

Follow-up on the Growth Strategy

June 18, 2021

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【Attachment】 Growth Strategy Follow-up Process Chart

The names of laws used in the Action Plan of the Growth Strategy and the Follow-up on the Growth Strategy will be abbreviated as follows.

Domestic Relations Case Procedure Act	Domestic Relations Case Procedure Act (Act No. 52 of 2011)
Act on Standardization of Local Government Information Systems	Act on Standardization of Local Government Information Systems (Act No. 40 of 2021)
5G Act	Act on Promotion of Developing/Supplying and Introducing Systems Making Use of Specified Advanced Information Communication Technologies (Act No. 37 of 2020)
Digital Platform Transaction Transparency Act	Act on Improvement of Transparency and Fairness in Trading on Specified Digital Platforms (Act No. 38 of 2020)
Amended Personal Information Protection Act	Act on the Protection of Personal Information (Act No. 57 of 2003) amended by the Act on the Development of Related Laws for the Formation of a Digital Society (Act No. 37 of 2021)
Act for the Protection of Consumers who use Digital Platforms	Act for the Protection of Consumers who use Digital Platforms (Act No. 32 of 2021)
Premiums and Representations Act	Act against Unjustifiable Premiums and Misleading Representations (Act No. 134 of 1962)
Industrial Safety and Health Act	Industrial Safety and Health Act (Act No. 57 of 1972)
Amended Agricultural Corporation Investment Facilitation Act	Act on Special Measures to Facilitate Investment in Agricultural, Forestry and Fisheries Corporations, etc. (Act No. 52 of 2002) amended by the Act Partially Amending the Act on Special Measures to Facilitate Investment in Agricultural Corporations (Act No. 26 of 2021)
Road Transport Vehicle Act	Road Transport Vehicle Act (Act No. 185 of 1951)
High Pressure Gas Safety Act	High Pressure Gas Safety Act (Act No. 204 of 1951)
Energy Conservation Act	Act on the Rational Use of Energy (Act No. 49 of 1979)
Local Public Transportation Revitalization and Rehabilitation Act	Act on Revitalization and Rehabilitation of Local Public Transportation Systems (Act No. 59 of 2007)
Plastic Resource Circulation Promotion Act	Act on Promotion of Resource Circulation for Plastics (Act No. 60 of 2021)
Amended Global Warming Countermeasures Act	Act on Promotion of Global Warming Countermeasures (Act No. 117 of 1998) amended by the Act Partially Amending the Act on Promotion of Global Warming Countermeasures (Act No. 54 of 2021)
Antimonopoly Act	Act on Prohibition of Private Monopolization and Maintenance of Fair Trade (Act No. 54 of 1947)
Subcontractor Act	Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors (Act No. 120 of 1956)
Subcontracting Promotion Act	Act on the Promotion of Subcontracting Small and Medium-sized Enterprises (Act No. 145 of 1970)
Labor Standards Act	Labor Standards Act (Act No. 49 of 1947)

Act Partially Amending the Employment Insurance Act, etc.	Act Partially Amending the Employment Insurance Act, etc. (Act No. 14 of 2020)
Amended Act on Stabilization of Employment of Elderly Persons	Act on Stabilization of Employment of Elderly Persons (Act No. 68 of 1971) amended by the Act Partially Amending the Employment Insurance Act, etc. (Act No. 14 of 2020)
Act Partially Amending the National Pension Act in order to Strengthen the Functions of the Pension System	Act Partially Amending the National Pension Act in order to Strengthen the Functions of the Pension System (Act No. 40 of 2020)
Part-Time/Fixed-Term Worker 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)
Worker Dispatch Act	Act for Securing the Proper Operation of Worker Dispatching Undertakings and Improved Working Conditions for Dispatched Workers (Act No. 88 of 1985)
Amended Labor Policy Comprehensive Promotion Act	Labor Policy Comprehensive Promotion Act, and Stabilization of Employment of Employees, and Enrichment of Their Working Lives (Act No. 132 of 1966) amended by the Act Partially Amending the Act on Promotion of Women's Participation and Advancement in the Workplace, etc. (Act No. 24 of 2019)
Amended Act on Securing, etc. of Equal Opportunity between Men and Women in Employment	Act on Securing, etc. of Equal Opportunity and Treatment between Men and Women in Employment (Act No. 113 of 1972) amended by the Act Partially Amending the Act on Promotion of Women's Participation and Advancement in the Workplace, etc. (Act No. 24 of 2019)
Amended Act on Promotion of Women's Participation and Advancement in the Workplace	Act on Promotion of Women's Participation and Advancement in the Workplace (Act No. 64 of 2015) amended by the Act Partially Amending the Act on Promotion of Women's Participation and Advancement in the Workplace, etc. (Act No. 24 of 2019)
Amended Childcare Leave/Caregiver Leave Act, etc.	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. 58 of 2021)
Act on Promotion of Japanese Language Education	Act on Promotion of Japanese Language Education (Act No. 48 of 2019)
Act on Workers' Cooperatives	Act on Workers Cooperatives (Act No. 78 of 2020)
Radio Act	Radio Act (Act No. 131 of 1950)
Civil Aeronautics Act	Civil Aeronautics Act (Act No. 231 of 1952)
Act on Special Measures for Productivity Improvement	Act on Special Measures for Productivity Improvement (Act No. 25 of 2018)
Road Traffic Act	Road Traffic Act (Act No. 105 of 1960)
Arbitration Act	Arbitration Act (Act No. 138 of 2003)

Amended Subcontracting Promotion Act	Act on Promotion of Subcontracting Small and Medium-sized Enterprises (Act No. 145 of 1970) amended by the Act Partially Amending the Industrial Competitiveness Enhancement Act, etc. (Act No. 70 of 2021)
Amended Industrial Competitiveness Enhancement Act	Industrial Competitiveness Enhancement Act (Act No. 98 of 2013) amended by the Act Partially Amending the Industrial Competitiveness Enhancement Act, etc. (Act No. 70 of 2021)
Amended Companies Act	Companies Act (Act No. 86 of 2005) amended by the Act Partially Amending the Companies Act (Act No. 70 of 2019)
Pharmaceutical and Medical Device Act	Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices (Act No. 145 of 1960)
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)
Space Activity Act	Act on Launching of Spacecraft, etc. and Control of Spacecraft (Act No. 76 of 2016)
PFI Act	Act on Promotion of Private Finance Initiative (Act No. 117 of 1999)
Act Related to Integrated Flood Management	Act Partially Amending the Act on Countermeasures against Flood Damage of Specified Rivers Running Across Cities, etc. (Act No. 31 of 2021)
Act on Promotion of Railway Crossings	Act on Promotion of Railway Crossings (Act No. 195 of 1961)
Building Standards Act	Building Standards Act (Act No. 201 of 1950)
Act on Promotion of Community Development Projects for Population Declining Areas	Act on Promotion of Community Development Projects for Specified Areas to Respond to Rapid Declining in Local Populations (Act No. 64 of 2019)
Amended Natural Parks Act	Natural Parks Act (Act No. 161 of 1957) amended by the Act Partially Amending the Natural Parks Act (Act No. 29 of 2021)
Cultural Tourism Promotion Act	Act on Promotion of Regional Cultural Tourism Centered on Cultural Tourism Facilities (Act No. 18 of 2020)
Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act	Act on Facilitating the Export of Agricultural, Forestry, and Fishery Products and Food (Act No. 57 of 2019)
Amended Plant Variety Protection and Seed Act	Plant Variety Protection and Seed Act (Act No. 83 of 1998) amended by the Act Partially Amending the Plant Variety Protection and Seed Act (Act No. 74 of 2020)
Act on the Support for Strengthening Agricultural Competitiveness	Act on the Support for Strengthening Agricultural Competitiveness (Act No. 35 of 2017)
Act on Special Measures for Agricultural Reservoir Construction Projects	Act on Special Measures Concerning the Promotion of Disaster Prevention Construction Projects on Priority Agricultural Reservoirs for Disaster Prevention (Act No. 56 of 2020)
Urban Farmland Leasing Act	Act on Urban Farmland Lease Facilitation (Act No. 68 of 2018)

National Forest Land Utilization Act	Act Concerning Utilization of National Forest Land (Act No. 246 of 1951)
Amended Forestry Cooperative Act	Forestry Cooperative Act (Act No. 36 of 1978) amended by the Act Partially Amending the Forestry Cooperative Act (Act No. 35 of 2020)
Amended Act on Special Measures for Thinning, etc.	Act on Special Measures Concerning Promotion of Implementation of Forest Thinning, etc. (Act No. 32 of 2008) amended by the Act Partially Amending the Act on Special Measures Concerning Promotion of Implementation of Forest Thinning, etc. (Act No. 15 of 2021)
Amended Fisheries Act	Fisheries Act (Act No. 267 of 1949) amended by the Act Partially Amending the Fisheries Act, etc. (Act No. 95 of 2018)
Amended Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea	Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea (Act No. 110 of 1973) amended by the Act Partially Amending the Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea (Act No. 59 of 2021)
Act on Special Measures for Land with Unknown Ownership	Act on Special Measures Concerning Facilitation, etc. of Use of Land with Unknown Ownership (Act No. 49 of 2018)
Amended Act on Protection of Cultural Properties	Act on Protection of Cultural Properties (Act No. 214 of 1950) amended by the Act for Partially Amending the Act on Protection of Cultural Properties (Act No. 22 of 2021)

Introduction

As outlined below, in accord with the framework of the Action Plan of the Growth Strategy, this Follow-up on the Growth Strategy describes the progress of past growth strategies and new initiatives.

1. Concentrated Investment and Implementation of Digitalization as a New Growth Driver and its Environment

(1) Promotion of digitalization with a focus on the Digital Agency

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Promotion of digital government from the people's perspective

- In order for both the public and private sectors to adopt and continue to use cloud services with greater safety and security, the government will add new cloud services, whose safety was evaluated based on the unified security standards for the Information system Security Management and Assessment Program (ISMAP), in the list of cloud services released in March 2021 under the ISMAP and review the existing ones for renewal, urge all government agencies to use the system, and review the standards, etc. based on the operational status.
- With regard to the public safety LTE system, the government will start the operation of the basic functions from FY2021 on a preliminary basis, and after conducting technical reviews to ensure the safety and reliability, start the full-scale operation from FY2022.
- The government will enhance the convenience of administrative procedures for businesses by improving digital platforms for business entities, such as expanding the spread of the gBizID system, enhancing the convenience of the jGrants system, and promoting data cooperation through the gBizCONNECT system.
- To realize the world-class business environment, the government will take the following initiatives.
 - With regard to the one-stop company incorporation service, the government will conduct PR activities so that the service will be commonly used when incorporating a company.
 - With regard to the commercial registration electronic certificate, the government will conduct PR activities so that the service will be commonly used as a means to complete digital verification of the identity of companies/corporations. The government will review the measures to improve the convenience and the feasibility of making the service available free of charge by the end of FY2021. At the same time, the government will conduct reviews towards the adoption of cloud computing. Moreover, while considering the cost effectiveness, the government aims to start operating the new system as soon as

possible by FY2025.

- With regard to procedures related to year-end adjustments and final returns for income tax, the government will introduce an automated entry system for various application forms using the Mynaporta. Specifically, the government will make the automatic entry system available for (1) medical expense notification data by February 2022 and for (2) Furusato Nozei (hometown tax) donation deduction certificate data after in or after FY2021.
- With regard to the common tax payment system for local taxes, from October 2021, the government will add withheld tax, levy on dividends, and levy on income from transfer of stock or other assets for individual inhabitant tax to the target tax items and computerize the tax filing and payment procedures for financial institutions and other parties subjected to special tax collection.
- With regard to court proceedings, it is expected that while ensuring respect for the autonomous judgment by the judicial branch, (1) remote consultations using web conferences to be operated under the current Domestic Relations Case Procedure Act on a trial basis at some of family courts by the end of FY2021, and (2) the “Study Group on Utilization of Information and Communication Technology in Criminal Procedures” to promptly study the necessity and appropriateness of legislation related to the use of online system, for the receipt and delivery of documents such as warrants and for various procedures of investigations and trials, and aim to compile the result of study by the end of FY2021.
- The government will review specific issues and policies to realize a database using AI by the end of FY2021 and work toward the utilization of civil judgment data.
- To promote online dispute resolution (ODR), the government will carry out reviews, including examining the feasibility of utilizing AI technology, and formulate the basic policies to make ODR more accessible by the end of FY2021. Started to provide the online consultations at consultation service for subcontractors from FY2021 at Kakekomi-dera.
- From the perspective of abolishing the practices of acquiring and submitting certificates of fixed asset valuation, the government will promote the expansion of online provision of asset valuation notification to the Legal Affairs Bureau by municipal governments.
 - To make it possible for the private sector to use electronic preliminary medical examination forms for routine immunizations for infants, the government will organize and disclose ideas that allow simple verification of the forms, such as a consent button or check box that can be clicked by the relevant people (guardians) and doctors instead of putting down their signatures that were required conventionally, as soon as possible by the end of FY2021. With this, the government

aims to gradually realize the digitalization of unified preliminary medical examination forms from the municipalities that can be front-runners in introducing the system. Regarding support for the standardization of local government work systems (sending vaccination notifications to relevant people, keeping vaccination records, sending bills and making payments with medical institutions, etc.), the government will raise the priority of the health management system, including the vaccination register system, which is one of the 17 procedures targeted for the standardization of local government work systems by FY2025.

