



TEC 26 MEETING

**EMERGING AND TRANSFORMATIONAL
ADAPTATION TECHNOLOGIES**

G-STIC 2023 RIO FINDINGS

Ilke Geleyn, Programme Manager G-STIC

CONNECTING TECHNOLOGICAL INNOVATION TO DECISION MAKING FOR SUSTAINABILITY

- Identify and promote context-specific, market-ready integrated technological solutions
- Raise awareness of these solutions within government, civil society, research, private sector, non-profit and multilateral organisations
- Key elements of the enabling environment for upscaling



G-STIC IS CURRENTLY CO-HOSTED BY 9 INDEPENDENT NON-PROFIT TECHNOLOGICAL RESEARCH INSTITUTIONS



ACTION-ORIENTED COMMUNITY BUILDING IN THE QUADRUPLE HELIX



ANNUAL
G-STIC CONFERENCE



OUTREACH
TO POLICY FORUMS



INSPIRATIONAL
EXPERT STORIES



CLIMATE ACTION
PROGRAMME

REACH IN 2022



7.900
PARTICIPANTS



80.000
VISITORS WEBSITE

GLOBAL REACH



18.000
PARTICIPANTS



310.000
VISITORS WEBSITE



9.000
SUBSCRIBERS

in
6.300
FOLLOWERS

CO-HOSTS



G-STIC CONFERENCES: UNITING 7.930 UNIQUE PEOPLE FROM 140 COUNTRIES WITH 1.180 SPEAKERS




250
SPEAKERS

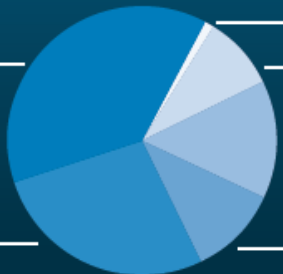


46
SESSIONS

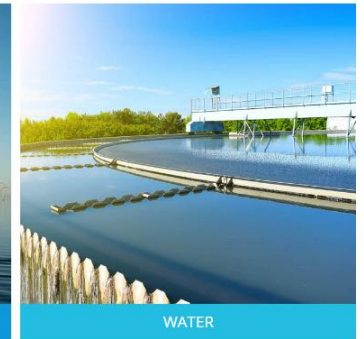
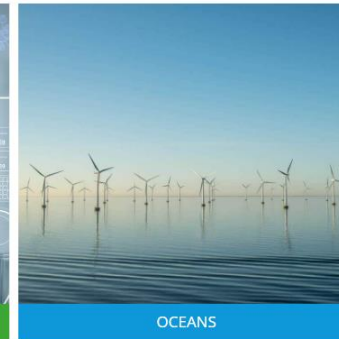
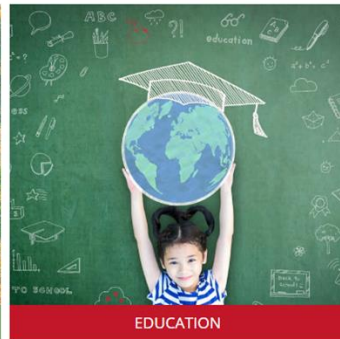
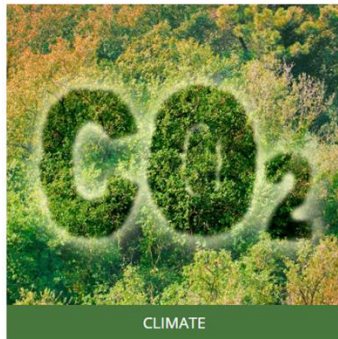
4.200
PARTICIPANTS



140
NATIONALITIES



Sector	Percentage
RESEARCH	38%
BUSINESS	27%
POLICY	14%
NGO	11%
NETWORKS & ASSOCIATIONS	9%
PRESS	1%

