

Provisional
translation

Follow-up

June 7, 2022

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The following abbreviations are used in this document to refer to specific laws.

Act on the Promotion of Subcontracting Small and Medium-sized Enterprises	Act on the Promotion of Subcontracting Small and Medium-sized Enterprises (Act No. 145 of 1970)
2020 Revised Act on Comprehensive Promotion of Labor Policies	Act on Comprehensively Advancing Labor Measures, and Stabilizing the Employment of Workers, and Enriching Workers' Vocational Lives (Act No. 132 of 1966) as amended by the Act Partially Amending the Employment Insurance Act (Act No. 14 of 2020)
Part-Time and Fixed-Term Employment Act	Act on Improvement of Personnel Management and Conversion of Employment Status for Part-Time Workers and Fixed-Term Workers (Act No. 76 of 1993)
Act on Promotion of Women's Participation	Act on Promotion of Women's Participation and Advancement in the Workplace (Act No. 64 of 2015) as amended by the Act Partially Amending the Act on Promotion of Women's Participation and Advancement in the Workplace (Act No. 24 of 2019)
Revised Child Care and Family Care Leave Law	Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members (Act No. 58 of 2021) as amended by the Act Partially Amending the Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members and the Employment Insurance Act (Act No. 76 of 2021)
Revised Act on Comprehensive Promotion of Labor Policies of 2019	Act on Comprehensively Advancing Labor Measures, and Stabilizing the Employment of Workers, and Enriching Workers' Vocational Lives (Act No. 132 of 1966) as amended by the Act Partially Amending the Act on Promotion of Women's Participation and Advancement in the Workplace (Act No. 24 of 2019)
Worker Cooperative Act	Worker Cooperative Act (Act No. 78 of 2020)
Act on Safety of Regenerative Medicine	Act on Safety of Regenerative Medicine, etc. (Act No. 85 of 2013)
Clinical Trials Act	Clinical Trials Act (Act No. 16 of 2017)
Universities of International Excellence Act	Act on Strengthening Systems for Researching and Utilizing Research Results from Universities of International Excellence (Act No. 51 of 2022)
National University Corporation Act	National University Corporation Act (Act No. 112 of 2003)
International Horticultural Exposition Act	Act on Special Measures Necessary for Preparing for and Managing the International Horticultural Exposition in 2027 (Act No. 15 of 2022)
Revised Airports Act	The Airports Act (Act No. 80 of 1955) as amended by the Proposed Act Partially Amending the Civil Aeronautics Act and Other Legislation (Cabinet Act No. 44 submitted to the 208th Ordinary Session of the Diet and enacted on June 3, 2022)

Act on Promotion of Resource Circulation for Plastics	Act on Promotion of Resource Circulation for Plastics (Act No. 60, 2021)
Next Generation Medical Infrastructure Act	Act on Anonymized Medical Data That Are Meant to Contribute to Research and Development in the Medical Field (Act No. 28 of 2017)
Act on Promotion of Private Finance Initiatives	Act on Promotion of Private Finance Initiative (Act No. 117 of 1999)
Revised Road Traffic Act	Road Traffic Act (Act No. 105 of 1960) as amended by the Act for Partial Amendment of the Road Traffic Act (Act No. 32 of 2022)
MeaDRI Sustainable Food System Act	Act on Promotion of Low Environmental Impact Business Activities to Establish a Food System in Harmony with the Environment (Act No. 37 of 2022)
Revised Plant Protection Act	Plant Protection Act (Act No. 151 of 1950) as amended by the Act Partially Amending the Plant Protection Act (Act No. 36 of 2022)
Revised Act on Facilitating the Export of Agricultural, Forestry and Fishery Products and Food	Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food (Act No. 57 of 2019) as amended by the Act Partially Amending the Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food (Act No. 49 of 2022)
Act on Special Measures for Facilitating Investment in Agricultural Corporations	Act on Special Measures for Facilitating Investment in Agricultural, Forestry and Fisheries Corporations, etc. (Act No. 52 of 2002)
Revised Act on Japanese Agricultural Standards	Act on Japanese Agricultural Standards (Act No. 175 of 1950) as amended by the Act Partially Amending the Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food (Act No. 49 of 2022)
Revised Act on Promotion of Improvement of Agricultural Management Foundation	Act on Promotion of Improvement of Agricultural Management Foundation (Act No. 65 of 1980) as amended by the Act Partially Amending the Act on Promotion of Improvement of Agricultural Management Foundation (Act No. 56 of 2022)
Revised Act on Promotion of Settlement and Interregional Exchange for Vitalizing Rural Areas	Act on Promotion of Settlement and Interregional Exchange for Vitalizing Rural Areas (Act No. 48 of 2007) as amended by the Act Partially Amending the Act on Promotion of Settlement and Interregional Exchange for Vitalizing Rural Areas (Act No. 53 of 2022)
Revised Land Improvement Act	Land Improvement Act (Act No. 195 of 1949) as amended by the Act Partially Amending the Land Improvement Act (Act No. 9 of 2022)
Revised Act on Special Measures concerning Advancements of Implementation of Forest Thinning, etc.	Act on Special Measures concerning Advancement of Implementation of Forest Thinning, etc. (Act No. 32 of 2008) as amended by the Act Partially Amending the Act on Special Measures concerning Advancement of Implementation of Forest Thinning, etc. (Act No. 15 of 2021)
Revised Act on Promotion of Wood Use	Act on Promotion of Use of Wood in Buildings to Contribute to the Realization of a Decarbonized Society (Act No. 36 of 2010) as

	amended by the Act Partially Amending the Act on Promotion of Wood Use in Public Buildings (Act No. 77 of 2021)
Act Concerning the Security of Forestry Work Force	Act Concerning the Security of Forestry Work Force (Act No. 45 of 1996)
Revised Natural Parks Act	Natural Parks Act (Act No. 161 of 1957) as amended by the Act Partially Amending the Natural Parks Act (Act No. 29 of 2021)
Regional Future Investment Promotion Act	Act on Strengthening a Framework for Regional Growth and Development by Promoting Regional Economy Advancement Projects (Act No. 40 of 2007)
Earth Filling Regulation Act	Act Partially Amending the Act on the Regulation of Housing Land Development (Act No. 55 of 2022)
Act on Promotion of Railway Crossings	Act on Promotion of Railway Crossings (Act No. 195 of 1961)
Revised Act on Special Measures for the Promotion and Development of Okinawa	Act on Special Measures for the Promotion and Development of Okinawa (Law No. 14 of 2002) as amended by the Act Partially Amending the Act on Special Measures for the Promotion and Development of Okinawa (Law No. 7 of 2022)
Revised Owner-unknown Land Act	Act on Special Measures for the Facilitation of Use of Owner-unknown Land (Act No. 49 of 2018) as amended by the Act Partially Amending the Act on Special Measures for the Facilitation of Use of Owner-unknown Land (Act No. 38 of 2022)
Space Activities Act	Act on Launching of Spacecraft, etc. and Control of Spacecraft (Act No. 76 of 2016)
Civil Aeronautics Act	Civil Aeronautics Act (Act No. 231 of 1952)
Maritime Industry Enhancement Act	Act Partially Amending the Maritime Transportation Act to Strengthen Maritime Industries (Act No. 43 of 2021)
Financial Instruments and Exchange Act	Financial Instruments and Exchange Act (Law No. 25 of 1948)
Revised Museum Act	The Museum Act (Act No. 285 of 1951) as amended by the Act Partially Amending the Museum Act (Act No. 24 of 2022)
Cultural Tourism Promotion Act	Act on Promoting Cultural Tourism in Regions Centered on Cultural Tourism Facilities (Act No. 18 of 2020)

Introduction

As outlined below, in accord with the framework of the Action Plan for a New Form of Capitalism, this Follow-up describes new initiatives and the progress of pre-existing initiatives based on past growth strategies and the Emergency Proposal from the Council of New Form of Capitalism Realization in last November.

I. Planned Priority Investment for a New Form of Capitalism

1. Investment in and distribution to people

(1) Promoting wage increases

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Optimizing transactions)

- To facilitate the smooth pass-on of increased labor costs, energy costs, and raw material costs to transaction costs by SMEs, March, and September will be designated as price negotiation promotion months. The government will also follow up on the status of price pass-on and price negotiations to announce rankings based on scoring by industry and provide guidance and advice based on the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises. In addition, subcontractor inspectors will conduct 10,000 individual hearings per year to encourage the formulation of industry-specific guidelines and voluntary action plans by industry associations. Additionally, in FY2022, IP inspectors will conduct individual hearings regarding IP transactions and provide guidance and advice based on the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises.
- To prompt the abolishment of promissory notes by 2026, by the fall of 2022, the government will confirm whether this change has been incorporated into the voluntary action plans contained within industry associations' specific roadmaps. We will also follow up with the financial industry's considerations regarding whether the handling of promissory notes at clearinghouses can be abolished in 2026.
- To promote the declaration of partnerships for coexistence and co-prosperity between large enterprises and SMEs, incentive measures for enterprises that make these declarations will be considered, with a conclusion reached by the end of FY2022.

(2) Facilitating labor mobility through skill increases

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Promoting recurrent education)

- The government will support the development of programs to train human resources to produce new value in growth fields such as digital and green sectors, startups, and

entrepreneurship. In addition, we will conduct surveys and research on the effectiveness of relearning and then disseminate these results.

- To encourage companies to support employee reskilling and relearning, in addition to providing examples of reskilling and relearning, relevant ministries and agencies will work together to provide more information on programs provided by universities and private companies, enhanced learning outcomes, etc. through expanding the functions of ManaPass (a portal site for recurrent education) during FY2022.
- To enhance courses in digital fields for which training benefits are provided, relevant ministries and agencies will work together to simplify course designation procedures in FY2022. In light of the advancement of digital technologies, further focus will also be placed on vocational training in digital-related fields.
- To make it easier for workers to take the initiative in learning, the number of online, weekend and evening courses available through the education and training benefit system will be increased. In addition, the dissemination of information on courses eligible for these benefits will also be strengthened through collaboration with the Digital Human Resource Development Platform portal site (Manabi DX), etc.
- Environments will be created to facilitate workers' access to career consulting services using job cards, including services available online and during weekends/evenings. A job card support website will also be built to enable the online creation and registration of job cards and will be operational in FY2022.
- For public vocational training, training courses will be established in FY2022 that meet human resource needs in digital and other fields. Vocational training will also be provided to develop IT literate human resources. ICT equipment such as VR will also be actively utilized to implement this vocational training effectively.
- To link creative ideas based on ideas from individuals and customer needs to business, the educational programs developed in FY2021 will be put into actual operation from FY2022. Improvements to these programs and the establishment of a base of universities and other institutions that implement these programs will also be promoted as soon as possible. In addition, the government will consider how to help those who have taken the programs to be active in business, reaching a conclusion by the end of FY2022.

(Securing employment opportunities)

- Based on the 2020 Revised Act on Comprehensive Promotion of Labor Policies, large companies with 301 or more full-time employees are obligated to publicize their ratio of mid-career hires to full-time employees with the aim of increasing mid-career/experienced worker hiring. This will be monitored through visits to business locations. Awareness of the Subsidy System for supporting Mid-career Recruitment, which subsidizes companies that publicize mid-career recruitment information and expand mid-career recruitment, will also

be promoted. Examples of efforts to publicize information on mid-career/experienced worker hiring will also be disseminated to employers.

- Considerations of the current state of employment and recruitment activities for new graduates will also be made, with a conclusion reached within FY2022.
- The status of the requirement to implement measures ensuring job opportunities up to the age of 70, which came into effect in April 2021, will be assessed. The spread and promotion of these measures will also be communicated to employers and workers through examples of initiatives and information on available subsidy programs.
- From the viewpoints of strengthening the management base of Silver Human Resources Centers by improving operational efficiency and increasing member convenience, we will promptly promote the digitization of Silver Human Resource centers and services for members so that services such as member registration and job matching, which currently require members to visit the centers, will be available online.
- To create a variety of employment and job opportunities for the elderly in regional areas, in FY2022, frameworks to promote ongoing activities that provide these opportunities in cooperation with local welfare activities will be demonstrated.
- Since May 2022, the measure to enable rollovers of pension assets from corporate type DC (Defined-Contribution) pension plans to the Portable Corporate Pension plan upon retirement has been implemented. From October 2022, expanding the coverage of employee insurance for short-time workers and the expansion of individual-type Defined Contribution pension plan (iDeCo) enrollment eligibility for participants of corporate type DC pension plans, will be implemented. The information on these changes will be disseminated and publicized for ensuring their smooth implementation.
- From December 2024, the actual contribution amount of DB including the others having DB schemes will be deduct from DC contribution limit. The actual contribution amount of DB will be calculated as the amount equivalent to the corporate type DC enterprise owner contribution based on level of benefit for DB, etc. The information on these changes will be disseminated and publicized to relevant organizations for ensuring the smooth implementation.

(Support for PhD students, young researchers, etc.)

- Alongside providing environments in which young researchers can play active roles, such as by securing sufficient research hours, we will provide support for PhD students, which has been dramatically expanded since FY2021, to improve the conditions of excelling PhD students and develop various career paths for them.
- The program of Fusion Oriented REsearch for disruptive Science and Technology (FOREST) provides young researchers conducting challenging research with integrated

support, including long-term research funding for up to 10 years, and environments in which they can focus on their research in collaboration with their home institutions. Based on the assessment of the impacts of the system related to the improvement of the research environment in the program, this program will promote stable support for researchers while striving to enhance the program with a view to making it permanent.

- Support will be provided for the commercialization of technology seeds through matching and joint research between young researchers and startups, etc., as well as spreading PhD student internships and cross-appointments amongst companies. Additionally, during FY2022, measures to promote the utilization of PhD holders in companies will be presented. Support for providing human resource development programs conducted jointly by universities and companies to foster the high-level human resources sought by companies, including PhD holders, will also be provided.

(Developing human resources for digital fields)

- To create a global industry in the field of ICT, the national (Inno) vation network will be utilized to uncover human resources that will take on the challenge of disruptive innovation. In addition, information dissemination and international expansion will also be strengthened in FY2022.
- To promote the spread of Community ICT Clubs, a curriculum for online learning will be developed in FY2022, and examples of online regional learning initiatives will be disseminated.

(Creation of environments supporting proactive career development)

- To support job-seekers' job-hunting activities and companies' recruiting activities, links between the Hello Work Internet service and job tag (a site providing job information (Japanese version of O-NET)) will be strengthened during FY2022.
- Regarding the monetary relief system when dismissal is invalid, reports from the meeting to discuss compensation for workers whose dismissal is ruled invalid will be reviewed by the Labour Policy Council, and necessary measures will be taken based on the results of its deliberations.

(3) Moving from savings to investment: formulation of the “Doubling Asset-based Income Plan”

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

(4) Supporting the efforts of all generations, including children, working adults, and the elderly

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Support for children and working adults generations)

- To improve and stabilize the income of younger and child-rearing generations, the employment environment will be improved through efforts such as supporting workers to find permanent employment, ensuring the implementation of part-time and fixed-term employment laws to realize equal pay for equal work, and raising wages.
- To provide childcare services for approximately 140,000 children by the end of FY2024 aiming for the quick elimination of waiting list, the government will support the construction and renovation of daycare centers and provide loans for tuition fees for students who wish to become childcare workers to secure human resources for this field.
- Support will be provided for the operation and development of facilities providing childcare services for sick children, temporary childcare services for infants and toddlers, and childcare concierges. In addition, support will be provided for users of company-led babysitting services to reduce burdens relating to use.
- Local governments will be supported to provide opportunities and venues for young people who wish to get married.

(Reduced burdens of care, preventive support)

- To promote scientifically proven care for maintaining independence, a full-scale analysis will be conducted using a database (LIFE) with information/analysis of situations faced by elderly people and the content of their care, etc. Results will then be used to revise care fees and formulate best practices.
- Through the accumulation and analysis of data obtained from demonstrations of the effectiveness of monitoring sensors in long-term care settings, etc., measures to further disseminate technologies that contribute to improving productivity in long-term care will be considered, with a conclusion to be reached within FY2023.
- Regarding the FY2023 evaluation indicators for grants for promoting strengthened insurer functions of long-term care insurance and grants to support efforts by insurers, we will create more robust outcome indicators and revise indicators for efforts that support independence, prevent the progression of serious illnesses, and optimize long-term care costs.

(Prevention of illness and worsening illness, and promoting healthy lifestyles)

- To further deepen efforts to prevent occurrence and aggravation of disease and promote people's health in cooperation with companies and medical insurers (collaborative health), additional display items/effective display methods on health scoring reports will be studied, with a conclusion to be reached within FY2022.
- In FY2022, support will be provided for providing health management know-how through supply chain business relationships in collaboration with the declarations for building partnerships. This support is provided with the goal of having 100,000 corporations implement initiatives related to health management with the support of insurers, chambers

of commerce and industry, local governments, etc., as well as obtain certification for these initiatives by 2025. Mechanisms for evaluation by the local community and labor market surrounding companies involved in these efforts will also be established. An international forum will also be held in FY2022 for institutional investors.

- In FY2022, support will be provided for the formulation of evidence and evaluation guidelines for intervention methods such as behavior changes using apps and wearable devices by academic societies in the disease area, aiming for the further implementation of health care services in society.
- Considerations will be made regarding reviewing measures to support efforts by medical insurers and local governments to prevent occurrence and aggravation of diseases, to promote people's health, and to optimize medical costs, with conclusions to be reached in FY2023.
- To ensure health care services are provided with a certain level of quality, in FY2022, the government will support the development of voluntary guidelines regarding remote health and medical consultations, etc., by industry associations.
- To provide comprehensive, lifelong support for women's health, information on the various physical problem, such as menstrual and menopausal disorders, and information on pregnancy and childbirth will be disseminated. Furthermore, support will also be provided for research and development to help solve problems related to women's health. In addition, efforts to encourage the utilization of Femtech products and services will continue to be supported.
- The formulation and publication of health promotion plans by local governments will be supported in FY2023 in preparation for the next National Health Promotion Movement Plan starting in FY2024.
- To review evaluation indicators and distribution points of incentive measures for medical insurers in conjunction with the start of the fourth period of the Specific Health Checkups and Specific Health Guidance System in FY2024, considerations will be made regarding reviewing the health status of enrollees in the addition and subtraction system of late-stage elderly support payments and the outcome-based incentive measures for insurers' efforts to optimize healthcare costs, with a conclusion to be reached by the end of FY2022.
- To elucidate the effects of exposure to chemicals on health, growth, development, etc., Concept Plan for implementing the Japan Environment and Children's Study targeting children aged 13 and over will be compiled by the end of FY2022.

(Enhancing comprehensive measures for dementia)

- In order to realize coexistence and prevention of dementia, based on the "Framework for Promoting Dementia Care" (decided by the Ministerial Council on the Promotion of Policies for Dementia Care on June 18, 2019), the Council will promote dementia care

policies in cooperation with the Japan Dementia Public-Private Council. Evaluation indicators and methods for prevention will be established through public-private partnerships, and a mechanism for product development will be implemented by FY2022 with the proactive involvement of people with dementia. In addition, dementia research will be strengthened by establishing a system of per-stage cohort studies of dementia by FY2025, with the aim of establishing preventive and curative methods for the disease.

(Organizational reforms in medical and long-term care fields)

- In preparation for the introduction of overtime work regulation for physicians in April 2024, efforts to shorten working hours at medical institutions and measures to prevent the uneven distribution of physicians will be further promoted. In addition, the actual working conditions of physicians working at university hospitals will be assessed and analyzed. Necessary measures will be studied to provide more efficient and higher quality medical education, with conclusions to be reached by the end of FY2022.
- In 2022, measures needed to support the enhancement of educational programs related to community medicine, etc., in the early stages of doctor training programs (university medical schools) will be implemented. In addition, necessary measures will be taken to allow the regional quotas for temporary enrolments at medical schools, whose primary purpose has been to secure doctors for regional areas, to be set within the necessary scope to secure doctors working in medical specialities where there are staffing shortages.
- To reduce burdens on long-term care workers and promote the provision of high-quality long-term care services in an integrated manner, necessary measures will be taken in FY2022 to enable online application and notification to reduce the burden of application and notification procedures for long-term care service providers.

(5) Respect for diversity and flexibility of selection

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Further Expanding promotion of femal participation and career advance)

- The Prefectural Labour Bureaus and local governments will cooperate in providing support such as consultation and personal visits for companies, including SMEs, obliged to formulate, report the plans of action for general employers, and disclose information under the revised Act on Promotion of Female Participation and Career Advancement, to implement measures steadily to promote female participation and career advancement. Furthermore, companies will be encouraged to introduce a shorter regular employee hours system and promote the use of split working hours and shift systems.
- By enhancing Grant for the Promotion of Local Women's Participation and Advancement, local governments will be supported in their efforts to support women's activities, such as

developing female human resources working in digital fields and detailed consultation support for women with various difficulties and challenges, including period poverty.

- In addition to enhancing and further utilizing the Female Leaders Human Resources Bank, further efforts will be made to promote the appointment of women to management positions by, for example, posting a ranking of the ratio of female executives at companies in different markets, including companies listed on the Prime Market, on the new Female Executives Information Website. In addition, to promote women's activities in companies, a survey will be conducted on the status of gender investment, etc., taking into account factors relating to women's activities, with results widely disseminated.
- Based on Digital Human Resources Development Plan for Women (decided by the Council for Gender Equality on April 26, 2022), to promote women's economic independence and mobility of labor into digital industries, which are growth fields, concentrated support will be provided for women to acquire digital skills directly related to employment and to gain employment in these fields for three years from FY2022.

(Promoting new working styles, including maternity leave and emigration without changing jobs)

- To ensure the Revised Child Care and Family Care Leave Law is smoothly implemented, the government will publicize the relaxation of requirements for childcare and family care leave for workers with fixed-term employment and the mandatory publication of the status of childcare leave taken. In addition, consultation support will be provided at Hello Work regarding securing substitute personnel during childcare leave, and awareness will be raised of subsidies for supporting work-life balance, etc.
- To promote introducing a selection-based four-day workweek system at companies, examples of initiatives, subsidies and others that can be used will be publicized.
- To promote and spread various types of regular employees, such as those with limited working locations and limited duties, in a way that is desirable for both labor and management, the Labor Policy Council will deliberate on matters such as adding changes in work location and duties to the scope of matters that must be clearly stated in working conditions as part of the rules of labor contracts. Required measures will then be taken based on these deliberations.
- Improvements to the treatment of non-regular employees will be promoted by ensuring equal pay for equal work for all employees through free consultation with labor management specialists, disseminating advanced case studies, and advice and guidance from the Labor Bureau.
- To ensure that quality telework with appropriate labor management is established and promoted across a wide range of industries, the introduction of telework by SMEs will continue to be supported, and a one-stop consultation service for labor management and

ICT utilization related to telework will be established in FY2022. In addition, a survey and research on the introduction of telework in rural areas will be conducted in FY2022 to confirm what new value it is providing, such as solving regional issues. This information will also be used to study measures toward realizing telework.

- The government will take measures to ensure the smooth application of regulations to limit overtime work for such as the construction industry, road transport industry, and physicians from April 2024, including improving consultation systems, making these systems more widely known, and providing support to reduce overtime work and ensure workers maintain their health. For example, improvements to working hours for those in the road transport industry will be made based on adding upper limits, with revisions made to standards.
- To enable small and medium-sized employers, etc. to take appropriate measures regarding their obligation to prevent power harassment based on the Revised Act on Comprehensive Promotion of Labor Policies of 2019, awareness-raising and consultation services will be provided, alongside support for corporate initiatives such as training of anti-harassment personnel for labor and social security attorneys.

(Employment maintenance)

- To support companies that genuinely need it, the government will continue to reduce subsidies for employment adjustment in stages while paying attention to the employment situation in areas where COVID-19 infections are spreading and to companies with challenging business conditions. It will also strengthen its response to fraudulent receipt cases of subsidies.
- Industrial employment stabilization subsidies will continue to be provided to the employer of both the seconding and receiving entity in response to companies who have been forced to downsize their business activities due to the impacts of COVID-19 while maintaining worker employment through temporary transfers.
- To facilitate labor mobilities between industries and companies, the Industrial Employment Stabilization Center provides information, consultation, and matching regarding labor mobilities avoiding unemployment due to secondment or transfer.
- To support displaced workers or who are in a similar situation to those affected by COVID-19 or those who have been forced to find employment in fields they are unfamiliar with, measures will be taken to reduce the burden on employers who employ these people on a trial basis.
- To prepare for the smooth implementation of the Worker Cooperative Act from October 2022, a website will be opened telephone consultations provided.

