

Overview of Support for Overseas Infrastructure Promotion

January 2022

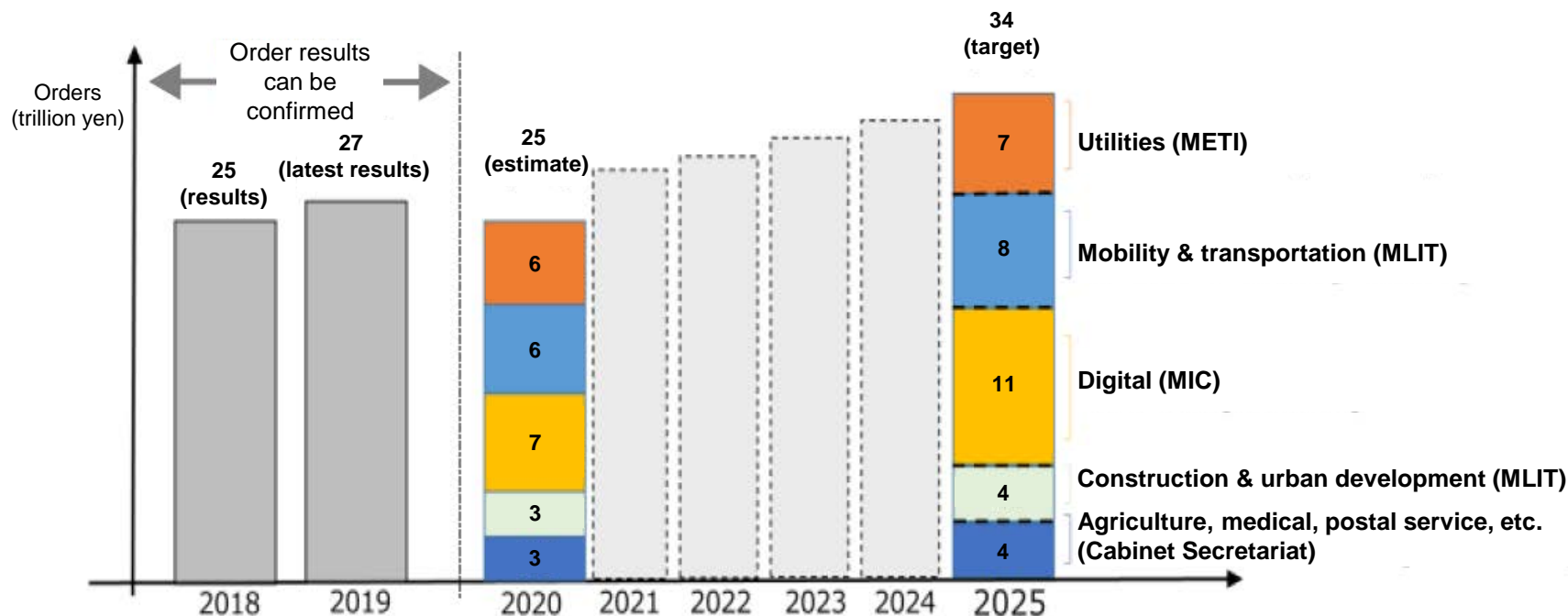
**Trade and Economic Cooperation Bureau
Ministry of Economy, Trade and Industry**

1. Support for Overseas Infrastructure Promotion

Order target of 2025 Policy Program for Promotion of Overseas Infrastructure Systems

- "2025 Policy Program for Promotion of Overseas Infrastructure Systems" (determined at the bureau's infrastructure strategic meeting in Dec 2020) set a **target to receive infrastructure orders worth approx. 34 trillion yen in 2025**. (* The infrastructure orders in 2019, based on statistics, etc., were **approx. 27 trillion yen**.)
- In addition to current **planning of top-level sales by the prime minister (target: at least 10 projects per year)**, approaches toward steady implementation of new strategies in view of the post COVID-19 era have been established.