**ii) Development of a common infrastructure for a digital society
 (“My Number” system)**

- In FY2021, the government will examine information cooperation using My Number in fields other than the three fields of social security, tax and disaster and information coordination using only agency-specific codes for general administrative work (excluding public security, diplomacy, etc.) and submit a bill for the one that gained the public understanding to the ordinary Diet session in 2022.
- The government aims to start registration and use of bank and savings accounts for the transfer of public moneys linked with My Number by the end of FY2022 as much as possible. With regard to smooth facilitation of listing My Number on bank and savings accounts (including services available in the event of inheritance or disasters), the government aims to start it them by the end of FY2024. Carry out further reviews while monitoring how listing My Number on bank and savings accounts unfolds.

In addition, the government will prepare for smooth enforcement in coordination with related parties by promoting the enactment of cabinet and ministerial orders and guidelines for financial institutions and developing systems at related organizations and financial institutions.

- As for the optimization of user interface and user experience of Mynportal, the government will drastically improve and maximize the level of satisfaction of users (people) (easy to understand, easy to operate, fast response, etc.) and the level of satisfaction of local governments (easy to operate, fewer defects, easy to link with existing work systems, etc.) that use the system in their work by FY2021. At that time, the government will carry out a review including further utilization of the knowledge and technologies of the private sector. In addition, the government will continue to make improvements even after FY2022 and onwards.
- With regard to about 30 national qualifications related to social security, etc., such as doctors, dentists and nurses, that require priority attention, the government aims to link with the Basic Resident Register Network System and the Cooperation Network System for

Personal Information using My Number. At the same time, the government will conduct a survey on the scope of various licenses and national qualifications in FY2021, develop and build a qualification information linkage system that can be jointly used by administrators and others who manage qualifications by FY2023, and start digitalization in FY2024.

- The government will digitalize driver's licenses and start integrating them with Individual Number cards by the end of FY2024. Prior to this, the government will consolidate the systems of the National Police Agency and Prefectural Police for managing driver's licenses on a common platform of the National Police Agency by the end of FY2024.
- With regard to the integration of My Number cards and residence cards, the government will reach a conclusion by the end of 2021 and submit the necessary bill to the ordinary session of the Diet in 2022. After the governmental ministerial ordinances are developed and systems are modified, the government will start issuing the integrated cards from FY2025.
- In preparation for the start of the continued use of Individual Number cards outside Japan by the end of FY2024, the government will promote the review of issuing Individual Number cards at overseas diplomatic missions. In addition, following the start of overseas use, the government will carry out reviews on the ideal way of providing smooth consular services for Japanese living overseas using Individual Number cards.
- From the fiscal year of 2022, the passport online application system will be inaugurated with Mynaportal by utilizing the public authentication of the "My Number Card", Individual Number Card. In addition, by the fiscal year 2024 the Ministry of Foreign Affairs will consider applications without requiring an attached copy of the Family Register, by making use of the Family Register information cooperation System to be established by the Ministry of Justice.
- The government will review the feasibility of utilizing the My Number system as a measure to secure child support payment.
- Aiming for the end of FY2022, the government will make administrative procedures, especially those that contribute to improving the convenience of the people, performed at all local governments available online by using the Mynaportal and My Number card, in principle, so that people can enjoy the improved convenience brought by digitalization at an early stage.
- By the end of FY2021, the government will implement a model project utilizing the infrastructure of the Myna Points project at multiple local governments and build an infrastructure that allows the local governments to implement various point rewarding projects.
- The government will complete technical verification and system design by the end of FY2021 to launch services by the end of FY2022 with the aim of realizing electronic

certificates of the Japanese Public Key Infrastructure (JPKI) on smartphones. In parallel, the government will consider using biometric authentication instead of PINs for JPKI as well as installing other functions of the Individual Number Card on smartphones, such as a function to accurately enter information on the card, after addressing various issues, including interoperability with related international standards. In addition, the government will identify issues, and solutions to those issues, to further promote the utilization of JPKI linked IDs provided by private businesses.

- To improve the convenience of the people and improve the efficiency of the vehicle inspection registration procedures by utilizing digital technology, including the use of the My Number cards, after thoroughly implementing business practice reforms, the government will sequentially introduce a new business flow from FY2022 by developing and modifying systems also taking into account the results of the review of the business flow improvement survey that has been conducted from the beginning of FY2021.

(Promotion of standardization of digital infrastructure, etc. through national and local governments)

- With regard to the systems (core systems) that process 17 main procedures of local governments, the relevant ministries and agencies will prepare standard specifications based on the “Digital Government Execution Plan” (decided by the Cabinet on December 25, 2020). Based on the Act on Standardization of Local Government Information Systems, while carefully listening to the opinions of local governments, the government will conduct verification thorough prior projects and provides support by the Digital Infrastructure Reform Fund, etc. so that local governments can make a smooth transition to a standard-compliant system built on the government cloud systems by the targeted FY2025.
- Based on the “Guidelines on Information Security Policies in Local Governments” (revised in December 2020), the government will urge local governments to thoroughly implement appropriate security measures, such as allowing electronic transfer of applications and other data via the Internet only for specific communications approved by the government, while maintaining comprehensive efforts to prevent the leakage of residents’ information. Additionally, the government will review appropriate approaches for new security measures, including radical review of the “three-tier measures” based on the standardization and commonization of the local governments' work systems. Furthermore, the government will review the necessary security measures for the use of public cloud systems by local governments based on the operational status, etc. of ISMAP.
- In order to steadily promote the efforts of local governments based on the “Digital Transformation (DX) Promotion Plan for Local Governments” formulated in December 2020, the government will present the way to proceed with the standardization and commonization of the information systems and online transition of administrative

procedures of local governments as the “Local Government DX Promotion Procedure Manual (tentative name)” by the summer of 2021.

iii) Promotion of comprehensive data strategy and development of common infrastructure in the quasi-public sector, etc.

(Data strategy)

- In order to promote the use of data, the government will develop and operate over the medium and long-term the infrastructure that will serve as a common base for the promotion of DX in the public and private sectors, such as the government cloud systems, government network systems and base registries in the public administration field, at the Digital Agency, which is scheduled to be established in September 2021. The government will provide these services to each ministry, agency and local government, and work in collaboration with the services of private businesses to realize public administration as a platform, aiming for FY2025.

In addition, the government will organize the rules for removing the factors that hinder data distribution and embody them in efforts to promote data cooperation and platform development in the future.

In the health, medical, long-term care, education and disaster prevention sectors, the Digital Agency and related ministries will work in collaboration to embody these rules, and identify policy issues facing each sector by the end of FY2021.

- The government will compile the basic approaches related to data cooperation, such as the methods of data cooperation and provision, safety management measures and the concept of cost burden related to data cooperation, in the major industrial sectors where data cooperation is progressing, including biotechnology, materials and space sectors by FY2021.
 - The government will formulate the “Guidelines for Biotechnology Data Cooperation and Utilization (tentative name)” in the biotechnology sector by the end of FY2022, with the aim of building the necessary data cooperation platform for acquiring international markets. For this reason, the government will also utilize research and development projects, such as SIP to compile an interim report of the guidelines by the middle of FY2021 so that the requirements for data structuring, cleaning and cooperation APIs can be demonstrated.
 - To promote process informatics to streamline and rationalize the manufacturing process, the government will formulate a policy for developing process data for fine ceramics and functional chemicals by the end of FY2021. In addition, after FY2022, the government will develop an effective data acquisition platform and build a simulation tool for utilizing the acquired open data. Furthermore, the government will spread the platform

by improving the accuracy of the tool also through the utilization of closed data at material development sites.

- To promote materials informatics by creating, accumulating and facilitating utilization of the necessary data, from FY2021, the government will develop a system to provide advanced shared equipment and promote research and development based on high-quality data that is aggregated at the core data sites due to the AI analysis function implemented. Additionally, the government will organize the priority areas and storage formats for the government-funded research data by FY2022 and start a trial operation of the system that centrally utilizes data by FY2023.
- In FY2021, the government will further expand the use and analysis of satellite data on the government satellite platform, "Tellus" and promote the provision and use of satellite data using APIs based on international standards. Moreover, encourage the expansion of the use of satellite data and creation of new businesses by implementing hands-on training and contests for users, building data cooperation with geospatial information owned by local governments, developing and demonstrating needs-based applications in collaboration with users and building data cooperation with Europe's Copernicus program.
- Based on the "Guidelines for Open API Development in the Agricultural Sector", the government will promote data cooperation and sharing, such as the locations and work records obtained from agricultural machinery, including tractors and combine harvesters from FY2021. Moreover, the government will carry out reviews for facilitating the utilization of the agricultural data collaboration platform by API implementation to realize data cooperation and strengthening the operation system, and build a smart food chain platform that realizes data cooperation from production to sales and consumption by FY2022.
- By the end of FY2021, the government will create standard specifications of the ICT production management system that enables data cooperation with the forest cloud system, which is being introduced by prefectures, promote its introduction to the private-sector businesses, and accelerate measures to share data, such as supply and demand in the supply chain and legality verification, on the system.
- To support the advancement of evaluation and management of fishery resources, efficient business operations and management and creation of fishery-related businesses, the government will promote data cooperation and sharing in the fisheries sector based on the fishery data collaboration platform, carry out reviews to establish data policies and standardize data to promote data utilization, and formulate data contract guidelines in FY2021.
- In order to increase the transparency of the real estate market, the government will

improve the productivity of the real estate industry and the convenience of consumers, and facilitate the utilization of under-used or unused real estate and search of the owners of land plots with unknown ownership by promoting the linkage of real estate-related data owned by the public and private sectors, by the end of FY2021, start developing rules for the real estate ID (common numbers), which will serve as the basis for linking real estate-related data.

- With regard to the digitalization of ports (Cyber Port), the government will promote the use and improve the functions of the port logistics field (which started its operation in April 2021), which digitalizes port logistics procedures among private businesses, as well as digitalizes the port administration field and port infrastructure field, and aim for the integrated operation of these three fields based on data coordination after FY2023.
- The government will review rules related to API collaboration on oceanic data and the standardization of data based on the opinions of users from FY2021, encourage the relevant stakeholders to utilize the data, and develop an environment that allows steady promotion of oceanic data linkage by FY2022. With this, the government will promote the utilization of oceanic data, such as sea temperature, ocean currents, and ship traffic, and the sharing of such information with the public and private sectors to optimize maritime route settings and improve accuracy when searching for fishing areas, release the trial version of the API for oceanic data in FY2021 to make functional improvements based on the opinions and requests of users, and release the official version of it by the end of FY2021.
- With the aim of building a cooperative infrastructure data platform for the entire infrastructure sector in the Cabinet Office, the government will develop an environment, such as a joint management system by the public and private sectors, by the end of FY2021, and start data collaboration among related organizations.
- The government will start implementing activities to improve data quality in the manufacturing sector, such as data units and expression methods by the end of FY2021, and introduce a data distribution system between companies to aim to maximize the use of valuable data at manufacturing sites from FY2022.
- In order to promote the social implementation of MaaS (Mobility as a Service), such as the provision of MaaS-related data on traffic congestions in public transportation, the government will promote the coordination and utilization of MaaS-related data based on the “Guidelines for MaaS-related Data Cooperation” revised in April 2021.

(Development of common infrastructure in the quasi-public sector, etc.)

- With regard to the quasi-public sectors, such as the health, medical, long-term care, education and disaster prevention sectors, and mutual cooperation sectors that require inter-system cooperation for contracts, payments, etc. beyond industries, the Digital Agency will

carry out reviews to create a program to comprehensively support the measures for digitalization and data cooperation. These measures include (1) extracting social issues and setting services to be realized; (2) formulating the necessary data and developing data handling rules and systems; (3) identifying the operation managers and embodying business models. In order to manage this support program beyond the boundaries of ministries and agencies, the Digital Agency will establish a promotion system for each sector, including related ministries, agencies and organizations, and examine how to promote digitalization in each sector.

iv) Development of digital human resources

- In order to develop human resources that support the promotion of DX, the government will develop a digital human resources development platform and create a nationwide network of regional DX promotion bases involving industry, academia, government and finance, and implement DX projects that contribute to the creation of successful DX cases and the development of human resources.
- In order to relieve anxiety in elderly people, etc. regarding the use of digital technology, the government will provide full-scale nationwide support, such as support for advice and consultation on how to use online administrative procedures and services from FY2021 in collaboration with private companies and local governments.
- In order to secure human resources who will lead digital transformation, the government will develop an environment where talented people can develop their careers while moving back and forth between the private sector, local governments, and the government, such as facilitating the recruitment process using the private sector's evaluation criteria for IT skills. From FY2022, the government will actively recruit those who pass the digital category, which will be newly established in the national civil service examination for comprehensive service and those who pass the digital/electrical/electronic category, which will be renamed from the digital/electrical/electronic category after the review of the examination contents, in the national civil service examination for general service in each ministry and agency centered on the Digital Agency. At the same time, the government will make efforts to develop digital human resources in governmental agencies, such as enhancing and strengthening training for the national and local government staff and promoting the setting of career paths. Furthermore, the government will promote the development and securing of digital human resources so that high-level digital human resources can be supplied and utilized by companies to improve their digital capabilities.

