

The Round Table for the global deployment of Infrastructure Systems – Final Report

Provisional Translation

■ Key Concepts

I. From the export of infrastructure systems to their global deployment

⇒Importance of on-site sales, investment, and business increases further.

II. From mere export of technologies/equipment to the co-creation of values

⇒Providing products and services according to the local needs in Asia and other regions, so that both parties can grow and mutually enjoy benefits.

III. Regarding quality infrastructure, values such as “sustainability”, “resilience” and “safety” become even more important

⇒New values of infrastructure are becoming visible due to environmental issues including global warming, social issues such as poverty and growing disparity, and pandemic risks like the recent global spread of COVID-19.

In order to achieve these, it is necessary to drastically review the existing measures

■ Current situation and the direction of review

Digital Rise of Mega-platformers and start-up companies in emerging countries, and the lagging of digitalization in Japan

✓The promotion of digital infrastructure contributing towards resolving local social issues and gaining industrial competitiveness by integrally implementing organizational transformation and business environment reform of Japanese companies.

✓Formulation of international rules, etc. that serve as a foundation for the initiatives

Energy Change in Japanese equipment manufacturers’ competitive edge in terms of price and performance and increase in technology needs including renewable energy

✓Contribution to realizing a global, carbon-neutral society in the long term, and support to achieve SDGs by leveraging technologies

✓Development of the packaged-type cooperative approach by public and private organizations, responding to the needs of the counterpart country

■ Cross-sectoral matters

✓ Reconsideration of KPI (+a achievement of SDGs, etc.)

✓ Further reinforcement of tools to support the global deployment of infrastructure, including finance

✓ Improvement of the leverage effect of Japan by reinforcing collaboration with local governmental agencies and international organizations through various support measures of Japanese government

✓ Sufficient implementation of domestic policies that increases industrial competitiveness in addition to policies for global deployment

Direction of Review Taken in the Global Deployment of Digital Infrastructure

Current situation and issues in the digital area:

Products and players in infrastructure are changing, and it has become necessary to cope with international issues.

- ◎ New forms of infrastructure are created by various digital technologies, and players taking a leading role in infrastructure diversify. (Entry of start-up companies, etc.)
- ◎ With the rise of Mega-platformers and start-up companies in emerging countries, there are also new opportunities for Japanese companies despite them being behind digitalization.
- ◎ Importance of the formulation of rules for data handling, etc., SDGs, and COVID-19 counter measures increases.

Direction of measures Japan should take in the overseas deployment of digital infrastructure in order to realize the co-creation of values

- ✓ **Promotion of business resolving social issues and achieving wide-ranging prosperity in local communities**
- ✓ **Corporate transformation (DX, etc.) and the establishment of an environment for co-creation with local partners**

1. Development of tools for digital business that enable the co-creation of values

- (1) Creation of opportunities to promote co-creation with local communities and supporting business facilitation
 - Development of human resources for DX, local capacity building, and publicizing best practice companies
- (2) Supporting matching for business development and partner searching
 - F/S survey including the due diligence of co-creation partners, matching platforms, etc.
- (3) Supporting demonstration for forming projects together with the local community
 - Demonstration by sharing data among companies in and out of the country, promotion of Asia DX, etc., and various regulatory reforms
- (4) Supporting finance to realize benefits for both parties
 - Provision of public financing tools and supporting private fund infusion (consideration of utilizing equity)



2. Transformation of the organizational structure of Japanese companies and government and business environment towards the co-creation of values

- (1) Transformation of organizational structure as a premise for co-creation
 - DX of administration and companies, supporting the creation of new business and start-up companies, and the realization of diversity, etc..
- (2) Transformation and development of an environment conducive to co-creation
 - Attracting companies to Japan, diffusion of the Contract Guidelines on Utilization of AI and Data, and cooperation of departments and agencies among administration

3. Formulation of international rules that serve as the foundation of initiatives, and dialogues between governments

- Materializing DFFT and promoting specific measures through intergovernmental cooperation and dialogues between the government and private sector in the local community

Direction of Review Taken in the Global Deployment of Energy Infrastructure

Current situation and issues in the energy area:

Expansion of the energy market worldwide and the flow of investments towards decarbonization will accelerate.

- ◎ In the Asia-Pacific region, which accounts for 70% of the increase in electricity demand, the share of fossil fuel is projected to account for 50% of all power generated in 2040. On the other hand, renewable energy power generation will significantly increase in the future. **Energy markets throughout the world will expand and become diversified.** It is necessary to consider the power mix and available renewable energy resources in each country.
- ◎ **Importance of stable and low-cost power supply increases** with further digitalization triggered by the COVID-19 pandemic.
- ◎ Flow of ESG investment accelerates. **Green industry is a new business opportunity.**
- ◎ **Japanese equipment manufacturers' competitive edge in terms of price and performance is changing.**

Direction of measures Japan should take in the overseas deployment of energy infrastructure in order to realize the co-creation of values

- ✓ **Contribution to energy transition towards realizing a global carbon-neutral society in the long term and support to achieve SDGs**
- ✓ **Strengthening the packaged-type cooperative approach by public and private organizations, responding to the status of economic development and issues in each country**

(1) Response to meet the increasing needs in emerging countries in the area of renewable energy power generation

- Providing support to ensure **access to energy through efforts to expand the use of renewable energy power generation (bilateral policy dialogues, human resources development projects, etc.)**
- **Support overseas business development in offshore wind/geothermal power generation projects and provision of regulated power supply technologies to stabilize systems by utility companies through finance, NEDO's demonstration projects, etc.**

(2) Enhancement of support to achieve SDGs (environment, safety, sanitation, etc.) by leveraging existing technologies and responding to the situation in each country

- **Enhancing support for Gas to Power projects and supporting the development of an Asia-wide LNG value chain**
- **Supporting Japanese companies in developing technologies in new areas** such as improvement in the efficiency of coal-fired power plants and biomass/ammonia-coal combustion, In addition to this, supporting the **reinforcement of engagement with partner countries for their decarbonization** through a variety of measures such as supporting the export of efficient coal-fired power generation in line with the new policy.

(3) Enhance development of new solutions-oriented business and innovative technologies for commercialization (hydrogen, Carbon dioxide Capture, Utilization and Storage (CCUS)/Carbon Recycling, and nuclear energy)

- **Enhance the development of new solutions-oriented business and innovative technologies for commercialization** also in the areas of hydrogen, CCUS including Carbon Recycling, and nuclear energy.