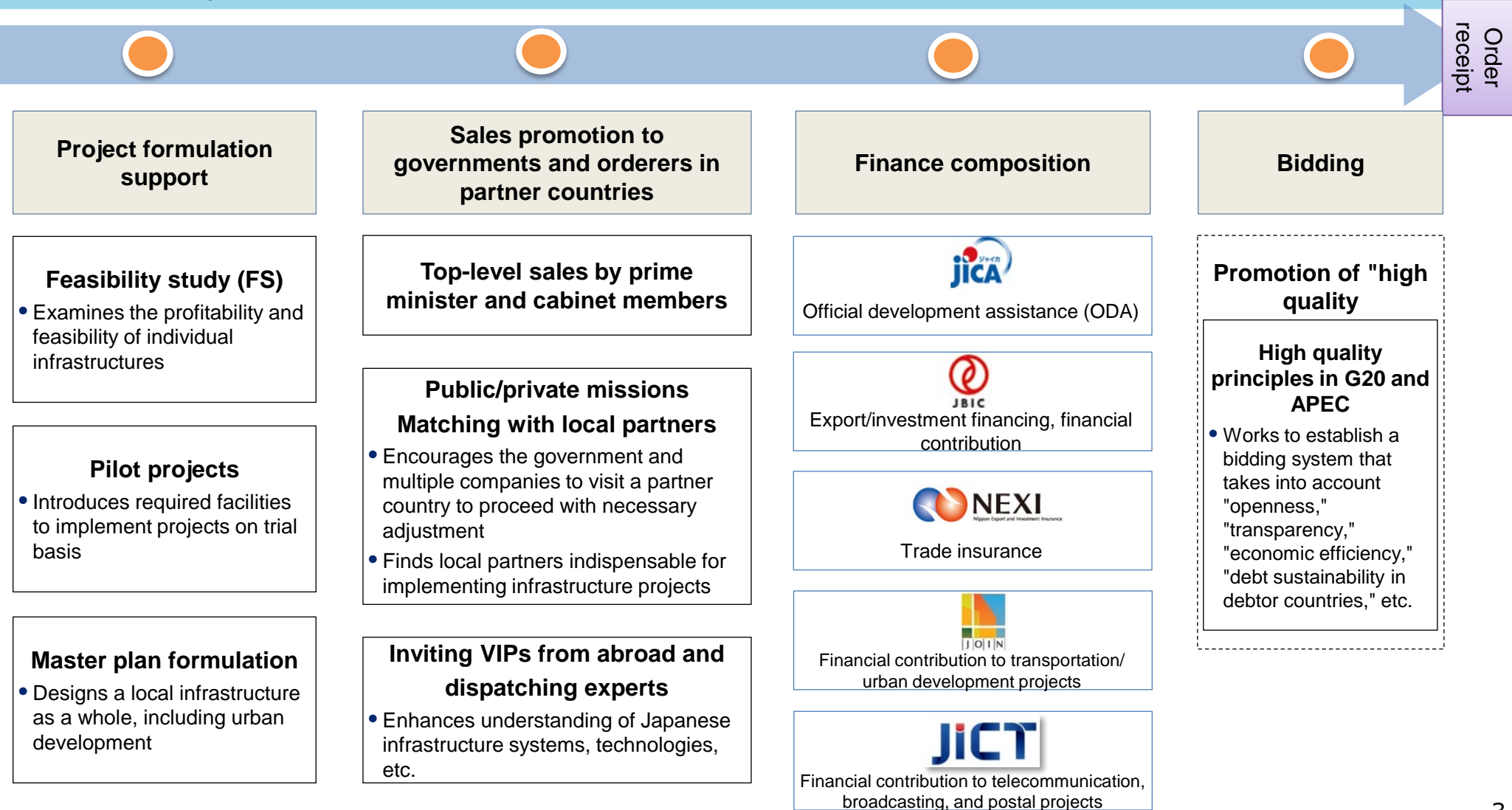
◆ Effectiveness KPI: Infrastructure system orders in 2025 of "34 trillion yen"



Note: The 2018 and 2019 values are the order results based on the "Infrastructure System Export Strategy." The 2020 value is an estimate for the effectiveness KPI of the "2025 Policy Program for Promotion of Overseas Infrastructure Systems" (order target of 34 trillion yen in 2025) (measurements for sales of overseas subsidiaries will be refined in later calculation)

Public support tools for overseas infrastructure promotion (from project formulation to order receipt)

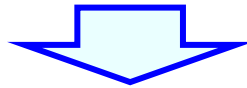
- Coordination of various tools from upstream to downstream and continuous support are required in order to win enormous global infrastructure demand and make it contribute to the country's economic growth.



Objectives and the target of 2025 Policy Program for Promotion of Overseas Infrastructure Systems

Changing environment after adopting the 2013 policy program

- Intensified competition with companies from emerging economies
- Broad support for the UN Sustainable Development Goals (SDGs)
- Increasingly complicated international environment (for example, Indo-Pacific is going through various changes)



Establishing three key pillars while keeping the original objective of “achievement of economic growth”

1. Achieve **economic growth** through carbon neutrality and digital transformation
2. Contribute to resolving social issues and achieving **SDGs** in partner countries
3. Realize Free and Open Indo-Pacific (**FOIP**)

Major policies: Response to critical issues

(1) Accelerate responses to the COVID-19 pandemic

- **Emergency response** to suspended projects (seeking cooperation from partner countries to resume projects, securing funds, etc.)
- Contribute to **strengthening of medical and healthcare, and public health** as needed by each partner country.

Support through ODA

Strengthening of medical services



Strengthening of research and precaution systems



(2) Contribute to carbon neutrality

- To reduce greenhouse gas emissions to net-zero by 2050, that is **to realize a carbon-neutral by 2050**, promote efforts toward carbon-neutral in Japan and contribute to **global decarbonization**, through joint developments and pilot projects in foreign partner countries.

Joint development and demonstration of advanced technologies

Hydrogen supply chain



(3) Promote the use of digital technologies/data

- Improving maintenance and operation of existing infrastructure through digital technologies, and start new services utilizing data obtained.
- Matching assistance for companies with advanced technologies in partner countries.

Remote medical systems using remote technologies



Major policies: Response to diversifying objectives

(4) Secure core technologies

- Promote measures to **ensure cost competitiveness** of Japanese companies through local partnerships while **securing important technologies and taking the lead** in projects.
- Support Japanese companies in technological development, reorganization, human resource development and partnerships with local businesses.