(2) Early nationwide deployment of 5G, promotion of post-5G, and promotion of so-called 6G (Beyond 5G)

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Promotion of safe and secure 5G, local 5G and post-5G

- In order to promote the development of nationwide 5G and local 5G that enable low latency and simultaneous connections while ensuring cyber security and openness, the government will implement tax incentive measures based on the 5G Act.
- In order to promote the nationwide development of 5G, the government will continue to implement cell phone coverage area development projects in areas with unfavorable conditions, and provide support based on the division of roles between the private and public sectors, such as promoting the development of base stations utilizing infrastructure sharing.
- In order to promote the spread of solutions using 5G, the government will work to create solution examples by developing and demonstrating local 5G, etc., and aim to build a system that makes it easy for many companies to provide and use such solution examples and mobile phone carriers' solution examples utilizing 5G.
- With regard to the information and communication infrastructure, such as post-5G (5G enhanced with even more simultaneous connections and ultra-low latency functions) required for the expansion into future industrial applications, the government will support the research and development of each elemental technology, including O-RAN and vRAN, social implementation and global expansion. Additionally, the government will work on the development of manufacturing technology to secure the technology that allows the advanced semiconductors, which are required for post-5G, to be manufactured in Japan in the future.
- While using the post-5G network, to promote the advancement and DX of various industries, such as smart factories, autonomous driving, and smart cities, by utilizing 5G-MEC (Multi-access Edge Computing), which performs high-speed and sophisticated AI learning and data processing at the closer edge of the network to users than cloud computing, the government will develop devices, systems and applications related to 5G and MEC in FY2021 to support their introduction for social implementation.
- To contribute to early nationwide expansion of information and communication infrastructure, the government will take the following initiatives.
 - With regard to fiber optics and mobile phones, the government will move the conventional goal one year ahead of schedule and aim to ensure that there are no areas where they cannot be used by the end of FY2022.
 - The government will promote the development of fiber optics through the Project to Promote Advanced Wireless Environment, etc., support the advancement of fiber optics

owned by local governments, and work to promote a shift from "public" to "private" for broadband infrastructure players.

- The government will carry out reviews for adopting universal broadband services, summarize the results by around the summer of 2021, and take the necessary measures based on the results.
- Given the rapid increase in Internet traffic associated with the spread of the COVID-19 pandemic, the government will formulate guidelines for dealing with the increase in Internet traffic by the end of FY2021 to ease congestion and ensure quality of Internet. Moreover, demonstrate a mechanism for sharing information on large-scale and unexpected traffic beforehand, promote decentralization of IX concentrated in Tokyo and Osaka, and conduct awareness campaigns for users related to improving Internet connection.
- While taking into account the results of tax incentives for efforts to adopt O-RAN and vRAN based on the 5G Act and the status of practical application of the 5G system in Japan, the government will ensure security and resilience by promoting openness and vendor diversification in cooperation with G7 countries, and promote the overseas expansion of 5G-related products and systems of Japanese companies.
- Based on the agreement between the leaders of Japan and the U.S., the government will build cooperative relationships to further promote the global digital economy, including Japan by launching the “Global Digital Connectivity Partnership” (GDGP) based on the partnership that has been cultivated through the Japan-U.S. Policy Cooperation Dialogue on the Internet Economy (IED) and the Japan-U.S. Strategic Digital Economy Partnership (JUSDEP) and building third-country cooperation and cooperation within a multilateral framework led by Japan and the U.S.

ii) Promotion of so-called 6G (Beyond 5G)

- With regard to Beyond 5G, the government will establish the world’s highest level of research and development environments, actively make upfront investments, and promote efforts to secure a market share. At the same time, the government will establish a system to work on strategies under global public-private partnerships toward the realization of Beyond 5G. Specifically,
 - By using the research and development funds established by the National Institute of Information and Communications Technology (NICT) and shared facilities and equipment, such as test beds, the government will gather the wisdom of the public and private sectors and work on the research and development of technologies that open up utilization of high-frequency waves, such as terahertz waves and high-speed and high-capacity optical network technologies, such as multi-core. Moreover, the government will examine the use of spectrum user fees for research and development of 5G to make

intensive investments in research and development for the next five years.

- In order to accelerate efforts toward the realization of Beyond 5G by industry, academia and government and promote international cooperation, by the end of FY2021, the government will share the knowledge gained by analyzing the sectors that Japan needs to focus on in the future by utilizing the “Beyond 5G Promotion Consortium”, etc., and build international partnerships by concluding MOCs including information sharing, etc. with overseas organizations that promote Beyond 5G.
- With the “Beyond 5G New Business Strategy Center” at the core, the government will strategically promote efforts to acquire knowledge and international standardization by bringing together major players from industry, academia and government and conduct international joint research with research institutes in countries and regions that are reliable and strategic partners that can be expected to bring a synergy effect so that activities to achieve international standardization can be carried out from the initial stage of research and development. In addition, the government will promote cross-ministerial efforts for strategic utilization of standards related to Beyond 5G in collaboration with the Standard Utilization Promotion Task Force of the Integrated Innovation Strategy Promotion Council.
- The government will develop and maintain radio wave emulator (Japanese version of Colosseum)¹ by FY2023 and partially release the verification environment for users by FY2022 to promote the development and verification of new radio wave systems.
- For early realization of communication networks with higher speed and larger capacity, the government will make use of optical transmission technologies to handle a rapid increase in communication traffic and power consumption. Specifically, the government aims to establish technologies that will increase the transmission speed of the backbone and access networks by 100 times than the current rate by the end of FY2025.

(3) Lowering of mobile phone rates

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Enforcing the Digital Platform Transaction Transparency Act and developing rules to make the digital advertising market more transparent and fairer

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

¹ A system that enables verification of new radio wave systems in cyberspace on a large scale and with high precision

- Based on the Digital Platform Transaction Transparency Act, the government will promote the understanding of issues through consultation desks and various fact-finding surveys and monitoring of trades using digital technologies, and urge regulated businesses to take voluntary efforts to improve transparency and fairness of their trades.
- From the perspective of promoting competitiveness in the digital market, the government will make efforts, such as taking strict and accurate measures to address anticompetitive practices, continuously implementing fact-finding surveys and building partnerships with competition authorities abroad, and strengthen the Fair Trade Commission's systems in the fields of digital, economic analysis and audit information analysis, such as improving personnel infrastructure for specialized knowledge, including the utilization of external human resources.
- Toward the enforcement of the Amended Personal Information Protection Act, the government will develop an organizational structure at the Personal Information Protection Commission to centrally monitor and supervise the handling of personal information by private businesses, national governmental agencies, independent administrative entities, etc., and local governments.
- Based on the Act for the Protection of Consumers Who Use Digital Platforms, the government will hold a preparatory meeting for the smooth launch of the public-private council around the fall of 2021, announce a concrete plan, such as guidelines regarding the measures to be taken by digital trading platform providers by the end of 2021, and establish the necessary systems for enforcement.
- In order to realize a fair market environment by optimizing digital trading, the government will review the approach to the application of the Premiums and Representations Act related to affiliated advertising and measures to prevent misleading representations, and reach a certain conclusion by the end of 2021.
- In order to promote the utilization of data, which is indispensable for the digital society and to increase the amount of data distributed, the government will develop the environment for strengthening data processing, mediation and analysis functions of personal data trust banks in FY2021. Based on the results, the government will review the realization of regional revitalization through data cooperation between personal data trust banks and local governments and regional businesses and data portability with personal data trust banks functioning as hubs, compile the requirements and specifications related to data cooperation, and review the necessary certification guidelines by the end of FY2022.
- In order to properly handle personal information and viewership data, the government will revise the “Guidelines concerning the Protection of Personal Information of Broadcast Receivers” by April 1, 2022. At the same time, in order to build a mechanism for utilizing viewership data of online streaming and broadcast programs that take into account the actual

situation in the regions, the government will examine what the optimal distribution platforms and reception environments should be according to the transmission methods and by compiling cases that contribute to the interpretation of the guidelines by the end of FY2022, and promote the formulation of voluntary rules by industry groups.

- The government will implement monitoring of how slander, fake news and disinformation on the Internet is handled by platform providers and compile an interim report of the assessment results by September 2021. Furthermore, in order to ensure the proper handling of user information, such as location information of communication terminals related to platform services, terminal IDs, cookies and activity history on the Internet, the government will implement monitoring of how the user information is handled by platform providers, review the “Guidelines for Protection of Personal Information in Telecommunications Business” by the end of FY2021 and apply them from FY2022.
- The government will examine technical specifications to realize Trusted Web that adds a new trustworthy framework on the Internet, such as a mechanism that strengthens data control by individuals or corporations without relying on a specific service or a mechanism that can verify the data to be exchanged and the other party.

(5) Revising regulations in light of digital technology

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

(Mobility field)

- With regard to the completion inspection of automobiles, inspection items that can be inspected by using AI, etc. have been organized as a result of the demonstration project. Based on this, the government will revise the system by the end of 2021 so that these items that are currently performed by completion inspectors can be replaced with AI, etc. In conjunction with this, taking into account the results of the examination of the automobile type approval audit by the national government on automobile manufacturers in FY2020, the government will carry out a further examination in FY2021 from the perspective of ensuring the security of inspection data, and review the system if it is possible to build a system that allows the audit to be conducted remotely.

(Finance field)

- With regard to the handling of professional investors, items relevant to the abilities of a professional investor were identified as a result of the demonstration project. Based on this, the government will revise the system by the end of FY2021 to make the requirements for professional investors more flexible.
- With regard to the handling of elderly customers in the sales of financial products, items

relevant to the abilities of an individual investor were identified as a result of the demonstration project. Based on this, the government will reach a conclusion by the end of FY2021 on the revision of the system to flexibly handle customers according to investors' abilities and circumstances.

- In order to improve efficiency of work that is handled by each financial institution individually at present, such as detecting suspicious transactions related to money laundering and collating sanctioned persons, demonstration projects were carried out for the development of work processes to be jointly undertaken by each company and the development of systems utilizing AI. In the future, based on the recommendations of the demonstration projects, the government will clarify the operation, governance, regulatory, and supervisory positioning of the joint platform so that transaction information can be smoothly utilized and shared on the joint platform.

(Construction field)

- With regard to drones equipped with infrared devices to survey exterior walls, improvement in accuracy was confirmed as a result of the demonstration project. Based on this, verify the issues which remained unresolved from FY2021, and after confirming that the accuracy is equivalent to or higher than that of a percussion survey by qualified persons, such as a 1st-Class Kenchikushi, revise the system to allow its use in exterior wall surveys in periodic inspections of buildings from FY2022.

Furthermore, the government will dig deeper into the aforementioned three fields and aim to develop into other fields, including smart security.

- With regard to businesses in the fields of electric power, city gas, high-pressure gas and liquefied petroleum gas that can independently secure a high level of security while utilizing technology, the government will allow them to make a transition to a self-managed regulatory system corresponding to their security capabilities under the appropriate audit and supervision of the government, regardless of uniform individual or pre-regulation, and review the appropriate procedures and inspections. For this reason, the government will carry out the review, with a view to submitting a related bill to an ordinary session of the Diet in 2022.
- For boilers that are subject to the Industrial Safety and Health Act, the government will publicize that the open inspection cycle has been extended to a maximum of 12 years in March 2021. Furthermore, with regard to technical issues, such as finding out applicable technologies and ensuring their reliability and institutional issues, such as the necessary organizational structure and ensuring fairness, including objectivity for the introduction of the methods to manage the inspection cycle according to the equipment's condition (CBM) and voluntary inspections by businesses, the government will examine how to handle them

by the end of FY2021, and reach a conclusion.

- Moreover, with regard to the Industrial Safety and Health Act for anti-explosion regulations, the government will publicize the criteria for determining dangerous areas concerning the use of electronic devices, etc. shown in February 2021. Furthermore, to review the regulations for bringing in non-explosion-proof portable devices in explosion-proof areas, the government will examine the appropriate measures to secure safety not depending on a certification system, and reach a conclusion, while taking into consideration the trends in the IEC being discussed aiming for 2022.

(6) Use of new digital technologies such as blockchain

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(7) Smart agriculture, forestry, and fisheries

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Promotion of smart agriculture

By FY2022, the following measures will be promoted in an integral manner in order to develop an environment for the steady and full-scale on-site implementation of “smart” agriculture that technically supports the strengthening of the production infrastructure.