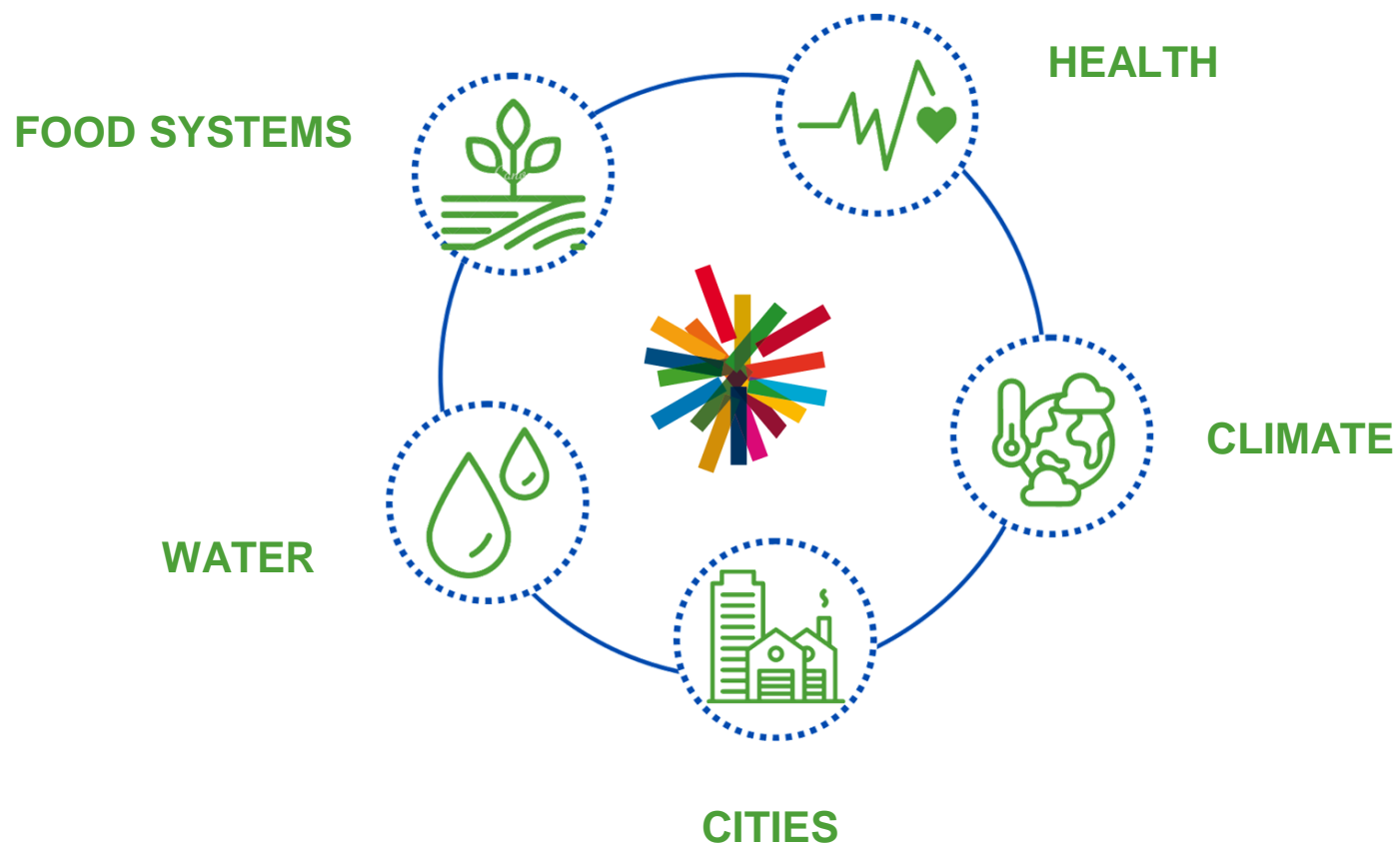


“**2030 Agenda** is the most comprehensive roadmap for a healthy, equitable, and more just world and the role of STI in supporting the achievement of all the SDGs is vital. We all feel an encompassing urgency to preparing health systems, production chains, and the global health infrastructure for potential health emergencies, especially in light of the climate change crisis, the high burden of non-communicable diseases, and the rapid demographic transition.” *Amb. Macharia Kamau, Ministry of Foreign Affairs and Permanent Representative to the UN*

“The SDG Summit, the mid-term review of progress on the 2030 Agenda, will take place in September 2023, and so far, **the goals are falling behind.**” *Amandeep Singh Gill, the United Nations Secretary-General's Envoy on Technology*

“When it comes to opportunities, the greatest of all is to **harness STI for the SDGs**. How? 1) instead of proposing that technology replaces people, it is better to use technology to augment the possibilities of human contribution to the world; 2) keep investing in science, regardless of any crises that emerge, because new solutions require objective knowledge; and 3) understand that technologies are made by humans to humans, therefore the humanities and social sciences must be well valued.” *Pedro Conceição, Director Human Development Report Office UNDP*







CLIMATE

- Integrated **IT heavy technologies**
- Comprehensive **risk assessments**
- Need to build up specific **capabilities and capacities**
- **Carbon pricing** instruments to build adaptation measures
- Exploring the potential of **nature-based solutions**
- **Ecoservice payments** – monetizing natural and social capital



FOOD SYSTEMS

- Importance of satellite remote sensing data, early warning, earth imagery and other technological advances towards **supporting small holder farmers** and their livelihoods
- **Translating this data** and tailoring it to the needs of smallholder farmers
- Develop **crop tolerance** to biotic and antibiotic stresses, as well as resistance to pests and diseases



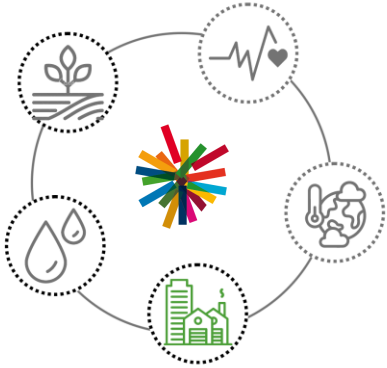
WATER

- **Remote sensing** and **AI** play an important role in mapping water and land productivity
- Investing in the collection and use of **meteorological data** and plan **preventive actions**.
- Necessary to explore **water-energy-food nexus**.
- The solution to climate change includes water as a main part, combined with responsive technological innovations (including nature-based solutions), as well as intra- and inter-sectoral coordination, and capacity building for involving communities



HEALTH

- Need to solve the **gaps in essential services** (water, sanitation, energy access, etc.) together with the adaptation plans to climate change because climate change will exacerbate these impacts
- **AESOP**: Early alert-systems for outbreak of fast-spreading diseases
- Major challenges: **sharing data** between decentralized information centers domestically and internationally and developing efficient systems that avoid redundancy



CITIES

- **Humanizing and contextualizing complex data** is essential – e.g. through digital interactive platforms and digital twins
- Although climate change will significantly impact cities, **other pre-existing gaps** must be addressed simultaneously, such as access to water and sanitation and other vulnerabilities and inequalities
- **Too complex** technological solutions in lower-income countries often become **costly** white elephants that turn out to be difficult to adapt to local contexts specific characteristics.

Collection, integration and visualization of data

Transparency & democratization of access to technologies

Knowledge is social - local policymakers and communities at the center of the discussion.

Investment in knowledge for the people – training, capacity building, knowledge sharing and develop partnerships to build the right skill sets and create ownership

Sustainable investments in research, infrastructure and widespread implementation and integration to guarantee continuity and stability

Dynamic, inclusive ecosystem focusing on a holistic approach rather than scaling 1 separate solution at a time



G·STIC

Delhi