Support technological development and promote overseas deployment of developed results based on Integrated Innovation Strategy

<Priority technical fields>

- ✓ AI and quantum technologies
- ✓ Safety and security (such as disaster prevention)
- ✓ Environmental energy
- ✓ Healthcare, medical, etc.

(5) Promote quality infrastructure and co-creation with partner countries

- Promote policy dialogue for dissemination and Implementation of **Principles for Quality Infrastructure Investment including resilience and social considerations**.
- Strengthen **involvement in early stages of project formulation** in such areas as **smart cities** so as to co-create development model that meets local needs of partner countries.

Support for establishing financial infrastructure systems (from human resource development to receiving orders for system maintenance)



(6) Promote economic prosperity and connectivity in partner countries

- **Promote project formation in line with FOIP** involving both soft and hard infrastructure.
- **Strengthen partnerships with countries** that share the vision.
- **Review/utilize a broad range of public financing instruments** including ODA to conduct appropriate risk management.

Support for maintenance and operation of ports



Development of communication networks



Major policies: Response to diversifying methods

(7) From one-off sales to continuous involvement

- Promote involvement in operation & maintenance (O&M) of infrastructure as well as business management via investment.
- Through identifying Japan's strengths and utilizing ODA and other resources, **support the formulation of comprehensive projects that cover the phases from infrastructure development to O&M.** Provide a **support package for human resource development and technology transfer** to promote collaboration with local businesses.

New Ulaanbaatar International Airport Operation Project



(8) Partnership with government/organizations in third party countries

- Promote collaboration with companies from partner countries operating in third-party countries.
- **Develop a cooperation framework with the government/organizations of partner countries** (e.g. Memorandum of Cooperation among financial institutions), and support specific projects.

Japan-China Forum on Third Country Business Cooperation



(Others)

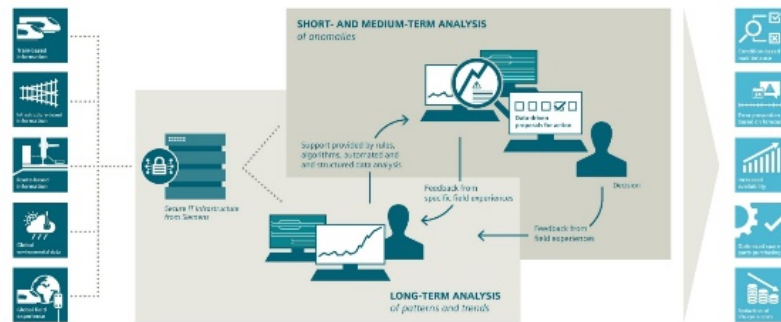
- Support via coordination between private and public funding
- Enhanced coordination with top-level sales and diplomatic activities by diet members
- Support regarding individual projects, including support for order receipt and later follow-up activities
- Promotion of strategies based on area-specific approaches

Feasibility Study Project for Overseas Deployment of High Quality Infrastructure (Energy Infrastructure)

- Supports expenses required for Japanese companies to receive orders for overseas infrastructures and put them into operation, including (1) formulation of infrastructure construction plans (such as master plans) for specific development zones, and (2) feasibility studies (FSs) for individual infrastructure projects.
- Projects for "high quality infrastructure" are targeted at ODA recipient countries while those for "high quality energy infrastructure" are designed for projects that contribute to reducing CO2 emission. In 2021, 38 projects were adopted.
- Both types of projects consist of two resources: commission expenses and subsidies (**subsidy rate of 1/2**). **The upper limit for commission expenses is 100 million yen while that for subsidies is 50 million yen.** Operators are selected through public invitation.
- Commission expenses are provided for "politically significant projects to be implemented by the country (projects with significant public benefit, spillover effect, and innovation)" while subsidies are provided for "individual specific projects aimed at short-term order receipt and operationalization by companies."



Maintenance of new transportation system



Deployment of infrastructure O&M via data analysis



Maintenance of power transmission/distribution and supply/demand⁸

Major expenses to be subsidized

- Information gathering, research, analysis, etc. required for proposals to partner countries
(e.g. investigation of current infrastructure conditions in partner countries, understanding of needs and issues of related parties in partner countries, prediction of market scale and demand, economical evaluation, risk analysis including environmental and social impact study)
- Understanding of trends in competitors and consideration of differentiation from other companies
- Basic design of infrastructure, etc.
(e.g. basic designing required to propose new construction, modification, or modernization of infrastructure)
- Calculation of project scale, cost, revenues, etc.
- Consideration of financing
- Planning of schedule from order receipt to operationalization
- Consideration of project implementation system

