

Science and Technology Innovation for SDGs

- To think, proceed, and create together with the world -

Teruo KISHI

Science and Technology Advisor to the Minister for Foreign Affairs

Scenario for Session 6

National STI Roadmaps for the SDGs and capacity building

Conference Room 4, UN Headquarters New York,

6 June 2018, 10:00 - 11:00

STI for SDGs

Breakthrough in Nutrient Use Efficiency for Rice by Genetic Improvement and Fertility Sensing Techniques in Africa



Rapid and extensive monitoring of geographical conditions of rice fields and nutrition status of rice plants

using a drone



Selection of lines that show high productivity in a local paddy field lacking phosphorus

Source: Book of Japan's Practices for SDGs

https://www.jst.go.jp/sdgs/pdf/sdgs_book_en_2017.pdf



SATREPS

Alternative to paper and plastic

Revolutionary new materials made out of limestone, an abundant natural resource



Source: TBM Co., Ltd.

<https://tb-m.com/en/>

Maximize the Benefit of STI for SDGs

Diverse Social Problems (17 goals, etc.)

↓ R&D

Knowledge Structuring

Customization & Commonization

R&D

R&D

**Various Countries
Regions**

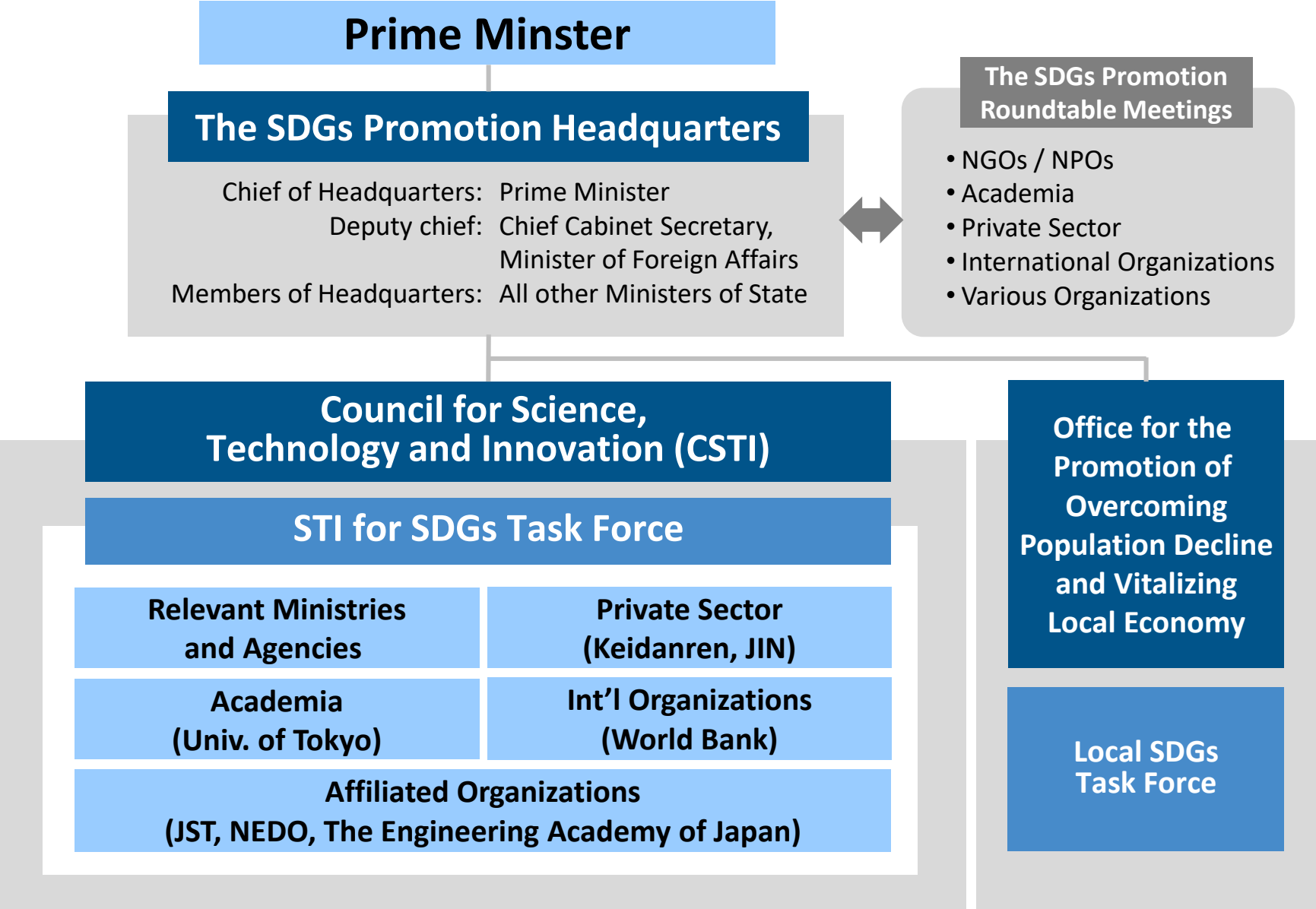
Multi-Stakeholders

STI Roadmaps

Supported by
Online Platforms

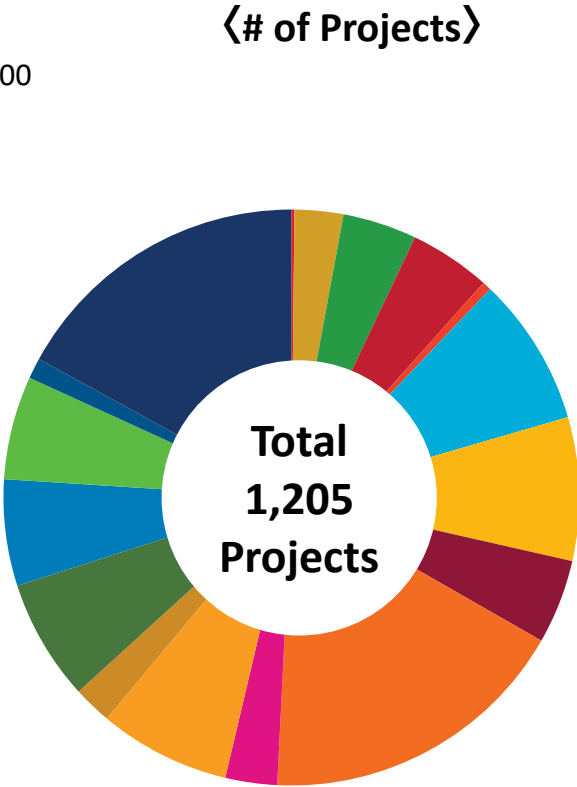
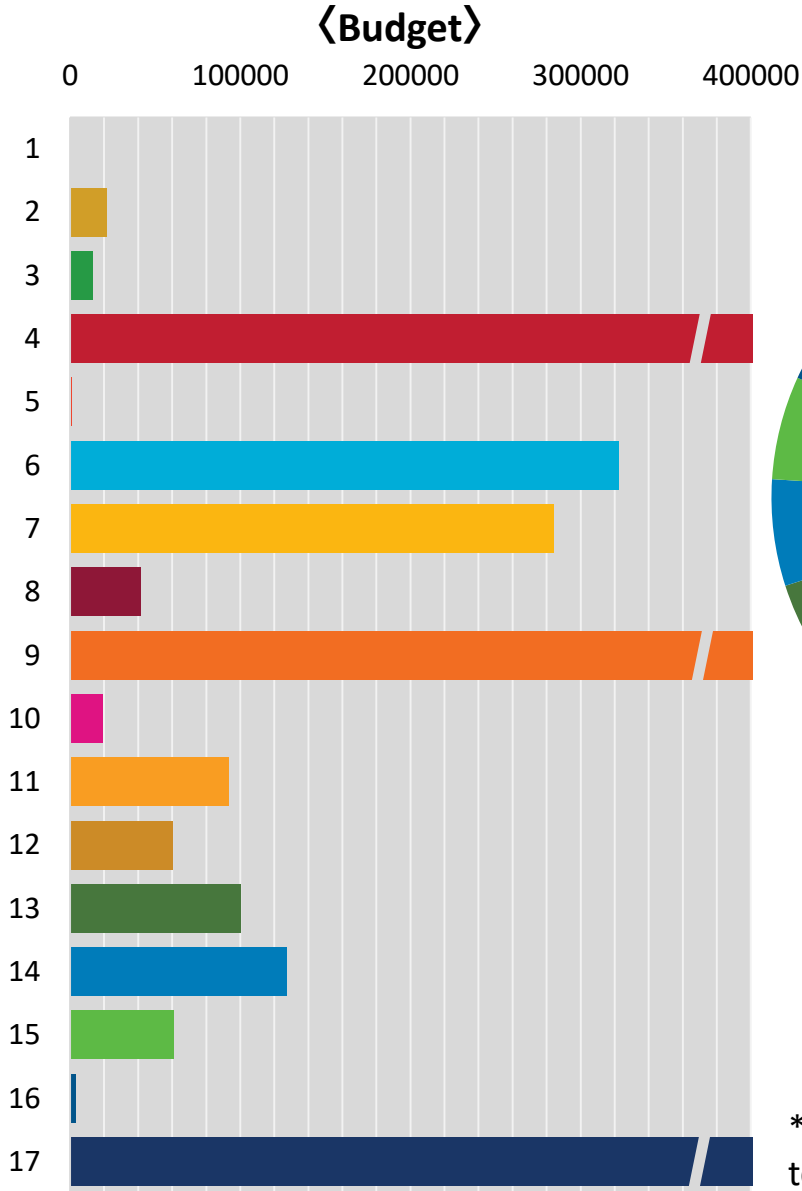
SDGs Implementations