(6) Formulating guidelines and strengthening disclosure to the stock market of non-financial information such as human capital

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

2. Targeted investment in science, technology, and innovation

(1) Quantum technology

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- Based on the “Vision of Quantum Future Society” (April 22, 2022 decision by the Integrated Innovation Strategy Promotion Council), the following initiatives will be systematically promoted.
 - Initiatives will be carried out in strategic technological development and basic research in partnership with different fields, in order to overcome numerous technical challenges with the aim of realizing quantum computers and quantum sensing.
 - Verification environments for quantum technology will be established, including the creation of hubs within research and development corporations, and the verification of quantum computers and quantum encryption will be promoted across a wide range of fields, including energy, finance, pharmaceutical development and medicine, lifestyle services, transportation, logistics, factories, and safety/security, while working to establish and vitalize new industries and startups that make use of quantum technology.
 - Initiatives will be carried out in research and development aimed at building a foundation for a quantum-encrypted communications network and in elemental technology aimed at realizing the quantum internet, as well as initiatives for establishing testbeds for social implementation at an early stage.
 - Human resource development and retention in industry and academia will be promoted through recurrent education, education in partnership with different fields, and outreach activities, in order to expand the numbers of users of quantum technology.
 - Efforts will be made to promote the renewal of Quantum Technology Innovation Hubs. The hubs will play the roles of providing comprehensive support to industry and providing key materials for realizing quantum computing, etc., furthermore they will exert a unifying influence at the international level by attracting top-level researchers from the world. In addition, the hubs will be made to promote cutting-edge research that can compete on the world stage as a core.

(2) AI implementation

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- The following initiatives based on the AI Strategy 2022 (April 22, 2022 decision by the Integrated Innovation Strategy Council) will be promoted.
 - Initiatives will be promoted aimed at building a foundation for digital twin technology, a

cornerstone for the use of AI in fields such as disaster prevention, through cooperation among related ministries and agencies.

- Initiatives in technological development in relation to “Explainable AI” and other related initiatives will be carried out, in order to realize “Responsible AI.”
- Initiatives will be carried out to promote adoption of general-purpose AI and to strengthen promotion structures, in order to promote the use of AI in government agencies.
- Work will be carried out to promote the social implementation of the G20 AI Principles, and to establish an international cooperation structure for this, with the aim of realizing a “human-centric AI society.”
- Policies will be discussed for the use of healthcare/long-term care data to enable the development of AI and the use of AI in pharmaceutical development, with such policies to be compiled during FY2022. Through developing partnerships with overseas medical organizations including those in Asia, the AI technology that has been developed in Japan will be expanded overseas, while AI technology inside and outside Japan will also be accumulated.

(3) Biomanufacturing

Based on the Action Plan for a New Form of Capitalism, in addition to the measures described in the Plan, the following specific measures will be taken.

- Based on the Bio Strategy Follow-up (June 11, 2021 decision by the Integrated Innovation Strategy Council), the following initiatives will be strongly promoted.
 - The Biocommunity Growth Policy Package (provisional name) will be compiled by the end of FY2022, and intensive investment in biocommunities possessing strategic resources of various kinds will be undertaken, while the expansion of market domains will be accelerated through the bio-transformation of existing industries and the foundation of new industries, by accelerating the establishment and utilization of biomanufacturing verification hubs that will form a central point for biocommunities.
 - Research and development into and social implementation of biotechnology will be strengthened across a wide variety of fields, in addition to the utilization of microorganisms that are able to absorb CO₂ such as hydrogen-oxidizing bacteria with functions that are enhanced through biotechnology (a trump card among climate change countermeasures).
 - The fusion of different fields that have grown out of biotechnology will be accelerated, including partnerships between and development of the results of Japan’s three largest biobanks, and enhancing and strengthening platforms for the utilization of big data connected with biological genetic resources, taking advantage of unique features of the biotechnology field that covers a wide variety of areas.

(4) Regenerative/cellular medicine and gene therapies

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Medical/pharmaceutical products)

- Continued discussions will be held on the nature of the Japanese government-wide guidance functions over policy for the pharmaceutical industry, based on full-scale strengthening of the organizational framework of the Ministry of Health, Labour and Welfare in FY2022, in order to establish an ecosystem for the pharmaceutical industry.
- Discussions will be held on the following points, and a revision of the Act on the Safety of Regenerative Medicine (Regenerative Medicine Safety Act) will be submitted to the Diet as soon as possible, with the aim of responding to the evolution of new medical technologies as well as disseminating and promoting such technologies with all speed while also ensuring their safety.
 - Ensuring that the implementation of *in vivo* gene therapy (treatment involving the direct introduction of genetically modified viruses, etc. into the patient's body) within clinical research and private practice falls under the provisions of the Regenerative Medicine Safety Act
 - Streamlining the required procedures for regenerative medicine technology (which comes under the provisions of the same Act)
- Discussions will be held on the placement of top-ranking officials in conducting clinical research as individuals with central responsibility for the planning and management of clinical research based on the shared use of multiple facilities across Japan, and an amendment bill of the Clinical Trials Act will be submitted to the Diet as soon as possible, to enable the development of revolutionary new pharmaceuticals. At the same time, a database will be created for the management of conflicts of interest in clinical research and the like.
- Based on the Basic Plan for the Promotion of R&D and Use of Medical Devices to Improve the Quality of Medical Care for the Public (May 31, 2022, decision by the Cabinet), the government will support the capacity building in research and development of medical devices, provide incubation, establish the premarket review and approval system for early realization, and secure the stable supply, etc.
- Testing structures/treatment structures, the development of treatment drugs and vaccines, information-gathering, and human resources development will be fundamentally strengthened as measures against the new emergence and re-emergence of infectious diseases including COVID-19, based on the following initiatives and others.
 - Support for research and development, which looks ahead to the exit strategy of the

industry-academic-government cooperation based on new pharmaceutical development methods and the formation of research and development hubs at the global top level will be launched by the fall of 2022, based on Japan Agency for Medical Research and Development (AMED) funds. This is for conducting research and development into vaccines for future pandemics, based on the Strategy for Strengthening Vaccine Development and Production Systems (June 1, 2021, decision by the Cabinet). At the same time, in order to ensure that these efforts are carried out by related ministries and agencies in close cooperation with each other, information-gathering and analysis will be conducted inside and outside Japan via the Strategic Center of Biomedical Advanced Vaccine Research and Development for Preparedness and Response (SCARDA), and the decision will be made on the orientation of research and development support that takes an all-encompassing perspective of vaccine research, development and practical utilization as a whole.

- Continual upgrading of the list of infectious diseases (and priority infectious diseases), which is essential for developing and securing special medical supplies in readiness for future pandemics, based on the epidemic situation of infections inside and outside Japan and on the latest findings. At the same time, strategic support will be provided for research and development into treatment drugs for infectious diseases and for empirical research into vaccines.
- Support for the establishment of shared network systems for sharing clinical trial data between clinical research core hospitals and support for the introduction of home-based clinical trials (a clinical trial method in which patients can undergo drug administration and observation without visiting a medical organization) will be commenced in FY2022, in order to establish and enhance the trial research environment at clinical trial core hospitals.
- Full-scale provision of information to the research organizations via the Databank (a national repository serving as a databank for new emerging and re-emerging infectious diseases), which gathers clinical information and specimens (such as blood specimens) from collaborating medical organizations all over Japan, will commence in FY2022.
- Discussions will take place concerning support measures for increasing the number of study courses relating to the clinical study of infectious diseases and public health crisis management at university hospitals, graduate schools of public health, etc., in order to systematically develop infectious disease specialists in readiness for future pandemics, with a conclusion to be reached within FY2022.
- In order to strengthen intelligence functions relating to infectious diseases, a secretariat, which will coordinate the collection of epidemiological data, training on risk assessment and the like and the dispatch of personnel outside Japan to conduct surveys at times of

emergency, will be established within FY2022.

- A structure will be established enabling responses to emergency situations, including the global bio-community, in order to facilitate the implementation of countermeasures against infectious diseases including zoonotic diseases. In addition to revising the Action Plan for Strengthening Measures on Emerging Infectious Diseases and the National Action Plan on Antimicrobial Resistance (AMR) as soon as possible by the end of FY2022, countermeasures against infectious diseases, which pose international threats (including AMR) will be strengthened across the government as a whole, with the One Health approach being borne in mind. Furthermore, conclusions will be drawn up aimed at the securing of drugs for treating drug-resistant bacteria following comprehensive discussion on specific methods including market incentives, as part of Japan's AMR countermeasures, to play a leading role in talks at the international level.
- Among the pharmaceuticals, which requires special consideration in terms of securing stable supply, and which are in widespread use due to being indispensable in terms of medical care, including antimicrobial drugs, discussions will be held concerning those with top priority on the drug price-setting, introduction of systems for national manufacturing support of raw materials, stockpiling and purchasing at times of emergency, from the perspective of supporting a continuous stable supply through nationwide efforts, to reach conclusions by FY2025.
- Support for young researchers and startups and partnerships with academic societies will be strengthened through medical-engineering collaboration innovation projects and the Healthcare Innovation Hub (InnoHub), an industry-academia-government domestic and international network covering the healthcare field, in order to promote the participation of newcomers in domains such as medical equipment and healthcare services. In addition, further measures to promote more vigorous participation of newcomers from other industries and the advance of Japanese venture companies overseas will be discussed, reaching a conclusion within FY2022.
- A system for designating and conducting approval reviews for the revolutionary Software as a Medical Device (SaMD) on a priority basis will be introduced on as a trial scheme during FY2022, in order to promote the practical utilization of SaMD. In addition, discussions will be held on response measures in fields where there are gaps between the existing challenges and the technology that can be provided in order to promote the development of new technologies that can respond to diverse needs, such as online medical services, with a conclusion to be reached within FY2022.
- Government targets for the future will be formulated for the promotion of the development and use of biosimilars (pharmaceutical products possessing the same level of quality as biopharmaceutical products that have been approved domestically) in FY2022. Based on

these targets, specific policies for promoting the use of such products will then be discussed, with the aim of reaching a conclusion in FY2024.

- To promote self-care and self-medication, during FY2022, challenges concerning medical test agents and other products will be set out individually for each product along with the formulation of schedules, with the aim of expanding the use of over the counter (OTC) in-vitro diagnostic drugs sold commercially at pharmacies.
- In order to steadily implement guidelines on improving logistics structure for pharmaceutical products used for medical care, surveys will be carried out during FY2022 to gauge the status of price negotiations and discussions held with the relevant industries on the nature of improvements.
- Research and development into heavy ion radiotherapy systems for cancer treatment will be accelerated and a research unit will be completed by FY2024, in order to bring about more compact and higher-precision heavy-ion cancer therapy equipment.
- For *kampo* medicines, support will be provided for the domestic production of crude drugs, while the creation of international standards regarding such drugs will be promoted in order to help raise the competitiveness of the domestic industry.
- The regulations required for the manufacture and distribution within Japan of pharmaceutical products containing cannabis as a material will be revised based on the status of cannabis usage in overseas countries, while discussions will be held on the strengthening of regulations on usage and the establishment of testing structures, based on the perspective of preventing dangers to public health caused by abuse of cannabis, with a conclusion to be reached within FY2022.
- The progress of the introduction of container medical units (which can be used as transportable and connectible medical facilities for providing medical services) at local governments will be gauged, while continued discussions and dissemination of information will be carried out aimed at promoting their use.
- Based on the Action Plan for Promotion of Production and Utilization of Medical Radioisotopes (May 31, 2022 decision by the Japan Atomic Energy Commission (JAEC)), research, development and practical utilization making use of research reactors such as JRR-3 and Joyo will be promoted starting in FY2022, in order to bring about the domestic production of radioisotopes for medical purposes, an area where Japan is currently reliant on imports.
- The whole-genome analysis for patients with cancer and intractable diseases will be carried out intensively from FY2022 with the aim of developing an initiative in this area on the scale of the 100,000 genomes project seen in the United Kingdom and other countries, and the results of such analysis will be introduced into everyday medical services as soon as possible. In addition, the results of whole-genome analysis together with multi-omics

analysis will be accumulated as data, integrated strategically with detailed longitudinal clinical information (a strong point of Japan), in order to promote research and pharmaceutical development.

(Strengthening the foundations of knowledge (research capabilities))

- Research and development for the two “moonshot targets” decided in September 2021 will be commenced at an early stage, in order to respond to changes in the socio-economic backdrop caused by the COVID-19 pandemic, climate change and other factors. Research and development into quantum computers will be fundamentally strengthened, and research and development into areas such as the “Cancer Moonshot” (based on a joint statement by Japan and the United States) will be commenced in FY2022, in relation to seven existing moonshot targets concerning the environment, agriculture, AI, robotics, quantum technology, healthcare and medical care. In addition, work will be done on enhancing research and development in relation to moonshot targets for the environment and agriculture, including carrying out stage-gate reviews through external evaluations of the state of progress three years after the start of research of development in FY2022.
- Regarding the next phase of SIP (Cross-ministerial Strategic Innovation Promotion Program), those themes with the greatest impact on both technology and business will be decided during FY2022, and work will be commenced from FY2023 onwards along with developing plans and systems aimed at social implementation.
- Regarding the competitive research funds such as Strategic Basic Research Programs, targets, which integrate the natural sciences with the humanities and social science, will be set during FY2022 with the aim of promoting challenges in new and integrated fields. At the same time, policies on eligibility and screening processes for applications will be revised, with the aim of ensuring that the results of research are utilized seamlessly in all areas from foundations to application, in order to generate innovation.
- Prioritized support will be provided to the development of high-caliber young researchers and for their stepping up, as part of Grants-in-Aid for Scientific Research -KAKENHI-.
- For the vitalization of international brain circulation, international research hubs will be formed systematically and continuously through the World Premier International Research Center Initiative (WPI), and by strengthening partnerships between universities and other relevant organizations and WPI hubs. At the same time, transfers/travel will be promoted and international joint research carried out as part of research and development projects.
- Analysis will be undertaken with the aim of improving the quality of budget formation, including the specification of key science and technology fields and the promotion of evidence-based policy making (EBPM), via the evidence data platform constructed by Council for Science, Technology and Innovation (e-CSTI), in order to establish effective science, technology and innovation policies.

- From FY2022, the National Institute of Advanced Industrial Science and Technology (AIST) will provide services such as joint research, trial production and evaluations for regional small- and medium-sized enterprises (SMEs) and startups, etc. at regional bases, while laboratories with a focus on research and development that can serve as bridges between industry and the technology “seeds” provided by universities will be set up at core universities in respective regions. In addition, incorporated enterprise that will promote joint research, etc. with private-sector companies using AIST research results is expected to be established in FY2023.
- During FY2022, a system for paying results-based remuneration exclusively to those persons who have produced particularly excellent research results will be introduced for research and development in the fields of cutting-edge technology. In addition, from FY2023 an incentive system, which has already been introduced in the Green Innovation Fund Projects, will be introduced into other research and development areas. Stage-gate reviews whose evaluation criteria are clarified on a prior basis will also be introduced for all research and development initiatives as a general principle.

(Realizing research DX)

- In order to promote AI-/data-driven research for realizing digital transformation of research activities (research DX), the sophistication of the digital infrastructure used in research (supercomputers, data storage and Science Information NETwork (SINET)), joint facility clusters and large-scale research facilities will be promoted, while at the same time criteria will be relaxed during FY2023 with the aim of promoting use in the industrial sector. Furthermore, initiatives relating to the strategic gathering, sharing and usage of research data in the material fields will be accelerated by making use of the above, while similar initiatives will be expanded in other fields, including the fields of humanities and social sciences such as disaster prevention and disaster mitigation.
- While making maximum use of supercomputer Fugaku, looking ahead to the post-Fugaku era, investigative research into the specific performance and functions of post-Fugaku, including its coordination with the new computational principles of quantum computers, etc., will be commenced in FY2022, and research into elemental technology will be conducted through industry-academic partnerships by FY2023.
- Mechanisms for the introduction, upgrading and sharing of research facilities and equipment across universities and other relevant facilities as a whole will be established based on the Guidelines for the Promotion of the Shared Use of Research Facilities and Equipment.
- The division of roles to be played by data curators and university research administrators (URAs), etc., and systemic methods of organizing research data will be discussed, with a conclusion to be reached within FY2022, in order to establish a structure that will facilitate searching among and using research data.

- Based on public-private regional partnership, operation of the Next Generation Synchrotron Radiation Facility is aimed to start in FY2023, while support will be given to the formation of an innovation community in which industry, academia, the government and financial institutions collaborate with specific regions.

(Material technology)

- The following initiatives will be strongly promoted based on the Materials Innovation Strategy (April 27, 2021 decision by the Integrated Innovation Strategy Council).
 - With the aim of pushing forward data-driven research in the materials field through promoting the generation, accumulation and usage of the necessary data, shared facilities, and equipment capable of taking up high-quality data will be advanced, systems for the gathering and management of data strengthened, and AI analysis base strengthened. By doing this, a system enabling integrated usage of data will be operated on a trial basis until FY2023, and on a full-scale basis until FY2025. In addition to undertaking full-scale research and development activities (including data-driven research and development) into the innovative materials that will contribute to decarbonization and to overcoming resource constraints, industry-academia collaboration initiatives centering on data such as that relating to magnets and macromolecules will be further expanded.
 - The data management policies of businesses and material performance prediction tools using AI and the data from various businesses will be shared and expanded during FY2022.

(5) Reform of university education

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Reform of universities through the foundation of the 10trillion-yen University Endowment Fund and others)

- Based on the Act on universities for research excellence, the universities that are eligible to receive support from the universities fund as of FY2022 will be invited to the public application for the support to be commenced in FY2024,
- The draft amendment of the National University Corporation Act is aimed to be submitted to the next ordinary session of the Diet, to enable the establishment of a collegiate body for stipulating the management policies necessary for national universities to become universities for research excellence.
- The core universities of each region and universities possessing strengths in specific fields will be given support through the Comprehensive Promotion Package for Regional Core and Distinctive Research Universities, to ensure that they are able to take full advantage of their strengths and distinctive characteristics and engage in the development of their

regional economic societies through human resource development, improved research capabilities and industry-academia-government activities.

- Surveys and discussions on the growth strategies of International Research Universities of Excellence and methods of retaining and developing university management human resources will be carried out in FY2022 via PEAKS (Leaders' Forum on Promoting the Evolution of Academia for Knowledge Society). The results of these being delivered to a wide range of universities in the form of workshops and training programs from FY2023 onwards.
- Based on the Fifth Five-Year Program For Facilities of National Universities (March 31, 2021 decision by the Ministry of Education, Culture, Sports, Science and Technology), universities and similar organizations will be provided with support for realizing an Innovation Commons (co-creation hub) including support for establishing facilities from the planning stages, while support will also be provided with the introduction of Net Zero Energy Buildings (ZEB) within university campuses.
- Efforts will be made to promote the use of policies expected to produce synergistic efforts with regard to “convergence knowledge (So-Go-Chi),” which will contribute to developing a comprehensive understanding of humans and society and resolving challenges through the fusion of various forms of intelligence, and to strengthen communication with society at large about the convergence knowledge(So-Go-Chi).

(Strengthening deep research and STEAM education)

- In order to strengthen exploration, STEAM and entrepreneurship education at the elementary and junior high school stages of education, colleges of technology(KOSEN) will be developed into hubs for science, technology, engineering, art and mathematics (STEAM) education for elementary and junior high schools, comprehensive high school reform will be implemented, and platforms connecting companies, universities, science museums and facilities that support exploration, STEAM and entrepreneurship with schools and children will be developed and provided from FY2023 onwards, based on the Policy Package Regarding Education and Human Resource Development toward the Realization of Society 5.0 (June 2, 2022 decision by the Council for Science, Technology and Innovation). In addition, in order to strengthen the various initiatives of designated Super Science High Schools (SSH), support will be provided to allocate coordinators and specialist human resources to promote partnerships between SSH and other schools and universities within respective local areas.
- With regard to the handling of educational programs and instructional guidance for children with special talents in specific fields, conclusions will be drawn concerning the orientation of this matter, including the participation of such children in out-of-school programs, during FY2022, and start to implement with whatever is currently possible.

- In order to eliminate gender bias concerning the study of science and mathematics and the division of roles by gender from parents/guardians, schools and society, information dissemination and events will be held from FY2023 onwards aimed at fostering a unified social movement across the industrial sector, while role models who are achieving success using what they have learnt in science and mathematics education will be presented, and large-scale surveys and factor analysis on the reasons why women tend not to choose scientific subjects will be carried out.

(Promoting diversity in learning)

- Universities and related institutions will join together to develop attractive Japanese educational contents and disseminate them to the world via international education platforms, while also conducting expansive promotion of Japan's public-private study abroad support program (Tobitate! (Leap for Tomorrow) Study Abroad Initiative) in order to fundamentally re-establish the international exchange of students (which has ground to a halt).
- Model curricula for AI, data science and mathematics will be brought into mainstream education at universities and colleges of technology (KOSEN) nationwide, and will be added to the eligible programs covered by the advanced literacy level within the approved higher education program at universities in FY2022.
- In order to foster the development of digital skills, etc. suited to occupations by specialized training colleges, relevant curricula will be developed for in FY2022 in partnership with the industries connected with the occupations in question.
- Support will be provided for the overseas training and joint domestic training of human resources with core skills who are to participate in the WorldSkills Competition in October 2022, while publicity and notifications concerning the Competition will be carried out.

(Promoting the acceptance of highly-skilled foreign human resources)

- In order to promote the recruitment and retention of highly-skilled foreign resources at regional mid-tier companies and SMEs, efforts will be made to enhance hands-on support for coordinators who will be responsible for formulating hiring strategies at enterprises prior to hiring, including identifying projects, which are expected to grow through the utilization of highly-skilled foreign human resources, and narrowing down the requirements for the human resources required. These efforts will be made in FY2022 and through Japan External Trade Organization (JETRO)'s Platform for Promotion of Active Participation by Highly-Skilled Foreign Professionals. In addition, the numbers of personnel such as administrative scriveners and social insurance labor consultants who provide support for hiring procedures will be augmented, and support information for local governments will be provided in an integrated manner on a portal website.
- In FY2022, approximately two cases of the Regional Consortium for Active Participation

by Highly-Skilled Foreign Professionals, comprising JETRO, economic groups, local governments and other organizations, will be formed mainly in regions covered under the Program for Enhancing Employment of International Students Accreditation System, and coordination will be carried out to support employment within these regions through liaison councils, wide-area matching events and other means, in order to promote the overseas expansion of mid-tier companies and SMEs and the vitalization of regional economies through the promotion of activities among foreign students.

- Based on the ASIA-Japan Investing for the Future Initiative (announced in January 2022), support will be provided to highly-skilled human resources from Asia in FY2022 with the opportunities for internships using online methods carried out by companies and employment opportunities via matching events held by JETRO with Japanese companies operating overseas, in order to promote the development and recruitment of diverse human resources at Japanese companies.
- In order to enhance structures for accepting foreigners in Japan, as part of a move to relax border control measures, effective and efficient residence support will be provided at foreign residents' support centers, everyday living support and employment support will be provided for foreign students at specialized training colleges, and Japanese language learning environments before coming to Japan and everyday life consultation systems for foreign residents will be established.
- The provision of educational contents that include Japanese language education, AI, data science and mathematics education will start in FY2022 over the Japan Virtual Campus (JV-Campus) online educational platform, which is used to share educational resources among universities inside and outside Japan, in order to secure top-caliber foreign students.
- A bill on mechanisms intended to maintain and improve the level of the qualifications providing proof of the abilities of Japanese language instructors and the level of Japanese language institutions will be submitted to the Diet as soon as possible.
- The Framework of Reference for Japanese Language Education was compiled as comprehensive indicators of learning, teaching and evaluation in Japanese language education to be shared both inside and outside Japan. Based on this, development of a self-assessment application for Japanese language abilities and of educational models and educational materials, etc. in the fields of everyday living, study abroad, employment, etc. will commence in Japan in FY2022. Support will also be provided for the creation of structures for Japanese language education in the regions of Japan. In addition, educational materials and online courses for Japanese language study will be developed and provided to foreigners and Japanese descendants who have no opportunity to study Japanese language at overseas educational institutions.
- In relation to the Japanese language education for foreign students at high schools, research

will be carried out into the creation of instructional guidelines for Japanese language education and Japanese language ability evaluation for in FY2022, with the aim of introducing an individual instruction system in FY2023.

