STI Road Maps and the Circulating and Ecological Economy



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Report of the STI Forum

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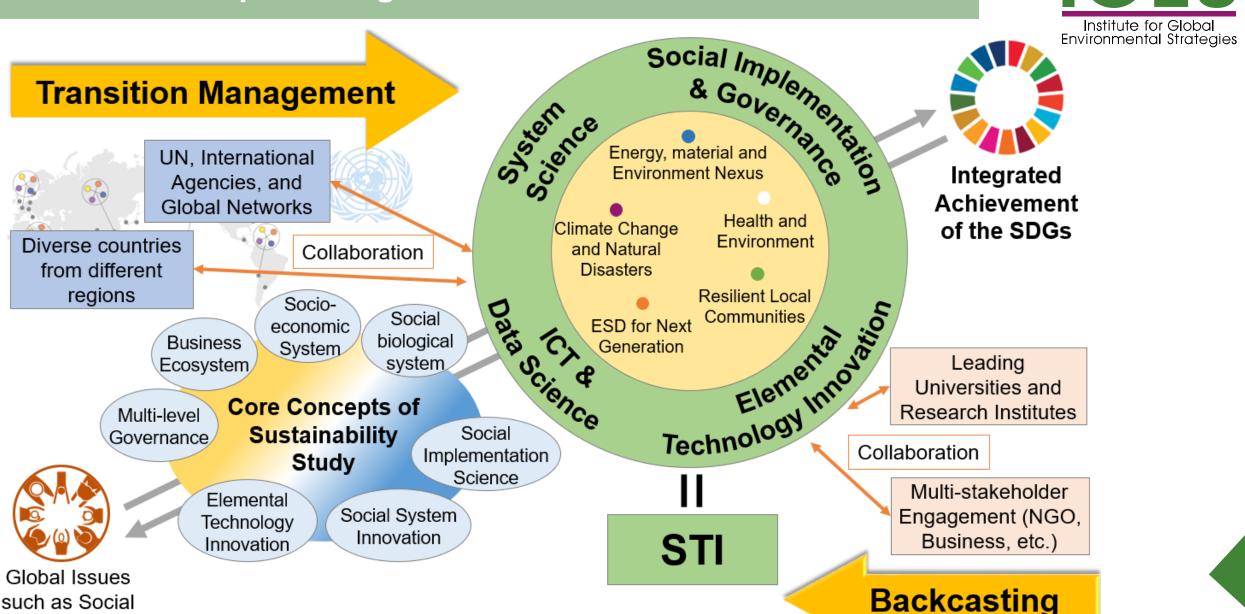
Key Takeaways from the STI Forum Co-Chairs' Summary



- 1. Para 27. The challenge is to design STI policies and instruments for the SDGs that translate the universality principle of the Goals into action, while respecting national science, technology and innovation priorities and realities....
- 2. Para 36. STI road maps to achieve the Goals need to be customized to fit the circumstances within countries and, at the same time, be harmonized worldwide as a means to structure the necessary knowledge and match problems with solutions. & Para 37. Main elements of the implementation of the road maps include the localizing, mobilizing, prioritizing and customizing of STI.
- 3. Para 39. Further international support, Member State engagement and partnerships with donors and the private sector will be needed to fill the critical gaps in data, finance and effective implementation. & Para 69. International partnerships could promote increasing investments in research and development and in demonstration projects for climate technologies.

Road Map for Integrated Achievement of the SDGs

Inclusion



IGES

Regional / Local Circulating and Ecological Sphere (CES)



Integration of environmental, economic and social dimensions Integrated response to declining and aging population, Local revitalization CES to achieve integrated solution for those local issues











Exchange of People, Information, and Technologies

Connect to Global Communities

Smart Grid

Renewable Energy, Energy Saving Decarbonization

Reduce, Reuse, and Recycle

Resource Circulation





























<Urban> Produced Capital

Harmony with Nature

Safe and Secure Community (e.g. Eco-DRR, EbA)









(IGES, 2019)

Next Generation Local Energy Model for Kitakyushu City



(2)Development of human resources for SDGs

Development of human resources for SDGs in companies, etc.



resources and ideas

(3) Visualization and development of a base for SDGs

> Exhibits and dissemination of

> > information

10000

Systems

stability

Creation of showrooms for residents and tourists and spaces for ideas and events



Supply of human resources and ideas Hydrogen and energy

mänagement

Continued use of local

energy companies and

Energy industry as industry core

Creation of

new

industries

Economy

power industries. biomass industries, etc.

Concentration of wind



Creation of recycling, forestry, hydrogen /energy management/ AI industries, etc.

Lecturers, programs

materials

Development of recycling industries



Reuse and recycling of PV and stora 12 RESPONSIBLE CONSUMPTION tc. equipment



Promotion of forestry industry



Povitalization of 15 LIFE ON LAND es and ss resources. (1) Formulation of SDGs strategy

Formulation of strategy around local energy and forestry industry

> Concentration of wind power industry



Manufacturing of equipment => installati => maintenance => reuse and recycling

> Promotion of solar power and biomass



Use of community-operated solar power facilities and bamboo biomass

17 PARTNERSHIPS







AI and robotics industries



Sharing Kitakyushu's actions

and cooperation on projects

Use in energy, resource recycling and forestry industries





Support for lifelona activities and civic actions

Creation of a comfortable and disasterresilient city

Job creation, active seniors, etc.



Protection from disasters through independent distributed power sources, autonomous driving, monitoring, etc.

Realization of a low-carbon and postcarbon society

Improvement of resource efficiency and protection of biodiversity

Renewable energy. energy savings, hydrogen, etc.



Expansion of 3Rs. protection of satochi and satoyama areas,

New international environmental businesses

Supply of materials



(4) Formation of SDGs platform and network

Disseminate information on activities based on SDGs studies by OECD, draw out project needs



STI Collaboration with Developing Countries



Case Study in Semarang City, Indonesia

- **u** Semarang's City Resilience Strategy (CRS): One of its pillars aims to improve the city's public transport system by enhancing management and service quality
- Importance of improving transportation: brings multiple benefits - mitigation of climate change and environmental pollution; new economic opportunities (jobs, markets); competitive human resource development (schools, social interaction), and others.
- Transformative processes: encouraged by policy-oriented research activities, multistakeholder participation to practical actions to change younger generation's behaviour and project developments on **Low Carbon Transport system.**

Resilient Strategies

Priority Area: Improvement of Transport System







Sustainable Urban

Infrastructure