Overview Structure for SDGs Initiative



STI Projects, categorized by 17 Goals (under investigation)

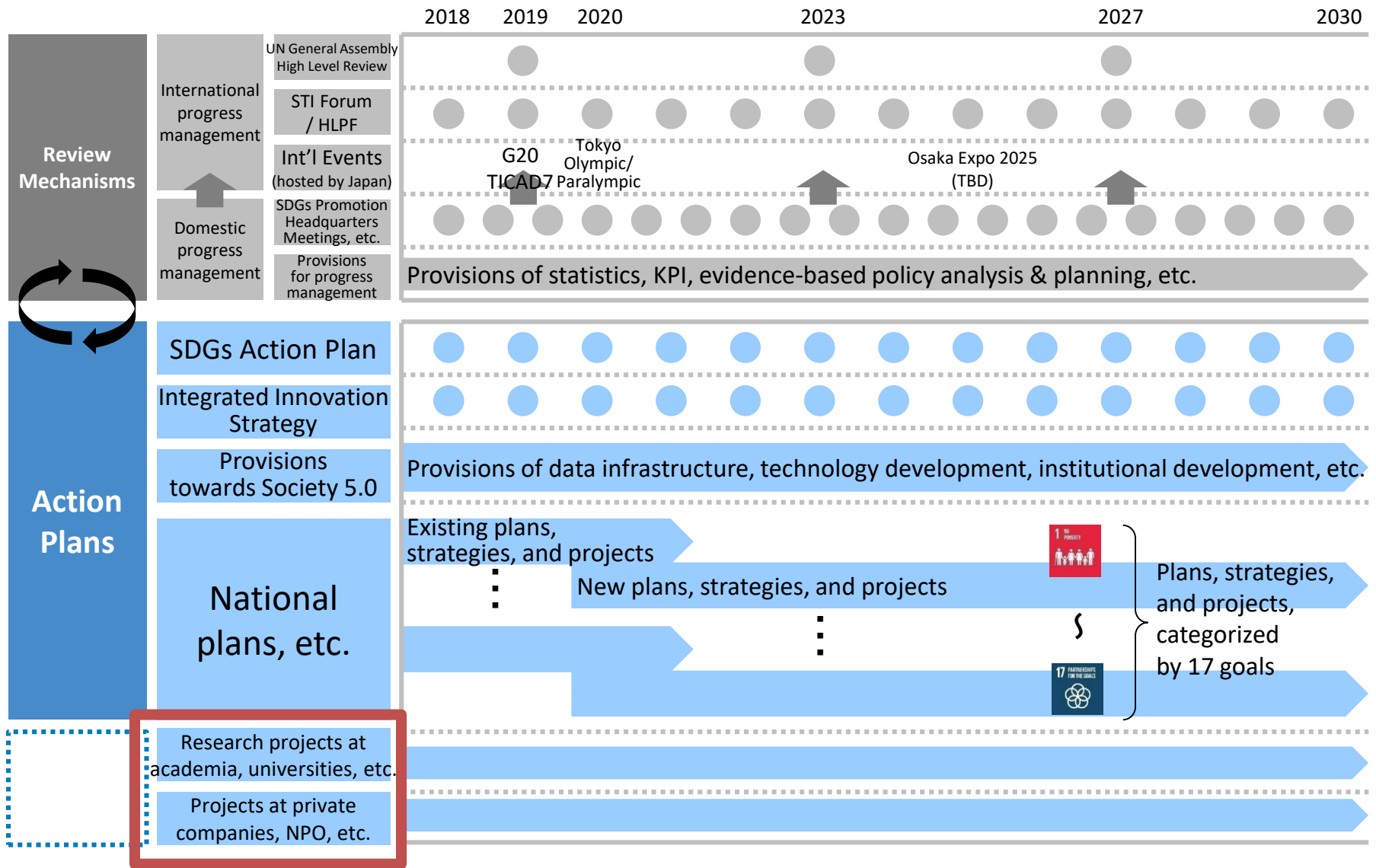
	# of Projects	Budget (million yen)
1	2	106
2	33	21,433
3	50	13,379
4	55	1,118,534
5	6	789
6	101	322,473
7	97	284,327
8	57	41,603
9	211	633,823
10	35	19,243
11	89	93,172
12	26	60,305
13	82	100,418
14	72	127,183
15	70	60,890
16	14	3,413
17	205	832,403
total	<u>1,205</u>	<u>3,733,490</u>