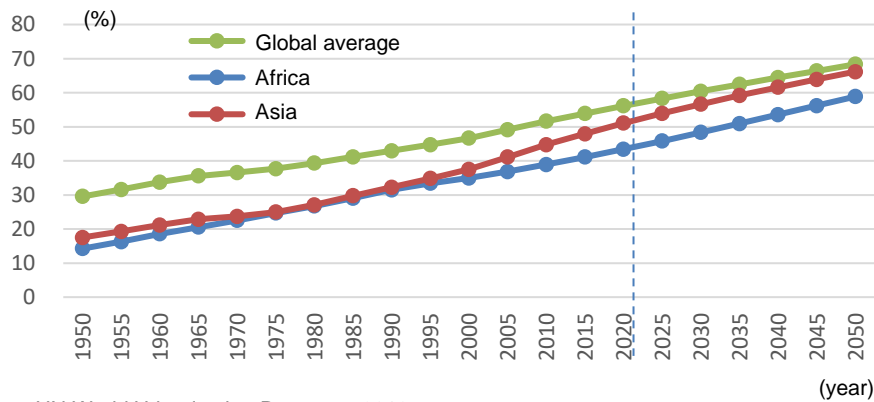
*** Demonstration-related expenses such as prototype development expenses are not subsidized**

2. Overseas Deployment of Smart Cities

Background for engagement in overseas deployment of smart cities

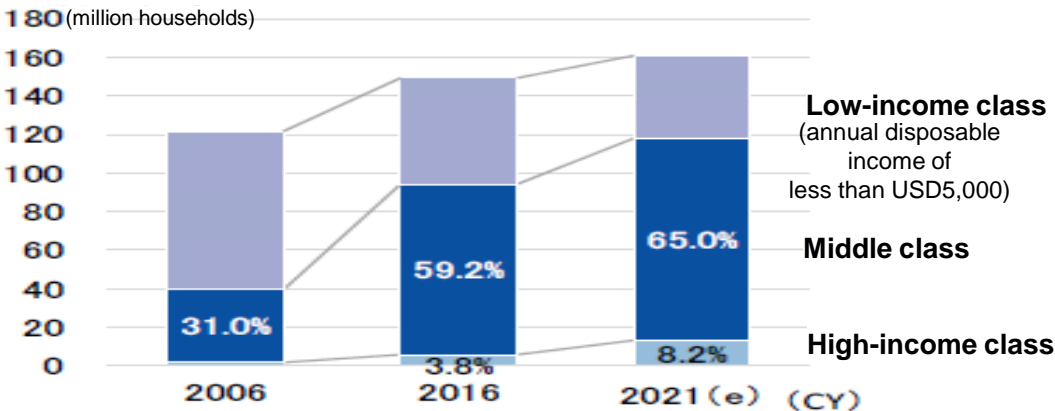
- In emerging economies, social problems such as traffic jams and power supply shortage have surfaced due to urbanization and expanding middle class.
- There is an increasing need for smart cities, which provide data-based solutions for those social problems.

Urbanization rate in emerging economies



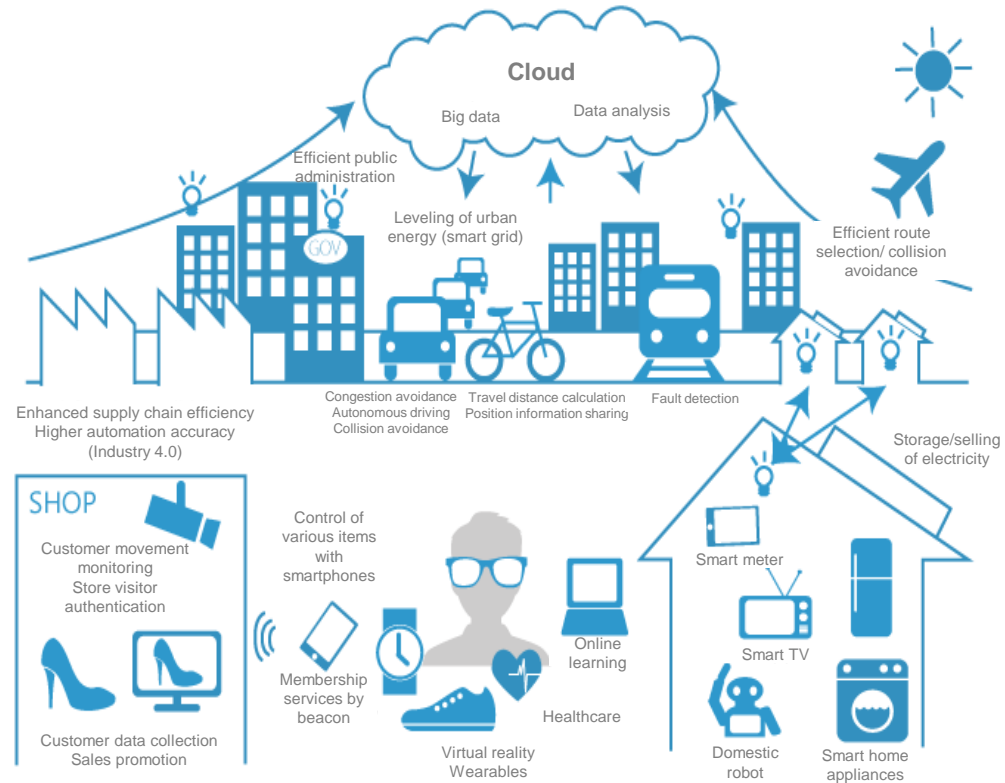
Source: UN World Urbanization Prospects 2018

Expanding middle class in ASEAN



Source: Material prepared by Mizuho Bank Industry Research Div. based on Euromonitor data