- In order to establish a structure for managing and gauging the school attendance of all children of foreigners in an integrated manner by FY2025, the surveys currently carried out on school attendance by such children will be switched to an annual implementation schedule from FY2022.
- A multilingual consultation desk will be established during FY2022 for ensuring health and hygiene at facilities, which exist unofficially to educate the children of foreigners (so-called “schools for foreign nationals”).
- In order to support business startup activities by foreigners, the necessary measures will be taken during FY2022 to ensure that foreigners who were unable to start new business within the stipulated period of the Startup Visa system be approved for a period extended up to six months through utilizing the Program to Promote Start-ups by Foreign Nationals in National Strategic Special Zones.
- During FY2022, online issuance of certificates of eligibility (COE) will be enabled, and work will be undertaken towards the creation of online procedures for residence-related procedures including applications for permanent residence and residence cards, and the creation of online procedures for procedures relating to the utilization of gBizID, applications for usage and regular reports.

(6) Expo 2025 Osaka, Kansai, Japan

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- The provision of “eVTOL”-based transportation services, Carbon Recycling initiatives such as concrete produced with maximized volumes of CO2 emissions reduction and CO2 fixation, hydrogen and ammonia fueled power generation, regenerative medicine and healthcare services, AI-based “multilingual simultaneous interpretation” at levels enabling practical utilization, and Beyond 5G (or so-called 6G) will be promoted as initiatives with the aim of communicating Japan’s cutting-edge technologies to the world.
- Structures for customs, immigration controls and quarantine structures will be strengthened in order to ensure that foreign visitors can be received smoothly. At the same time, the functions of transportation infrastructure will be strengthened and infrastructure developed in Osaka, Kansai to ensure safe and smooth transportation for visitors and management-related persons, while also looking ahead to the period after the conclusion of Expo 2025 Osaka, Kansai, based on the Infrastructure Development Plans for the international exposition (Expo 2025 Osaka, Kansai, Japan) (August 27, 2021, decision by the

Headquarters for the World Expo). Along with this, countermeasures for ensuring security will also be promoted.

- Support for the participation of developing countries and invitations of dignitaries from various countries and regions will be implemented steadily, in order to accelerate invitation activities and preparations relating to the Expo 2025 Osaka, Kansai, Japan.

(International Horticultural Expo 2027, Yokohama, Japan)

- Recognition for International Horticultural Expo 2027, Yokohama, Japan will be granted in FY2022 based on the Convention relating to International Exhibitions, while financial and human resource-related support will be provided to the Japan Association for the International Horticultural Expo 2027, based on the International Horticultural Exposition Act.

3. Accelerating establishment of startups and promoting open innovation

(1) Formulating the startup development five-year plan

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Support for the establishment, etc. of startups)

- We will support the acceptance by startups of the employees of large corporations as side jobs, as secondary jobs, or as secondments, and support startups that are independent of capital ties to large companies, etc. while supporting efforts by employees of large corporations to be seconded to those startups (seconded startups). In addition, we will demonstrate initiatives that large companies, etc. work to create new businesses by utilizing individuals with entrepreneurial experience, and disseminate the results of them.
- "Guidebook for Taking Advantage of Spin-off Approach," which outlines procedures and taxation for implementing spin-offs, will be revised by the summer of 2022. Measures to facilitate the use of spin-offs, including cases where a company retains a portion of the equity in the spin-off company, will be considered with a conclusion to be promptly reached.
- In order to give pre-employment students the opportunity to experience startup work and an entrepreneurial career, long-term internships of one month or longer will be supported, and, in addition, we will support for creating places where entrepreneurs and students can interact, such as at student dormitories.
- In order to develop human resources for global innovation, we will add internships at overseas Japanese venture capital (VC) firms and long-term dispatch training at overseas VC firms to the "Sido Next Innovator" program, which fosters human resources through a combination of training in Japan and dispatches to Silicon Valley, in FY2022.
- At universities participating in Startup Ecosystem hub cities, while placing an emphasis on overseas business expansion, gap funds will be secured to demonstrate the

commercialization of research results, and there will be support for the formulation of intellectual property strategies that anticipate overseas business expansion. Together with this, educational programs will be implemented to foster entrepreneurs who aim to expand their businesses overseas. In addition, entrepreneurship education will be provided to university students nationwide so that 60,000 students per year will be enrolled annually by FY2026.

- Focused support will be provided to companies selected by J-Startup, such as support for overseas expansion and additional points in the subsidy screenings. In addition, in cooperation with local governments, regional companies selected by the regional version of J-Startup will be given priority support, such as additional points in the subsidy screenings and relaxed requirements for bidding qualifications.
- In order to secure the management human resources necessary for the growth of startups, we will consolidate issues related to securing human resources with the knowledge and experience necessary for overseas expansion and with expertise in the commercialization of technology seeds, consider measures to address them, and reach a conclusion within FY2022.
- In order to support the management of startups aiming for global expansion, a system will be established to register lawyers, accountants, patent attorneys, management personnel, etc. as advisory groups to advise on management strategies. Additionally, in order to give legal advice to startups, the support system by experts from the Organization for Small & Medium Enterprises and Regional Innovation, JAPAN (SME SUPPORT JAPAN) will be strengthened. Furthermore, the "Startup New Market Creation Task Force," consisting of lawyers with expertise in regulatory reform, will provide startups with advice on regulatory compliance and will support the utilization of regulatory sandboxes and systems to eliminate gray zones, etc.
- In order to create a flow of people from large companies to local companies, including startups, in various forms such as transfers, side jobs, secondary jobs, or secondments, the human resources list of large companies that are on the human resources platform maintained by the Regional Economy Vitalization Corporation of Japan (REVIC) will be expanded to the 10,000 people scale at an early stage through cooperation with economic organizations. In addition, subsidies will be provided to regional companies that have secured management personnel, and human resources matching will be promoted via regional financial institutions.
- In order to promote the creation and growth of startups in regional areas, in collaboration with VCs and employment agencies specializing in startups, Professional Human Resources Strategy hubs and regional financial institutions will promote matching of management and professional human resources in urban areas with startups in regional areas, and in the

digital field will achieve the conclusion of approximately 3,000 contracts by FY2024. Together with this, startups aiming to solve regional social issues will be thoroughly supported through regional revitalization business startup support program.

- In order to develop human resources who can provide advice on equity financing for startups that have just been founded, the dispatch of staff to VCs at regional financial institutions will be supported.
- In FY2023, we will increase the number of participating organizations in the Platform for unified support for startups (Plus), in which there are nine participating government-affiliated organizations, including the New Energy and Industrial Technology Development Organization (NEDO), and, in addition, we will strengthen support for startups, such as through accompaniment support that utilizes external human resources via NEDO.
- "Model contracts," which explain matters to be noted in regards to the handling of intellectual property in contracts when R&D startups collaborate with large companies and universities, will be revised during FY2022 based on user requests.
- In order to enable a wide range of freelancers to enroll in worker's accident compensation insurance, a new framework for the worker's accident compensation insurance special enrollment system will be considered, and after deliberation by the Labor Policy Council, necessary measures will be promptly taken based on the results.
- The availability of human resources for regional startups will be surveyed, and during FY2022 necessary measures will be taken based on the results of the survey.
- From the perspective of facilitating startup participation, in addition to reviewing government procurement procedures, etc. such as bidding participation qualifications, there will be consideration and a conclusion will be reached on making it possible in public procurement to create free contracts, under the same mechanism as the procurement method for research and development results under Japan's Small Business Innovation Research (SBIR) system, with J-Startup selected companies that have advanced new technologies, etc.
- In implementing the next SIP, the creation of a special quota for startups will be considered and a conclusion will be reached within FY2022.
- In order to visualize the relationship between corporate growth and research and development investments in startups, during FY2022 a survey will be conducted on methods for valuing research and development costs as assets and how they should be disclosed to investors, and then within FY2023 a conclusion will be reached on necessary measures.
- In order to enable local startups, etc. to take high-risk and innovative initiatives, within FY2022 a mechanism will be established for the preferential distribution under certain conditions in SME SUPPORT JAPAN fund investment projects, and equity financing will

be provided to local startups, etc. In addition, in order to promote growth through the M&A of startups, during FY2022 SME SUPPORT JAPAN will consider how to supply the necessary funds and will take necessary measures.

- From the perspective of facilitating listing examinations for companies with business models that are difficult to evaluate from conventional perspectives and from the perspective of ensuring that the net asset requirements of continued listing criteria do not interfere with the appropriate risk taking of listed companies, the Tokyo Stock Exchange will conduct necessary examinations of listing rules, and within FY2022 will reach a conclusion.
- In order to contribute to facilitating fund supply to unlisted companies such as startups and to provide investors with diverse investment opportunities, the Investment Trusts Association, Japan will consider valuation methods, etc. for shares of unlisted companies including startups incorporated in investment trusts, and within FY2022 will reach a conclusion.
- In order to further promote the use of the angel taxation system that encourages investment in startups, simplification, etc. of the procedures will be considered.
- In order to revitalize the secondary market, the Japan Investment Corporation (JIC) will invest in secondary funds.
- The Tokyo Stock Exchange will consider measures to facilitate the use of direct listings by startups and will reach a conclusion within FY2022.

(Improving the environment for startup support)

- In order to create university-launched startups and to attract world-class researchers by utilizing university funds, there will be support for securing the necessary salary levels and for the establishment of research environments that are at global standards.
- In order to promote the commercialization of technology seeds possessed by universities and colleges of technology(KOSEN), etc., in addition to providing matching support between external management human resources and researchers at universities and colleges of technology(KOSEN), etc., there will be support for the development, etc. of incubation facilities that serve as hubs for entrepreneurial activities.
- For further utilization of intellectual property specialists that are dispatched to universities, in addition to providing support in FY2022 for giving advice on establishing university-launched startups, for the utilization of intellectual property by university-launched startups, etc., there will be support to universities and public research institutes, etc. for the costs of applying for foreign patents. In addition, in FY2022 there will be support for giving advice on intellectual property strategy before a startup is established.
- With the aim of making the Fukushima Hamadori area into an advanced area for creating startups such as in deep tech areas, we will improve the demonstration field, provide priority

support for practical development of startups, etc., and strengthen support systems, such as for securing human resources and developing sales channels

- In FY2022, joint research, trial production, evaluations, etc. will be conducted for local startups, etc. at each of AIST's regional base, taking advantage of the characteristics of each base. In addition, during FY2022 AIST's business regulations will be revised to allow intellectual property rights held by AIST to be transferred to startups.
- In order to support the creation of intellectual property strategies for startups, during FY2022 intellectual property specialists will be dispatched to VCs.
- In order to support the overseas expansion of startups, there will be consideration of improving the convenience of tax measures for when shareholders such as founders temporarily leave Japan and prepare for overseas launches.
- During FY2022 international matching events will be held with the participation of domestic and international startups, global companies, and overseas VCs and accelerators, etc.
- At JETRO's Global Acceleration Hub, in addition to increasing the number of specialists who advise startups on overseas business opportunities and on financing, the dissemination to overseas investors of information on Japanese startups will be strengthened. In addition, JETRO will discover foreign companies, such as overseas startups, that provide innovative products and services, and during FY2022, will provide push-type support for those companies to enter the Japanese market, with the aim of attracting 80 or more companies.
- In FY2022 the target business fields and the number of participating companies will be expanded for the Global Accelerator Program, in which top overseas accelerators give advice to startups and which provides matching with overseas investors, etc.

(2) Value-added creation and open innovation

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Growth support for SMEs, etc.)

- In addition to the steady implementation of the "Stimulus Package for SMEs," there will be consideration of measures to further accelerate the implementation of the package, such as for formulation of practical guidelines that summarize the practices and focuses of support for improving profitability and for strengthening cooperation between the SME Revitalization Council and credit guarantee associations, and a conclusion will be reached within FY2022.
- In order to facilitate the smooth business restructuring of SMEs, there will be consideration and implementation of necessary measures for business restructuring assistance based on the status of past efforts, etc. by the Small and Medium Enterprise Agency, and, in addition to this, there will be support in growth fields such as green fields and in fields that require

structural transformations.

- In order to promote business revitalization support-related efforts by financial institutions, etc., there will be a follow-up on the status of support for the formulation of business revitalization plans and on the status of guaranteed liabilities by financial institutions, etc. based on the "Guidelines for Business Revitalization, etc. of Small-and Medium-sized Enterprises" and on the "Basic Perspectives of 'Guidelines for Personal Guarantee Provided by Business Owners' in the Event of the Closure of a Business."
- To facilitate business succession, including succession by employees, a support environment will be established by the Support Centers for Smooth Business Succession based on the "Business Succession Guidelines" (revised in March 2022).
- In order to enable SMEs with little M&A experience to judge the validity of proposals, etc. from M&A support organizations while being aware of maintaining and improving corporate value, there will be an examination of the ideal form of diagnosing business successions and of a simple corporate value evaluation tool, and a conclusion will be reached within FY2022.
- In order to promote financing that does not rely on management guarantees, there will be consideration of adding support for releasing management guarantees, at times other than business successions, to the content of support provided by a management guarantee coordinator, with a conclusion to be reached within FY2022.
- As financing support for SMEs affected by the situation in Ukraine, rising crude oil prices, and other factors, support such as safety net loans and lowering interest rates will be provided. In addition, for businesses affected by COVID-19, complete financing support will be ensured through the extension of virtually interest-free/unsecured loans and crisis response loans by government-affiliated financial institutions until the end of September 2022, and through the continuation until the end of March 2023 of subordinated capital loans by the Japan Finance Corporation and by the Okinawa Development Finance Corporation.
- Capital investment, IT introductions, market development, business succession, and research and development for SMEs and small-scale businesses that are working to improve productivity will be supported via the Project for Encouraging SMEs to Advance the Productivity Revolution and the Research and Development Support Project for Growth-Type SMEs. Together with this, the overseas expansions and the development of products and services that contribute to productivity improvements of other SMEs will be strengthened.
- In order to promote innovative business development at business succession opportunities, the "At Business Take-over Support Network" (tentative name) will be established within

FY2022 to support cooperation between support organizations, successors (including successor candidates), and other successors.

- In order to firmly establish post-merger integration (PMI) efforts in SME M&A, based on the "SME PMI Support Menu" (established in March 2022), SME PMI guidelines will be made known, PMI will be supported, and specialists will be trained. In addition, the SME PMI guidelines will be revised based on the results, etc. of these efforts.
- In order to develop an appropriate transaction environment for SME M&A, there will be a survey of the actual state of SME M&A transactions, and then, during FY2022, revisions, etc. of the SME M&A guidelines will be considered based on the results of the survey and the necessary measures will be taken.
- In order to enable SMEs, etc. to take high-risk and innovative initiatives, during FY2022 a mechanism will be established for the preferential distribution under certain conditions in Strengthening of SME Management Capacity Fund investment projects, etc., and equity financing will be provided to SMEs, etc.
- In order to promote the grouping of SMEs, there will be consideration of investing in holding companies, etc. and of adding eligibility for low-interest loans from the Japan Finance Corporation through LBO loans, and a decision will be reached during FY2022.
- In order to promote expansion of scale and business restructuring, etc. in SMEs that have unique advanced technologies, the Small and Medium Business Investment & Consultation companies will invest in a fund management company, etc. that have a discerning eye for specific technologies, and, in cooperation with the fund management company, within FY2022 a system to support investee companies will be established.
- In order to promote growth-oriented management that is conscious of relationships with stakeholders, there will be consideration of the ideal form of governance for SMEs, including their relationships with stakeholders, and a conclusion will be reached within FY2022.
- In order to encourage managerial self-sufficiency in SMEs (the managers themselves recognize management issues and rebuild management ability), in addition to supporting accompaniment support at SME support organizations, etc. nationwide, measures to accelerate managerial self-sufficiency in SMEs will be considered after the establishment of a promotion council via SME support-related organizations within FY2022, and necessary measures will be taken.

(Co-creation of new businesses with emerging Asian countries and acceleration of reverse innovation)

- In order to promote reverse innovation (solving local social issues via the creation of new products and services through collaboration with companies in emerging countries and then

reimporting those products and services to Japan), "J-Bridge" (a platform for collaboration between Japanese companies and foreign companies including startups) support functions will be strengthened based on the "ASIA-Japan Investing for the Future Initiative," and JETRO and Japan's diplomatic missions abroad will be utilized to strengthen support for joint projects, with an emphasis on solving local social issues and sustainable economic growth.

(Promotion of intellectual property/standard utilization strategies)

- The "Intellectual Property and Intangible Asset Governance Guidelines" (formulated in January 2022) will be disseminated. These guidelines were formulated in response to the revision of Japan's Corporate Governance Code in June 2021, which included the disclosure of investments, etc. in intellectual property and effective supervision by the Board. In addition, there will be consideration of measures to clarify the role of investors in promoting improvements in corporate value by investing and utilizing intellectual property and intangible assets through dialogue with companies, and a conclusion will be reached by the end of FY2022.
- Taking into account the perspective of economic security, new fields such as quantum will be identified, and there will be support for the formation of international standards, such as accelerating standards development.
- From the perspective of management strategy, there will be support for the development of human resources who work on formulating standards. In addition, there will be consideration of visualizing standardization efforts based on corporate management strategies, and within FY2022 a conclusion will be reached. Furthermore, in order for Japan to play an active role in the formulation of international standards, there will be support for standards development and for the dispatch, etc. of specialists to international standards organizations, etc.
- In order to spread intellectual property management to universities, such as acquiring strong intellectual properties and promoting licenses, the "University Intellectual Property Governance Guidelines" (tentative name) will be formulated.

4. Investment in GX (Green Transformation) and DX (Digital Transformation)

(1) Investment in GX

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Promotion of energy and industrial structures toward net-zero greenhouse gas emissions by 2050)

- In order to secure by 2030 a domestic annual manufacturing capacity of 150 GWh and a global annual manufacturing capacity of 600 GWh of batteries, the "Battery Industry

Strategy" will be compiled by around the summer of 2022, and integrated support will be provided for the development of domestic manufacturing base, for securing the necessary upstream resources for manufacturing, for human resources development, for next-generation technology development, for the promotion of batteries introductions, etc.

- In order to ensure a stable supply of rare metals, in FY2022, in addition to actively developing resource diplomacy, the supply of risk money to secure the rare metal interests of Japanese companies will be strengthened via the Japan Oil, Gas and Metals National Corporation (JOGMEC), and securing diverse suppliers will be accelerated.
- In order to comprehensively promote private investment for decarbonization and business transformation for suppliers, etc., within FY2022 a roadmap for the spread of vehicles that are electrically driven (electric vehicles, fuel cell vehicles, plug-in hybrid vehicles, and hybrid vehicles), charging infrastructure, etc., and such as for expanding, the spread of hydrogen and synthetic fuels will be formulated.
- In order to maximize introductions of renewable energy under the principle of giving the utmost priority to renewable energy on the major premise of S+3E while also reducing the burden on citizens and coexisting with local communities, consumer-led introductions of solar power will be promoted, there will be surveys and technical development necessary for geothermal, and there will be development, etc. of an environment for the appropriate introduction and management of renewable energy.
- There will be support for maximal utilization of the existing power grid by enhancing the power grid and increasing the sophistication of its operation for maximal introductions of renewable energy and for improving its resilience.
- In order to standardize by FY2030 the evaluation methods, etc. for concrete made from CO₂, verifications in public works will be conducted from FY2022.
- In addition to the technological establishment by FY2025 of synthetic methane production on a medium scale, rules will be developed, etc. for the CO₂ emissions during the combustion of synthetic methane.
- In order to realize by 2030 a supply of functional chemical that are made from CO₂ and of biomass/waste plastic-derived chemicals that are at the same price level as existing products, there will be support for the establishment of manufacturing technologies for these chemicals and for increasing the sophistication of the manufacturing processes for major raw materials.
- In FY2022 the design and development of hydrogen bacteria, etc. and demonstration research, etc. with a view towards large-scale production will be accelerated.
- To achieve net-zero greenhouse gas emissions in international shipping by 2050, Japan will lead discussions at the IMO from FY2022 and will support Research and Development (R&D) for zero-emission ships and encourage the dissemination of these ships. In addition,

toward expanding the utilization of domestically produced SAF and replacement of 10% of fuel used by Japanese airlines with SAF by 2030, we will support technology development and supply chain establishment, etc. Furthermore, through the formation and support of public-private councils, there will be support for the railway asset utilization and the introduction of renewable energy in the form of cooperation with areas along railway lines.

- To form Carbon Neutral Ports, in FY2022 support for the formulation of Carbon Neutral Port formation plans and Carbon Neutral Port demonstrations will be implemented. In addition, the conversion of airports into renewable energy hubs will be promoted under the revised Airports Act, etc., and until FY2025 there will be concentrated technological development and introduction supports for further utilization of sewerage biomass, etc. Furthermore, a system will be built to support the introduction of innovative construction machinery, such as electric construction machinery, and a promotion system will be built for the utilization in public works of construction materials that contribute to CO2 savings.
- Based on the "Strategy for Sustainable Food Systems, MeaDRI," there will be support for the creation of model advanced areas through regions in order to promote efforts to reduce environmental burdens. Together with this, research and development will be conducted to reduce CO2, N2O, and methane emissions.
- Measures to develop and introduce negative emission technologies (NETs) will be considered, and necessary measures will be taken during FY2022.

(Environmental improvements and investment promotion measures for the transformation of energy and industrial structures)

- In FY2023, in order to expand and accelerate regional decarbonization efforts through renewable energy coexisting with local communities, etc. under national and regional cooperation, subsidies will be provided and investments will be made by Japan Green Investment Corp. for Carbon Neutrality. In addition, Japan-US initiatives will promote the decarbonization of subnational areas around the world from 2022.
- In FY2022, in addition to supporting decarbonization efforts by utilizing heat such as the heat from renewable energy, in FY2023 there will be nationwide introduction and dissemination of examples of such efforts.
- In order to secure and develop human resources for regional decarbonization efforts, during FY2022 there will be support for the establishment of a platform between local governments, local corporations, and local financial institutions, etc., there will be the creation of a human resources information registration system for decarbonization projects, and there will be the creation of a qualification system for financial institutions.
- In order to encourage effective climate change responses at the clients of financial institutions, in addition to formulating guidance in early 2022 that shows how to proceed with support for the clients of financial institutions, such as through consulting and the

provision of growth funds, there will also be support for local financial institutions by providing examples of efforts, etc. In addition, examples of efforts will be provided to promote constructive dialogue between industry and finance for transitions.

- In addition to increasing the number of Green Life Points that are issued in 2022, for social implementation by FY2030, large-scale demonstrations will be conducted of changing consumer behaviors by utilizing digital technologies and the nudge method. Furthermore, in order to promote environmental education, in FY2022 the cost of university students visiting local governments and other organizations in Decarbonization Leading Areas will be subsidized.
- Aiming for early HFCs emission reduction, in FY2022, necessary measures will be taken for implementing intensive support to convert refrigeration equipment into natural refrigerant equipment and develop next generation refrigerants and equipment.
- In order to realize doubling the amount of collection of plastic resources and that of metal raw materials that are recycled by FY2030, we will provide support to strengthen efforts by private businesses and local governments based on the Act on Promotion of Resource Circulation for Plastics and to establish resource collection hubs for the utilization of urban mining.
- In order to realize "genuine local production for local consumption and energy systems that coexist with local communities," there will be support for the construction of regional microgrids that utilize renewable energy.