※1JPY = 110 US\$

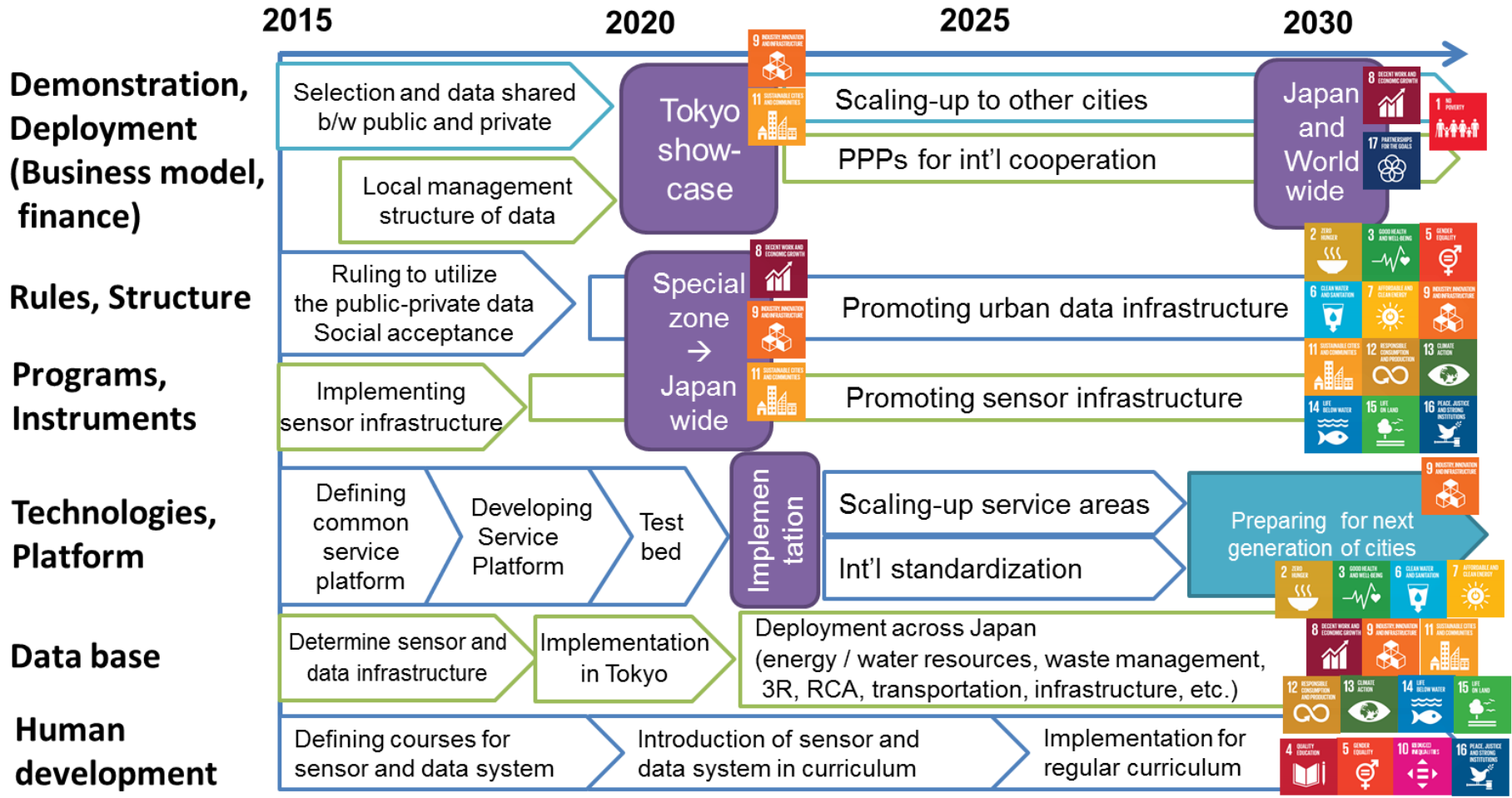
*These charts are based on the tentative categorization.

STI for SDGs Roadmap (draft)



Example of the Roadmaps

Digitized and optimized activities in urban cities by Public and Private Partnership



* Prepared by JST based on various references

Recommendation for the Future

STI as a *Bridging Force* to Provide Solutions for SDGs implementations

- 1. Change through Innovation: Global Future Creation through Society 5.0**
- 2. Grasp and Solve: Solution Enabled by Global Data**
- 3. Link across Sectors, Unite across the Globe**
- 4. Foster Human Resources for “STI for SDGs”**

STI can contribute to the achievement of the SDGs as a “bridging force”

Reference

Japan's experience to fight against pollution

City of Yokkaichi around 1970



Public-Private Partnerships

- Policy/Laws/ Social systems
- Business/ Investment
- Research and Development/ Capacity Building