Smart city that provides solutions utilizing data

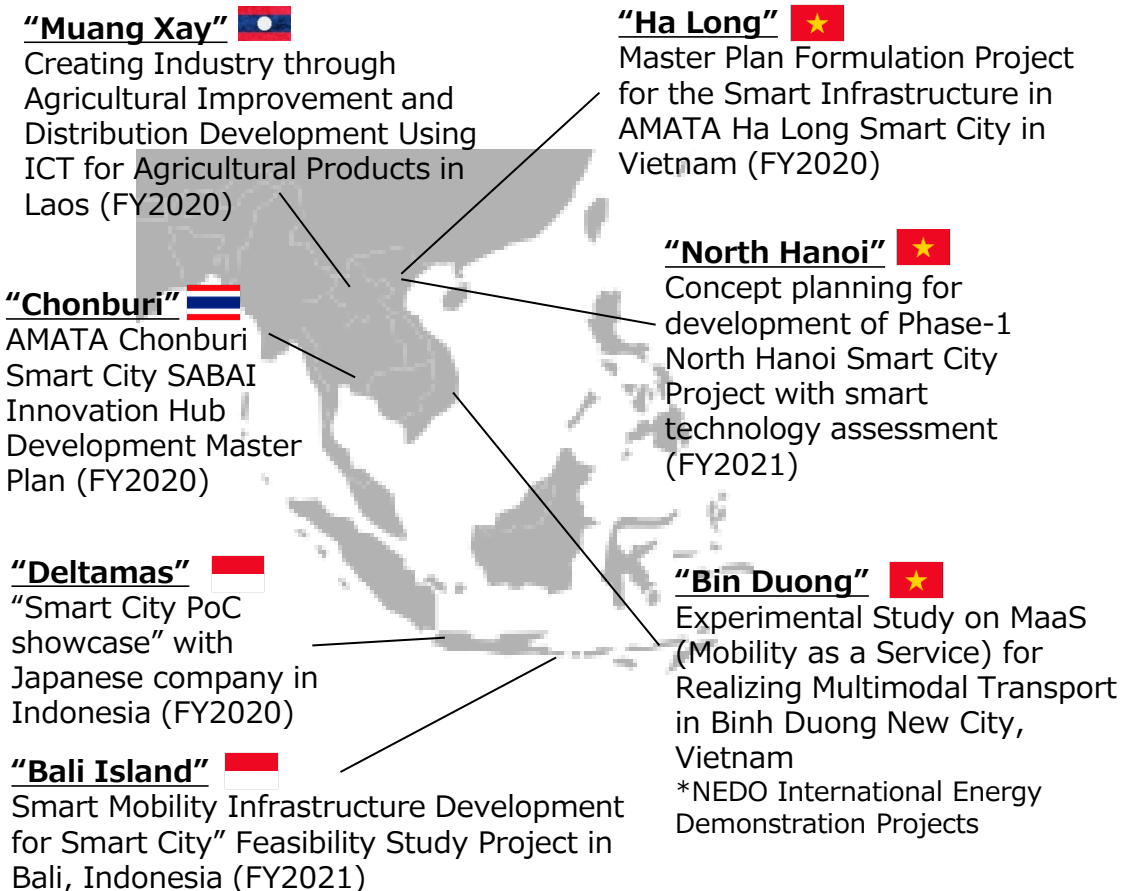


Source: IoT news (<https://iotnews.jp/archives/1218>)

Project Formulation and Finance support

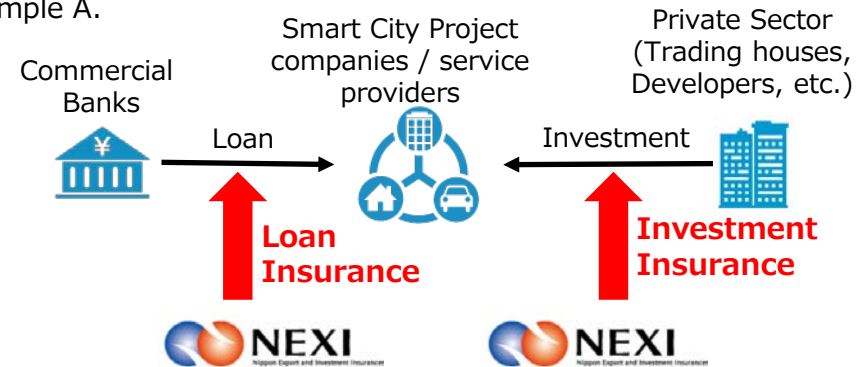
- To support Japanese companies' involvement from an early stage, METI supports Feasibility Studies and Demonstrations.
- To mobilize funding by the private sector, METI supports finance by utilizing NEXI's Trade and Investment Insurance.

Feasibility Studies & Demonstrations

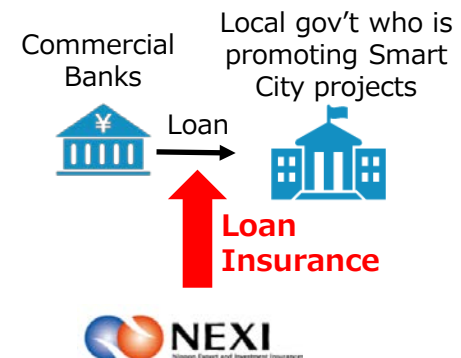


Finance

Example A.