(International contributions for measures against climate change)

- With regard to international rules on climate change, Japan will take the lead through the Tokyo "Beyond-Zero" Week this fall and through the G7 to be held in Japan next year, in developing an approach that focuses not only on "policy stringency" such as explicit carbon price, but also on "carbon intensity", while taking into account the energy situation and the industrial structure of each country.
- In order to achieve net-zero greenhouse gas emissions, we will develop an "Asia Zero Emissions Community" to implement joint projects and measures to address common challenges that Asian countries face.
- In order to expand the Joint Crediting Mechanism (JCM), we will accelerate discussions with relevant countries, aiming to increase JCM partner countries up to around 30 by 2025, and develop and disseminate the guidance on the formulation of JCM project financed by the private sectors in FY2022.
- In order to promote the decarbonization of SMEs, we will support for the formulation of "Carbon Neutrality Action Plan" via SME support organizations and there will be training of support human resources. In addition, in order to facilitate the calculation and publication of greenhouse gas emissions by SMEs, an electronic reporting system will be established

in FY2023 and capital investments and utilization of specialists for decarbonization will be supported. Furthermore, with the aim of creating a green product market and of decarbonizing entire supply chains, rules regarding the labeling of product emissions, etc. will be formulated during FY2022.

- In addition to promoting research and development and social implementation of advanced decarbonization technologies via expanding support from the Green Innovation Fund, etc., in order to accelerate social implementation, collaborations between startups and research and development corporations, etc. will be supported and standardization efforts, such as the formulation of standards, will be promoted.
- In order to create innovative green technologies for GX, by FY2023 the government will support for integrated research and development that combines several elemental technologies in critical technological areas for achieving net-zero greenhouse gas emissions.
- In order to lead international efforts to create initial demand for products and services with a high decarbonization value, in 2022 Japan will participate in the First Movers Coalition as a strategic partner country.

(2) Investment in DX

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Promotion of research and development in the digital field)

- In order for Japan to lead the development of so-called 6G (Beyond 5G) technologies and to realize ultra-high speed and energy saving communications infrastructure as well as expansion of communications coverage to land, sea, and air, an information and communications technology strategy will be compiled during FY2022, and based on this strategy, Japan will promote research and development of optical network technologies, photoelectric fusion technologies, satellite, and High-Altitude Platform Station (HAPS) networks technologies, etc., and will promote social implementation, international joint research, and standardization of the results after 2025.
- In order to meet the demands for computing power to process large volumes of data at high speeds and at high efficiencies, the necessary technologies for next-generation computing infrastructure will be developed in order to realize, from the latter half of the 2020s to the 2030s, next generation computing infrastructure that connects a variety of computational resources such as classical computers (including super computers) and quantum computers via optical transmission technologies.

(Environmental improvements for digital markets)

- Fact-finding surveys will be conducted on endorsement, in which advertisers place advertisements while concealing the fact that they are their own advertisements, and, after

an examination based on the results of the survey, a conclusion will be reached with a goal of doing so within 2022.

- In order to promote data utilization and data distribution at the will of individuals, in FY2022 there will be consideration of data linkages between personal data trust banks and regional public organizations, of data portability with personal data trust banks as hubs, and of utilization of personal data trust banks in quasi-public fields and in mutual cooperation fields, and then in FY2023 the certification guidelines will be reviewed.
- In order to prevent abuse of viewer's medical history and political beliefs that are inferred from their viewing data of live broadcasts over the Internet, during FY2022 there will be consideration of handling rules of viewing data in live broadcasts over the Internet for protection of the personal information and the democratic development, and then during FY2023 the effectiveness of the rules will be verified.

(Improvements for the cashless usage environment)

- In order to alleviate the concerns of consumers who hesitate to use cashless payments due to concerns about security, in addition to conducting a survey on payment providers' anti-fraud measures, etc., information that alleviate the concerns, based on the results of the survey, etc. will be made known and publicized to consumers in FY2022.
- With regards to Central Bank Digital Currency (CBDC), based on the results of the proof-of-concept for basic functions that was conducted by the Bank of Japan in FY2021 and based on the progress in the proof-of-concept for additional functions that are currently being implemented, Japan will continue to collaborate with other countries and consider the feasibility and legal aspects of CBDC issuance.

(Promotion of DX for companies, etc.)

- We will promote the spread of "the DX Certification System", which certifies companies that comply the basic requirements of "the Digital Governance Code", by selecting "the DX-Stocks 2022", and revise this System during FY2022.
- In order to promote the social implementation of the "Cyber/Physical Security Framework (CPSF)," in addition to formulating guidelines during FY2022 for strengthening the security of factories, etc., in early FY2023 there will be formulation of guidelines that show utilization guidelines, transaction templates, etc. for Software Bill of Materials (SBOM), which is a list of software components.
- With regards to a mechanism that enables the shared use of space/building information by utilizing a "3D space ID" (which identifies real space locations through data linkage mechanisms, mobility, smart buildings, etc. for the digitalization of all transaction activities), from FY2022 there will be sequential implementations of design and verification of the architecture, which is a common technical specification of the entire system that is

required for mutual cooperation. In addition to this technology, development and demonstration projects for its implementation will be conducted.

- To promote the smooth introduction of a waterworks information utilization system, from FY2022, in addition to supporting the utilization of data that uses this system, examples of efforts to improve operational efficiency, etc. will be made known and disseminated. In addition, in the field of water for industrial purposes, the creation of model examples that use this system will be supported.
- In order to promote the utilization of data at manufacturing sites and the distribution of data between companies, in addition to supporting improvements in the quality of data at manufacturing sites, a roadmap will be created early in FY2023 for the standardization of data in the smart manufacturing field.
- In order to respond to unforeseen circumstances such as supply chain disruption risks, in addition to promoting the utilization of IoT, technologies that enable flexible control and recombination at manufacturing sites through the use of wireless communications technologies will be established by FY2023.
- In order to achieve drastic cost reductions and quality improvements in the development of mobile entities that require high reliability, in FY2022 technological development will begin on a method that models aircraft and uses digital technologies to replace the design, development, manufacturing, and safety certification used by actual aircraft.
- To establish a system for data sharing and utilization in global supply chains, the requirements for ensuring data reliability, system users, referenceable data, etc. will be examined in collaboration with private-sector organizations, and a conclusion will be reached in FY2022.
- In addition to establishing by FY2025 a "Base Registry" as a basis for registering and referencing basic social data such as people, business operators, land, building, and qualifications, data linkage environment prototypes for each field will be designed, developed, and demonstrated, etc. in order to comprehensively support efforts for digitalization and data linkages in semi-public fields such as health, medical, long-term care, education, and disaster prevention. In addition, the digitalization of administrative services will be promoted via utilization of the Individual Number System and by promoting the spread of Individual Number cards (My Number Card), gBizIDs, JGrants, etc.
- In order to promote further penetration and establishment of the sharing economy in society, in FY2022 and based on the actual situations of regional public organizations, etc., the Sharing City Promotion Partner, in addition to considering measures for the effective introduction of mutual assistance business models and sharing economies in regions, will also work to further spread the Sharing Economy Trust Mark and the sharing economy

safety examination that were built via public-private collaboration.

- In order to steadily promote DX efforts by local governments, the "Local Government Digital Transformation (DX) Promotion Plan" and the "Local Government DX Promotion Procedures Manual" will be revised as necessary in FY2022 based on the progress of efforts by the national government, etc.
- In order to promote productivity improvements via the digitalization of SMEs, etc., a digitalization diagnostic tool will be developed during FY2022 and it will be used to diagnose SMEs, etc.

(Medical DX)

- The introduction of Online Confirmation System for Health Insurance Qualification will be promoted to almost all medical institutions and pharmacies by the end of FY2022. In addition, aiming for FY2024, the necessary systems will be built so that health insurance qualifications can be confirmed online for home-visit medical care and for home-visit long-term care, etc. Furthermore, considering the plan that the electronic certificate functionality via Individual Number Cards (My Number Card) will be installed in smartphones, consideration will be given to the early introduction of a mechanism that uses smartphones as health insurance cards.
- There will be promotion, via the utilization of the Medical Information Support Fund, of the introduction of electronic medical records that are compliant with Ministry of Health, Labour and Welfare standards that use the international Health Level Seven (HL7) Fast Healthcare interoperability Resources (FHIR) standard.
- As for the provision of personal information on medical checkups and examinations through the Mynportal, etc., based on the "Data-based Health Management Initiatives Roadmap", the provision of information on school medical examinations and employer health checkups for employees under 40 will be promoted by FY2023.
- In order to create high-quality PHR services, there will be support for the establishment in early FY2023 for business organizations that standardize data and formulate guidelines for ensuring data portability and security.
- In order to utilize AMED-supported research and development data in industry-academia-government research and development, the utilization of genomic data that uses AMED's data utilization platform will begin in FY2022. In addition, relevant ministries and organizations will work together to coordinate the form of consent for research participants so that data utilization by companies and data utilization among multiple studies will be possible, and operation based on this will begin from FY2022.
- In order to promote the utilization of medical information in research and development in the medical field, there will be consideration of measures, based on the Next Generation Medical Infrastructure Act, to enhance the usefulness of collected and processed data

utilization, after reaching a conclusion with summer 2022 as a goal, necessary measures will be taken.

(Cybersecurity)

- During 2022, "The Cybersecurity Policy for Critical Infrastructure Protection (4th Edition)" (decided on by the Cyber Security Strategy Headquarters on January 30, 2019) will be revised, and activities including "Enhancement of Incident Response Capability", "Maintenance and Promotion of the Safety Principles", and "Enhancement of Information Sharing System" will be strengthened.
- In order to enhance protection against cyber-attacks on critical infrastructure, plants, etc., demonstrations will be conducted during FY2022 to clarify the requirements for a system to investigate the causes of accidents in control systems so that the systems for responding to cyber incidents in control systems can be strengthened.
- During FY2022 a fact-finding survey on cyber-attacks on SMEs will be conducted, and, based on the results of that survey, during FY2023 there will be support for further disseminating security services for SMEs and support for activities according to regional characteristics, and there will be efforts to strengthen measures for SMEs in supply chains, such as revising guidelines. Together with this, there will be consideration of measures that the public and private sectors should take to strengthen credit card security measures, and a conclusion will be reached within FY2022.
- In the Information system Security Management and Assessment Program (ISMAP), a mechanism will be built for cloud services used by systems that handle operations and information at low security risks within 2022.
- In order to develop cyber security human resources for critical infrastructure and industrial infrastructure who are intimately familiar with information and control systems, and to expand them to regional areas, drill/exercise programs provided to local areas will be expanded. Additionally, in FY2022, in addition to providing drills/exercises for educational institutions, etc. that utilize cyber drill/exercise bases during trial operations, information system personnel such as from government agencies will improve and provide "practical cyber defense drills/exercises" for regional public organizations that have difficulty in attending such exercises.
- In light of the occurrence of serious incidents caused by cyber-attacks targeting medical institutions and in order to strengthen the defense systems of medical care as a whole, including of those involved in medical institutions, by FY2023 the Pharmaceuticals and Medical Devices Agency (PMDA), etc. will revise the requirements for the regulatory approval of medical devices based on the latest knowledge in order to confirm cyber security measures for medical devices. In addition, methods for collecting and evaluating

information on the cyber security of medical devices after regulatory approval will be specifically considered, and that content will be widely disseminated. Together with this, a guide for the management and operation of medical devices and for incident responses will be formulated during FY2022.

- The "Guidelines for the Safe Management of Medical Information Systems" will be reviewed during FY2022, taking into account the latest technological trends and the status of cyberattacks on diversified and sophisticated medical institutions. In addition, in order to improve the security measures of medical institutions, consideration will be given to adding a cyber security support team service based on the special characteristics of medical institutions, with a conclusion to be reached within FY2022.
- In order to verify the cyber security and system risk management systems of financial institutions and to encourage them to strengthen these systems, in addition to strengthening the inspection and supervision systems, such as through increasing the number of inspection personnel, common issues at and examples of efforts by financial institutions will be made known via industry groups.
- In order to strengthen the cyber resilience of financial institutions, cyber exercises/drills will be conducted under more advanced scenarios that take into account not only attacks on financial institutions, but also attacks on their outsourcing partners, etc.

II. Building Economic and Social Systems for Solving Social Issues

1. Consider reforms of new and existing corporate forms that play public roles in the private sector

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

2. Strengthening advocacy functions of competition regulators

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

3. Strengthening support for social entrepreneurs, including promoting donation culture and venture philanthropy

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

4. Promoting impact investing

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

5. Support for NPOs and other organizations that solve social issues such as loneliness and isolation

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

6. Strengthening concessions (including PPP/ PFI)

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Promotion of initiatives for public facility, etc. operating project)

- The dissemination of performance criteria-linked methods for infrastructure, which do not incur usage fees, will be promoted by providing practical guidelines describing how to utilize them. There will be calls for national institutions and regional public organizations to consider using these methods, and, by FY2022, more than 10 feasibility studies will be conducted, and based on the results, projects will be formed for those that can introduce these methods.
- Regarding the Act on Promotion of Private Finance Initiative (PFI), in order to enable the operating rights to operate public facilities, etc., more efficiently, a revision to the law will be submitted to the Diet at an early stage in order to make it possible to change matters related to the implementation policies for public facilities, etc., after the operation rights for public facilities have been set,
- Regarding benchmarking mechanisms that compare the management status, service level, and sustainability of each waterworks and sewerage project side by side, during FY2022 and taking into account the systems of other countries, in addition to compiling how to utilizing benchmarking indicators in waterworks projects, there will also be a review of benchmarking indicators in sewerage projects. Together with this, during FY2022 there will be a survey of the utilization status of benchmarking indicators in Japan and of the needs of local governments.

(Promotion of Pay For Success contracting system)

- Regarding Pay For Success contracting system (PFS), based on the "Action Plan for promoting Pay For Success contracting system" (March 27, 2020 decision by the Liaison Meeting of Relevant Ministries and Agencies Regarding the Promotion of Pay For Success contracting system), in addition to transferring good practices in the medical, health, and long-term care fields, we will create more examples in newly developing fields such as recidivism prevention, environment, and community development. We will also develop and review performance indicators and evaluation methods. In addition, after summarizing past efforts, the next action plan will be formulated, incorporating new initiatives since FY2023, such as efforts to expand PFS projects that utilize Social Impact Bonds (SIB).

(Revision of PPP/PFI Promotion Action Plan)

- In addition to what is stipulated in the action plan, based on the "PPP/PFI Promotion Action Plan (2022 Revision)" (June 3, 2022 decision by the Council for the Public Private

Partnership/Private Finance Initiative Promotion (PPP/PFI)), efforts will be drastically strengthened to achieve new business scale targets and numerical targets in priority fields such as projects for the management of public facilities. In addition, the five-year period from FY2022 will be designated as a "priority execution period" for forming a foundation for autonomous development of PPP/PFI, and relevant measures will be intensively introduced while also utilizing the functions of the Private Finance Initiative Promotion Corporation of Japan.

III. Multi-polarization of the Economy and Society

1. Promoting the Vision for a Digital Garden City Nation

(1) Infrastructure development for the realization of the Vision for a Digital Garden City Nation

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Digital Infrastructure Development in Every Corner of the Country)

- To alleviate concerns amongst the elderly and others about digital utilization, in collaboration with private companies and regional public organizations, nationwide support for advice and consultations on how to use smartphones, such as for online administrative procedures will continue to be provided, while also dispatching instructors, including to areas where there are no mobile phone shops.

(Development and revitalization of the living environment hilly and mountainous areas, etc. through digitalization)

- Coordinators of innovation from rural areas will be dispatched and digital technologies will also be used to create 300 model examples by FY2025. In FY2022 there will be support for human resources development in order to improve services and strengthen management capabilities by utilizing the digital technologies throughout the entirety of countryside stay regions. In addition to promoting in FY2022 the intensive formulation of rural communities' strategies for Japanese agricultural direct payment system, there will be support for a variety of composite management-related trainings (including for livestock and forestry) for prospective farmers in mountainous regions and, with FY2024 as a goal, per-region models will be compiled and promoted.
- In light of the growing interest in diverse work styles due to COVID-19 pandemic, such as returning to the countryside and the work style of "half-farmer, half X" (combining farming with other non-farming jobs), for formation of rural area Region Management Organizations (rural RMOs) that will serve as receivers for the flow of people to rural areas will be promoted, and, by FY2026, rural RMOs that implement agricultural land

conservation in 100 districts will be formed.

- In order to expand the usage of game meat to 4,000 tons by FY2025, in FY2022 support for wide area deliveries to game meat processing facilities will be strengthened.
- In order to create 3,000 parties engaged in the agriculture-welfare collaboration by FY2024, in FY2022 there will be support for the establishment of universal farms with a view toward hiring and employment at agricultural sites, such as for persons with disabilities and young people with difficulties. For forestry-welfare collaboration, there will be support for employment centered on mushroom cultivation and wood processing according to the characteristics of persons with disabilities as well as the development of high-value-added regional wood products that are conducted in collaboration between welfare individuals and community individuals.
- In order to create forestry services industries in more than 45 regions by FY2025, advice and dissemination on the creation of forestry services will be provided.
- In order to make 500 districts into marine business districts by FY2026, there will be improvements to the environment by reorganizing and improving fishing port facilities and by arranging fishing port sites. In addition, a mechanism will be considered for utilizing fishing port sites, etc. that enable long-term and stable business operations by fisheries cooperatives and private businesses, and by FY2023 the necessary measures will be taken. Furthermore, during FY2023, "Digital Fisheries Strategic Hubs (tentative name)" will be designated that utilize digital technologies in the region as a whole and that address resource management, production, processing, distribution, consumption, tourism, etc., and the human resources development at those hubs will be promoted.

(Mass Overhaul reforms of regulations and systems, and implementing demonstration projects)

- The goal is to bring all regulations and systems into conformity with the "Digital Principles for Structural Reforms" (December 22, 2021 decision by the Special Commission on Digital Administrative Reform). To this end, the three years from July 2022 to June 2025 will be set as a intensive reform period, and the following measures will be taken in addition to inspecting and reviewing regulations, and demonstrating technologies.
 - Efforts by local governments to adapt regulations and systems based on ordinances to digital principles will be supported by providing manuals, etc.
 - In order to make regulations and systems, including those to be enacted in the future, conform to digital principles, processes for drafting laws and regulations and of the procedures for reviewing existing laws and regulations will be designed in detail by the end of FY2022.

(Super City and Digital Garden Health Special Zone)

- In order to solve regional issues through data linkages and the implementation of cutting-edge services to realize the vision for a Digital Garden City Nation, with around the summer of 2022 as a goal, regional conferences will be set up for each of the Super City-type national strategic special zones and Digital Garden Health Special Zones, and strong efforts at regulatory reform will be made.

(National strategic special zones)

- In addition to past efforts, National Strategic Special Zones will focus on regulatory reforms that contribute to solving regional issues such as investments in people, regional revitalization, diversity and inclusiveness, startups, the vision for a Digital Garden City Nation, and productivity improvements.
- Special measures for regulations in National Strategic Special Zones will be sequentially considered based on the "Basic Policies for National Strategic Special Zones " (February 25, 2014 decision by the Cabinet, and partial change on April 1, 2022).

(Automated driving and automated driving mobility services)

- To launch a remote monitoring-only automated driving mobility service in abandoned railway sites, etc. by the goal of FY2022, there will continue to be support for the introduction of automated driving mobility services. Together with this, in order to improve their sophistication, there will be technology development and demonstrations for commercialization of automated driving vehicles and of remote monitoring systems that enable the simultaneous monitoring of four vehicles.
- In order to realize region-limited unmanned automated driving mobility services at more than 40 locations by the goal of 2025 and at more than 100 locations nationwide by 2030, the following measures will be taken.
 - During FY2023 unmanned automated driving mobility services in medium-sized buses will be started in the BRT exclusive space. For this purpose, obstacle detection functions and safe stop functions will be verified in technical demonstrations of unmanned automated driving with medium-sized buses.
 - By the end of FY2022 guidelines for the operation of such services will be developed, such as measures to ensure passenger safety.
 - Regarding the technical performance recommended for Level 4 autonomous vehicles, there will be an examination of the ideal form for smooth communications between autonomous vehicles and other traffic, of the range in which automated driving systems guarantee safety in response to difficult events such as road rage, and of the social acceptability of the judgements made by the systems, and then during FY2023 these will be compiled as guidelines.
 - In order to realize automated driving vehicles by the goal of 2025 in mixed traffic environments such as urban areas, experiments on test courses will be conducted during

FY2022. In addition, demonstration tests will be conducted on public roads from FY2023.
— In FY2022, there will continue to be support for the development of electromagnetic induction lines, magnetic markers, roadside sensors, driving spaces, etc. that are based on the development status of vehicles.

- For the realization by the goal of 2025 of Level 4 automated driving on highways for private vehicles, by the end of FY2023 there will be formulation of requirements for demarcation lines that contribute to lane-keeping by autonomous vehicles and of the specifications for a system that provides autonomous vehicles with information about conditions on the road ahead that are difficult to collect through onboard sensors.
- In order to achieve Level 4 automated driving by 2025 within the restricted areas in airports, technical verifications will continue to be conducted for vehicles, roadside equipment, etc., and, in addition, the necessary infrastructure and operational rules will be considered and revisions to the guidelines and guidance will be made as soon as possible in 2024.
- For the practical application of Maritime Autonomous Surface Ships (MASS) by the end of 2025, by the end of FY2022 there will be consideration of certification procedures for remote support sites that remotely monitor and operate MASS, and the necessary measures will be taken. Additionally, in addition to promoting the necessary technological development for avoiding dangers such as collisions, international proposals will be made for international safety standards regarding the safety requirements for MASS.

(Autonomous delivery services)

- In order to realize low-speed and small-sized automated delivery robots that drive on public roads, we will clarify that they do not fall under the category of road transport vehicles in order to smoothly enforce the revised Road Traffic Act. In addition, there will be support for efforts to improve safety in industry, for the promotion of further technological development to stable and simultaneously operation of multiple robots, and for efforts to expand the introduction of automated delivery robots, etc.

(Drones)

- In order to realize a system during FY2022 that will enable non-visual drone flight (Level 4 flight) in populated areas, the necessary operational system will be developed. In addition, the implementation of drone logistics services from remote islands, mountainous areas, etc. will be promoted. Furthermore, in addition to promoting the implementation of drones that can handle a variety of use cases, there will be development of the necessary performance evaluation methods required for simultaneous operation of multiple drones and of the traffic management technology for drones, eVTOLs (electric Vertical Take-Off and Landing), and manned aircraft to operate more safely and efficiently will be developed.
- For the launch of a drone certification system and an operator skill certification system, the registration and designation of private organizations that can conduct drone certifications,

operator tests, etc. will be implemented by December 2022.

- In order to realize safer and more efficient operation of drones, in FY2023 demonstration experiments of flight management systems based on international trends will be conducted, and, based on the results, regulatory policies will be established, such as for safety standards for flight management systems according to flight areas and flight modes.
- In order to enable the use of radio waves for drone flights, image transmission, etc. at altitudes of 150 meters and above, there will be consideration of the technical conditions to prevent radio wave interference and of simplifications to usage procedures, and a conclusion will be reached with FY2023 as a goal.
- In addition to continuing to support the introduction of delivery services by drones, there will be support for delivery services that utilize various types of mobility based on the results of demonstrations such as deliveries by linking drones and autonomous delivery robots in remote islands and mountainous areas.
- In order to realize drone logistics over rivers with few obstacles, demonstration experiments will be conducted in FY2022 in collaboration with river administrators and local governments, and, based on the results, in FY2023 supports for the establishment of departure and arrival hubs, etc. will be strengthened and manuals for river usage rules, etc. will be formulated.
- For quick and safe rescues in the event of a disaster, with the end of FY2022 as a goal, high-spec drones, etc. equipped with automatic map image creation functionality will be deployed to all prefectures.
- In order to improve the social acceptance of drones, during FY2022 a website will be set up to provide access to drone-related policies and examples of drone applications, and, in addition, symposiums will be held in cooperation with communities.
- With the end of FY2022 as a goal, there will be formulation of performance specifications for standard drones that are capable of disaster recovery, inspections, surveys, meteorological observations, etc.
- With FY2024 as a goal, there will be development of a test method that enables drone manufacturers to efficiently evaluate the durability and reliability of drones.
- With FY2024 as a goal, there will be development of a performance evaluation method for drones and related equipment that will enable the safe and simultaneous operation of multiple drones.
- The traffic management technology for drones, eVTOLs (electric Vertical Take-Off and Landing), and manned aircraft to operate more safely and efficiently will be developed by FY2025.
- By 2025, there will be development of technologies, etc. for motors that have higher efficiency, that are smaller in size, and that are lighter in weight, which will contribute to

increase payload capacities and to long-distance flights, etc.