(Promotion of smart agriculture)

- Based on the agricultural management data collected from the demonstration project that has been implemented since FY2019, and with mainly by the National Agriculture and Food Research Organization (NARO), the government will develop a management diagnosis system that is easy for farmers to use and promote the introduction of smart agriculture that contributes to the improvement in farm management.
- In the demonstration project, the government will work on establishing new smart sales channels, including distribution and consumers from FY2021 so that they will not only lead to labor savings at the agricultural production stage but also increasing added value of agricultural products, expanding employment and revitalizing rural areas .
- By FY2022, the government will establish a smart food chain platform that realizes data cooperation from production to sales and consumption. In order to promote the social implementation of the smart food chain, the government will examine the formulation of the Food Chain Information Disclosure JAS (tentative name) that aims to give incentives to businesses and promote value to consumers.
- In order to promote the introduction of smart agriculture technologies for vegetables and

fruits that Japan is delayed in development and introduction compared to rice ., the government will encourage the formation of a regional consortium by local manufacturers, farmers, universities, start-up companies, and local financial institutions, and promote efforts, such as research and development of highly versatile technologies that lead to effective social implementation, including the possibility of improvements that meet regional needs.

- For regions where farmland aggregation and consolidation has been progressing, the government will continue to encourage the implementation of smart agriculture by providing support to farmers for adopting smart agricultural machinery. Additionally, for small-scale agricultural production areas that may not have benefited from smart agriculture and haven't be aggregated and consolidated sufficiently, the government will work to form and create smart agriculture production areas, while facilitating aggregation and consolidation of farmland, and promote the improvement in productivity by introducing smart agriculture technologies. The government will consolidate agricultural work by participation of multiple management bodies that have reached a consensus on the regional vision for smart agriculture technologies, to overcome the challenges on investment by utilizing agricultural machinery rental and sharing services.
- In order to clarify the benefits of smart agricultural production areas to contribute to building consensus, the government will form an information dissemination base that will function as a consultation office related to business models of each production area, centrally collect the examples of efforts in areas implemented with the smart agriculture demonstration project and information on smart agriculture technologies by various agriculture support service providers, and establish a nationwide council led by private sector to spread excellent cases across the country.
- With regard to a mechanism to promote the introduction of smart agriculture technologies that are effective for environmental conservation and significant labor saving by reducing pesticides and chemical fertilizers in smart agriculture production areas, the government will conduct a review and take concrete measures, while monitoring the introduction status of smart agricultural machinery.
- In order to facilitate the implementation of smart agriculture, the government will promote the expansion of farmland suitable for automated agricultural machineries and the development of ICT water management facilities.
- In order to improve the communication environment around rural areas that contributes to the promotion of smart agriculture, the government will effectively utilize the related projects of the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Internal Affairs and Communications.
- The government will establish a liaison meeting between the Ministry of Agriculture,

Forestry and Fisheries and the Ministry of Internal Affairs and Communication to share a sense of urgency regarding the necessity of accelerating the smart agriculture, forestry and fisheries industry, issues across each field and region of the agriculture, forestry and fisheries industry and the progress status of measures taken in each field and to review the countermeasures for solutions with the cooperation of private companies.

- With regard to the development of a smart agriculture curriculum at prefectural agricultural colleges, the government will increase the number of colleges from the current 32 to 42 by FY2022 and enhance the smart agriculture training for farmers who are already working in their agriculture field.
- The government will establish a consultation system that allows agricultural extension advisors of prefectural officials to respond to inquiries from farmers and agriculture support service providers.
- In preparation for FY2022, when the new Upper Secondary School National Curriculum Standard that include learning contents related to smart agriculture and forestry will be implemented to agricultural high schools (including forestry-related courses), the government will promote the increase in the number of schools that will implement active learning about smart agriculture ahead of schedule by utilizing the educational contents created by the Ministry of Agriculture, Forestry and Fisheries, etc.
- In addition to supporting the introduction of smart agriculture machinery to keep the interest of high school students in working in the changing agriculture, forestry and fisheries industry, the government will utilize external human resources in classes and on-site training, such as graduates who practice smart agriculture, forestry and fisheries, local agriculture, forestry and fisheries personnel and agriculture support service providers, and enhance training including online training and promote the participation of high school teachers to further improve their leadership.
- The government will establish a liaison meeting between the Ministry of Agriculture, Forestry and Fisheries and the Ministry of Education, Culture, Sports, Science and Technology to share the understanding on the necessity of accelerating the smart agriculture, forestry and fisheries industry and promote the development of human resources with expertise in the smart agriculture, forestry, and fisheries industry.
- In order to further promote the smart agriculture, forestry and fisheries industry, the government will urge the formation of a regional consortium, which brings together diverse stakeholders with different technical capabilities and ideas across industries. At that time, the government will actively urge local colleges and financial institutions that are expected to play a particularly important role. Moreover, the government will accumulate the efforts of the regional consortia in the public-private council of private sector organizations, which is responsible for centralized accumulation of nationwide examples of smart agriculture for

the nationwide deployment of best practices, and work to disseminate the information across the country.

- As part of the national university reform, the government will facilitate the supply of human resources and research and development at local national universities toward the promotion of smart agriculture, forestry and fisheries to contribute to local communities.
- In order to facilitate a smooth regional funds supply, the government will further strengthen the collaboration between Japan Finance Corporation and local financial institutions, such as conducting training related to the utilization and evaluation of smart technologies.

(Development of agriculture support services and improvement of service environment)

- The government will provide financial support for the agriculture support service providers by utilizing investment schemes based on the Amended Agricultural Corporation Investment Facilitation Act and financing provided by Japan Finance Corporation, etc.
- On a portal site that provides one-stop information for new farmers and job opening information, the government will also provide job opening information for agricultural support service providers from FY2021. Moreover, the government will share this job opening information also with technical colleges in each prefecture that have students with high technical skills to secure human resources from fields other than agriculture, such as engineers. Furthermore, by the end of FY2021, the government will launch a portal site where the information of services of agriculture support service providers are registered, which can be easily searched and compared by farmers, and also establish a place where agriculture support providers can exchange information with each other by the end of FY2021.
- The government will promote the matching service with farmers provided by local governments so that agriculture support service providers who have few ties with local communities can participate smoothly in each region and farmers can receive the necessary services. The government will expand the agriculture support service market by sharing the concrete results of the measures of local governments to support the market entry and activities of agriculture support service providers with private companies and research institutes of the new smart agriculture service creation platform. Furthermore, the government will examine the structure for providing information to agriculture support service providers towards the utilization of NARO experts.
- In order to realize the new Pest Forecasting Program by FY2025, the government will work on collecting information on pest incidence through the use of drones and developing technology to forecast pest incidence through the use of AI, etc.

ii) Promotion of smart forestry

By FY2024, the following measures will be promoted integrally to create an environment

for the steady and full-scale on-site implementation of smart forestry.

- In FY2021, the government will establish the “Forestry Innovation Hub Center (Mori Hub)”, which is participated by various experts from industry, government and academia, explore technologies other than the forestry field to promote the introduction of advanced technologies regarding the development and demonstration of strategic technologies, such as unmanned and automated forestry machinery, and utilize the results to promote the formulation of technology development policies and to support commercialization by private businesses.
- In order to realize highly safe and productive forestry and transform forestry into a safe and attractive industry for youth, women and various forestry business operators, including self-harvesting forestry businesses, the government will utilize the knowledge of Mori Hub, and develop and demonstrate machineries to carry out forestry operations, such as tree felling, transportation and afforestation, remotely and automatically and wireless communication technologies that serve as the basis of this work, aiming for their practical application by FY2024. Moreover, the government will establish safety guidelines in line with the practical application of these machines.
- The government will introduce Forest Cloud that summarizes the information of forest resources that can be used by municipalities and forestry managers in all prefectures by FY2021. Moreover, the government will promote precise measurements using lasers and post the measurement results in Forest Cloud, as well as information on forest resources in national forests. Furthermore, the government will examine a mechanism to integrally disclose the information of forest resources of private and national forests to the general public.
- Toward the model introduction of smart forestry across Japan, the government will analyze and provide practical examples and present technical models in about 12 locations nationwide by FY2022, while also utilizing fields in national forests.
- The government will expand the curriculum for smart forestry in all College of forestry of 21 schools nationwide by FY2024 from the current 19 schools nationwide. At the same time, given the fact that the new Upper Secondary School National Curriculum Standard that include learning contents related to smart agriculture and forestry will be implemented to agricultural high schools (including forestry-related courses) in FY2022, the government will promote the increase in the number of schools that will implement active learning of smart forestry by utilizing educational contents created by the Ministry of Agriculture, Forestry and Fisheries, etc.

iii) Promotion of smart fisheries

By FY2023, the following measures will be promoted integrally to create an environment

for the steady and full-scale on-site implementation of smart fisheries.

- With the aim of expanding the target fish species for the evaluation of fishery resources to all useful fish species (about 200 species) by FY2023, as well as improving the precision of resource evaluation, the government will develop systems for collecting landing information of major fish markets and fisheries cooperatives in electronic data. The government will develop the systems with an aim to cover 200 spots in FY2021 and increase the number to about 400 spots in FY2023. In addition, the government will promote the introduction of a system for checking the landing price information on board and a system for sharing landing information with the market personnel in the production areas on board.
- By FY2023, the government will develop and demonstrate systems for predicting fishing and oceanographic conditions so that more than 1,000 fishing vessels engaged in fishing in offshore and coastal areas can utilize highly accurate information on fishing and oceanographic conditions from satellite information, including fishing ground prediction.
- By the end of FY2021, the government will implement measures to help fishermen, even those who are inexperienced, efficiently reach fishing grounds in 10 or more prefectures by providing a seven-day forecast on fishing and oceanographic conditions for coastal fishing.
- With regard to aquaculture, the government will implement the measures to utilize the red tide prediction information in 10 or more locations by the end of FY2021 and promote the utilization of fishery support services, such as a service that estimates aquaculture productivity in individual sea areas and a service that proposes the optimal raft placement.
- In order to develop innovative technologies for aquaculture, which has a high affinity with smart technologies, the government will develop a platform consisting of various industries with different ideas of industry, government, academia and finance by FY2022.
- As part of improving the communication environment at sea, the government will develop the necessary systems by the end of FY2021 to make inexpensive communication services using satellite constellations promptly become available.
- By FY2024, the government will implement the curriculum for smart fisheries at the National Fisheries University. Moreover, enhance short-term smart fisheries training for those working in the fishing industry.
- In preparation for FY2022, when the new Upper Secondary School National Curriculum Standard that include learning contents related to smart fisheries will be implemented, the government will promote the increase in the number of fisheries high schools that will implement learning utilizing active on-site lessons by experts from universities and companies.

(8) Promotion of DX in companies, etc.

- In addition to the selection and announcement of the DX Stock 2021 in June 2021, the

government will continue to promote the spread of the system (DX certification system) in which the government certifies companies that comply with the basic items of the Digital Governance Code. Moreover, review the Digital Governance Code in FY2022.

- By the end of FY2021, the government will formulate reference scenarios by industry that are effective for individual companies to evaluate the status of DX measures so that companies and investors can proceed with DX with a more detailed understanding of it. Moreover, in order for unlisted companies and SMEs to promote appropriate DX, the government will formulate reference scenarios for promoting DX and select outstanding companies by the end of FY2021.
- The government will summarize the elements necessary for companies to become providers of globally competitive digital technologies through DX by the end of FY2021. In addition, in order to accelerate DX in society as a whole, while promoting the deployment of the system for utilizing water supply information by supporting nationwide water supply utilities in introducing the system, the government will provide technical support to develop a common platform by forming collaborative areas in various industries, such as long-term care by utilizing the knowledge obtained from the water supply businesses as an example and start building platform low-latency services that use embedded software technologies, etc.
- In order to strengthen corporate transformation capabilities (dynamic capability) to respond to the risk of supply chain disruptions, etc., the government will start providing support for technical development that contributes to full-scale utilization of wireless communication technology at manufacturing sites by the end of FY2021.
- With the Digital Architecture Design Center as the central figure, the government will proceed with the leading projects based on the request from the Digital Agency and other ministries and agencies regarding the common technical specification (architecture) that will be the basis for promoting data cooperation and utilization amongst multiple operators, and achieve certain results by the end of FY2021.
- In order to create an environment where system owners can easily ensure the quality of their services by utilizing third-party security verification, by the end of FY2021, the government will start a demonstration project for the utilization of SBOM (Software Bill of Materials), which is a list of software components that contributes to the appropriate management of software that makes up the system, etc. At the same time, the government will examine measures that contribute to the development of Japan's security verification business, including a system that visualizes the reliability of security verification businesses and summarize the direction.
- The government will promote the spread of the certification system for share workers and share businesses to promote the penetration and establishment of the sharing economy in

society while improving safety and reliability. In addition, the government will encourage the conclusion of agreements by local governments based on the model cooperation agreement in disaster prevention fields for the utilization of the sharing economy in their regions and by the end of FY2021, and create an implementation manual for sharing businesses in the event of a disaster, etc. Furthermore, working in collaboration with the Sharing City Council, the government will examine new sharing economy models to be utilized as a public service with local governments and have the business associations present the results of the examination.

- In order to develop “Spatial ID” that expresses the location information in real space with common specifications under the unified standards so that 3D information in real space can be shared among users, the government will examine the technical implementation method and management of “Spatial ID” from FY2021, formulate guidelines for the operation of “Spatial ID” by the end of FY2022, and promote standardization of "Spatial ID" by FY2024.

