zero emissions; plans for scaling up technologies; effective support for innovation ecosystems, emerging demonstration projects and best deployment practices; and how the UN could contribute to a responsible discussion of the potential consequences, costs and trade-offs of various technologies, their interactions with various SDG goals, and their ethical and governance issues alongside conventional mitigation and adaptation strategies.

Thematic session 6: Delivering on the SDGs: Next steps for the TFM and its partners (16:00-16:45; hybrid)

This session will begin with status report on the TFM, including the IATT and its activities. TFM partners will also present a number of initiatives from across the world that support the science-based, solution-oriented, multistakeholder and collaborative approach of the Technology Facilitation Mechanism (TFM) including discussions on broadening their impacts and closer connection to the TFM. It will conclude with a presentation of the way forward for the TFM.

Closing remarks

(16:45-17:00; hybrid)

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^{*}special events and ** other informal sessions (Roundtables, Pre-events, Exhibition opening) will not have interpretation services.

^{***} Side events will be held on the day prior to the Forum (4 May), as well as on 4-5 May during specific designated times (5-6 May: before 10am, during 12:00 – 1:30pm, or after 6pm, EST). For a full list of side events, please click here.