- In order to monitor the risk of secondary disasters such as landslides, by the end of FY2025 there will be development of technologies to measure topographical changes in locations where there is a risk of collapse using the laser scanner and sensors mounted on the drone.
- For the practical utilization of high-performance drones for agriculture in FY2023, in addition to prototyping drones and application equipment, software will be developed for utilizing image data that has been acquired for spraying pesticides, etc.

(eVTOLs)

- In order to realize the utilization and commercialization of eVTOLs at the Expo 2025 Osaka, Kansai, Japan such as for scenic flights and transportation between two points, the following efforts will be made based on the "Roadmap for the Air Mobility Revolution."
 - By the end of FY2023, safety standards for eVTOL airframes and operations and for the skill certification standards for operators will be established.
 - By the end of FY2023, the requirements for airports and off-airport airfields where eVTOLs can take off and land will be established.
 - In order to implement luggage transportation in eVTOLs and passenger transportation at the Expo, by the end of FY2023 examination criteria for permissions for air transportation businesses will be established.
 - For safe and efficient flights around the Expo venue, which will serve as the take-off and landing site, the airports, etc., a system for traffic management will be established by the end of FY2024.
 - The traffic management technology for drones, eVTOLs (electric Vertical Take-Off and Landing), and manned aircraft to operate more safely and efficiently will be developed by FY2025.

(Mobility data linkages)

- In order to use mobility-related data held by the private and public sectors in the operation and management of local public transportation, etc., by the end of FY2022 prototypes of those applications will be developed and demonstrated.
- For the spread of more advanced safe driving support technologies, in FY2022 there will be support, etc. for the introduction of automobiles equipped with high-precision positioning technologies for automobiles and with vehicle control systems software that can be remotely updated.
- In order to revitalize local communities through the social implementation of new mobility services, the introduction of share cycles, electric scooters, green slow mobility, AI on-demand transportation, etc. will be supported.
- Based on the "Second Bicycle Use Promotion Plan" (May 28, 2021 decision by the Cabinet Office) and in order to create a better environment for bicycle usage, during FY2022 best

practices of cooperation with public transportation, such as cycle trains and cycle buses, will be compiled and made public, while businesses will be informed of the results and encouraged to introduce them.

- In order to realize the common use of truck data, discussions with commercial vehicle manufacturers and with transportation companies, etc. will be held, and, with the end of FY2024 as a target, data related to truck driving, etc. will be standardized and a mechanism will be built to cooperatively use it.

(Robot technologies)

- In order to create robot-friendly environments that maximize the use of robots that carry luggage, clean, and provide security in facilities, communication cooperation standards between robots and automatic doors and security gates, etc. will be formulated during FY2022. In addition, by the end of FY2024, standards will be formulated for a system that simultaneously controls multiple robots throughout a facility.
- In order to create a technological foundation for robots in Japan, there will be a strengthening of support for regional efforts in robot contests for high school students, college of technology(KOSEN) students, and university students that contribute to learning and education about robots.
- The Consortium of Human Education for Future Robot System Integration will provide educational videos, etc. in FY2022, and will support the development of human resources at colleges of technology(KOSEN), polytechnic colleges, polytechnic centers, etc.

(Telemedicine)

- In order to promote the use of telemedicine, such as the widespread and appropriate implementation of online medical care in regions, during FY2022 there will be formulation of a basic plan for the further utilization of telemedicine, including the role played by telemedicine and the promotion of understanding by patients and residents. In addition, from FY2022, with the cooperation of regional medical personnel and relevant academic societies, there will be seminars and public awareness campaigns, etc. to gain the understanding of patients and residents, while also disseminating examples of online medical care and supporting the introduction of information and communication equipment to medical institutions that provide telemedicine.
- For the start of operations of electronic prescriptions from January 2023, the environment for safe and accurate operation will be improved. In addition, with a goal of March 2025, there will be support for the introduction of the electronic prescription system at almost all medical institutions and pharmacies that have introduced online qualification confirmations.
- A "Telemedicine Model Reference Manual" will be formulated during 2022 for the safe and effective implementation of telemedicine among doctors. In addition, in FY2022 dedicated equipment for clinical applications will be developed so that the primary surgeon can jointly

perform an operation with a specialist doctor who is monitoring the operation remotely.

(2) Promoting agriculture, forestry, fisheries, tourism, and education to support the Vision for a Digital Garden City Nation

1) For the establishment of food security, promote agriculture, forestry, and fisheries such as through the strategy for sustainable food systems, MeaDRI

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Build a stable food supply system to establish food security)

- In order to switch to domestic production according to domestic demand for wheat and soybeans and to promote the use of domestically produced rice flour, in FY2022, in addition to support for the introduction of cropping complexes and advanced moisture damage prevention technologies, etc., the development and sale of rice flour products that meet consumer needs will be supported.
- In order to increase domestic shipments of processed and commercial vegetables to 1.45 million tons by 2030, for vegetable items with large volumes of imports, support will be provided for the cultivation of production areas using rice fields and for the development of primary processing facilities.
- In order to strengthen the livestock production base, there will be support for increasing the number of head of Wagyu cattle, for the introduction of labor-saving machinery and ICT, for investments in new farmers, for fostering external support organizations that are responsible for feed production, and for the development of meat export facilities.
- In order to realize sustainable livestock production that does not excessively rely on imported feed, support will be provided for the production and widespread distribution of high-quality compost and for the production and expanded use of domestically produced feed such as corn and rice straw for feed.

(Promotion of the strategy for sustainable food systems, MeaDRI)

- Based on the MeaDRI Sustainable Food System Act, there will be certification of the activities of agriculture, forestry, and fisheries companies and production areas that work to reduce environmental burdens (soil preparation, reduction in usage of chemical pesticides and chemical fertilizers, reduction in greenhouse gas emissions, etc.), as well as of machine manufacturers that develop drone technologies and high-quality compost manufacturing technologies for those purposes, and there will be support for these activities by utilizing interest-free and low-interest loans as well as special measures for income taxes and corporate taxes.
- By FY2024, by working with producer organizations there will be a review of the cultivation calendar for production areas of major commodities in all prefectures.

- In order to make more than 10% of all municipalities into organic villages that promote organic farming and to increase the export value of organic agricultural products to 21 billion yen by 2030, in FY2022 model production areas that integrate the production, distribution, and consumption of organic agricultural products will be created in more than 40 production areas nationwide. In addition, in FY2022 priority will be given to businesses that are working to reduce their environmental impact by adopting support projects such as technology development and facility maintenance. Furthermore, during FY2022 more than 500 organic farming instructors will be trained to provide technical guidance on cultivation techniques for organic farming, which is difficult to cultivate.
- For the smooth enforcement of the revised Plant Protection Act, the basic guidelines will be formulated during FY2022, and, in addition, the formation of prefectural plans that are in line with the guidelines will be supported in FY2023. Additionally, by FY2025 pest forecasting technologies that utilize AI and ICT will be developed.
- In order to expand the use of high-quality compost, in FY2022 there will be support for formulating standards in all prefectures on reducing chemical fertilizers through the use of compost. In addition, the effective utilization of livestock excrement and sewage sludge will be supported to reduce dependence on chemical fertilizers from overseas.
- In order to reduce the amount of fossil fuels that are used, there will be support for the introduction of small, electric agricultural machinery, for the development of small, electric forestry machinery, and for the conversion to energy-saving fishing boats. In addition, support will be provided for the introduction of energy-saving equipment such as heat pumps in order to accelerate the energy transformation in horticultural facilities.
- In order to improve the technical skills of farmers, including of new farmers who are highly interested in reducing their environmental impact, education on reducing environmental impacts will be provided at agricultural universities.
- In FY2022, demonstrations of simple sheets that numerically visualizes the greenhouse gas reduction effects of activities at the production stage and an expansion of the target products will be conducted.
- With the aim of reducing the amount of commercial food loss to 2.99 million tons in FY2022, there will be support for disseminating knowledge of and raising awareness about food loss reductions, and there will be support for food bank efforts.

(Expansion of exports of agriculture, forestry, and fisheries products and foods)

- Based on the revised Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food, there will be support for promptly certifying organizations that promote exports for food products and for agricultural, forestry, and fisheries products, for research surveys on overseas markets that are conducted by such certified organizations, for developing demand, and for the formulation of industry standards.

- By FY2023, Japan Food Export Platforms consisting of overseas diplomatic missions, JETRO overseas offices, and Japan Food Product Overseas Promotion centers (JFOODO), etc. will be established in eight countries and regions, including in the US and in the EU. The Japan Food Export Platforms will provide comprehensive, specialized, and continuous support to local exporters, and, in addition, will promote market-in-market making and strategy making for all of Japan, will establish councils for local Japanese restaurants, etc. to build strategic supply chains, will create country reports, and will monitor, investigate, and eliminate counterfeit products.
- Cooking and recipe videos that make use of Japanese food ingredients to meet overseas demand for home cooking will be produced and distributed. There will be support for the development of human resources who can disseminate information on Japanese foods and Japanese food cultures through virtual trips and who can convey the appeal of local foods and food cultures. Measures to strengthen the sale of regional products through private cross-border EC sites in export destination countries will be considered for priority export items in approximately five countries, reaching a conclusion by the end of FY2022.
- In order to provide risk money to export businesses, there will be support for the activities of local overseas corporations, etc. through investments by investment entities whose business plans have been approved based on the Act on Special Measures for Facilitating Investment in Agricultural Corporations.
- In order to reduce the risks inherent in the export of agricultural, forestry, fisheries, and food products, low-interest financing for long-term working capital and debt guarantees for private-sector borrowing will be provided.
- Based on the revised Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food, support through the utilization of new low-interest institutional funds and of special measures for income taxes and corporate taxes will be provided for investments in the equipment necessary to build export logistics, in the manufacturing lines necessary to export processed foods, and in the equipment necessary for the application of IT to ensure traceability, etc.
- For the Global Farmers/Fishermen/Foresters/Food Manufacturers Project (GFP), in addition to strengthening functions such as support according to the level of the exporter, there will be consideration of a continuous and stable operations system, and by the end of FY2022 a conclusion will be reached.
- In addition to strengthening the functions of distribution hubs to improve the efficiency and sophistication of export distribution, a system will also be established for one-stop export procedures so that local ports and airports can be smoothly used.
- In order to further expand exports of processed foods, support will be provided for

compliance with the food additive regulations for each export destination country and for market-in product development, sales channel development, etc., which are conducted in collaboration with local SME food manufacturers, additive manufacturers, trading companies, etc.

- In addition to supporting the efforts of liquor made in Japan businesses to raise awareness of and develop sales channels for liquor made in Japan, branding, and sake brewery tourism, technical support will also be provided for the spread and utilization of geographical indication (GI) and high added value. Efforts will be made to inscribe Japanese sake, shochu, awamori, etc., on the Representative List of the Intangible Cultural Heritage of Humanity of UNESCO.
- Based on the addition of organic alcoholic beverages to the Japanese Agricultural Standard (JAS) for organic processed foods due to the revisions of the Act on Japanese Agricultural Standard, equivalence negotiations for organic alcoholic beverage certification with the US and the EU will steadily proceed.
- In order to promote the export of agricultural products that utilize superior Japanese new plants varieties, there will be consideration of establishing a breeder's rights management organization that exclusively manages and protects intellectual properties rights such as breeder's rights on behalf of the holder of the breeder's rights for new plant varieties, and a conclusion will be reached by the end of FY2022.

(Growth industrialization of agriculture, forestry, and fisheries, such as smart agriculture, forestry, and fisheries)

- During FY2022, the National Agriculture and Food Research Organization (NARO) will develop an application for simulating the introduction of smart technologies by farmers.
- In order to improve farmers' management, during FY2022 NARO will organize and made known data utilization methods that use the farm management systems.
- In order to introduce smart agriculture, by FY2023 more than 200 smart agricultural demonstration districts will be formed to promote the accumulation and consolidation of agricultural land and to demonstrate the utilization of smart machine sharing services.
- In order to encourage the active participation of local universities and of regional financial institutions in forming regional consortiums to promote smart agriculture, points will be added for participating in the adoption of smart agriculture-related projects.
- To improve the communications environment in rural areas, in addition to disseminating the guidelines related to survey and maintenance methods, technical advice will be provided via private businesses and regional public organizations in each district. Plan formulation and facility development will be supported for approximately 20 districts in FY2022.
- In order to solve issues in the telecommunications field in smart agriculture, forestry, and

fisheries industries, the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Internal Affairs and Communications will collaborate through a liaison council and with the cooperation of private companies, and there will be development of the systems necessary for expanded introductions of local 5G and Low Power Wide Area (LPWA) network and for the introduction of satellite communication services such as satellite constellations.

- In order to develop smart agriculture human resources, hands-on smart agriculture guidance support will be provided based on the issues in the production area, with support teams consisting of farmers who practice smart agriculture, experts, etc. from industry, academia, and government. In addition, in FY2022 technical guidance will begin in collaboration with prefectural dissemination advisors and agricultural support service businesses, and examples of efforts will be disseminated.
- In order for students at agricultural high schools that offer forestry-related courses to have increased awareness of employment in the agriculture, forestry, and fisheries industries, in addition to supporting the introduction of smart machines, etc. and providing guidance and support through classes for local farmers and agricultural support service businesses, trainings will be expanded to include online methods to raise instructors' leadership and awareness.
- In order to solve challenges field of human resources development in the smart agriculture, forestry, and fisheries industry, the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Education, Culture, Sports, Science and Technology will collaborate through a liaison council, will support the introduction of smart machines, etc., and will utilize them for classes for local farmers and agricultural support service businesses.
- The activities of agricultural support service businesses will be supported through financing by the Japan Finance Corporation and through investments based on the Act on Facilitating Investment in Agricultural Corporations. In addition, there will be an expansion in the information that is provided on the activities of agricultural support service businesses.
- In FY2022, in addition to supporting data analysis of the forest resource information on private forests that is obtained as a result of LiDAR measurements, in FY2022 a disclosure method will be demonstrated for the disclosure of forest resources information on private forests.
- From FY2023, the Forestry Innovation Hub Center (Mori-Hub) will dispatch coordinators to mountain region to promote the formation of local consortiums, and, in addition, will promote the creation of "Digital Forestry StrategicAreas (tentative name)" where the entire area will work together, primarily through the local consortiums, to utilize ICT technologies to survey forestry resources, improve the efficiency of harvesting, and reduce the costs of

reforestation, etc.

- At agricultural high schools including forestry-related courses and forestry colleges, in FY2022 and in collaboration with local forestry management bodies, hands-on experience and training will be provided for digital technologies.
- At agricultural high schools including forestry-related courses and forestry colleges, in FY2022 and in collaboration with local forestry management bodies, hands-on experience and training will be provided for digital technologies.
- In order to improve the accuracy of fisheries stock assessment, a system to collect the catch information from more than 400 local fish markets will be built by FY2023. In addition, there will be support in local fish markets for the development of facilities equipped with information and communication technologies.
- So that it can be used by more than 1,000 fishing vessels by FY2023, there will be development and demonstrations of a system that predicts sea conditions for fishing, using satellite information, etc. to expand and include fish species other than Pacific saury.
- In order to promote digitalization in fishing village areas, by 2023 a "Fisheries Digital Human Resources Bank" will be established, which registers specialist human resources to support digitalization in fishing village areas, and there will also be matching between fishermen and the specialist human resources as well as the dissemination of best practices through digitalization.
- In order to promote the consolidation of agricultural land, etc., support will be provided to the formulation of regional plans for municipalities based on the revised Act on Promotion of Improvement of Agricultural Management Foundation and the intensive implementation of subleasing, including outsourcing of agricultural work through the cropland intermediary management institution (Cropland Bank). In addition, there will also be support for the formulation of revitalization plans based on the revised Act on Promotion of Settlement and Interregional Exchange for Vitalizing Rural Areas in order to promote the use of agricultural lands that are difficult to consolidate, such as for pastureland or wild animals buffer zones.
- In order to secure and develop new farmers, in FY2022 there will be support for introducing machinery and facilities, support for the development of training farms via accompaniment organizations, and support for securing technologies and sales channels.
- In order to improve the business management capabilities of farmers, there will be support for the establishment of a system of prefectural agricultural management and new farmer support centers that are based on the revised Act on Promotion of Improvement of Agricultural Management Foundation.
- In order to increase the proportion of female agricultural committee members to 30% and the proportion of female agricultural cooperative officers to 15% by FY2025, an

environment where women can comfortably work will be created, such as by training women farmers who can be regional leaders and by supporting childcare.

- In order to reduce rice production costs, in FY2022 there will be an analysis of the current state of production costs in approximately five ambitious production areas, issues will be identified, and technologies to reduce costs will be demonstrated.
- To firmly establish rice policy reforms, support for crop production of well-established and highly profitable crops will be strengthened in FY2022.
- To raise the income of farmers, the continuation and strengthening of self-improvement practices will be supported through the guidance and supervision of agricultural cooperatives.
- In order to promptly and appropriately implement measures to prevent the spread of animal infectious disease, in FY2022 development will begin on a system that utilizes information on compliance with Biosecurity Standards.
- In order to strengthen agricultural production bases through land improvements, in FY2022 there will be support for prompt measures against torrential rains, such as ponds based on the revised Land Improvement Act, as well as for the development of large plots and agricultural water utilization facilities on leased farmland above a certain size in agricultural land banks.
- In order to expand the leased area of urban farmland to 255 ha by FY2024, guidelines for supporting urban farmland will be formulated during FY2023 and will be disseminated.
- In order to promote DX at agricultural sites, during FY2022 the partial operation of eMAFF maps will begin, which manages agricultural land information on digital maps by using data accumulated through the use of eMAFF, and, in addition, eMAFF will continue to be developed.
- To ensure that by the end of FY2023 almost all municipalities with privately owned planted forests will have forest management based on the forest management system, training to develop technical experts to support the municipalities will be provided. In addition, to realize the accumulation and consolidation of 3.10 million ha by FY2028, by the end of FY2026 an intention survey will be conducted on an area of approximately 1.30 million ha.
- In order to improve the profitability of the forestry industry, in FY2022 approximately 5 to 10 forestry management organizations will demonstrate labor savings in logging and afforestation via the introduction of new technologies and will demonstrate demand-oriented timber production and sales, etc. via the use of ICT, and, after the establishment by FY2024 of this management model, its dissemination will be promoted.
- Through the smooth implementation of the revised Act on Special Measures for Thinning, etc., reliable reforestation will be carried out after logging and unforested areas will be

eliminated.

- Based on the revised Act for Promotion of the Use of Wood in Public Buildings, educational and public relations activities will be conducted to deepen public understanding on the promotion of timber utilization. In addition, new technologies will be developed through demonstrations of woody, fire-resistant components, and CLT dimensions will be standardized to reduce costs. Furthermore, by FY2023 standards will be rationalized to promote the use of JAS products.
- To promote a shift to domestic timber in the housing field, in addition to supporting the introduction of high-performance forestry machinery, support will be provided for the development of wood processing and distribution facilities to address the shortage of imported timber.
- To secure and strengthen forests' functions of CO₂ absorption and fixation, in FY2022 investment guidelines will be formulated and disseminated for forest utilization projects that contribute to corporations honoring forest maintenance and to carbon absorption, etc., and the system to expand forest credit transactions will be reviewed.
- In order to address illegal logging, effective measures to promote the distribution and use of legally harvested wood and wood products will be considered with a conclusion reached by the end of FY2022.
- In order to promote the use of woody biomass for energy, there will be support in FY2022 for disseminating efficient use cases and for technological development for cost reductions.
- 1,200 new workers per year with safe and efficient skills will be developed, and measures will be taken to retain them.
- In order to enhance efforts to develop a diverse workforce for the forestry, including foreign human resources, and to improve the skills required or multi-skilled workers, during FY2022 the basic policy on the Act concerning the Security of Forestry Work Force will be reviewed. In addition, to halve the incidence of occupational accidents in forestry with a goal of doing so by 2030, in FY2022 the introduction of safety equipment for small-scale businesses will be supported.
- To improve the compensation of forestry workers, etc., businesses that raise wages above a certain level in FY2022 will be preferentially selected to support the development of wood processing and distribution facilities. In addition, the retention rate of new workers will be considered through adopting support for the introduction of high-performance forestry machinery.
- Fisheries resources are to be managed with a goal to achieve the MSY (Maximum Sustainable Yield) basically through TAC (Total Allowable Catch) management. By the end of FY2023, it will be putting 80% of fisheries production under TAC management and

introducing management based on IQs (individual quotas) to Minister-licensed fisheries, whose main targets are TAC species, in principle.

- In order to develop fisheries that can adapt to resource fluctuations and make effective use of fisheries resources, while giving consideration to fisheries coordinations, there will be support for a gradual transformation of fisheries' operations, such as pluralization of targeting fisheries species and fishing methods or collaboration with multiple fisheries.
- In order to respond to the decline of the salmon returning rate due to the marine environmental changes, the ideal form of sustainable hatchling and releases in cooperation with relevant prefectures and fisheries bodies will be sought including the effective utilization, reorganization, and integration of facilities expecting to reach a conclusion within FY2022.
- Efforts to improve productivity via coordinating the production, processing, and distribution of maritime products will be supported, and at least 10 model examples will be selected by FY2023. In addition, for the stable supply of processed raw materials, there will be support for supply leveling of marine products and for the effective use of low and unused fish.
- Based on the Basic Plan for Conservation of Environment of the Seto Inland Sea, the relationship between nitrogen and phosphorus, etc., which are supplied in short and sand lance and seaweed, etc., whose productivity is declining will be investigated, and management measures for the supply of nutrient salts will be proposed to coastal councils and other entities, by FY2023. In addition, surveys will be conducted in other waters, such as Tokyo Bay and Ise-Mikawa Bay, to improve the bottom layer environment and to clarify such relationship. Furthermore, to utilize blue carbon, seaweed beds and tidal flats will be preserved by installing substrates on which seaweed can easily grow.
- In addition to supporting the introduction of large-scale offshore aquaculture that utilizes remote automated feeding systems, establishing aquaculture production hub areas, and promoting the utilization of the water areas at fishing ports, to promote the spread of land-based aquaculture, there will also be support for utilization optimization via reorganizations and ordering of fishing port land and support for the development of irrigation water facilities, etc.
- In order to promote new entry into the aquaculture industry, in addition to supporting the aquaculture businesses of new entry aquaculture companies through financing by the Japan Finance Corporation and through investments based on the Act on Facilitating Investment in Agricultural Corporations, feasibility study of aquaculture business guidelines will be disseminated to regional financial institutions, etc. to supply funds without requiring real estate collateral.
- In order to promptly implement measures against fish diseases, during FY2022 examples

on the use of telemedicine will be disseminated and widely promoted to aquaculture companies, etc.

- In order to secure 2,000 new workers per year and to encourage them to settle in fishing village areas, job fairs, internships, etc. will be held, and, in addition, there will be support for cooperation with private businesses outside of the fishing industry, such as with the restaurant and accommodation industries.
- To promote the use of a mechanism that shortens the embarkation history required to take the maritime officer examination, in FY2022 an embarkation course will be established at the National Fisheries University so that graduates of fisheries high schools, which are training schools for level five mariners, can easily obtain their embarkation history, and the operation of the mechanism will be supported.
- In order to secure treatment comparable to that of international standards, priority treatment will be given to businesses that have raised wages above a certain level, and support will be provided for the development of communication environment on fishing boats that is attractive to young people.

(Productivity improvements in the food industry and development of new business fields)

- In order to improve the labor productivity of food companies and to disseminate and firmly establish AI and robots, in FY2022 there will be demonstrations of technologies and guidelines will be established to ensure safety when AI and robots are used in collaboration with humans.
- In order to provide high quality food products that are demanded by consumers, in FY2022 a business model in which food companies are actively involved in agricultural production will be created in 20 districts.
- In order for the food industry to promote ESG initiatives such as reducing environmental burdens and respecting human rights throughout supply chains, during FY2022 guidance will be formulated to promote ESG-related goal setting and information disclosures by food industry SMEs, and it will be disseminated. In addition, there will be support for capital investment to reduce environmental impacts based on the MeaDRI Sustainable Food System Act.
- In addition to efforts such as food delivery and share kitchens that specialize in delivery and responding to the "new normal" such as through the "Guidelines for Business Continuity in the Food service and Restaurants ," there will be support for the renovation/reorganization of existing stores and for business format conversions.
- Based on the increase in at-home cooking during the COVID-19 pandemic, in production areas support will be provided for introducing items that meet household demands in

FY2022, while sharing consumer awareness surveys and their results.