(9) Ensuring cyber security

- The government will formulate the “Cyber Security Strategy” by the end of FY2021, utilize the measures being promoted for the Olympic and Paralympic Games Tokyo 2020, and develop a technical verification system for supply chain risks. At the same time, the government will steadily implement measures, such as changing the mindset of management, measures for SMEs, and developing and securing human resources, necessary for promoting DX with Cyber security. In addition, based on the “Basic Reform Policies for the Realization of a Digital Society" (decided by the Cabinet on December 25, 2020), the government will conduct audits to strengthen cyber security measures for systems of the national governmental agencies, etc., including the systems maintained and operated by the Digital Agency, while the National center of Incident readiness and Strategy for Cybersecurity (NISC) is strengthening its system.
- In order to break away from excessive dependency on overseas for technologies and information regarding cyber security, the government will develop Japan’s unique system infrastructure for collecting, generating and providing cyber security information in Japan by the end of FY2021, and start analyzing the information on cyber attacks. Furthermore, the government will start a trial operation of product verification environment and practice environment utilizing this information by 2022, and promote the development of domestic products and human resource development by opening up to industry and academia.
- In collaboration with the Supply Chain Cybersecurity Consortium established in November 2020, the government will organize and summarize the measures necessary for promoting the spread of security services for SMEs, the formation of security communities in each region and the facilitation of industry-academia-government collaborative security

measures across the entire supply chain, including SMEs by the end of FY2021.

- With regards to mechanisms (trust services) to prevent data falsification and sender spoofing, the government will take the following initiatives in FY2021.
 - Investigations and examinations, such as system comparisons in anticipation of mutual recognition of eIDAS, etc. with other countries
 - Implementation of measures to expand the use of time stamp so that the national accreditation system becomes an effective means in laws and regulations for sending, receiving and keeping electronic documents
 - Formulation of guidelines on the appropriate way of implementing e-seal as a private accreditation system

Based on the status of these measures, the government will examine the trust infrastructure, including the electronification of privately kept documents.

- With regard to identity verification methods required for safe and secure private transactions in digital space, the government will launch an expert study group by the end of 2021 in addition to promoting the use of the Japanese public key infrastructure service, organize the concrete issues and directions while considering the safety and reliability, and based on the results, promote the spread of identity verification methods using eKYC, which is one of the simplest methods.

2. Growth of the Green Sector

(1) Green Growth Strategy towards Carbon Neutral in 2050

i) Framework for a Green Growth Strategy based on the 2030 emission reduction target

As stated in the Action Plan of the Growth Strategy.

ii) Key cross-sectoral policy tools

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will provide up to a 10% tax exemption for production equipment of products with high decarbonization effects, such as compound power semiconductors and their bases, lithium-ion storage batteries, fuel cells and main parts of offshore wind power generation facilities, and capital investment that lead to improved carbon productivity.
- Based on the “U.S.-Japan Global Partnership for a New Era” launched at the Japan-U.S. Summit Meeting in April 2021 and such, while making the most of the technologies of both countries in clean energy and other related fields, the government will address climate

change by promoting the transition to decarbonization in third countries and promote the growth and recovery towards a green and sustainable world.

- In order to accelerate realistic transition efforts towards the realization of carbon neutrality in the world, while securing a stable supply of energy resources and realizing sustainable economic growth in emerging countries, such as those in Asia, the government will promote the "Asia Energy Transition Initiative (AETI)", which is a package of various support measures, including the formulation of roadmaps and financial aid based on the needs of each country, and support the voluntary efforts of emerging countries.
- In order to develop an international framework, such as eliminating tariffs on products that contribute to addressing climate change and creating regulatory rules, that Japan proposed at a ministerial-level meeting consisting of like-minded WTO member countries (Ministerial Meeting of the Ottawa Group) in March 2021, the government will collaborate with interested countries for the WTO's 12th Ministerial Conference scheduled for November to December 2021.
- The government will utilize the "Japan Innovation Bridge (J-Bridge)" to promote collaboration between Japanese companies and overseas companies in Europe, the United States and other countries that have strengths in carbon-neutral technologies, such as offshore wind.
- The government will intensively hold international conferences concerning energy and environment as the "Tokyo Beyond Zero Week" in the fall of 2021 to disseminate Japan's strategies towards the realization of carbon neutrality to the world, promote cooperation among leading research institutes, and develop an environment for raising funds to support innovations and transitions. At the same time, the government will lead international discussions and cooperation on hydrogen, carbon recycling and decarbonization of fossil fuels.

iii) Issues and responses by sector

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

(Offshore wind industry)

- The government will establish a 10-million-kW project by 2030 and a 30- to 45-million-kW project by 2040, including floating power plants. At the same time, the government aims to complete the master plan for system development including submarine DC power transmission by FY2022 and also promote efforts for infrastructure development, such as organizing the functions required for Japan's future base ports by the end of FY2021.

- The government will promote capital investments, collaboration between overseas and Japanese companies through J-Bridge, etc., regulatory reform, human resource development, etc. to build a competitive and resilient supply chain triggered by the domestic market.
- The government will promote the development of next-generation technologies for wind turbines indispensable for building supply chains and floating turbines, which are expected to expand over the medium to long term, and work on international cooperation for the development of the Asian market in the future and international standardization of evaluation methods for floating turbines.

(Next-generation solar industry)

- The government will promote the development of next-generation solar cell technologies, which can overcome location limitations and expand the installation of solar cells in homes and buildings where it is difficult to install existing solar cells due to technical restrictions.
- the government will promote economic independence of solar power generation by introducing the FIP system, etc. and work to expand industries related to solar power generation by generating the participation of various players through the creation and development of aggregation business and other related industries.
- In order to secure suitable locations where the project can be run inexpensively while coexisting with local communities, the government will reexamine the regulations and systems in various fields and expand the introduction of solar power generation.

(Hydrogen industry)

- Aiming to reduce the supply cost and expand demand of hydrogen, the government will work on developing and demonstrating technologies related to the enlargement and modularization of water electrolyzers and stability of hydrogen combustion for power generation, building hydrogen supply chains in and outside Japan, and developing various models for a hydrogen society.
- Toward achieving decarbonization of large vehicles as early as possible, the government will demonstrate hydrogen internal combustion engines from FY2021 and promote the establishment of a renewable hydrogen supply chain.

(Fuel ammonia industry)

- Aiming to introduce and spread 20% use of ammonia co-firing at thermal power generation toward 2030, the government will implement it in existing power plants based on the demonstration project of NEDO and clarify the policy position of the fuel ammonia, such as the manifestation of non-fossil value.
- Toward 2030, the government will promote the construction of new ammonia production plants, improve the environment, such as ports that support import/export and storage, and develop a fuel ammonia supply chain through organic cooperation with producing and consuming countries.

(Automobile and storage battery industry)

- In order to stably secure rare metals that are indispensable for the spread of electrified vehicles, the government will launch the development of technologies that allow efficient collection of rare metals contained in storage batteries and work on the development and demonstration of technologies to further reduce the amount of rare metals required for high-performance motors from FY2021.
- In order to reduce the burden of businesses and users toward the expansion of the spread of fuel cell vehicles, the government will examine how the regulations should be taking into consideration the unification of the regulations related to the Road Transport Vehicle Act and the High Pressure Gas Safety Act, and summarize a certain direction in June and reach a conclusion by the end of 2021.

(Industry related to carbon recycling)

- The government will establish artificial photosynthesis technology to manufacture plastic raw materials using hydrogen and CO₂, functional chemicals using CO₂ as raw materials (oxygen-containing compounds, such as polycarbonate) and manufacturing technologies for chemicals derived from biomass and waste plastic and aim to achieve the same price as existing products. Additionally, the government will promote efforts toward the advancement of naphtha cracking furnaces by adopting a carbon-free heat source.
- With regard to synthetic fuels produced from CO₂ and hydrogen as its raw materials, the government will establish high-efficiency and large-scale manufacturing technologies by 2030 through intensively conducting technology development and demonstration over the next 10 years, expand the introduction and reducing costs in the 2030s, and aim for independent commercialization by 2040 while considering the environmental value.

(Material industry)

- Aiming to achieve a significant reduction of CO₂ in the steelmaking process, the government will start technological development and demonstration of hydrogen reduction steelmaking technologies in FY2021.
- For decarbonization and power saving in the manufacturing process for metals, chemical recycling technologies in the manufacturing process for basic chemicals, decarbonization of cement manufacturing processes, conversion of combustion process to hydrogen and advancement of recycling, the government will work on technology development and demonstration from FY2021 to aim to capture new markets.

(Housing and building industry)

- In order to expand the spread of wooden buildings, the government will examine the rationalization of building standards by the end of 2021, take the necessary institutional measures after 2022, develop a portal site that provides information regarding the support for the introduction of leading design and construction technologies that use CLT, etc. and

design information, and provide support for the development of designers.

- The government will consider further strengthening of regulations, such as imposing mandatory energy efficiency standards for houses, and provide support for the maintenance of highly energy efficient-saving houses and buildings, such as ZEH/ZEB and LCCM houses and buildings, and energy efficient retrofits. Moreover, the government will promote zero energy houses and building through efforts, such as encouraging the introduction of solar power generation.

(Next-generation power management industry)

- The government will promote businesses that utilize distributed energy resources through efforts, such as the renewable energy market integration through the FIP system, development of requirements of balancing market, utilization of price signals to ease congestion in local systems, reduction of the prices of storage batteries and demonstration for optimal control of each energy source, including EV.
- The government will promote the introduction of next-generation smart meters and promote the businesses related to power transmission and distribution through efforts, such as the development of technologies for providing inertia, addressing grid congestion by expanding non-firm access and inducing demand, advancement of monitoring and operation technologies for power transmission equipment, and introduction of long-distance DC power transmission.
- By sharing the knowledge and experience acquired in model projects utilizing microgrid, operating the power distribution business license and clarifying resilience value, the government will overcome issues, such as technical difficulties related to independent operation in times of disaster and facilitate coordination among stakeholders, and promote the introduction of microgrid by encouraging the formation of various business models.

(Next-generation heat energy industry)

- In order to replace natural gas with methane synthesized (methanation) from hydrogen and CO₂, etc. to realize decarbonation of heat demand, from FY2021, the government will work on the development and demonstration of technologies for making methanation equipment larger and efficient higher for practical application and commercialization and develop a supply chain through the unified efforts of the public and private sectors.

(Nuclear industry)

- Utilization of research and test reactors, including fast reactors and high-temperature gas-cooled reactors, and development of fusion energy technology, and innovative nuclear reactors, such as small modular reactors are promoted in consideration of other countries R&D efforts.

(Shipping industry)

- In order to strengthen the international competitiveness of Japan's maritime industry and

promote decarbonization, the government aims to realize the commercial operation of zero emission ships before 2028 and promote the establishment of international regulations that contribute to its introduction and spread; the development and spread of gas-fueled ships and the establishment of those production infrastructures; the development and implementation of low-carbon and decarbonizing technologies; the establishment of international regulations to promote the replacement of old inefficient ships with new greener ships by the end of FY2021 and its domestic institutionalization. At the same time, the government will work on efforts necessary for achieving low-carbon and decarbonization in coastal shipping, including the development of systems, and domestic production of ships related to offshore wind farms.

(Logistics, people flow, and civil engineering infrastructure industries)

- Based on the “MLIT’s Green Challenge“, the government will strategically promote cross-sectoral decarbonization and other initiatives in the field of livelihood, urban development, transportation and infrastructure through the acceleration of technological innovations and its implementation in cooperation with the private sector.
- With the aim of further improving the efficiency and energy saving of logistics, the government will work to improve the efficiency and energy saving of the entire supply chain by introducing machinery and digital technologies in cooperation with consignors, logistics companies, consignees, etc., through demonstration projects, which will be implemented from FY2021. At the same time, the government will examine how these efforts should be evaluated under the Energy Conservation Act so that they can lead to further motivation, and reach a conclusion by the end of FY2021.
- The government aims to reduce CO2 emissions by spreading construction machinery with excellent fuel efficiency and ICT construction to the small and medium-sized construction industry engaged in construction projects of local governments.
- In order to support the decarbonization of the sewerage system, the government will intensively work on accelerating the development of technologies related to energy-saving renovation, sewage heat, sewage biomass energy and sewage-derived hydrogen and promote their introduction until FY2025.
- The feasibility of improving dam operations, such as releasing floodwater stored in multipurpose dams while using it for power generation as much as possible without interfering with flood response by utilizing the latest weather forecasting technology when lowering the water level in preparation for the next typhoon, etc., will be verified, from FY2021, and the government will promote the utilization of unused water energy.
- In order to reduce CO2 emissions from automobiles, the government will take the measures for road traffic flow and for truck transportation efficiency, improve bicycle user environment and promote bicycle usage further aiming for 18.2% bicycle share for

commuting purposes by FY2025. In addition, the government will aim to start experiments in the middle of the 2020s by supporting research on the electric road system and promote the spread of electric vehicles by promoting social experiments on the installation of charging facilities on public roads and the maintenance of information signs.