City of Yokkaichi today



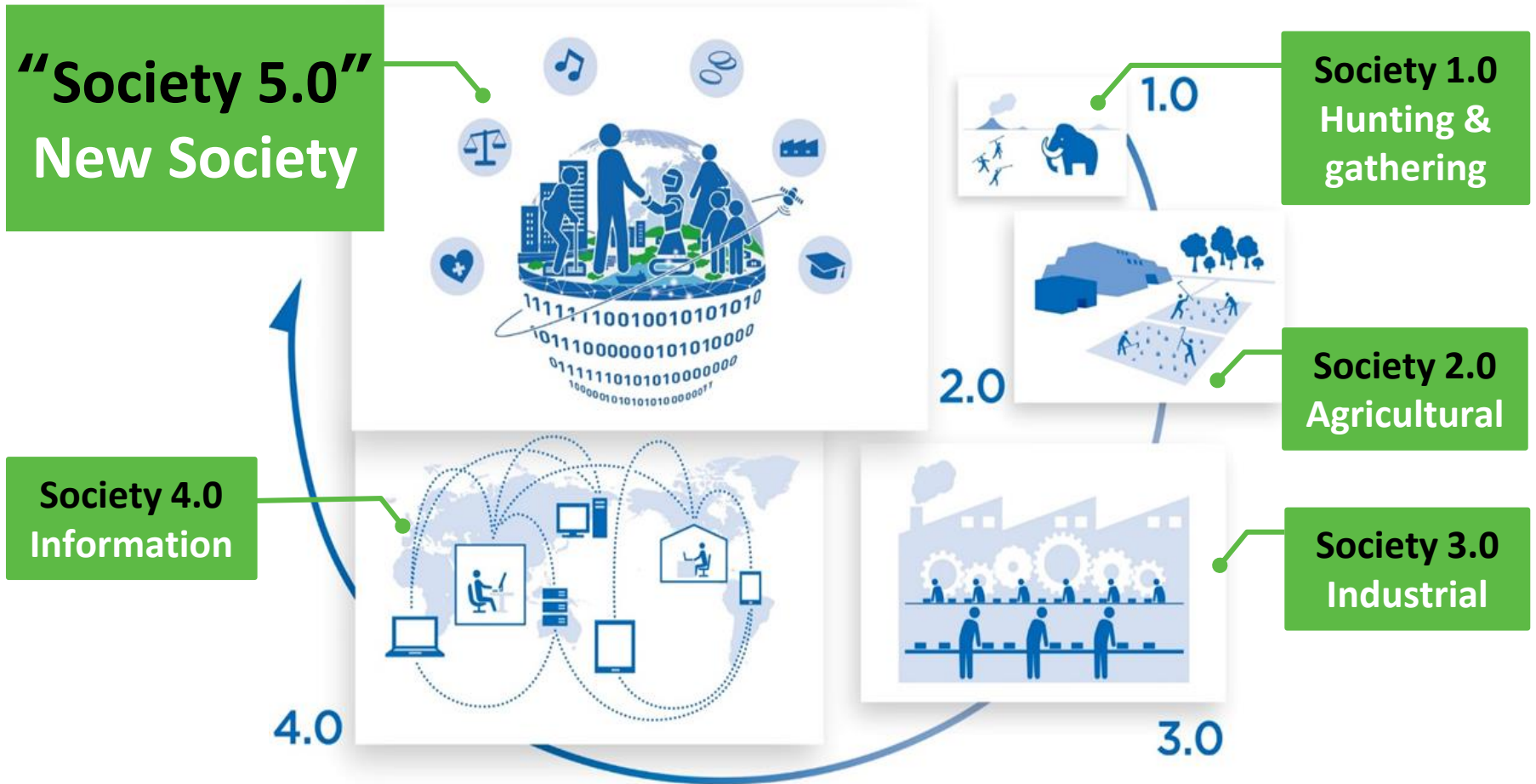
From now,
+ Data analysis and integration

Source: Presentation of Dr.Michiharu Nakamura
at STI Roadmaps for SDGs-Expert Group Meeting May 8-9, Tokyo
https://www.jst.go.jp/sdgs/pdf/20180508/20180508_opening_4.pdf

<http://yokkaichi-kougai.www2.jp/index.php/siryu/2011-02-17-13-36-32/103-2011-02-12-05-09-10.html>

What is “Society 5.0”?

Realize the advanced fusion of cyberspace and physical space,
To balance economic advancement with the resolution of social problems,
Bring about a human-centered society





Visibility of Japan's Practices

- A collection of various practices for implementing the SDGs in Japan by private sectors, research institutes, universities and other NGOs was printed and distributed in the side-event at the 2017 STI forum.
- This book was also introduced by Co-chair of the STI forum, Macharia Kamau, Permanent Representative of Kenya to the UN, in the opening session, as one of three leading actions across the world.