- In wholesale markets, support will be provided for labor savings through digitalization and for enhancing functions as hubs for export logistics.
- The Council for Public-Private Partnership in Food Technology will formulate a Foodtech Promotion Vision and Roadmap during FY2022. In addition, during FY2022 demonstrations of commercializing Foodtech will be supported.
- Surveys and analysis on efforts to reduce food loss, including on the utilization of unused food ingredients, will be supported.
- Research and development of long-term care foods, medicinal crops, and functional food ingredients will be supported through open innovation that fuses the agriculture/forestry/fisheries industries with the food industry and medical care/welfare. In addition, in order to expand the domestic cultivation areas of medicinal crops to 630ha by FY2025, in FY2022 a technical farm hub will be established for medicinal crops with high domestic needs, and the introduction of labor-saving technologies into production areas will be supported.
- Through an industry-academia-government network that utilizes AI and digital technologies, a prototype of a breeding system for the rapid development of cultivars that are adapted to climate change and food security will be built by FY2022, and by FY2027 it will develop cultivars for major items.
- In order to further utilize domestically produced biomass, in FY2022, in addition to estimating the total production of resource crops when resource crops such as elephant grass are cultivated on degraded agricultural land, the development of biofuel production facilities for unused resources, etc. will be supported

2) Support for industry that is tailored to local conditions, such as the revival of inbound tourism

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Support for the revitalization of regional tourism)

- Due to the spread of the COVID-19 pandemic, demand for domestic and overseas tourism declined significantly, seriously affecting the tourism industry. To support maintaining employment and business continuity, we will activate financial and employment-related support systems.
- To stimulate demand for domestic travel, we will implement the "New Go To Travel business" based on the fact that the business can be executed by the end of FY2022, after making a review from the perspective of avoiding congestion on weekends and giving

consideration to SMEs. At that time, we will continue to work carefully based on pandemic conditions and actual conditions in local areas, and in line with this implementation, we will promote weekday travel in collaboration with tourism and transportation companies. Also, we will create a safe and secure travel environment by thoroughly disseminating the industry-specific guidelines of tourism and transportation companies and the "New Travel Etiquette".

- To promote the introduction of the system to workation, leisure and other companies, in FY2022 we will conduct about 30 model projects such as workation projects with the participation of companies and local regions. In 2022, we will launch a public-private consortium of companies and local government to support telework and workation and distribute information on examples of such activities. Furthermore, to promote and firmly establish "second hometown development (repeated travel to and from areas)" that deepens the relationship between residents and visitors and increases medium- to long-term stays and repeated visits, in FY2022 we will create about 15 areas that will make use of model projects to work on improving the stay environment and mobility environment necessary for community development in host communities and marketing.
- To promote universal tourism, we will implement monitoring tours that involve multiple accredited facilities to raise awareness of the "Barrier-free mind certification program for tourist facilities" and increase the number of accreditations, so as to create an environment in which senior citizens can travel with a sense of security. Also, we will consider making additional facilities eligible for certification, such as cultural facilities, reaching a conclusion within FY2022.
- In FY2022, we will consider further promotion measures, including legislation, to achieve a V-shape recovery of tourism in the wake of COVID-19 and solve long-standing structural problems in the tourism industry such as low productivity and delays in digitalization, and take necessary measures. These measures will serve as mechanisms to support the strengthening of the management capabilities of the accommodation and travel industries systematically and vigorously from a medium- to long-term perspective, which are at the core of the broad-based revitalization and high-added value of tourist areas.
- To improve productivity and boost added-value in the accommodation industry, we will support the digitization of customer management systems, the separation of lodging and meals, the creation of new services through collaboration with different industries and the improvement of management capability by separating ownership and management. In addition, we will strengthen recurrent education at universities and encourage industry-academia-government collaboration to promote the development of tourism human resources having IT, marketing and regional development knowledge and skills.
- To strongly promote the broad-based revitalization of tourist destinations and generate

added-value, we will support efforts such as the renovation of accommodation facilities, tourist facilities and public facilities that represent the face of tourist locations, and the removal of abandoned houses, to improve the attractiveness of tourism sites. We will expand the system so that systematic and continuous support measures such as funding will be possible.

- Through collaboration with a wide range of stakeholders in local regions, we will create income-generating tourism content that utilizes tourism resources unique to the region, such as nature, food and local trades, and new tourism content through the fusion of digital technologies such as XR/5G with tourism resources in the region. We will conduct feasibility studies and take other actions to attract tourists from Japan and abroad in the future, that will lead to repeat visits and increased consumption and the formation of new tourism resources that will become the legacies of local regions and Japan.
- To promote tourist excursions and improve tourist destination management using digital technology, we will support efforts by local governments and local business operators to promote revisits and expand consumption using cashless payment data, avoid congestion and other difficulties at tourist destinations using reservations and route search data, and more.
- To strengthen the structure of a Destination Management/Marketing Organization (DMO), we will provide assistance for priority support DMOs (pioneering DMOs that should strengthen support for attracting inbound tourism) using a profession support team. In addition, we will raise the performance level of all DMOs by providing support for the improvement of marketing capabilities by utilizing accommodation data analysis systems and Customer Relationship Management (CRM) applications and for the development of human resources that will leverage various kinds of data to achieve profitability in tourism areas.
- To help realize sustainable tourism, we will build a management system through model formation by implementing the Japan Sustainable Tourism Standard for Destinations (JSTS-D) while incorporating regional sustainability into content creation, and improve the accepting environment.
- We will ensure the safety and security of travelers and destination places, and resume inbound travel in stages while assessing the status of COVID-19 infections in Japan and overseas. Through the Japan National Tourism Organization (JNTO) and other organizations, we will disseminate easy-to-understand information on immigration and emergency response, and undertake effective promotion in each country and region that has resumed passenger travel.
- To improve the visitor stay environment of national parks that contribute to the promotion of inbound tourism, we will expand the initiatives of the Project to Fully Enjoy National

Parks to all national parks in Japan, promote nature experience activities based on the revised Natural Parks Act, improve the landscape such as by removing abandoned buildings, increase sustainability such as through decarbonization, utilize the vitality of the private sector and improve workation environments.

- Regarding tourism urban development that utilizes historical resources such as castle ruins, shrines and temples and traditional Japanese-style houses, we will disseminate examples of efforts by creating model areas through support for such initiatives as formulating regional planning for commercialization and creating tourism content for inbound tourism. At the same time, we will support renovations to improve the accommodation environment for inbound tourism and the enhancement of concierge services.
- To meet the diverse needs of inbound tourists, we will support the development of cultural tourism destinations, the revitalization of art markets, sports tourism, farm stays, gastronomy tourism, sake brewery tourism and more. In addition, in light of changes in the social environment and tourist consciousness caused by COVID-19, we will support the promotion of sustainable tourism and adventure tourism, and the creation of outdoor activity content such as the building of snow resorts.
- As regards JNTO, with the Expo 2025 Osaka, Kansai, Japan and other events upcoming, this agency will strengthen its comprehensive promotions utilizing digital marketing, reinforce cooperation with local regions, and strengthen tourism promotion in priority markets such as the Middle East and Mexico. In addition, we will support efforts related to resuming international flights and increasing flights at regional airports.
- Within FY2022, we will select as model tourist destinations about 10 areas that are expected to attract luxury travelers, high unit price inbound travel tourists. Intensive support will be provided for the development of luxury accommodation facilities, discovering and developing tourism resources, the development of guides and other human resources and strengthening overseas sales. Also, the use of business jets will be improved, such as by easing procedures.
- In order to safely resume MICE and strengthen its appeal, we will provide the invitation and support for holding international conferences in a hybrid format and attracting incentive travel.
- Regarding IR development, we will gradually create necessary procedures such as the approval of area development plans, including the implementation of strict casino regulations.
- We will develop an environment to receive tourists which includes multilingualization and cashless support in tourist spots in collaboration with venture companies that have the latest technology know-how, such as AI and ICT, and local public organizations, strengthen and facilitate CIQ systems, and improve transportation to tourist locations. Also, to expand

consumption and promote excursions in tourist areas, we will provide support for creating a favorable environment for nighttime walking around cities and consumption of services by lighting up townscapes and improving the glamping environment.

- We will provide support for capital investment by aviation and airport companies to maintain and strengthen the aviation network to help the recovery and expansion of tourism demand. Also, initiatives will be undertaken to promote aviation innovation, build a new runway at Narita Airport to expand the capacity of annual departures and arrivals at Tokyo metropolitan area airports to about 1 million flights, improve infrastructure facilities for railway access to Haneda Airport, etc. Further, functions at Kansai International Airport, Chubu Centrair International Airport, Fukuoka Airport, and other airport facilities will be strengthened.
- We will provide support for the promotion of cruise ship port calls in concert with thorough measures to prevent the spread of COVID-19, so as to create an environment in which a cruise can be enjoyed with a sense of security. Also, support will be provided for efforts to resume international cruises subject to the safety and security measures of other countries.
- In anticipation of the gradual resumption of outbound travel while also assessing the status of COVID-19 in Japan and overseas, public-private partnership system that bring together a wide range of experts and related organizations will be reconstructed. In addition to considering methods for promoting post-COVID-19 outbound travel, in order to ensure the safety and security of travelers, we will prepare the environment for the resumption of international travel by disseminating accurate information on infection disease control and local information in each country.

(Strengthening support for local SMEs)

- In FY2022 we will provide support for challenge shops and facility development in collaboration with local government that assist new ventures so that shopping districts will contain the optimal combination of business types based on the needs of local residents.
- To improve the productivity of local shopping districts, in FY2022 we will provide support for efforts to formulate marketing strategies for shopping districts based on introducing IT tools in collaboration with multiple small and medium-sized merchants to collect and analyze various kinds of data.
- In regard to "Gambaro! Shopping Street Campaign," we will focus support on efforts related to the decentralization of periods, times and locations. Also, after support is provided for the cost of purchasing antigen test kits and measures are thoroughly implemented to prevent the spread of infection, we will decide the management of implementation based on future COVID-19 conditions.
- We will provide support for efforts to develop sales channels beyond existing customers and markets and sustain local communities so that small businesses can respond to

structural changes in local economies.

- To promote growth through business conversion and business succession of local mid-sized companies and SMEs, we will begin full-scale creation of business succession projects utilizing the specific investment business of the Development Bank of Japan (DBJ), as well as by supplying capital funds through investment in business succession funds by FY2025 and identifying and selecting management personnel and target businesses using search funds. At the same time, we will share know-how with regional financial institutions and develop human resources.
- At REVIC, we will strengthen the supply of capital-like funds and the factoring for businesses whose debt is excessive due to the effects of COVID-19, through providing support utilizing a business revitalization framework and funding in collaboration with regional financial institutions. Also, intensive support will be provided for core companies that are indispensable to local regions, such as regional transportation firms, and for broad-based rehabilitation projects such as tourism.
- To accelerate support from regional financial institutions for SMEs and small-scale enterprises in local regions, we will conduct research into support methods that utilize AI and ICT and typical revitalization support methods appropriate for respective industries in FY2022. We will disseminate and promote the results of this research and help regional financial institutions enhance their business support capabilities.
- To realize the digital transformation (DX) of local companies, in FY2022 we will provide support for creating a DX strategy formulation through a support community consisting of local industry-academia-government funding participants and matching with IT vendors. Also in FY2022, support will be provided for demonstration projects by local companies to help create businesses that combine regional characteristics with digital technology, and examples of such projects disseminated.
- In FY2022 we will provide support for "Regional Human Resource Departments" that assist the joint efforts of regional companies to acquire, train and retain human resources in urban areas.
- In order to continuously provide services that are indispensable for local residents, such as creating measures for disadvantage shoppers and protecting the elderly, SMEs inside and outside the region will demonstrate efforts in about 100 regions in FY2022 to resolve both regional and social problems and aim profitability while cooperating with local governments and other related parties in the region. Also, we will implement matching between local governments and SMEs working on problem-solving.
- We will examine the enforcement status of the Regional Future Investment Promotion Act from the perspective of realizing DX for regional companies and strategic use of human

resources, and draw conclusions in FY2022.

- The Japan Securities Dealers Association will consider establishing a mechanism to promote the transfer of unlisted stocks in order to contribute to facilitating business revitalization and business succession of regional companies, and draw conclusions within FY2022.

3) Improving the ICT environment for education

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- We will build a desirable educational environment and guidance system for schools, including junior high schools that take into consideration the planned development of 35-student classes in elementary schools and assessment of the effects. Also, we will promote schoolwork-style reforms by gradually developing a curriculum management system in the upper grades of elementary school, improving school administration using ICT, carefully selecting, and reviewing school events, and enhancing the diversity of support staff.
- We will consider the ideal way of fostering, hiring and training teachers and reach a conclusion in FY2022. In addition, content utilizing digital technology will be created to help advance teacher training, and develop a leading teacher education program at flagship universities for fostering of teachers.
- In all regions, GIGA school concept will move to the implementation phase to realize individual optimized learning and collaborative learning that leaves no one behind. Based on full-scale utilization of one computing device for each student, we will consider the existence of the system of digital textbooks and method of educational materials and draw conclusions within 2022, for the purpose of starting full-scale introduction of digital textbooks in FY2024. At the same time, supportive environments will be developed for promoting open innovation in teaching materials together with EdTech companies.
- To ensure the sustainability of the GIGA school concept, we will consider the continuous and smooth utilization of ICT devices.
- We will build a platform for the development and utilization of school facilities in FY2022. Also, support will be provided for efforts to improve the educational environment for the use of ICT, decarbonization and countermeasures against the deterioration in an integrated manner.
- To solve problems in education and improve the quality of education, we will provide nationwide examples of efforts that utilize advanced technology. Additionally, in order to promote the utilization of educational data, information about learning content and activities will be standardized, with due regard for the protection of personal data.
- To achieve nationwide development of "Third Place" as places to discover and nurture children's talents, such as exploration and research abilities, apart from home and school,

we will conduct demonstrations and utilize the STEAM library schools in order to disseminate and promote individual optimal learning and interdisciplinary and exploration learning.

- To improve non-cognitive abilities, we will support the dissemination and awareness and real experience activities of youth by making FY2022 as the "first year of promotion of experience-based learning activities".
- Regarding overseas educational institutions, which are the basis for developing global human resources and companies advancing into overseas markets, we will consider improvements to the educational environment such as dispatching teachers so as to enhance the teaching system, based on the results of empirical research on improving the abilities of dispatched teachers, and reach a conclusion.
- We will undertake consultation and public relations services in order to increase the number of International Baccalaureate authorized and candidate schools to 200 or more by the end of FY2022. Also, we will consider measures to promote the utilization of the International Baccalaureate at universities, reaching conclusions within FY2022

(3) Ensuring security as a precondition for Vision for a Digital Garden City Nation

1) Accelerated investment in national resilience and disaster prevention and mitigation

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- Preventive disaster risk reduction measures such as river improvement and strengthening of inland waters in response to climate change will be accelerated. Also, to strongly promote River Basin Disaster Resilience and Sustainability by All efforts such as providing flood-risk information for corporate risk analysis and location selection and promoting land-use based on flood risk, we will prepare flood-risk maps showing the frequency of inundation from FY2022, and improve the accuracy of flood forecasts by FY2025, among other measures.
- To further strengthen the flood control functions of existing dams, we will improve the accuracy of rainfall and inflow prediction using AI, and develop dam operation support tools with warning and other functions by FY2025. At the same time, field tests of measures to increase hydroelectric power generation using rainfall and inflow prediction technology will start in FY2022 to help achieving net-zero greenhouse gas emissions.
- As part of the " Dramatic DX project in River Basin Disaster Resilience and Sustainability by All " to dramatically advance and improve the efficiency of disaster prevention and mitigation measures utilizing digital technology, we will conduct field tests of inexpensive and 1) long-life small-size flood sensors and 2) drainage pumps that utilize mass-produced components in FY2022.

- To strengthen and accelerate measures regarding stationary linear mesoscale convective systems (repeated areas of rain), we will develop water vapor observation equipment and advance meteorological prediction models, and provide information on the possibility of occurrences of stationary linear mesoscale convective systems by the end of FY2022 to make gradual improvements. Also, next-generation meteorological satellites equipped with three-dimensional atmospheric observation functions, which are indispensable for revealing the risk of disaster in individual municipalities, will begin to be manufactured by FY2023 and put into operation starting in FY2029. Furthermore, we will enhance meteorological offices and increase the number of weather disaster prevention advisors to improve regional disaster prevention.
- In light of growing demand for observation data and forecasts related to meteorology and rivers, we will promote the provision of meteorological and disaster prevention services based on public-private-academic engagement. AI will be used to relax requirements for the number of weather forecasters stationed in forecasting operations, and the forecasting system reviewed to make possible the use of the latest technologies such as IoT and sensors for meteorological observation. Also, we will consider the enhancement of data provided by the Japan Meteorological Agency using cloud technology. A conclusion will be reached by the end of 2022 and necessary measures implemented.
- To support disaster-related evacuation efforts and reduce damage, we will establish an alert environment within FY2022 to send accurate tsunami warnings in the event of a major earthquake along the Japan Trench and Chishima Trench and information on tide level changes due to large-scale volcanic eruptions, such as an eruption near the Tonga Islands. Also, by FY2024 we will develop an environment to support the rapid dissemination of information that stimulates an initial response in areas affected by large-scale eruptions.
- By FY2025, we will prepare landform classification information, which is the basis of disaster risk assessment, for a total of 12,400 square-kilometer areas that are undeveloped but have a concentrated population. In addition, we will prepare the geospatial information for disaster prevention, such as data on designated emergency evacuation sites.
- We will provide support for detailed surveys and construction measures carried out by local governments as part of an effort to prevent damage to private homes and other buildings due to the collapse of embankments or other structures. Also, operational guidelines will be created and distributed, and advice provided to local governments, to achieve smooth enforcement of the Embankment Regulation Law.
- We will begin implementation of road risk assessment based on a combination of road facility inspection data and hazard maps in FY2022 to facilitate development of efficient and effective disaster prevention measures for road networks.
- To ensure the smooth movement of people and distribution of goods in the event of a disaster,

we will encourage restrictions on new utility poles and the elimination of utility poles on emergency transportation roads, such as in urban areas where there is a risk of utility poles collapsing, based on the plan to promote the elimination of utility poles. Also, based on the revised Act on Promotion of Railway Crossing, about 500 railway crossings that should determine emergency management methods in the event of a disaster will be specified by 2025, and measures will be implemented, such as prioritizing railway crossing openings.

- To improve the understanding of disaster situations in regard to port facilities, we will demonstrate the performance of drones used for aerial photography and the utilization of satellite imagery-based automated discrimination systems in FY2022. Also, by 2023 a system will be constructed to share images obtained from drones and satellites among port-related authorities using "Cyber Port," a platform for central management of port facility information.
- In regard to the Sea Surface Cleaning Ship that serve the role of collecting drifting objects such as driftwood and oil spills to maintain marine transportation networks, we will consider sea areas for their deployment and the wave resistance required for these ships to enable navigation in the open ocean, so that drifting objects generated by disasters can be quickly removed even around remote islands that were previously difficult to reach, with a conclusion to be reached within FY2022.
- We will gradually expand collaboration between the "Disaster Prevention x Technology Public-Private Partnership Platform" established by the national government and the public-private network established by local governments from FY2022 to encourage development of a disaster prevention industry that utilizes advanced technology.
- The next iteration of the integrated disaster management information system will be established by the end of FY2023 to help facilitate the efficient sharing of disaster-related information before and after a disaster. Also, a platform to facilitate the distribution of data necessary for disaster management, such as damage information, will be established within FY2025.
- Regarding disaster case management, which involves listening to the situation of each victim of a disaster and providing necessary support in cooperation with disaster-related authorities, we will conduct outreach activities and awareness activities, such as preparing a guidebook, within FY2022. In addition, regarding evacuation plans for individuals, model projects will be implemented in 2022 and good practices will be promoted nationwide.
- To strengthen evacuation life support systems in local regions, we will initiate a certification system based on completion of a training program from FY2023, so as to develop regionally-based human resources for disasters.

2) Development of transportation and logistics infrastructure to support a prosperous

Garden City Nation

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Transportation/logistics, infrastructure and urban problem solving)

- To respond to changes in socio-economic situations due to the impact of COVID-19 as well as support economic growth, we will strengthen industrial infrastructure functions through the rapid development and use of high-speed transportation networks, such as high standard roads, new Shinkansen lines and the Maglev Chuo Shinkansen, as well as international hub airports and international container and bulk strategic ports. In addition, we will promote sustainable infrastructure maintenance by utilizing new technologies and full-scale conversion to preventive maintenance and proceeding DX in the infrastructure sector and Compact Plus Network initiatives. Efforts will be made to maximize the stock effect of infrastructure such as by improving productivity and convenience, encouraging private investment and revitalizing regions.

(Transportation/logistics)

- To protect the lives and livelihoods of people from disasters, we will implement initiatives to eliminate the missing links on high standard roads, provisionally convert two-lane highways into four-lane highways and strengthen the double network between high standard roads and national highways that have alternative functions. In addition, we will improve the maintenance rate of the three major metropolitan ring roads to 89%, and strengthen access to airports, ports and other facilities and road network functions, so as to improve productivity and revitalize regions.
- We will continue to study measures that will ensure maintenance, repair, renewal and implementation of evolutionary changes and improvements of expressways in line with the changes in social and economic structures, and take necessary measures for the toll road system by FY2023.
- We will expand the service routes of double-connected trucks by the end of FY2022. Also, SA and PA parking spaces will be expanded and base facilities will be developed, that contribute to the commercial application and acceptance of junction transportation.
- To promote road system DX with the aim of ensuring safe and secure traffic on roads and providing advanced services, we will proceed with the following initiatives:
 - The advancement of road management will be accelerated by realizing early discovery and early processing of road irregularities with an automatic traffic hazard detection system and dashboard cameras, and by utilizing CCTV cameras and 3D point cloud data. Also, the automation of snow removal work that requires advanced skills will be promoted, and the operational deployment of automatically controlled snow removal machines at national highway offices will start within FY2022.

- The renovation of the road occupancy system in FY2022 will be started to make the location information of occupying properties three-dimensional. Furthermore, from FY2023, the online application for parking permits for specific vehicle parking facilities will be implemented sequentially.
- Cashless and touchless tollgates using dedicated ETC and other technologies will be promoted, to be nearly completed by FY2025 in urban areas and by FY2030 in rural areas. Within FY2022, traffic congestion countermeasures will be implemented in all prefectures based on utilizing big data in Traffic Demand Management (TDM).
- Data on specifications and inspection results of highway facilities such as bridges and tunnels to universities and companies will be released within FY2022, and the development of private applications useful for optimizing maintenance plans on roads and soundness diagnostic support using image recognition AI will be promoted.
- We will promote the universal design of roads, increase the number of “roadside stations” with childcare support facilities to 50% or more by FY2025, and improve the sanitary environment of toilets and other facilities.
- Toward the realization of "AI terminals which support people," the new port information system (CONPAS), which began full-scale operation at Yokohama Port in 2021, will be deployed horizontally, remote-controlled rubber tyred gantry cranes (RTGs) will be introduced, AI systems to optimize terminal operations will be implemented and the introduction of a contactless access control information system that utilizes face recognition technology will be promoted, for the purpose of solving the waiting time of foreign trailers in front of the Terminal Gates while complying with ship operation schedules within FY2023. In addition, with regard to the digitalization of port (Cyber Port) we will promote the use and its nationwide development in the fields of port logistics, port administration and port infrastructure by coordinating with other systems and feature improvements, and achieve integrated operations of these three fields within FY2023.
- We will facilitate digital transformation in the logistics field by promoting automation, mechanization and digitization of logistics operations. Also, we will build an autonomous operating system for a "logistics/commercial distribution data platform" within FY2022, proceed with the research and testing necessary for the promotion of logistics standardization and the Physical Internet (a joint transportation and delivery system that transports cargo packed in standardized containers using a network of warehouse, truck and other assets owned by multiple companies), and gradually disseminate the results of studies by industry, academia and government to help achieve pallet standardization.
- Based on the lessons learned from the tour boat accident in Shiretoko, Hokkaido in April 2022, it will be discussed to review safety measures for passenger transportation with small vessels, such as enhancing examination of ensuring safety when entering the boating tour

business and enhancing ship equipment requirements. An interim report of the discussion will be published by summer 2022, and the necessary measures will be taken.