- By providing incentives for electric vehicles when using expressways, we will reduce emissions by shifting traffic from general roads to expressways and promote the spread of electric vehicles.
- The government will promote the use of LED road lighting and encourage the introduction of new road lighting that can further reduce energy consumption by reviewing the standards for the installation of road light facilities, etc. by FY2025. Additionally, the government will conduct reviews to promote the use of renewable energy, such as solar power generation in road management and aim of nationwide deployment.
- In order to further reduce the environmental load caused by railways, the government will promote the development of fuel cell railway cars and facilitate the introduction of energy-saving cars, such as hybrid cars, and the introduction of energy-saving equipment to railway facilities.
- In order to develop carbon-neutral ports (CNP) by improving the receiving environment that enables large-quantity, stable and inexpensive imports of hydrogen, fuel ammonia, etc. and increasing the sophistication of port functions that support decarbonization, the government will promote the improvement of the environment for developing CNPs, such as formulating a CNP development plan preparation manual by the end of FY2021. The government will implement the introduction of technologies, such as onshore power supply to ships at berth and stand-alone hydrogen power supply, as soon as possible.
- In order to strengthen the competitiveness of the aviation industry by decarbonizing the aviation sector, the government will accelerate the introduction of new technologies into aircraft and equipment, improvement of flight operation methods by upgrading air traffic control, promotion of the introduction of sustainable aviation fuel (SAF) and reduction of CO2 emissions from airport facilities and vehicles. At the same time, the government will study and initiate the measures to turn airports into renewable energy hubs by the end of FY2021, and promote public-private partnerships.
- In order to promote the area decarbonization in cities, the government will establish a support system, including examining how to set an area and making private funding more accessible in FY2021, and strongly promote comprehensive initiatives from FY2022.
- In FY2021, the government will investigate the feasibility of introducing renewable energy into urban parks, including national government parks, and promote the introduction.
- With the aim of implementing green infrastructure in society, the government will promote the joint public-private and cross-sectoral development of technologies and introduction to

regions through the utilization of the "Green Infrastructure Public-Private Partnership Platform". At the same time, the government will expand private investment by attracting green bonds, etc. to green infrastructure projects undertaken by local governments and private businesses.

- The government will promote the introduction of transportation systems with a low CO2 emission rate, such as LRT, BRT and electric vehicles, and facilitate the use of public transportation by improving its convenience through the utilization of the Local Public Transportation Revitalization and Rehabilitation Act, social implementation of MaaS, etc.

(Food, agriculture, forestry and fisheries)

Based on the “Strategy for Sustainable Food Systems”, the government will promote greening in the agriculture, forestry, fisheries and food sectors through the creation of sustainable agriculture, forestry, fisheries and food technologies and involving stakeholders to the initiatives from research and development to commercialization of products and services while utilizing cross-ministerial framework.

- From FY2021, the government will promote the development of new biochar materials that have the effect of both carbon sequestration and soil amendment and revision of the standards, and promote the development of smart machinery necessary for efficient application to increase the amount of carbon sequestration to cropland soils.
- The government will promote the development of technologies to enable energy autonomy of rural villages through renewable energy, the development of technologies to the next-generation organic farming and the development of environmental control facilities that achieved the RE100 initiative in horticulture facilities from FY2021. In livestock production, the government will work on the conversion from the imported feed to domestic feed, resource recycling through the distribution of livestock-derived compost across wide areas, and refinement of breeding techniques.
- From FY2021, the government will promote the development of technologies that enable effective utilization of waste heat from food factories and technologies, such as data-driven cold chain systems to improve the efficiency of energy and heat use in the process of food manufacturing and distribution and reduce food loss and waste.
- From FY2021, the government will intensively work on the maintenance of forests, such as appropriate thinning of artificial forests, and reforestation utilizing the “elite tree” species, etc. and the development and expansion of the use of building materials that contribute to the wider adoption of wood in high-rise buildings to secure and increase the carbon sequestration rate of forests.
- The government will promote the reduction of CO2 emissions by improving energy-saving and efficiency of fishing vessels, establish a method to measure the amount of CO2 absorbed

and stored into seaweed beds by FY2023, aim to reflect it in the national greenhouse gas inventory report, and conserve and create seaweed beds and tidal flats.

(Resource recycling-related industries)

- Toward the establishment of the first commercial-scale CCU technology by 2023, the government will advance the demonstration of the production of plastic raw materials by collecting and using exhaust gas emitted from waste treatment facilities.
- The government will conduct demonstrations to facilitate the use of trees in river channels for biomass power generation fuel, etc., examine the feasibility of effective utilization of existing general waste treatment facilities, and create a guidebook for expanding the use of biomass power generation facilities and general waste treatment facilities.

(Lifestyle-related industries)

- In order to simultaneously achieve true local production and local consumption of energy, decarbonization and resilience, the government will promote power interchanging between buildings through DC power supply and development of autonomous decentralized energy systems.
- In order to revitalize the electric vehicle market and promote decarbonization of mobility in the next few years, in terms of lifestyle and business aspects, the government will promote the introduction of EVs, PHEV, and FCVs combined with renewable energies as a moving storage battery and the development of communities where it is easy to use electric vehicles.
- In addition to working on the computerization of application procedures for the J-Credit Scheme and simplification and automation of monitoring and credit authentication procedures, the government will consider the creation of a market that utilizes blockchain, with the aim of launching operation from FY2022 at the earliest.
- The government will engage in industry-academia-government collaborative efforts to enhance the atmospheric and oceanic observations and projections through the advance of meteorological satellites and simulation technologies, and promote the results to be utilized as scientific bases for climate change countermeasures by private and public institutions.

(2) Carbon pricing

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(3) Attracting domestic and foreign private capital to carbon-neutral markets

i) Development of infrastructure for smooth provision of funds

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- From the perspective of creating an environment for smooth funding, the government will examine and revise the Green Bond Guidelines concerning the issuance procedures, etc. Additionally, formulate guidelines also for social bonds and consider formulating a document that shows a broad range of examples, such as specific indicators related to solving social issues.
- In order to advance transition support for emerging countries, such as Asian countries, the government will promote the formulation and spread of the concept of the Asian version of transition finance based on the basic domestic guidelines.

ii) Improvement of the environment for green bond transactions, etc.

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- Taking into consideration the opinions that external evaluation methods related to ESG, etc. are not always clear, the government will verify the ideal conditions of ESG evaluation organizations, such as transparency and governance.
- With regard to investment trusts related to ESG, the government will promote the clarification of product characteristics and the provision of appropriate explanations, such as environmental and social effects, at the time of composition and sales from the perspective of protecting investors.

iii) Enhancement of sustainability-related disclosure

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- With regard to the formulation of international standards, the government will actively participate and disseminate opinions of Japan in the movement of the International Financial Reporting Standards (IFRS) Foundation to develop a comparable and consistent disclosure framework for sustainability, including climate change.
- By the fall of 2021, the government will add industries, increase the number of case studies, and carry out other work on the Task Force on Climate-related Financial Disclosures (TCFD) Guidance, include transition finance in the Green Investment Guidance, and while advancing the scenario analysis, disseminate it to the world at the next TCFD Summit and COP26 scheduled to be held in 2021.

- In the real-estate sector, the government will promote information disclosure by utilizing the “TCFD Guidance for Real Estate Sector” compiled in March 2021 and toward the revision of the guidance after FY2022, and examine the ideal way of disclosing information to further promote ESG investment.
- By the end of FY2021, the government will revise the list of companies engaged in innovations that enable significantly large CO2 reduction (Zero Emission Challenge) and attract more private funds.

iv) Support for lenders by financial institutions and public-private partnerships

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- As the support for the efforts of local financial institutions, related ministries and agencies will provide various information and share know-how, while collaborating with related local governments.
- The government will encourage the mobilization of private funds by promoting dialog between companies and financial institutions triggered by public fund funds, such as the Green Innovation Fund and the Green Investment Promotion Fund set up by Development Bank of Japan (DBJ).

(4) Regional decarbonization roadmap

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

Based on the trends of local governments that are actively working on the transition to decarbonization, for example, by announcing their intentions to achieve net-zero carbon emission by 2050 (Zero Carbon City Declaration), the Council for National and Local Decarbonization formulated the "Regional Decarbonization Roadmap" (decided by the Council for National and Local Decarbonization on June 9, 2021). Based on the roadmap, we aim to promote the creation of decarbonization leading areas and aim to achieve decarbonization of electricity consumption in the consumer sector by 2030 in at least 100 decarbonization leading areas. Moreover, we aim to realize a decarbonization domino effect that spreads decarbonization efforts throughout the country centering on leading areas by implementing priority measures nationwide, such as spreading self-consumption solar power generation systems in houses and buildings, improving the energy-saving function of

houses and expanding the spread of zero-carbon driving utilizing renewable energy such as EVs, PHEVs and FCVs.

In order to realize this, we will concentrate on promoting these efforts over the next five years, while also utilizing policy packages of related ministries and agencies, such as "Green Food System Strategy" and "Ministry of Land, Infrastructure, Transport and Tourism Green Challenge".

(5) Transition to a circular economy, business-led international roll-out and international cooperation

- In order to support efforts based on the Plastic Resource Circulation Act to strategically promote the transition to a circular economy necessary for decarbonization, the government will promote guidelines related to environmentally friendly design, develop regional resource circulation systems and promote the advancement of recycling, development and dissemination of alternative materials and utilization of digital technologies. Moreover, in order to promote advanced efforts for a circular economy, the government will internationally advocate the formulation of circular economic principles shared in and outside Japan that will become the norms of the global industries and financial communities.
- Based on the "MARINE Initiative", which is a concrete initiative toward the realization of the Osaka Blue Ocean Vision, the government will deepen the discussions with experts from other countries and promote international roll-out through means, such as the utilization of global data compilation by around 2023. The government will also promote measures against marine plastic litter taken by local governments.
- Aiming for the creation and saving of energy in sewage system and advancement and efficiency of facility management, in FY2021, the government will conduct demonstrations on the development of a common platform, which will be the infrastructure for data utilization, and wide-area management of sewage treatment plants through the use of ICT and AI.
- With the aim of formulating guidelines for accepting used paper diapers in the sewage system in FY2022, the government will implement demonstrations to evaluate the effect of introducing paper diaper treatment equipment in welfare facilities in FY2021 and examine measures for appropriate use.
- As a chairing country, the government will lead the review of long-term goals for reducing CO2 emissions in the task group (proposed and established by Japan) under the International Civil Aviation Organization (ICAO) by 2022.
- In order to promote the global expansion of environmental infrastructure, the government will strengthen and increase public-private collaboration for JCM with a view to regional development centered on the Asia-Pacific region through holding workshops for Pacific

island countries, whose inclusion in the Joint Action plan of the 9th Pacific Islands Leaders Meeting (PALM9) is currently being prepared.

- From FY2022, the government aims to achieve commercialization of CCS by 2030 through the full-scale demonstration of methanol synthesis using CO₂ and establishment of Tomakomai CCUS as a demonstration base through collaboration between agglomerated industries.
- In order to establish a technology to transport liquefied CO₂ by ships, which leads to long-distance and mass transportation of CO₂ and cost reduction, the government will conduct a demonstration test of liquefied CO₂ transportation by ships between the locations where CO₂ is emitted and utilized/stored from FY2021.
- Through the “Asia CCUS Network”, which will be built under the leadership of Japan in FY2021, the government aims to expand the knowledge and technologies gained in the CCUS demonstration to Asia and in order to commence a large-scale CCUS demonstration project, which will be the first in Southeast Asia, in FY2022, carry out a feasibility study in view of the utilization of JCM.
- Under the public-private initiative led by Japan, CEFIA (Cleaner Energy Future Initiative for ASEAN), the government aims to launch projects, such as the development of renewable energy microgrids in island countries and optimal control of factory facilities using IoT by the end of FY2021.
- Based on the basic energy plan, which is currently under discussion for review, the government will raise the goal for the self-development ratio and formulate LNG strategies by the end of FY2021 in anticipation of securing suitable sites for hydrogen, ammonia and CCS in the future, in addition to petroleum, LNG and rare metals. At the same time, the government will promote the development of comprehensive resource diplomacy and the development of domestic marine resources, such as methane hydrate, submarine hydrothermal deposits and rare earth mud to raise the self-development ratio based on the goal.
- In order to promote further energy saving in the industrial and business sectors, the government will sequentially review the target levels of the benchmark system based on the Energy Conservation Act and expand the target industries from FY2021. Additionally, in the household sector, the government will review the guidelines concerning the provision of energy-saving information from energy retailers to general consumers, examine a mechanism for evaluating the initiatives of energy retailers for information provision, and reach a conclusion by the end of FY2021.
- For nuclear power, while reducing the dependency as much as possible, the government will promote the restarting of nuclear power plants, with the understanding and cooperation of the relevant individuals and local governments, etc., if the Nuclear Regulation Authority

finds that the nuclear power plant in question meets the strictest regulatory standards in the world. Additionally, the government will strive to restore social trust through steady promotion of the development of a nuclear disaster prevention system, including securing evacuation routes by maintaining roads, and efforts to improve voluntary safety control. Furthermore, the government will start strengthening human resources, technology, and the industrial infrastructure, and promote research and development for the future, such as pursuing reactors with excellent safety and promoting technological development for the future, such as research and development to resolve backend issues, including the decommissioning of reactors.

