



KINGDOM OF BELGIUM



UN STI FORUM 2021

G-STIC ONLINE SIDE EVENT DURING THE STI FORUM, 4 MAY 2021

Looking beyond COVID-19: integrated pathways to address health, economy and climate

The G-STIC online side event during the 6th [UN STI Forum](#) (Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals) was organised by the permanent mission of Belgium and Brazil to the United Nations. Similarly to the STI Forum itself, this side event was about looking for innovative, technological solutions that positively contribute towards achieving the Sustainable Development Goals (SDGs).

The COVID-19 pandemic revealed unprecedented clarity about the way health and sustainability challenges interconnect. We urgently need better ways to provide healthcare and education, as well as decarbonising our energy systems, making agriculture and nutrition more sustainable and ensuring our cities are both sustainable and healthful places to be.

The pandemic has also caused enormous diversion from advancing towards the SDGs. It has raised questions such as: How can we rethink the pathway for jointly addressing health, economy and climate? What are the key actions urgently needed for a green recovery in the wake of the COVID-19 crisis? How can we better prepare for future pandemics and other sustainability crises?

For answers, we turned to Dirk Fransaer (Managing Director, [VITO](#)), Paulo Gadelha (former President & Coordinator of Strategy for the 2030 Agenda, [Fiocruz](#)), Phoebe Koundouri (Co-Chair, [SDSN Europe](#) and [SDSN Greece](#)), Vibha Dhawan (Director-General, [TERI](#)) and Thulani Dlamini (CEO, [CSIR](#)).

Turning the COVID-19 crisis into an opportunity

The SDGs could serve as a framework for long-term COVID-19 recovery strategies. However, it is clear that COVID-19, at the same time, presents a major setback for the SDGs. To get back on track, we need a strong framework for guiding government actions for the immediate post-crisis recovery and framing long-term strategies.

COVID-19 is forcing us to design a new area of technological development that balances economic, social and environmental progress to build a greener and more inclusive future. The world has learned that Science, Technology and Innovation (STI) play a fundamental role in identifying and preventing damage and controlling a global health crisis.

The current discussions around vaccine patents also remind us how important it is to take a global view of solutions right from the start. A view that leaves nobody behind. A view which appreciates and understands how technology scales up to global production. In this sense, the COVID-19 pandemic presents a unique opportunity to rethink how “business as usual” operates and come up with better solutions to the world’s present-day problems, using STI as a catalyst for the transformation process.

New post-pandemic technology trends

The pandemic has already become an extraordinary catalyst for change. It has also shown that existing technology is not up to the twin challenges of attaining the SDGs and tackling health crises. This means the need for innovation is greater than ever. Investing in innovation should be a “no-brainer” as it

creates jobs, increases knowledge and, if all goes well, results in new products and markets. But innovation won't happen by itself. We need to keep incentivising the entire innovation chain, all the way from fundamental research upwards, while recognising that innovation is not possible without failure.

Moreover, digital innovation is crucial in all areas. For creating a stronger connection between climate mitigation and renewable energy. For supporting the transition to a more sustainable environment that's built to be climate-friendly. And for building new virtual education platforms.

One good example of the innovation potential is its use in addressing climate change through CO₂ capture. The technology to do this already exists, but could be innovated to become better and more cost-effective. Further developments could see captured CO₂ being turned into building materials or new chemicals. If we sequester CO₂ from the air now, for uses such as these later, the present climate problem would already be turned into an opportunity. Combined with further electrification based on renewable energy sources and increased energy efficiency, this kind of innovation can help combat the climate crises which have large scale effects on humankind, the environment and natural life on land and in the seas.

Another example lies in the collection and treatment of wastewater. Technology innovation can realise opportunities for improving the health of people and the environment. Turning wastewater into drinking water, bioenergy or fertiliser contributes to water security and helps produce food and energy. Making use of household waste to clean and treat wastewater – as in [the Andicos™ process](#) – addresses multiple SDGs, is cost-effective and already implemented in 2 projects in India.

Other new technology trends will be discussed during the 5th G-STIC conference during the World Expo in Dubai, where both of these events focus on technology and innovation for accelerating achievement of the SDGs. The [G-STIC conference in Dubai](#) will be spread over two editions: 24 – 27 October 2021 and 17 – 19 January 2022.