(Infrastructure development/maintenance and management)

- Within FY2022, we will begin to operate systems that share 3D models and other infrastructure data among contractors so that BIM(Building Information Modeling), which is the management of information through whole life cycle stage of construction projects, can in principle be used for public works from FY2023. In addition, to improve the construction efficiency of reinforced concrete structures such as bridge piers, we will determine an implementation method by the end of FY2023 to enable confirmation of reinforcement arrangement using image analysis that can be performed remotely.
- To improve on-site productivity, we will expand the range of utilization of ICT construction in small-scale construction within FY2022 with the aim of disseminating ICT construction among small and medium-sized construction companies. Efforts will be made to promote i-Construction, such as realizing the digitization of documents related to the quality control of ready-mixed concrete from FY2024 by amending JIS standards and taking other steps.
- To secure construction workers through improved treatment in the construction industry and work-style reforms and ensure smooth construction in public works, anti-dumping measures will be thoroughly implemented toward wage increase in the construction industry across the public and private sectors, and appropriate contract prices will be set to reflect transaction prices such as labor costs and raw material costs. Also, we will develop a "leveling chart" within FY2022 to help promote the leveling of construction period and the optimization of construction periods in each municipality. At the same time, we will improve the Construction Career Up System during FY2022 so that public works orderers can efficiently check the 5-day workweek performance status of construction workers at construction order work sites, and promote the dissemination of wage payments according to skill level and the visualization of construction capabilities of construction companies using this system. Furthermore, the engineer system will be reviewed on the premise of using digital technology, and necessary measures will be taken from FY2022 onwards.
- To make it possible to more efficiently perform urban disaster-prevention simulations that link together public facility data owned by the government and building data owned by companies, we will strengthen the functions of the "MLIT Data Platform" and expand data linkages within FY2022 so that data can be centrally searched, displayed, and downloaded.
- We will continue to develop 3D point cloud data that will be the basis for digital twin modeling, while developing about 110,000 km² of data by FY2025, especially in areas with a high risk of disasters such as the Nankai Trough earthquake.
- To improve the efficiency of infrastructure maintenance, we will create a manual within FY2022 to support the introduction of comprehensive private outsourcing of operation and

maintenance by local governments, and promote the openness of operation and maintenance data by FY2023. In addition, we will act through the Infrastructure Maintenance National Conference to strengthen information sharing on technologies and systems related to infrastructure maintenance by FY2024.

- To promote the introduction of new technologies that can be used for inspections of road embankments and cuts in addition to road bridges and tunnels, we will start preferential use of the technologies listed in new technology catalogs within FY2022, and expand new technology catalogs in FY2023.

(Improve urban competitiveness)

- Based on the "Guidelines for BIM Standard Workflows and their utilization measures in the construction field (2nd edition)" (decision of the BIM Promotion Roundtable on March 30, 2022), we will introduce BIM on a trial basis in architectural design and construction ordered by the public and private sectors, and compile a roadmap within FY2022 to expand the use of BIM data throughout the life-cycle of buildings.
- To promote urban DX such as smart cities, we will promote the further development and utilization of urban spatial data, such as the 3D city models (PLATEAU) that serve as urban digital infrastructure, and the reconstruction of urban infrastructure corresponding to the development of various urban services. We will formulate a medium- to long-term vision and roadmap for the urban DX within FY2022. At the same time, to promote area management activities that utilize digital technology, we will build a structure to strengthen the system necessary for collecting and using data and developing urban services in collaboration with various stakeholders in the region.
- To improve productivity and consumer convenience in the real estate industry and promote real estate DX, we will promote the linking of real estate IDs which will come into use in FY2022, and real estate-related information, and consider how to improve the environment for the utilization in a wide range of fields such as urban development, to reach a conclusion in FY2022 followed by taking necessary measures.
- To promote compact and walkable urban development that supports diverse work styles and lifestyles, within FY2022, efforts will be made to build a public-private partnership system that enables the consolidation of existing public and private stock and know-how, such as by strengthening the governance of community development organizations. In addition, to help strengthen the innovation power of local cities and the international competitiveness of large cities, we will promote urban revitalization through providing support for outstanding private urban development projects that utilize digital technology.
- To encourage co-creation of new regional value by community-based real estate agents and real estate management companies that develop communities with local governments, residents and etc., a new award will be introduced in FY2022.

- To eliminate information asymmetry in the real estate market and reduce information search costs, we will launch a "Land/Real Estate Information Library" that displays easy-to-understand land and real estate-related information on a map in FY2024, with library requirements to be defined in FY2022.
- With the aim of increasing the total value of REITs and other assets to approximately 40 trillion yen by around 2030 to achieve the formation of excellent real estate stock, we will review the guidelines for the utilization of healthcare REITs within FY2022, and diversify asset types such as REITs and promote ESG investment in the real estate investment market by reviewing the guidelines for the utilization of healthcare REITs within FY2022 and revising TCFD guidance for the real estate sector by the end of FY2023.
- To build a housing circulation system in which existing housing is evaluated as an asset and passed on to future generations by improving the quality of housing stock and smoothly distributing high-quality housing, we will consider providing support for the efforts of regional financial institutions in regard to housing development based on regional characteristics from FY2022, as well as promote utilization of vacant houses using property information. Also, we will implement initiatives in support of management optimization, such as promoting certification of condominium management plans, and endeavor to revitalize condominium complexes.
- To bring about regional innovation and improve well-being for the realization of the Vision for a Digital Garden City Nation, we will enhance diversity and inclusion while making use of the unique character of each region around the country, and promote efforts to create attractive and open communities where people can connect with each other through public-private partnerships. Therefore, in regard to making pioneering initiatives, such as creating innovation by gathering diverse creative human resources and knowledge from within and outside the regions through the power of digital and urban development resources, we will conclude agreements with business entities and provide hands-on support, and consider methods for more effective horizontal deployment during FY2022, followed by taking necessary measures.
- To promote dual habitation along with the creation and expansion of related populations and the promotion of local migration to rural areas, in FY2022 we will revise the local government guidelines, which contain a summary of efforts by pioneering local governments, such as disseminating information about local life, creating opportunities for interaction with residents and utilizing vacant houses, based on national fact-finding surveys.
- We will create and release tools to visualize the flow of people within FY2022 so that various entities in the region can actively utilize data on the flow-of-people to solve regional issues and create new services.

- To meet the need for diversifying road spaces, we will promote the system of Improving Pedestrian Convenience Road (Hokomichi) and take necessary measures during FY2023 for the flexible utilization of roads.
- To promote solutions to local issues in remote islands, peninsulas, heavy snowfall areas and specific agricultural and mountain villages, we will expand efforts that utilize advanced technologies related to telemedicine, distance learning, green slow mobility, drone delivery, renewable energy, human and technical support for roof snow removal, wildlife control to a total of more than 130 local governments by FY2025.
- In order for Okinawa, which recently celebrated the 50th anniversary of its reversion from the United States to Japan, to realize a "strong Okinawa economy" and become a driving force in Japan's economic growth, we will make maximum use of the revised Law on Special Measures for the Promotion and Development of Okinawa, and as a national strategy, comprehensively and proactively implement Okinawa promotion measures such as promotion of tourism and various other industries, promotion of northern and remote island areas, measures against child poverty, human resource development, and the use of former military base property sites.

(Regional transportation)

- To realize affluent living for residents in the post-COVID-19 era while promoting the implementation of the latest technologies such as MaaS and automated driving, we will improve the management of transportation operators, promote co-creation between transportation operators in the public and private sectors in collaboration with other fields, and redesign the regional transportation network in a sustainable manner. Accordingly, we will actively involve public entities and transportation operators under appropriate incentive settings and move forward with the study of mechanisms to realize the overall optimization of the regional transportation system and the stabilization of long-term transportation services in certain areas.
- We will demonstrate business models that combine regional transportation with digital, energy, medical care, and long-term care as "Co-creation Model Demonstration Project," and based on the results, address issues related to the creation of the resulting business schemes and financing, while taking necessary measures. Also, we will promote the horizontal development of case examples in FY2022.
- In FY2022, we will begin demonstrating business models for automated driving mobile services provided by local governments as part of community development. In addition, we will provide support during FY2022 for the introduction of traffic congestion information provision systems and cashless payment mechanisms to transportation companies.
- To ensure that bus and taxi operators can sustain themselves as public transportation options, we will consider measures within FY2022 to restructure these businesses according to their

scale and characteristics, and encourage horizontal deployment of case examples of business improvement and business revitalization achieved by these operators.

- We will reaffirm the need for local railways in each region while railway operators and areas along railway lines cooperate and collaborate with each other, through a new national-centered consultation framework. DX including maintenance functions will be promoted utilizing new technologies and coordination between transportation modes. Within FY2022, specific measures will be considered to rebuild local railways in each region into a sustainable and convenient regional transportation network while reaching an understanding with local regions, and an environment developed to support that rebuilding.

(Measures for owner-unknown land)

- Based on the Basic Policy on the Promotion of Measures for Owner-Unknown Land (Ministerial Group decision to promote measures for owner-unknown land on May 27, 2022), to smoothly implement and promote the utilization of the system for optimizing the promotion and management of the use of owner-unknown land and strengthen the promotion system and other laws, we will provide steady support to municipalities and promotion corporations designated by the mayors of municipalities. In addition, regarding cadastral surveys, measures to promote smoother and faster surveys and take necessary measures will be considered. Furthermore, the development of registry office designated maps will be implemented and measures such as a mandatory application for inheritance registration and the System of Vesting Inherited Land in the National Treasury will be widely disseminated and publicized, and an implementation system established.

2. From a unipolarly managed virtual space to a multipolar virtual space

(1) Establishing a new framework of trust for the Internet

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

(2) Improvements to promote Web 3.0, such as using NFTs (non-fungible tokens) based on blockchain technology

Based on the Action Plan for a New Form of Capitalism, specific measures will be taken.

(3) Expanded use of content, including the metaverse

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- We will consider specific measures for building a cross-sectoral copyrights information database to facilitate the search for rights holders, and reach a conclusion within FY2022. Also, we will steadily implement measures against pirated content based on the "Comprehensive Countermeasures and Flow Chart to Stop the Spread of Pirated Content on the Internet" (updated April 2021).

(4) Promoting FinTech

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- Regarding the payment of wages to the accounts of fund transfer business operators, we will establish schemes such as a guarantee system in which a sufficient amount is provided at an early stage in the event of bankruptcy of the fund transfer business operator, so that workers can be protected by ensuring wage payments. Such schemes will be institutionalized promptly in FY2022 in consultation with labor management groups.

3. Promoting overseas business investments by Japanese companies

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Promoting overseas development and business development of Japanese companies)

- To promote business that leads to solving social challenges in Africa, while expanding trade and investment in Africa, we will take an opportunity of the Eighth Tokyo International Conference on African Development (TICAD 8) in August 2022, etc. to provide support for forging partnership between Japanese and African companies and support for the advancement of Japanese companies including startups into Africa. At the same time, initiatives will be taken to improve the business environment in Africa and develop industrial human resources through the utilization of ODA and other assistance.
- While steadily implementing the “National Action Plan on Business and Human Rights,” such as raising awareness of human rights due diligence, the Guidelines on Respect for Human Rights in Responsible Supply Chains will be formulated and disseminated by summer 2022 under international cooperation to increase the predictability of companies. We will provide support for the formulation of national action plans of various governments through our contributions to the United Nations Development Program (UNDP) and the Organization for Economic Co-operation and Development (OECD).
- To promote "Science and Technology Innovation for SDGs (STI for SDGs)," we will support, through contributions to the UNDP, efforts by Japanese companies to analyze social issues in developing countries and commercialize solutions to these problems together with local stakeholders.
- In FY2022, we will start supporting the demonstration of data utilization by companies toward the development of data sharing and collaboration infrastructure that will contribute to the advancement of the supply chains through the Asia region. In addition, we will enhance cooperation through the “Supply Chain Resilience Initiative (SCRI)” to strengthen regional supply chain between Japan, Australia, and India.

- To support the global development of Japanese companies, we will develop a foreign policy implementation structure, such as embassies, consulates and permanent missions overseas to ensure the safety of businesspeople and strengthen support for economic activities.
- We will strengthen support for exhibiting at the "Japan Mall" on JETRO's overseas EC site to help capture demand for Japanese mid-sized companies and SMEs in the overseas BtoC and BtoB markets. Also, matching opportunities will be provided through "Japan Street" and support provided for trade fair exhibitions and coordination with test marketing. At the same time, we will increase differentiation support of cross-border EC businesses.
- To strengthen business support systems in overseas locations, additional local experts will be assigned under the Consortium for New Export Nations, and JETRO will increase and redeploy personnel, that collect and provide information overseas. In addition, we will strengthen support for Japanese companies in Africa, India, Vietnam, Mongolia, the EU, and China in FY2022 utilizing specialists in local infrastructure, legal affairs, and export promotion of agricultural, forestry and fishery products at embassies, consulates, and permanent missions overseas.
- To develop the export support business of private companies, we will provide assistance for the demonstration of export support businesses, such as sales of regional products using digital technology and trade procedures support.
- To promote international arbitration, we will develop human resources, increase awareness, and coordinate the translation of Japanese laws into foreign languages, and develop legal systems that meet the latest international standards. A bill will be submitted within FY2022 to the Diet, which includes interim measures of protection of arbitral tribunals, procedures of arbitration related cases and granting enforcement to settle agreements reached in mediation outside courts.

(Cool Japan)

- To secure the survival and further the development of Cool Japan (CJ)-related fields such as food and drink, tourism, culture/arts, events/entertainment and others, which were severely damaged by the COVID-19 pandemic, we will provide support for such efforts as the optimal combination of real and online activities.
- Based on the "Intellectual Property Strategic Program 2022" (Intellectual Property Strategy Headquarters decision of June 3, 2022), we will study more closely the attractiveness of different fields such as tourism, food, liquor made in Japan, culture, art, national parks and regions and strengthen cooperation between fields.
- To maintain and cultivate Japanese fans around the world, Japan Cultural Expo and other events will be held overseas to serve as venues for showcasing Japan's appeal.
- To improve the business trade and workplace environment of the content industry and industries related to culture and the arts, we will create, disseminate, and raise awareness

of contract templates as well as support the development and demonstration of systems for the efficiency of production and distribution processes. Also, we will support fundraising and human resource development for overseas expansion, and create guidelines for businesses operators expanding overseas.

- With the aim of the overseas expansion of broadcasting content that conveys the appeal of Japan, we will support the production of content that can be video streamed and the provision of programs for overseas broadcasting stations and video streaming platforms in Japan and overseas.
- To attract foreign film shooting in Japan, we will implement various measures in FY2022 subject to the inbound border control measures. Also, we will assess the socio-economic impact from pilot projects of the foreign film shooting in Japan, such as enhancement of the visual entertainment industry through human resource development and an increase in inbound tourism and regional revitalization, and will take necessary measures based on the assessment results.
- To expand the base of culture and art and create an environment in which funds can be returned to creators, we will create systems to encourage companies to invest in art through guidelines and awards for local governments by the end of FY2023.
- People who have specialized knowledge in overseas marketing, digital techniques, technology, etc. will be appointed as a CJ Producer (tentative title) and will hold consultations online and other connecting events to support the matching in CJ-related fields.

(Infrastructure system overseas promotion)

- The following measures will be taken based on the "Infrastructure System Overseas Promotion Strategy 2025 (supplementary version in 2022)".
- We will provide total support from the feasibility study (FS)/demonstration stage to commercialization for the formulation of projects for overseas development of ICT solutions related to smart cities, MaaS and core communication infrastructures including 5G. We will support the participation of Japanese companies in the laying and maintenance of optical submarine cables that improve connections with geopolitically important areas by leveraging partnerships with relevant countries.
- In the field of decarbonization, we will promote the dissemination of decarbonization technologies through implementation and expansion of the JCM, in accordance with the implementation guidelines of Article 6 of the Paris Agreement decided at COP26. Also, the government will support the formation of overseas infrastructure projects to help acquire overseas markets through project feasibility studies and international joint R&D and demonstration projects. In addition, including through the Asia Energy Transition Initiative (AETI), the government will support strengthening the international competitiveness of

- Japanese companies with decarbonization technologies and developing their sales channels.
- Based on the "Kumamoto Initiative for Water" at the 4th Asia-Pacific Water Summit in April 2022, we will support the introduction of infrastructure systems that utilize hybrid technology with dams, sewerage systems, irrigation and drainage facilities and other facilities to reduce the damage caused by flooding for river basin sustainability and resilience against water-related disaster risks for climate change adaptation and also to reduce greenhouse gas emissions for climate change mitigation.
 - To realize "Free and Open Indo-Pacific (FOIP)," we will seek to support the maintenance and operation of port, airport, railway, ship and other facilities, and the development of access roads to ports, to contribute to improving connectivity within overseas regions. In addition, the public and private sectors will work together on the international standardization based on Japanese standards, such as for cold chains, and disseminate them overseas. Moreover, we will disseminate and raise awareness of the importance of quality infrastructure development overseas through awarding overseas construction projects.
 - To support the formulation of operation and maintenance (O&M) projects for infrastructure such as railways, airports, ports and roads, an area of Japanese strength, as well as overseas investment and financing for O&M projects, we will strategically utilize ODA and public financing.
 - To promote overseas expansion of companies in advanced sectors and sectors where Japan has strengths, decarbonization and resilience of supply chains under uncertain international economic conditions, the Japan Bank for International Cooperation will supply risk money more broadly by establishing a new loan facility and enhancing its functions, such as expanding eligible sectors for JBIC operation in developed countries.
 - Nippon Export and Investment Insurance aims to form a 1 trillion yen project by FY2025 through the LEAD Initiative, to help realize a carbon-free society, promote post-COVID-19 policies and achieve SDGs.

IV. Initiatives in Individual Fields

1. Responding to changes in the international environment

(1) Strengthening economic security

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- In order for researchers, universities and research institutes to independently ensure the soundness and integrity of research (research integrity) and to conduct necessary international joint research, based on the government policy decided in 2021, we will conduct a survey on the status of efforts such as strengthening training at universities and research institutes, the status of regulations and organizational development regarding

conflicts of interest and responsibilities, and the status of efforts at research funding agencies. The result will be published in FY2022.

- To support the full-scale launch of think tanks in FY2023, we will carry out a wide range of survey analysis to continuously collect and organize basic information and trends in multiple technology fields and in-depth survey analysis to extract information about important technologies that should be nurtured and protected from the perspective of safety and security.

(2) Promoting external economic partnerships

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- Based on the outcomes of the 12th WTO Ministerial Conference (MC12), Japan will work with like-minded Members to create rules for electronic commerce, restrain trade restrictions on medical supplies and reform the WTO. In the WTO plurilateral negotiations on e-commerce, Japan as the co-convenor, will seek convergence on the majority of issues by the end of 2022.
- Japan will ensure the full implementation of the Regional Comprehensive Economic Partnership (RCEP) Agreement, and lead discussions on the UK's accession process to the CPTPP while maintaining its high standard. Japan will actively promote the conclusion of economic partnership agreements. In addition, Japan will work towards the early conclusion of the investment-related agreements that are currently under negotiation, and the commencement of new negotiations of such agreements.
- Japan aims to increase the number of Japanese junior and senior level staff and secure Japanese executive level staff in order to enhance Japan's influence on the rulemaking of the UN-related organizations.
- Looking ahead to Japan's presidency of the G7 in 2023, in order to ensure the free and safe flow of data with trust, Japan will collaborate with countries that share the basic views and principles regarding data. At the same time, Japan will actively work towards the operation of "Data Free Flow with Trust (DFFT)", as a proponent of the concept, through such efforts as the formulation and discussions of international rules relating to flow of data and the establishment of frameworks to ensure its interoperability.
- Regarding the openness of 5G, along with strengthening international cooperation through the Japan-Australia-India-U.S.(Quad) Leaders' Meeting in FY 2022, we will actively work on third-country cooperation based on the Japan-US Global Digital Connectivity Partnership (GDCCP) by conducting 5G demonstrations in Latin America.
- We will lead an international discussion on the importance of multi-stakeholder Internet governance at the Internet Governance Forum (IGF) in Japan in 2023.

2. Space

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- We will conduct research studies to shorten the satellite data acquisition time so as to contribute to a quick response to various events by utilizing domestic commercial small satellite constellations.
- We will conduct the necessary development to achieve the practical application and advancement of disaster situational analysis and information provision systems utilizing satellite data.
- We will consider extending operations of the International Space Station (ISS), which is expected to become a demonstration platform for the Artemis program, from the perspective of expanding the participation of private businesses.
- We will promote research and development for future space transportation systems through public-private co-creation in order to dramatically lower the cost of space transportation systems.
- We will aim to launch the Global Observing SATellite for Greenhouse gases and Water cycle (GOSAT-GW) in FY2023, and design a future observation mission concept. In addition, we will continue to conduct global observations using the GOSAT series in order to promote overseas verification that will lead to international standardization of emissions estimation technology.
- We will support research and development of space solar power generation by microwave method and laser method.
- Regarding air-launched satellites and manned sub-orbital flights,¹ we will promote the development of the institutional environment necessary for demonstrations and projects. Also, we will aim to become a core center for the space business in Asia by developing spaceports and other activities, while considering cooperation with the United States and other countries.
- We will develop Information-gathering satellites to increase the frequency of imaging in an effort to establish a ten-satellite constellation.
- To realize a so-called G-spatial society that makes advanced use of geospatial information, we will promote the creation and provision of various services that utilize geospatial information, in collaboration with industry, academia, the government and the private sector, based on the "Basic Plan for the Advancement of Utilizing Geospatial Information"

¹ The Space Activities Act only regulates the launch of artificial satellites to an altitude of 100 km or more; sub-orbital flights (flights of about 100 km) are not covered by the law. On the other hand, the Civil Aeronautics Act does not apply to aircraft that fly at an altitude of about 100 km, similar to a sub-orbital flight, so this law is not applicable as well. Thus, a new legal system for sub-orbital flight is required.

(Cabinet decision of March 18, 2022)

- For space debris countermeasures, we will proceed with research and development in collaboration with private companies in an effort to begin demonstrations of debris removal technology by FY2025. In addition, based on the "Mid- to Long-term Policy on Efforts for Rule-Making on the Use of Earth Orbit" (1st Minister's Meeting of Inter-Agency Task Force on Space Traffic Management decision of March 28, 2022), we will work on creating international rules by developing domestic rules and providing case examples.
- To promote stable use of space by the public and private sectors, a SSA satellite will be launched by FY2026 and a Space Situational Awareness (SSA) system will be established.

3. Oceans

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- To achieve the advancement and efficiency of ocean observation in Japan's Exclusive Economic Zone (EEZ), and the development of domestic marine resources such as methane hydrate, sea-floor polymetallic sulphides in the seas around Okinawa and rare earth yttrium rich mud, in FY2022 we will develop technology for an autonomous underwater vehicle (AUV) that can be used in deep sea areas. In addition, an unmanned ocean observation system will be developed by FY2031. Furthermore, we will formulate strategies for the development of domestic marine resources and social implementation for AUVs and other technology.
- In order to strengthen the international competitiveness of the shipping and shipbuilding industries, we will consider measures within FY2022 to further promote the introduction of vessels that have a high environmental performance that meet the need for decarbonization, and take necessary measures. In addition, to promote the DX of the shipbuilding industry and the resilience of the supply chain, in FY2022 we will formulate a roadmap for data linkages related to ships in the areas of ship development, design, construction, and maintenance.
- To maintain Japan's international maritime transport with more stability, we will consider specific measures to secure Japanese flagged ships and Japanese seafarers during FY2022 and take necessary measures.
- To enhance the business base of the coastal shipping industry, we will promote comprehensive efforts based on the Maritime Industry Strengthening Law, including efforts to reform the workstyle of seafarers. Also, we will collect and disseminate case examples related to improving the trade environment between shippers and coastal shipping companies by the fall of 2023.
- To achieve more sophisticated understanding of situations associated with oceans by linking

and utilizing marine data, from FY2022 we will start providing oceanographic and maritime information acquired from satellites and other sources in a format that can be used in commercial-use systems and applications through the MDA Situational Indication Linkages system (“MSIL”).