- In order to expand the introduction of non-fossil energy and optimize the energy use based on the situations of the supply side and strengthen resilience, in addition to implementing thorough energy saving efforts, the government will review an institutional framework for reinforcing every initiative of the demand side to realize 3E+S and present a direction by the end of FY2021.
- With the aim of reducing emissions across the entire supply chain, the government will encourage the formulation of action plans by companies to achieve goals that are consistent with the Paris Agreement and revise the guidelines that contribute to the decarbonization of SMEs by the end of FY2021. At the same time, the government will encourage a wide range of businesses to practice decarbonization in corporate management by further improving visualization of their emission levels and reduction efforts based on the Amended Act on Promotion of Global Warming Countermeasures and conducting awareness-raising campaigns from FY2022.

The government will promote climate change adaptation efforts by changing the Climate Change Adaptation Plan in FY2021 taking into consideration the Assessment Report on Climate Change Impacts in Japan (published in December 2020) based on the latest findings on climate change and its impacts.

From the perspective of the synergy between climate action and disaster risk reduction, the government will promote the simultaneous realization of regional “climate change and resilience” and Circular and Ecological Economy. This includes the utilization of waste treatment facilities as local energy centers, implementation of Ecosystem-based Disaster Risk Reduction, strengthening resilience to disasters taking into account the complex risks associated with climate change, maintenance and utilization of climate change risk information related to disasters and strengthening information dissemination through heat stroke alert based on Heat Illness Action Plan (formulated in March 2021).

- In order to contribute to achieving the Post-2020 Global Biodiversity Framework and conserving at least 30% of the global land and ocean by 2030 through protected areas and other effective area-based conservation measures, the government will deliberate a

mechanism to areas under the natural resource management such as company-owned lands, as the areas that contribute to biodiversity conservation and develop the concept of its certification criteria by the end of FY2021 and at the same time, formulate guidelines for private sector on management and investment by the end of FY2021. By these measurements, the government will support corporate and regional activities.

- Taking the opportunity of the 15th meeting of the Conference of the Parties (COP15) to the Convention on Biological Diversity, the government will promote the Satoyama Initiative, which aims to conserve satochi, satoyama, and satoumi (Socio-ecological Production Landscapes and Seascapes) based on landscape approaches, and support about 120 developing countries' efforts in revising their national biodiversity strategies and action plans reflecting the concept of the Satoyama Initiative by around 2023 when the COP16 to the Convention on Biological Diversity will be held.
- At the COP15 to the Convention on Biological Diversity to be held in October 2021, the government will urge the strengthening of international cooperation on the prevention of unintentional introduction of invasive alien species, such as fire ants, by proposing the inclusion of the strengthening of international cooperation on measures against alien species in the Post-2020 Global Biodiversity Framework.
- Toward the realization of carbon neutrality, relevant ministries and agencies will collaboratively develop and conduct research on statistics (Green GDP (tentative name), etc.) and indicators that take into consideration environmental factors while following the System of Environmental Economic Accounting (SEEA), which is an international standard set by the United Nations, and research by international organizations.

3. Realizing New Investments for Green Growth Strategies

(1) Industrial structural transformation associated with carbon neutrality

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(2) Electrification and the use of digital technology in conjunction with carbon neutrality

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(3) Development of hydrogen stations

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Development of quick charging facilities for electric vehicles

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(5) Gas conversion of coal-fired private power generation, etc.

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(6) Development of transmission line networks to promote renewable energy

Specific measures will be taken based on the Action Plan of the Growth Strategy.

4. Strengthening Investment in “People”

(1) The state of the freelance protection system

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- Regarding freelance work, it is necessary to create an environment where individuals can choose freelance work from the perspectives of expanding diverse working styles, expanding employment of the elderly through expansion of the gig economy, extending healthy life expectancy, and increasing supporters and workers for social security. To that end, the government will inform the contents of the comprehensive guidelines, that clarify the applications of the Antimonopoly Act, the Subcontractor Act, labor-related laws and regulations, and problematic behaviors based on these laws regarding the transactions between businesses and freelancers, to freelancers by using leaflets, etc. that provide easy-to-understand descriptions of the guidelines, and provide detailed consultation services for trouble related to transactions. In addition, the government will enhance the enforcement system based on the Antimonopoly Act and the Subcontractor Act so that any transaction trouble between the ordering businesses and freelancers can be dealt with promptly.

Furthermore, considering the fact that the contents of the guidelines were reflected into promotion standards based on the Subcontracting Promotion Act in March 2021, ministries and agencies with jurisdiction over industries will revise subcontracting guidelines for each industry and strengthen enforcement based on these guidelines.

- Moreover, to promote further utilization of the special enrollment system of the workers' compensation insurance, whose scope was partially expanded from April 1, 2021, the government will continue to consider expanding the scope based on requests, etc.

(2) Initiatives to establish telework

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- As a flexible work style that can effectively utilize time and place, it is important to introduce and establish new work styles, such as teleworking. Toward the establishment of teleworking, the government will revise the telework guidelines in March 2021 and take the following efforts for understanding and managing working hours and ensuring health:
 - With regard to the understanding and managing self-reported working hours of workers when teleworking, the government will clarify that employers will not be held responsible

in relation to the Labor Standards Act, except when the employer is aware of the fact the self-reported working hours are different from the actual hours worked based on objective facts.

- The government will confirm that there is no problem in relation to the regulations of the Labor Standards Act as long as the start time and end time of working hours (even if there is a break time) are properly understood and managed.
- The government will make the “overtime, holidays and late-night work” in the telework guidelines, which are understood to be prohibited during teleworking, in principle, treated in the same way as in cases other than teleworking.
- For face-to-face guidance by doctors for workers who work long hours and those with high stress levels, companies can flexibly choose the guidance to be conducted remotely. Based on the direction of these efforts, descriptions given in the guidelines have been significantly renewed, and the government will thoroughly disseminate the guidelines by using leaflets, etc. that describe the contents of the guidelines in an easy-to-understand manner.
- From the viewpoint of preventing the spread of COVID-19 as well, the government will aggressively promote the introduction and support for teleworking through establishing and operating telework consultation centers and subsidies related to introducing teleworking.
- Based on the fact that many companies have experienced teleworking as a countermeasure against COVID-19, the government will conduct a fresh examination on the evaluation mechanism for companies that introduced teleworking to establish and accelerate quality teleworking. Moreover, the government will continue support measures, such as establishing a nationwide support system for introducing teleworking and providing free consultations by experts for SMEs. At the same time, promote the active use of ICT tools to solve communication, management and other issues involved with teleworking and support the development of ultra-high-speed broadband infrastructure that enables smooth teleworking.

(3) Realization of new ways of working, such as lifting the ban on second and side jobs and promoting the introduction of short-time working regular employees

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Promotion of second and side jobs

- In order to allow both companies and workers to feel comfortable with having second and side jobs, the government has just clarified rules, such as how to grasp the number of hours

worked at the side job reported by workers and a simple method to manage working hours, by revising the “Guidelines for Promotion of Second and Side Jobs” in September 2020. The government will thoroughly disseminate brochures that describe the contents of these guidelines in an easy-to-understand manner and sample forms that can be used when reporting working hours.

In addition, the following reviews were made on the safety net for workers with multiple jobs:

- With regard to the application of employment insurance for persons aged 65 and over, the government will test out a system that applies the total number of hours worked at two jobs, from the point when the relevant person requests.
- With regard to the benefits of industrial accident compensation insurance, the government will add up the wages of workplaces with no occurrence of industrial accidents in the calculation and approve industrial accident compensation by comprehensively evaluating the work load of workers with multiple jobs at their workplaces.

The government will widely disseminate the Act Partially Amending the Employment Insurance Act, etc. enacted in 2020, which includes the above reviews to business owners and workers.

ii) Improvement of work environment for essential workers, etc.

- The government will promote the improvement of the work environment where essential workers who are the backbone of our society, such as medical and nursing care, cleaning, public transportation, transportation, logistics, electricity, gas and water workers, can work with peace of mind.

iii) Ensuring employment opportunities until the age of 70, etc.

① Ensuring employment opportunities until the age of 70

- In consideration of the fact that companies are obliged to strive to take measures in order to ensure employment opportunities for individuals until the age of 70 based on the Amended Act on Stabilization of Employment of Elderly Persons, which was enforced in April 2021, the government will widely disseminate the contents of such measures to business owners and workers. These measures include introduction of any of the following: abolition of mandatory retirement age, extending mandatory retirement age until 70 years old, continuous employment system until 70 years old, or measures to support for starting a business, etc. (a system to conclude outsourcing contracts continuously until the age of 70, a system that allows employees to engage in social contribution programs continuously until the age of 70).

② **Reviewing pension systems due to diversification of work styles, prolongation of old age, and expansion of employment**

- Based on the Act on the Partial Revision of the National Pension Act, etc. to strengthen the pension system approved in 2020, the government will implement measures, such as expanding the coverage of the employees' insurance to part-time workers, raising the upper limit from 70 to 75 years old when individuals can claim their old-age pensions, raising the threshold for income of pensioners in their early 60s who are employed, over which the employees' pension amounts are reduced, and increasing the eligible ages for enrollment in private pensions (defined contribution pensions).

iv) Supporting work styles that can maximize productivity

① **Improving the working environment, including correction of long working hours**

- The government will continue to strive to properly enforce overtime regulations, which were applied to large corporations from April 2019 and to SMEs from April 2020. In conjunction with this, to apply the regulations to the construction industry and doctors starting in April 2024, the government will work on the smooth application of the law, such as by encouraging and supporting efforts to reduce overtime work and to ensure workers' health, including the necessary legal arrangements, even during the application grace period for enhancement of consultation systems and thorough dissemination of knowledge about the systems.
- The government will continue to aim to ensure the steady implementation of "Equal Pay for Equal Work" (Part-time and Fixed-Term Workers Act, Worker Dispatch Act) that has been sequentially enforced since April 2020, and continue to provide consultation support to SMEs and small businesses at the Work Style Reform Promotion Support Center.
- In addition to the establishment of employment management obligations for business owners to prevent power harassment, measures to prevent sexual harassment, etc. have been strengthened based on the Amended Labor Policies Comprehensive Promotion Act and the Amended Equal Employment Opportunity Act. Considering the fact that employment management obligations for business owners to prevent power harassment will be enforced to SMEs in April 2022, the government will disseminate information, raise awareness, and support corporate efforts by experts so that SMEs can take appropriate measures.

② **Promoting the "visualization" of human capital information**

- The government will promote companies to build human resource strategies that respond to changes in the business environment, and from the perspective of improving sustainable corporate value, related ministries and agencies will work together to further promote the "information visualization" regarding corporate human capital and dissemination of

information to institutional investors, etc. based on the “Ito Report - Human Capital Edition”² that clarifies the roles that should be played by management, boards of directors, and institutional investors, etc., and international discussions on the disclosure of non-financial information and human capital. At the same time, the government will build a mechanism across ministries and agencies to visualize the efforts of companies to support the active participation of diverse human resources and create a pleasant working environment to further promote the efforts of companies. Furthermore, following the revision of the Corporate Governance Code in June 2021, the government will facilitate the effective supervision of the board of directors on the allocation of management resources, including human capital investment, as well as the disclosure of information in an easy-to-understand and detailed manner.

③ Wages

- In order to achieve an early economic recovery led by private demand, the government will work to sustain the momentum of wage increases by strengthening the abilities of companies to create value added, which is the source of wage increase and tax incentive measures that stimulate income expansion, such as employment increase and wage increase. The labor share in Japan has been declining for many years, and as the wage disparity is widening due to the impact of COVID-19, it is essential to raise the minimum wage to correct the disparity. In order to create an environment where wages can be increased smoothly while maintaining employment with due considerations to companies that are facing harsh conditions due to the impact of the COVID-19 pandemic, the government will make further efforts to strengthen the support for SMEs that are working to improve productivity, optimize subcontracting transactions and provide financial support, and also aim to raise the national weighted average to 1,000 yen earlier this year by referring to the efforts of other overseas countries that have raised the minimum wage even under this pandemic and also taking into consideration regional disparities based on the wage increases³ made in Japan before the pandemic spread.
- With regard to the payment of wages to the accounts of fund transfer service providers, while establishing schemes, such as a system that guarantees the payment of an adequate amount to workers quickly in the event of the bankruptcy of the fund transfer service providers so as to protect workers and ensure that they receive payments, the government will institutionalize the system as soon as possible in FY2021 upon consultation with labor

² Report of the Study Group on Improvement of Sustainable Corporate Value and Human Capital (September 30, 2020)

³ In the “Basic Policy on Economic and Fiscal Management and Reform 2016” (decided by the Cabinet on June 2, 2016), it is stated, “The government will raise the minimum wage by around 3% per year, taking into account the growth rate of the nominal GDP, to realize the national weighted average of 1,000 yen”. Since then, the national weighted average of the minimum wage has been raised by 3.1% in 2016, 3.0% in 2017, 3.1% in 2018 and 3.1% in 2019 on a year-on-year basis. In 2020, the minimum wage was raised by 0.1%.

and management organizations. At the same time, the government will monitor risks, on a risk-basis, including money laundering risk, while referring to the examples of other countries.