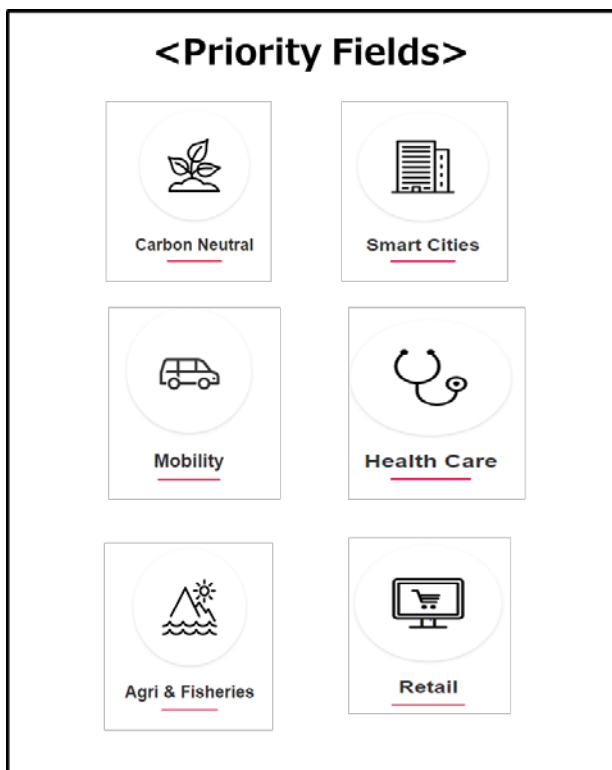
Example B.



Business Matching support

- To support Japanese companies in collaborating and advancing M&A with overseas companies, METI and JETRO launched J-Bridge, a business platform. Smart City is one of the six priority fields of the support.

J-BRIDGE Priority Fields



Support Program

For Japanese Firms

For Overseas Firms

Bridging
info gap

Relevant business info thru Website /Online Seminars

Bridging
encounter

- Potential partner /Market information
- Meeting Arrangement
- Private consultation by various experts

- Potential partner /Market information
- Meeting Arrangement
- Private consultation by various experts

Deepening
business
process

Exclusive for J-Bridge Members

J-Bridge and Invest Japan Programs

JETRO J-Bridge



JETRO Invest Japan



(Reference) Feasibility Study Projects for Overseas Deployment of High Quality Infrastructure

Adopted smart city-related projects (examples of those adopted in FY2020)

Country/project	Assignee	Project outline
Indonesia/ Deltamas	Sojitz Research Institute Sojitz Nippon Koei	A demonstration showcase will be established for smart technologies and services utilizing IoT, AI, etc. and a master plan will be formulated to develop a system for creating new value toward solution of local social problems in a sustainable and continuous manner.
Vietnam/ Ha Long	Pacific Consultants	To realize AMATA Ha Long Smart City, the possibility of technical deployment and participation in integrated smart services by Japanese companies will be studied, under cooperation of YUSA (Yokohama Urban Solution Alliance, an incorporated association in Yokohama) and Yokohama City, through formulation of a master plan for various smart infrastructures. (Note: For Ha Long industrial estate smart city development promoted by AMATA VN, a consulting agreement for formulating a "smart infrastructure mater plan" based on the concept master plan pre-established by Surbana Jurong in Singapore was signed between AMATA VN and YUSA in September 2019.)
Thailand/ Chonburi	Pacific Consultants	For the gateway area of AMATA Chonburi Smart City, a plan will be formulated to deploy a total solution project that integrates smart infrastructure construction and local development, including public transportation-oriented development, under cooperation of YUSA and Yokohama City.
Laos/ Muang Xay	Pacific Consultants	For a smart city project promoted by AMATA near a new rapid railway station being constructed in northern Laos, a supply chain will be built for high value-added agricultural products, through agricultural production improvement utilizing digital technologies and industry creation via distribution and sales channel development, under cooperation of YUSA and Yokohama City.

(Reference) Feasibility Study Projects for Overseas Deployment of High Quality Infrastructure

Adopted smart city-related projects (examples of those adopted in FY2021)

Country/project	Assignee	Project outline
Indonesia/ Bali Island	Masuda Cyber Smart City Creative Consortium (general incorporated association), etc.	Japan and Indonesia will collaborate for a development and flagship project in an EV special zone to be established in Bali Island. More specifically, an FS will be conducted for assumed "smart mobility infrastructure development" with three pillars: (1) development of MaaS service platform, (2) development of EV infrastructure (distributed power source and charger system), and (3) development of smart transportation (road) monitoring system.
Vietnam/ North Hanoi	Sumitomo Corporation, etc.	A digital infrastructure will be established to realize comprehensive town management, community formation, data utilization, etc. in North Hanoi smart city development, and a long-term town management plan will be developed. In a country with poor infrastructures, this project also aims at planning for enhancement of basic infrastructures for ensuring safe living, such as electricity, communication, water supply and sewerage systems, and solution for social problems in the country.
ASEAN countries	Nippon Koei, etc.	The purpose of this project is to demonstrate the effectiveness of a business model for providing a comprehensive city management service (CMaaS) for private urban developers in ASEAN. Local governments in Japan with knowledge of town development and city companies with urban solutions will cooperate to supply necessary knowledge and technologies seamlessly, from the basic concept phase of urban development to the actual development phase and the operation and management phase, and support smart and sustainable urban development. The business model will be established while sales activities and survey are conducted for development projects of private developers, with an aim to receive service orders from those developers.