- We will make steady progress with the construction of an Arctic Research Vessel, which will be the basis for international research activities in the Arctic region, with the aim of starting service in FY2026. At the same time, we will proceed with concrete discussions for international cooperative observations that will follow once the service starts, as well as increase the number of young researchers dispatched overseas and start accepting scientists from overseas in order to develop research personnel.
- To provide solutions in the face of challenges in the use of sea areas in coastal and remote island regions, we will conduct a pilot project using next-generation mobility technologies in the sea, namely Autonomous Surface Vehicles (ASVs), AUVs, Remotely Operated Vehicles (ROVs), as well as technical support in the development by startups and utilization support in the smart fisheries. Furthermore, we will establish the website intended to provide a platform that enables connecting manufacturers/distributors with fishery businesses, local governments and other entities by the end of FY2022.

4. Developing financial markets

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Expanding Japan’s role as an international financial center)

- To enhance the international presence of Japan's financial administration and financial markets, Japan will host the 2023 Annual General Meeting of the International Association of Insurance Supervisors (IAIS), and will actively lead international discussions on regulatory and supervisory issues, including those related to climate related risk, natural disaster risk, and technological innovation.
- Regarding the Proprietary Trading System (PTS), we will consider revising the upper limit on the trading volume of listed stocks while securing investor protection, and reach a conclusion within FY2022.

(Promote investment instead of savings through efforts by financial institutions)

- In order to be able to receive appropriate advice and solicitation from financial instruments business operators, etc. when building household assets, we will consider establishing a system for advice from financial instruments business operators, etc. and solicitation and explanation services, and enhancing the information provided to customers using digital tools, and will reach a conclusion by the end of FY2022.

- To encourage asset management companies, etc. to supply financial products that benefit clients, we will promote product governance (for example, structuring financial products and setting fees in line with client needs, providing information that contributes to appropriate product selection, and evaluating and verifying such initiatives), strengthen the governance of asset management companies, etc. to ensure product governance and ensure the appropriateness of fund management, and consider developing a system for the advancement of the asset management industry, etc. and draw conclusions within FY2022.
- Based on the lowering of the age of adulthood and the implementation of the new high school curriculum guidelines, we will implement model lessons using financial education teaching materials in high school home economics. Also, we will create and provide teaching materials that contribute to improving financial literacy, including asset building, and disseminate information by holding seminars.

(Promote sustainable finance)

- In order to improve the reliability of the ESG market, we will further request asset management companies to build and clarify appropriate operational processes, enhance disclosure and provide customers with detailed explanations, and take necessary measures regarding supervisory guidelines by the end of FY2022.
- We will consider including a column for sustainability information such as responses to climate change and information on the status of the activities of the Board of Directors and other corporate bodies in the annual securities report, and reach some conclusions.
- In order for strengths of Japanese companies to be reflected in sustainability reporting standards being developed at the International Financial Reporting Standards (IFRS) Foundation, the Sustainability Standards Board of Japan (SSBJ) will play a central role in gathering domestic opinions, with the public and private sectors working together to disseminate opinions to the IFRS Foundation.

(Corporate governance)

- We will abolish the quarterly reports that come under the Financial Instruments and Exchange Act and "integrate" them into stock exchange quarterly financial statements. Also, the position of quarterly financial statements to be "integrated" (ways of mandatory reports, disclosure contents, audits/reviews, etc.) will be considered in FY2022 together with appropriate timely disclosure other than quarterly.
- To strengthen the functions of both the executive side and the monitoring side so as to demonstrate entrepreneurship, the "Practical Guidelines for Corporate Governance Systems" (CGS Guidelines) will be revised and disseminated by the summer of 2022 in order to demonstrate best practices regarding the framework for formulating management strategies, the delegation of business execution authority and the methods of highly independent monitoring.

- We will prepare and publish a guide in FY2022 that summarizes the idea about practical issues regarding the granting of company stock remuneration to employees, such as executive candidates, for the purpose of improving company engagement with employees.
- We will improve the quality of accounting standards by making Japanese standards consistent with international standards, and promote the expansion of companies that voluntarily apply IFRS by strengthening efforts to reflect Japan's viewpoints in IFRS, among other actions.
- To ensure audit the quality at small and medium-sized audit firms that conduct audits of listed companies, we will reach a conclusion on the direction of the revisions to the "Principles for Effective Management of Audit Firms" (The Audit Firm Governance Code) during FY2022.
- As the vice chair country of the International Forum of Independent Audit Regulators (IFIAR), which has its secretariat in Tokyo, we will actively lead discussions on improving global audit quality in light of the growing interest in non-financial information and progress in technological innovation.
- In order to support efforts for projects that contribute to solving social issues, we will utilize DBJ's special investment operations and strengthen provision of funds using the social impact bond method until FY2025. In addition, we will promote the improvement of corporate governance of regional companies through dialogue with DBJ regional financial institutions and joint investment entities. Furthermore, we will promote the supply of private risk money to startups by stimulating investment by DBJ in private funds including VCs.

(Promote financial DX)

- We will achieve expansion of the qualifications for participation in the Zengin System to non-bank payment service providers by the end of FY2022, while taking necessary measures from the viewpoint of ensuring payment safety. In addition, we will proceed with the examination of the basic policy toward the renewal of the Zengin system in 2027 with participation from a wide range of stakeholders.
- We will support efforts by regional financial institutions to promote broad-based and integrated DX of regional SMEs, such as further bank support for digitization at SMEs and active participation of regional financial institutions in DX promotion efforts in collaboration with public and private sectors in each region.
- To encourage financial institutions' provision of financial support for companies through utilizing data, we will conduct a proof of concept study in FY2022 and identify issues to efficiently collect granular data from financial institutions and analyze them in combination with external data.
- To promote financial innovation while protecting users and taking measures against money

laundering, financing of terrorism and proliferation financing, we will conduct international collaboration and joint research on blockchain technology in addition to developing promptly stablecoin regulation.

- To improve Japan's anti-money laundering and counter-terrorist financing measures, etc.(AML/CFT), to the level required by the Financial Action Task Force (FATF), which is an international standard that we have committed to, we will strengthen the inspection and supervision of financial institutions, etc., in cooperation with related ministries and agencies and thoroughly disseminate information of AML/CFT policies to the public through government public relations. At the same time, we will introduce a regulatory framework for the entities that provide transaction filtering and transaction monitoring for banks' fund transfer transactions on a large scale, aiming to ensure the quality of their business operations.

5. Global Health

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- We will promote Universal Health Coverage (UHC) and strengthen prevention, preparedness and response to public health emergencies based on the "Global Health Strategy" (Approved by Headquarters for Healthcare Policy on May 24, 2022). For that purpose, we will support bilaterally as well as contribute to the Access to COVID-19 Tools Accelerator (ACTA), which is an international framework for measures against COVID-19 that includes COVAX facility, and make financial contributions to international organizations and public-private partnership funds including Global Fund, CEPI, Gavi and Global Health Innovative Technology Fund (GHIT Fund).
- We will take seamless measures against rubella in coordination with measures related to COVID-19, and support the international development of medical care by Medical Excellence Japan (MEJ), JETRO, etc. as its center. In addition, during FY2022, in order to promote medical inbound field, we will simplify the registration application procedures for the registered guarantors of visa for medical stay purpose, and strengthen the dissemination of information by Japan International Hospitals (JIH) to overseas medical travel patients. Furthermore, to ensure the quality of service provided by coordinators, we will support the formulation of voluntary guidelines.
- We will promote international development of products and services related to medical care and healthcare under the "Asia Health and Well-Being Initiative" and "Africa Health and Wellbeing Initiative." In addition, based on the "'Grand Design for Asian Pharmaceutical and Medical Device Regulatory Harmonization' Implementation Strategy" (Headquarters for Healthcare Policy decision of July 14, 2020), we will develop a multi-regional clinical

trial system in Japan and overseas to harmonize regulations on pharmaceuticals and medical devices and enhance the clinical development system in Asia.

6. Promotion of culture, the arts and sports

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

(Culture and the arts)

- We will promote the "'Bloom in all its glory! Japanese Culture' Strategy WABI -Worldwide Art Blossom Initiative-." Also, the 2nd Basic Plan on the Promotion of Culture and the Arts will be formulated by the end of FY2022, including taking measures to promote a virtuous cycle of culture and economy while respecting the unique significance and value of culture and the arts.
- To improve national brands, we will globally disseminate and develop Japan's soft power, from discovering top-level artists to supporting local promotions, while strengthening cooperation with related ministries and agencies.
- To develop sustainable management in art and cultural fields, we will support restructuring organizations with hands-on support and generating multiple sources of income such as through donations, sponsorships and partnerships.
- To promote the continuous creation, development and succession of culture and the arts, we will support the performances will be held by cultural and arts-related organizations, that were greatly affected by COVID-19 and the innovation of business models and the improvement of profit structures by diversifying profit channels and enriching customer experiences.
- We will make efforts to improve the business environment for persons related to culture and the arts, including freelance artists, by creating contract templates for the purpose of establishing appropriate contractual relationships in the field of culture and the arts, and by raising awareness about them.
- For the Expo 2025 Osaka, Kansai, Japan, we will develop "Japan Cultural Expo 2.0," a large-scale project to convey the beauty and heart of Japan nationwide. Also, we will improve the international understanding of Japanese culture through world heritage sites and hold international cultural exchange festivals with a focus on high creativity that utilize rich digital content. In addition, in order to promote international cultural exchanges among artists or cultural facilities, we will build and strengthen partnerships and dispatch artists overseas.
- To create global art hubs and to vitalize the art market in Japan, we will support organizing world-class art fairs with a contact point in the Agency for Cultural Affairs, improving environment for global art collectors, developing reliable public art appraisals and

digitizing art collection management systems.

- We will globally disseminate art at the National Museum of Art and develop exhibition methods utilizing digital technology at the National Museum of Nature and Science and the Tokyo National Museum. We will steadily promote initiatives in support of an understanding of Ainu culture, such as educational dissemination projects that include distance learning and teacher training through the National Ainu Museum, and enhancement of digital content exhibitions and information distribution. In addition, we will promote the redevelopment of the National Theater, which is at the heart of transmitting and creating Japanese traditional performing arts.
- To promote the creation of manga, animation, games, music, etc. in Japan and transmit them to the world, we will develop an information platform for holding global festivals, supporting the creative activities of young creators, archiving works of Media Arts (Media Geijutsu in Japanese) and strategically disseminating information on these art forms overseas. Also, we will conduct necessary studies based on concepts at the Japan Media Arts National Center for manga, animation, games, etc. In addition, we will strengthen support for film production and training young filmmakers, and dispatch young directors to overseas film festivals in order to disseminate Japanese films abroad.
- Based on the revised Museum Act, we will support efforts by museums, art galleries, etc. to improve the vitality of local regions through collaboration and cooperation with various local actors, including other museums. Also, we will support digital archiving, human resource development and training.
- To continue the nationwide development of tourism hubs and regions centered on cultural resources, we will promote the development of cultural tourism hubs and regions based on the Act on Promotion of Cultural Tourism, improve the attractiveness of cultural resources such as the Japan Heritage program, and strengthen dissemination, as well as support the certification and preparation of cultural property preservation and utilization regional plans. In addition, we will support the development of a reception environment that responds to domestic and overseas COVID-19 aware tourism demand for cultural facilities, such as museums and art galleries. Furthermore, to increase the added value of cultural resources, we will support efforts to enhance cultural tourism content that generates appropriate income with the idea of returning proceeds to local cultural facilities and cultural resources. At the same time, we will investigate and utilize underwater ruins, which are sites of Japan's underwater historical heritage, and exhibit the collections of the Museum of the Imperial Collections, Sannomaru Shozokan in local regions.
- We will steadily conduct surveys and registration of intangible cultural properties, and support traditional events and other activities that promote the inheritance of local cultural heritage and lifestyle culture. In addition, to build a sustainable preservation and inheritance

system for cultural resources, we will promote the "Takumi Project for Cultural Properties," as well as consider measures to secure a stable supply of raw materials and promote diverse financing, which are indispensable for the preservation of cultural properties, and take necessary measures by the end of 2022. Furthermore, support will be provided for initiatives aimed at preserving and utilizing archaeological sites that have high historical and academic value, such as the remains of the Takanawa Embankment historical site, and are expected to be used as historical assets of the country or region. Regarding local food culture, we will support regions that are engaged in making surveys to register intangible cultural properties.

- To secure opportunities for children to appreciate and experience cultural arts in various places in view of the situation where children have lost the opportunity to appreciate cultural arts due to the impact of COVID-19, we will support efforts to provide children with more effective cultural and artistic experiences utilizing cultural facilities such as museums and music halls while collaborating with educators, artists, and schools. In addition, to promote arts education in school education, we will conduct training that includes appreciating actual performances to improve the qualities and abilities of teachers in charge of art subjects. Furthermore, the second Act on the Promotion of cultural and artistic activities for people with disabilities will be formulated in FY2022 to expand opportunities and improve the environment for appreciation, creation, and presentation in cultural and artistic activities for persons with disabilities.

(Sports)

- Based on the "Third Sport Basic Plan" (Minister of Education, Culture, Sports, Science and Technology decision of March 25, 2022), we will promote the growth industry of sports, promote DX and regional revitalization centered on sports that incorporate "Japanese sports hospitality".²
- The Sports Future Industry Conference (Second Term) will be resumed in FY2022, and concrete consideration will be conducted for a new growth trajectory and new fund-circulation for the sports industry in the post-COVID-19 centered on sports DX and the creation of a regional sports environment.
- We will provide advice to the governing bodies and central sports organizations based on the results of the "Governance Code for National Sport Federation Members" compliance assessment conducted by the governing bodies (Japan Sports Association, Japanese Olympic Committee and Japan Para Sports Association) of central sports organization and utilize the results of the compliance assessment for competitiveness improvement projects. In addition, we will verify the current governance code of sports organizations and the

² Attitudes and ways of thinking that maximize the value of sports, as sports are not only enjoyed but also utilized for revitalizing regions and economies through having diverse meaning (pleasure, excitement, fandom, etc.).

methods for strengthening governance, such as compliance assessments based on governance codes, and compile the results by the end of FY2022.

- To strengthen the management ability of central sports organizations, we will focus on creating diverse value in competition by utilizing advanced technology, and on supporting central sports organizations that manage their organizations utilizing human resources with management experience and improve work efficiency through collaboration between Olympic and Paralympic sports organizations.
- To further promote the construction of the "Sports Open Innovation Platform (SOIP)" aimed at creating new businesses and solving social issues through the integration of the field of sports with other industries, we will hold conferences on the latest trends such as commercialization support, awards, and domestic and overseas sports businesses. In addition, from FY2022, we will consider expanding awards themes and promote the participation of various organizations, such as university institutions and local governments, in SOIP to expand its scale. Furthermore, we will follow up on thus far existing cases of commercialization support and awards, disseminate and publicize them, and support overseas development.
- In order to raise the interest of domestic related companies and organizations in promoting the international development of the overall sports industry, including services, products and technology, we establish a website to disseminate case examples of Japanese sports industries expanding to overseas market and other information, and circulate it to related organizations. In addition, by introducing leading cases of Japanese companies and organizations at sports ministers' meetings and international sports exhibitions, we will strengthen dissemination to the world, and we will support the creation of domestic and international network for the purpose of exchanging information with companies and organizations wishing to expand overseas and search for partners by taking measures such as supporting dispatches to international sports conferences.
- To ensure that large-scale sporting events such as professional sports matches are held safely and securely, we will support efforts to utilize knowledge gained from the use of various techniques during game management for further measures against infectious diseases.
- We will endeavor to promote DX in the sports world by utilizing various data that makes full use of digital technology. Specifically, we will support new initiatives that will lead to profits even with the existence of COVID-19, such as by creating and distributing sports content using the latest digital technology. In addition, we will investigate and publish advanced cases studies of the use of digital technology in Japan and overseas, and consider and compile within FY2022, the handling of sports data, in order to create a system for securing new revenue sources in the sports world.
- To promote the implementation of national sports by the public and private sectors, we will

expand the number of members in the "Sport in Life Project" consortium and promote cooperation between groups by disseminating information, commending good practices and providing opportunities to interact. And to further enhance the "Sport in Life" movement, we will develop public participation campaigns and other activities.

- During FY2022, while collecting examples of management methods for games and events that use overseas stadiums and arenas, we will consider more specific measures aimed at the profitability of stadiums and arenas and disseminate information on these measures to related organizations. In addition, to realize stadiums and arenas that serve as bases for regional economic revitalization where different generations gather, we will further promote the horizontal development of cases by holding seminars to introduce bases selected as good cases to local governments and companies.
- To promote the construction of a "regional SOIP" that encourages urban development and the creation of high value-added services in collaboration with local professional sports teams, companies and universities, we will implement new acceleration programs in about three regions in FY2022, and support cooperation with other regions.
- To reinforce and enhance the local sports environment, in FY2022 we will support the creation of a model for effective use of school gymnasium facilities by utilizing digital technology. Also, we will start the operation of a comprehensive community sports club registration and certification system that requires substantive activities, substantive management and governance, and aim to improve the quality of comprehensive community sports clubs through this system, and we will promote efforts to resolve regional issues in collaboration with local governments.
- We will collect and analyze examples of regional development utilizing university sports and demonstrate attractive models in FY2022.
- To improve the quality of the "Regional Sports Commission," which is one of the main promoters of urban development through sports, we will support the development of basic human resources who will be responsible for operations in FY2022. In addition, based on the goal of revitalizing local communities through sports, in FY2022 we will build a collaborative system among local stakeholders in three regions, discover leaders who can meet the needs of diverse residents and create a sports environment that utilizes existing public facilities.
- To build by the end of FY2025 an environment where a wide variety of sports can be safely and securely organized in communities according to the needs of children, we will make efforts to improve the development of groups that will serve as the receiving organization for regional transitions in athletic club activities and secure leaders.
- We will disseminate information about the formation of exercise habits from early childhood and raise awareness. Also, in view of the importance of exercise and sports habits for

persons with disabilities, the elderly, women, and others, we will support the efforts of these groups of people and promote universal design for sports facilities.

- To promote interaction inside and outside the region through sports tourism and other activities, in FY2022 we will support the collection of marketing data that will contribute to content development and promote expansion of private companies, in order to develop high value-added content for sports tourism that utilizes outdoor sports that make use of the natural resources of each region, urban sports that became sports events at the Tokyo Olympic and Paralympic Games, and martial arts and other Japanese sports that meet the needs of inbound tourists.
- Related ministries and agencies will host a meeting around the summer of 2022 to comprehensively and effectively implement measures related to sports-based urban development.

7. Creation of new industries in Fukushima and other north-eastern regions

Based on the Action Plan for a New Form of Capitalism, the following specific measures will be taken in addition to the measures described in the plan.

- To make the Fukushima Robot Test Field a core base for developing and demonstrating next-generation mobility and operating regulatory framework, we will secure specialized human resources to certify drones in FY2023. In addition, we will improve the environment for the development of performance evaluation standards for eVOTLs by FY2024. Furthermore, we will support practical development and social implementation in the Fukushima Hamadori area.

8. Transition to a circular economy and coexistence with nature

- JOGMEC will invest in supporting business such as exploration, mining and smelting of rare earths and other metal resources.
- In FY2022, we will accelerate the development of manufacturing technology for automobile-use wrought materials using scrap and metal refining technology from seawater.
- We will perform research and development and verification of manufacturing cost reductions and application development of cellulose nanofiber, a new material made from wood, and disseminate the results.
- By the end of FY2022, we will formulate guidelines for local governments that contain standards for using Heat Stroke Alert, and take measures to prevent heat stroke, such as disseminating results of the demonstration of a flat-rate air conditioner introduction model.
- Based on the results of the Asia-Pacific Water Summit held in April 2022, we will develop an information database for groundwater in collaboration with the public and private sectors and build a platform to support the formulation of regulations on the proper conservation

and use of groundwater within FY2022 .

- Towards the realization of the Osaka Blue Ocean Vision, we will actively participate in discussions on the development of an international legally binding instrument on plastic pollution, including in the marine environment, starting in FY2022 and accumulating scientific knowledge necessary for the instrument. Also, we will promote measures against marine plastic pollution, such as supporting the training of human resources in developing countries based on the MARINE Initiative, and evaluating the impact on living organisms.
- To realize resource circulation throughout the life cycle of materials and products, such as rare metals, toward the transition to a circular economy that is consistent with carbon neutrality, we will formulate a Circular Economy Roadmap and a strategy that contributes to economic growth based on the Circular Economy Vision 2020 in FY2022.
- We will deliberate the waste management system that utilizes waste as a local resource and decarbonization measures for waste management systems, and reach a conclusion soon.
- To prevent the ignition of lithium-ion batteries at recycling sites, we will support sorting and dismantling to ensure safe disposal, support research of recycling, establish a system to encourage consumers to separate thoroughly according to the rules and take safety measures for lithium-ion batteries.
- To create zero food waste area, we will demonstrate food loss and waste reduction and cyclical food resources recycling, and utilize the results to develop zero food waste areas in about 10 locations in FY2023.
- We will revise the National Biodiversity Strategy during FY2022, taking into account the Post- 2020 Global Biodiversity Framework.
- We will select and announce candidate sites for expanding the area of national and quasi-national parks, including doubling the area of marine park areas, in order to conserve 30% of land and sea by 2030. Also, we will disseminate a system for certifying company-owned land that contributes to biodiversity conservation through proper management of natural resources, and certify more than 100 areas by the end of FY2023.
- To take a lead role in rule-making in the Taskforce on Nature-related Financial Disclosures (TNFD), we will support the related activities of companies participating in pilot projects.
- To create a sustainable economy through commercializing efforts to conserve the natural environment, we will formulate guidelines for a Nature Positive Management Support for businesses that comply with SBTs for Nature and overseas due diligence regulations by the end of FY2022.
- In order to institutionalize a system of blue carbon offset credits, in FY2022 we will start developing a system to ascertain and aggregate the amount of CO₂ absorbed by blue carbon in the coastal areas of Japan.
- Based on the “JICA Clean City Initiative,” we will support capacity development of

government agencies in more than 20 developing countries in FY2022 to promote 3Rs and countermeasures for plastic waste and so on through technical and financial cooperation.

- We will support the conversion of ammonia, hydrogen, and CCS to zero-emissions thermal power in Asia through the "Asia Energy Transition Initiative (AETI)," and the results of AETI will be disseminated through an Asian Transition Finance interim report and other materials at the "Asia Green Growth Partnership Ministerial Meeting (AGGPM) Public-Private Forum."
- To accelerate the international development of a climate change adaptation business utilizing the weather observation technology of Japanese companies, we will disseminate best practices at COP27 and create a roadmap for developing overseas sales channels by the end of FY2022.
- We will lead discussions at the International Civil Aviation Organization (ICAO) General Assembly in this fall 2022, toward adoption of the Long-Term Aspirational Goal(LTAG) for CO2 emissions reductions in the international aviation.

9. Promoting foreign direct investments in Japan

- To attract direct investments from overseas, we will strengthen the functions of startup ecosystem cities by implementing acceleration programs in cooperation with the world's top-level accelerators and core universities and strengthening cooperation with overseas cities in FY2022, as well as enhance cooperation with "J-Startup Program to be Deployed to Regional Areas."
- In order to promote collaboration and M&A between Japanese companies and foreign companies including startups, the "Japan Innovation Bridge (J-Bridge)" will be expanded to Africa as the target region in FY2022 and provide hands-on support such as strengthening business matching through webinars, business strategy formulation support and legal consultation by experts.
- To create Japanese regional brands that enable overseas to use, we will support creating concepts and promoting strategies in multiple regions in FY2022. At the same time, we will disseminate examples of efforts to create regional brands through the Block Council for Promotion of Foreign Direct Investment in Japan, among other venues.
- To promote matching between Japanese companies and foreign companies in the interest of bringing foreign capital to local regions, in FY2022 we will hold a Regional Business Conference for foreign direct investment in Japan, mainly focused on the health technology field.
- To promote inward M&As deals in Japan, we will survey cases of Japanese companies that have accepted inward M&As deals in Japan and have improved their business performance, and disseminate the results.

- In accordance with the review situation of border measures, we will disseminate to foreign companies through social media information on Japan's business environment and information support for foreign-affiliated companies.