References

Feasibility Study Project for Overseas Deployment of High Quality Infrastructure

Budget request for 2022: 850 million yen (750 million yen)

Project outline

Project purpose and overview

- To promote overseas deployment of Japan's high quality infrastructure to contribute to economic development of the partner country and guide Japan's strong economic growth.
- In order to start involvement at the infrastructure planning stage for the partner country, this project will conduct the following:
 - Survey including formulation of infrastructure construction plans (such as master plans) for specific development zones, which will lead to formulation of individual infrastructure projects
 - Support for feasibility studies (FSs) for individual infrastructure projects

Achievement goals

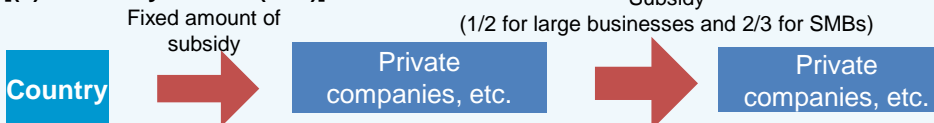
- This project ranges from FY2016 to FY2025 and ultimately aims to achieve the following:
 - As for survey including formulation of infrastructure construction plans for specific development zones, after completion of the survey, 80% of the results will be utilized for projects by partner country governments or Japanese companies.
 - As for feasibility studies (FSs), 60% of the adopted projects will proceed to the next stage, such as detailed design toward bidding, within 3 years after completion of the study, and 20% of the adopted projects will reach the order receipt or equivalent stage within 5 years after the completion.

Conditions (targets, target actions, subsidy rates, etc.)

[(1) Survey including formulation of infrastructure construction plans for specific development zones]



[(2) Feasibility studies (FSs)]



Project image

(1) Survey including formulation of infrastructure construction plans for specific development zones

Conducts survey including formulation of infrastructure construction plans (such as master plans) for specific development zones, which will lead to formulation of individual infrastructure projects.

- Survey of needs and market of the partner country
- Local survey (such as environmental, geological, and measurement survey)
- Opinion exchange and adjustment between both countries' public and private sectors (such as seminars)
- Formulation of infrastructure construction plans for entire zones, etc.

Formulation of individual infrastructure projects

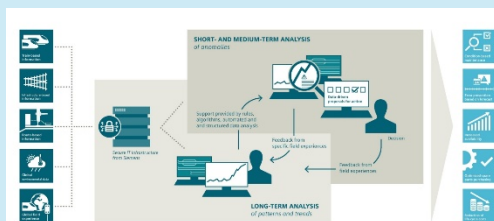
(2) Support for individual feasibility studies (FSs)

Supports survey of the following items, which are required for feasibility analysis of individual infrastructure projects, preparation of proposals, etc.

- Basic design of infrastructure
- Cost/construction period, financing, profitability, due diligence of local companies
- Procedures in local legal systems, regulations, etc. and compliance with them
- Opinion exchange and adjustment between both countries' public and private sectors (such as seminars), etc.

Support for sales promotion to the partner country government, etc. (top-level sales, demonstration, etc.)

Project order receipt, operationalization (including project participation via financial contribution)



Deployment of infrastructure O&M via data analysis



Maintenance of new transportation system

Feasibility Study Project for Overseas Deployment of High Quality Energy Infrastructure

Budget request for 2022: 1.16 billion yen (0.9 billion yen)

Project outline

Project purpose and overview

- To contribute to reduction of energy source CO2 emission worldwide and stable energy supply in Japan by promoting overseas deployment of Japan's high quality energy infrastructure related to energy saving and renewable energy.
- In order to start involvement at the infrastructure planning stage for the partner country, this project will conduct the following:
 - (1) Survey including formulation of infrastructure construction plans (such as master plans) for specific development zones, which will lead to formulation of individual infrastructure projects
 - (2) Support for feasibility studies (FSs) for individual infrastructure projects

Achievement goals

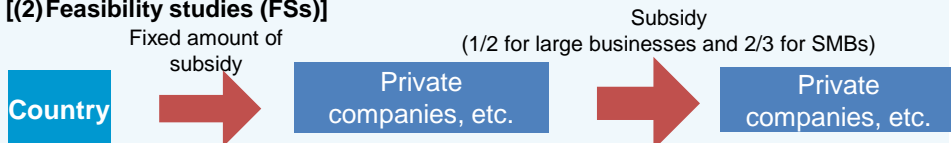
- This project ranges from FY2013 to FY2023 and ultimately aims to achieve the following:
 - (1) As for survey including formulation of infrastructure construction plans for specific development zones, after completion of the survey, 80% of the results will be utilized for projects by partner country governments or Japanese companies.
 - (2) As for feasibility studies (FSs), 60% of the adopted projects will proceed to the next stage, such as detailed design toward bidding, within 3 years after completion of the study, and 20% of the adopted projects will reach the order receipt or equivalent stage within 5 years after the completion.

Conditions (targets, target actions, subsidy rates, etc.)

[(1) Survey including formulation of infrastructure construction plans for specific development zones]



[(2) Feasibility studies (FSs)]



Project image

(1) Survey including formulation of infrastructure construction plans for specific development zones

Conducts survey including formulation of infrastructure construction plans (such as master plans) for specific development zones, which will lead to formulation of individual infrastructure projects.

- Survey of needs and market of the partner country
- Local survey (such as environmental, geological, and measurement survey)
- Opinion exchange and adjustment between both countries' public and private sectors (such as seminars)
- Formulation of infrastructure construction plans for entire zones, etc.
e.g. Formulation of maintenance plans for renewable energy power supplies, power systems, and management systems according to power demand

Contribution to formulation of individual infrastructure projects

(2) Support for individual feasibility studies (FSs)

Supports survey of the following items, which are required for feasibility analysis of individual infrastructure projects, preparation of proposals, etc.

- Basic design of infrastructure
- Cost/construction period, financing, profitability, due diligence of local companies
- Procedures in local legal systems, regulations, etc. and compliance with them
- Opinion exchange and adjustment between both countries' public and private sectors (such as seminars)
e.g. Feasibility study for solar power station construction and operation

Support for sales promotion to the partner country government, etc. (top-level sales, demonstration, etc.)

Project order receipt, operationalization (including project participation via financial contribution)



Solar power station



Wind power station



Maintenance of power transmission/
distribution and supply/demand

Emerging Market Development Project Through Technical Cooperation

Budget request for 2022: 4.26 billion yen (4.15 billion yen)

Project outline

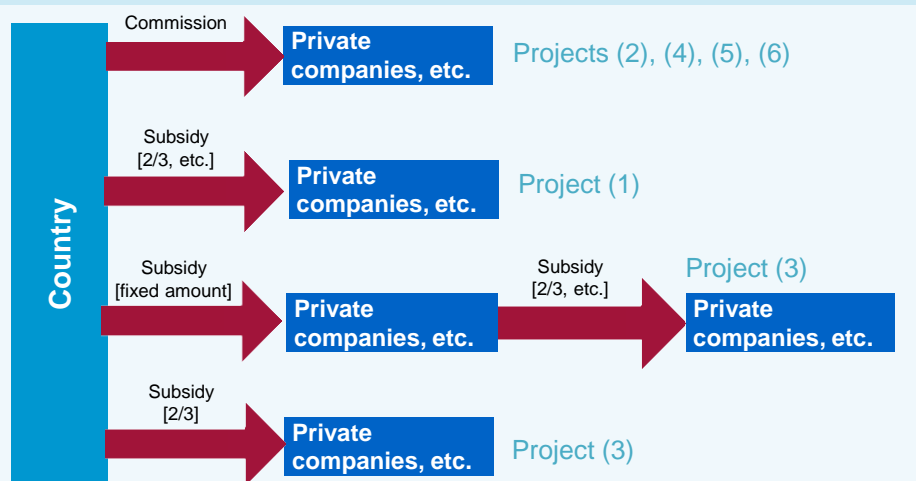
Project purpose and overview

- To contribute to economic development of emerging economies through technical cooperation with public-private partnership utilizing technologies and know-how in Japanese companies.
- Through its technical cooperation, this project will also support Japanese companies' entry into emerging economy markets, including support for development of local human resources and improvement of project environment, which will be challenges Japanese companies will face in expanding their businesses in emerging economies.
- In conducting the project, remote approaches will be taken, as much as possible, including online teaching materials and web training.

Achievement goals

- This project will continue up to FY2025 and aims to achieve 70% of its goals in the last fiscal year of each project for system and environment development in emerging economies.

Conditions (targets, target actions, subsidy rates, etc.)



Project image

(1) Training and expert dispatching project

- For development of local human resources to be engaged in projects in target overseas markets, assists initiatives by Japanese companies such as acceptance training in Japan, dispatching experts to target sites, and opening of donated courses at overseas higher education institutions.

(2) System and project environment development project

- Enhances development of systems and project environment in emerging economies through human resource development for related parties in local governments and industrial sectors to make Japanese companies easier to deploy their businesses in emerging economies.

(3) International joint development project through solution of social problems

- Assists product and service development, creation of new local businesses, etc. conducted by SMBs, etc. jointly with organizations in emerging economies such as companies and universities for solving local social problems.

(4) Internationalization promotion internship project

- Provides opportunities to accept interns and other students from abroad to promote utilization of highly skilled foreign human resources by Japanese companies aiming at overseas deployment, etc.

(5) Japanese language training project for nurses and care worker candidates

- Provides Japanese language training for smooth acceptance of nurses and care workers to ensure fulfillment of EPA-based commitment.

(6) Support project for overseas infrastructure deployment

- Dispatches experts overseas and invites VIPS from abroad to promote understanding of Japan's high quality infrastructure, including advanced O&M technologies.