(4) Promoting diversity, including the appointment of women, non-Japanese, and mid-career hires

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Further expanding women's participation

- Based on the fact that the scope of the obligation to formulate action plans and disclose information on women's participation will be expanded to business owners with 101 or more regularly employed workers from April 2022 under the Amended Act on the Promotion of Female Participation and Career Advancement in the Workplace, for smooth implementation, thoroughly disseminate information on the amended contents and support for consultations and individual visits for companies while promoting cooperation between prefectural labor bureaus and regional public organizations so that SMEs can steadily make initiatives for women's participation. At the same time, based on the "Fifth Basic Plan for Gender Equality (decided by the Cabinet on December 25, 2020), further strongly support and promote the initiatives of local governments for women's participation, such as providing support for women's re-learning/education and training for digital skills and reemployment/job change utilizing such skills and developing female executive candidates using the handbooks for developing female leaders, through the regional women's participation promotion grant.
- The government will promote efforts to achieve the goals for the appointment and employment of women (58 items) included in the "Fifth Basic Plan for Gender Equality". Moreover, with regard to gender investment, which considers women's participation at companies a factor that carries weight in investment decisions, encourage the promotion of efforts for women's participation by disseminating the "Report on Gender Investment Survey" compiled in FY2020 to business owners, institutional investors, etc. Furthermore, in order to secure human resources who will become female officers and executives, the government will promote initiatives regionally and in the private sector, and enhance and further utilize the Female Leaders Human Resources Bank.
- In order to build a society where people can make a variety of choices in the era of 100-year human life spans, the government will promote the re-entry of a diverse array of women, including those who are in their child-rearing phase and immediately after their child-

rearing phase, into the labor market through efforts, such as promoting the establishment and utilization of a “public-private partnership platform” to support new employment, promoting the development of models that comprehensively support career advancement through collaboration between universities, gender equity promotion centers and companies, and supporting initiatives of local governments in collaboration with NPOs that work closely with the needs of women with various issues and difficulties.

- Regarding the development of childcare capacity, in addition to aiming to eliminate children being wait-listed for childcare as soon as possible, the government will develop childcare capacity for about 140,000 children in the four years from FY2021 to FY2024 based on the “New Childrearing Security Plan” (announced on December 21, 2020) to respond to the rise in women's employment rate.
- In order to contribute to attaining balance between work and child-rearing, the government will provide partial support for the babysitter service charges through the company-led support project for babysitter users, and improve the convenience of users by digitalizing the application procedure of the project in the summer of 2021.
- Based on the “New After-school Children Plan”, the government will promote the development of further capacity in after-school children’s clubs. Furthermore, in order to support child-rearing that meets the diverse needs of various child-rearing families, such as whether or not they are working, the government will further advance the establishment of regional child-rearing support bases and promote multi-functionalization.
- In order to enable women to continue their careers even after childbirth, the government will encourage male participation in childcare and household chores, and correct the current situation wherein the burden of childcare and household chores is biased towards women. Specifically, the government aims for smooth enforcement of the Amended Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members, etc. enacted in June 2021, which included revisions, such as introducing a new framework that promotes leave in the period immediately after a spouse gives birth and obliging employers to take measures to inform the leave system to individual workers who have announced pregnancy or childbirth of their own or their spouse and to improve the work environment, such as setting up training/consultation counters, and promoting the publication of the rate of men who took childcare leave.
- In the science and technology sector, including the IT sector, the government will create role models close to women and promote efforts to improve the proportion of female teachers in the sector. The government will promote an increase in the proportion of female students majoring in science and engineering, including provincial universities by taking comprehensive support measures, such as setting of the capacities for female students who take school-recommendation-based and comprehensive entrance exams, implementation of

open campus and establishment of STEAM education bases for female students.

ii) Promotion of acceptance of highly-skilled foreign professionals

(Cross-government approaches to promote employment of foreign students etc. in Japan, and promote their continued activity after employment)

- Under the Platform for Promotion of Active Participation by Highly-Skilled Foreign Professionals, the government will further enhance the portal site for utilizing highly skilled foreign professionals, “Open for Professionals”, by expanding information on companies that are motivated to hire foreign professionals with the cooperation of economic organizations by the end of FY2021. At the same time, the government will further strengthen dissemination of information for highly-skilled professionals in overseas countries by holding job-matching events and webinars for companies and supporters in collaboration with related ministries and agencies.
- In collaboration with related ministries and agencies, the government will encourage companies to disseminate and utilize the educational video training materials and guidebooks on ways of learning (published in April 2021), which were created to promote effective communication between Japanese and foreign employees in the workplace.
- The government will promote the conclusion of a cooperation agreement to consistently provide international students with job hunting support between universities and prefectural labor bureaus (Hello Work) and strengthen the support of universities and related organizations nationwide and Hello Work for international students by rolling out excellent examples of the initiatives and know-how of both parties by the end of FY2021.
- Through the “Foreign Residents Support Center” (opened in July 2020), which integrates the relevant administrative agencies and other organizations that support the residence of foreign nationals, the government will provide effective and efficient residence support, including the support for promoting the employment and active participation of highly-skilled foreign professionals in Japan.
- Through the Japan International Cooperation Agency (JICA), the government will support the expansion and facilitation of the acceptance of foreign professionals by companies and local governments in Japan through efforts, such as holding seminars on multicultural coexistence at the JICA’s domestic bases by the end of FY2021.

(Enhancement of educational programs, etc.)

- With regard to measures related to international students, while paying attention to the balance between the impact of the spread of COVID-19 and measures to prevent technology leaks, the government will start the accreditation based on the accreditation system for educational programs to promote employment of international students by around the fall of 2021 to further improve the quality of acceptance, with an aim of accreditation at more

than 50 educational bases by the end of FY2026. Moreover, the government will implement and promote efforts, such as thorough enrollment management at educational institutions that accept international students, provision of education and dissemination of information using remote and online methods, and strengthening of networks with international students who returned to their home countries.

- Based on the Act on Promotion of the Japanese Language Education, the government will consider new qualifications to prove the qualities and abilities of Japanese language teachers and a mechanism to maintain and improve the standards of Japanese language educational institutions by the end of FY2021, with a view to submitting a bill to an ordinary session of the Diet in 2022.
- The government aims to enhance the contents of support for Japanese language instruction to foreign children and smoothly introduce a system to position individualized Japanese language instruction in the curriculum at the high school level from FY2023.
- In order to ensure school enrollment for foreign children, the government will make it possible to integrally manage and understand the school enrollment status of all foreign children by FY2025 and examine how to manage the health of children attending facilities that are exclusively for the purpose of educating foreign children (so-called “schools for foreign students”) by the end of FY2021.
- With regard to international students at specialized training colleges, the government will establish by FY2023 a model that comprehensively accepts international students from securing them to finding employment at domestic companies through efforts, such as providing online classes for international students at schools where they plan to enter even before they arrive in Japan and developing an employment support system in close cooperation with companies.
- In order to create an environment where foreign professionals can live and work smoothly immediately after arriving in Japan and easily adapt to their host companies and local communities, the government will promote the development of an environment where they can learn Japanese language before they arrive in Japan by training Japanese language teachers in other countries through dispatched specialists of Japanese language education, supporting the activities of Japanese language education institutions through subsidized programs, and developing and providing appropriate teaching materials and evaluation methods. Moreover, promote understanding of Japanese culture overseas and motivate foreign professionals to come to Japan through projects to disseminate Japanese culture in cooperation with relevant local organizations.

(Review and awareness-raising of immigration and residence control systems)

- With regard to the measures taken to add entrepreneurial activities in Japan by foreign nationals who have graduated from Japanese universities to the “Designated Activities”

category of residence status and the projects for encouraging foreign entrepreneurs to start businesses, the government will share successful examples of entrepreneurial activities with related organizations to promote entrepreneurship by foreign nationals.

- As part of the measures to deal with COVID-19, the government will continue to flexibly allow foreign nationals, including international students, who have difficulty returning to their home countries to renew their period of stay or change their status of residence, and if necessary, grant them permission to engage in activities other than those permitted by their status of residence previously granted.
- In order to accurately and continuously grasp the acceptance status of foreign nationals, the government will complete the development of the host institution database system by the end of March 2022, whose partial functions began to be operated in April 2021, and start operating it to manage enrollment information for each host institution.
- In order to further improve convenience and promote non-face-to-face and non-contact procedures in residence application procedures, the government will make online applications by foreign nationals themselves possible from the spring of 2022 and add applications for status of residence, such as “spouse of Japanese national” to the scope of online applications.
- From the perspective of improving convenience for foreign nationals and facilitating landing and residence examination procedures, the government will consider electronic payment of fees for the issuance of certificates of eligibility by electromagnetic means from FY2022, and for residence procedures and issuance of registered user cards from FY2023.

iii) Promoting the hiring of mid-career and experienced workers

- In order to increase the number of mid-career and experienced hires, it is necessary for companies to review their hiring systems and evaluation and compensation systems. With regard to the obligation of large companies that employ 301 or more full-time workers to periodically disclose the ratio of mid-career hires to the number of full-time workers hired based on the Amended Labor Policies Comprehensive Promotion Act enforced in April 2021, the government will disseminate the details of the obligation to ensure its smooth enforcement. At the same time, the government will disseminate information on subsidies to support mid-career hiring, which are provided to companies that expand mid-career hiring.
- On the premise that learning environments for students have been secured, and based on the recommendations and progress made by the Industry-Academia Council on the Future of Employment and University Education, the government will steadily examine the direction of actions, including a review of the “Basic Approach to the Promotion of Internships”, with regard to how students and companies should engage in job-hunting and recruitment activities appropriate for the future era.

iv) Promoting corporate organizational transformation

- Japanese companies need to change themselves into organizations that include diversity as a basis for growth and transform themselves into corporate organizations that can make decisions quickly and flexibly. To this end, the government will compile the results of the study made by the “Study Group on the Transformation of Corporate Organizations” by the summer of 2021 and present a list of specific actions to be taken by Japanese companies to trigger a movement for the transformation of corporate organization with the understanding, participation, and cooperation of management. With this, the government will promote the initiatives for the transformation of corporate organizations, such as reducing the ratio of managers and appointing experts as corporate officers (CxOs), appointing diverse human resources, such as women and young people, as executive officers and directors based on the working for one company in his/her career (as we say “HAENUKI”), examples of quota systems introduced in various countries, encouraging the experience of trying his/her skills outside of own company by using sabbatical leave, secondment to start-ups and conditional retirement with reinstatement, and introducing compensation incentives by setting the criteria for disclosure of executive compensation to be the top three executives.

(5) Stabilizing the employment environment for the younger generation by reviewing the personnel evaluation system

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(6) Facilitating labor mobility

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Maintaining employment and facilitating labor mobility

- With regard to the special measures for the employment adjustment subsidy, the government will continue to give consideration to regions where infection is spreading and to companies facing particularly harsh business conditions, gradually reduce the subsidy while carefully monitoring the employment situation.
- As part of measures to strengthen support for large companies to maintain their employment amid the prolonged effects of COVID-19, the government will allow workers who work in large companies in shifts or other work patterns to be eligible to receive the support fund and allowance if they have not been paid their wages (or leave allowance) for the leave.

- When employers, who have been forced to reduce their business activities due to the impact of COVID-19 to maintain the employment of their workers by means of employment sharing, the government will provide subsidies to both the employers of the source and recipient of the secondment through the Industrial Employment Stability Subsidy.
- In order to contribute to the smooth mobility of labor between industries and companies, the government will strengthen the matching system the Industrial Employment Stabilization Center, which provides information and consultations on labor mobility that does not involve unemployment through secondment and transfer.
- The government will reduce the burden of employers who employ, on a trial basis, workers who have been forced to leave their jobs due to the impact of COVID-19 and who wish to work in an occupation that they have never worked in before and support the smooth labor mobility to different fields.
- The government will make the period and contents of vocational training more diverse and flexible, including shorter training periods and online courses, to make the system easier to use, and through Hello Work, provide information on vocational training to those who have left their jobs or those who are on leave, mediate their enrollment in vocational training, and support them in finding employment based on the results of vocational training.
- The government will increase the amount of the subsidy in the case of reemployment to a growing company in the Early Hiring Support Course of the Labor Mobility Support Subsidy.
- The government will ensure the smooth enforcement of the Act on Workers' Cooperatives, which promotes the creation of various employment opportunities and the implementation of businesses that meet the diverse demands of the community through workers' cooperatives.
- In addition to conducting interviews and questionnaires on start-up management human resources, in FY2021, the government will support the creation of good partnerships that efficiently and effectively match human resources that contribute to the growth of start-ups. Moreover, compile and publish the findings and case studies gained in the process to aim to make the results to be widely used in the private market and the flow of human resources to start-ups to be accelerated on a large scale.

ii) Promotion of recurrent education

(Promotion of recurrent education at schools, such as universities and professional training colleges)

- The government will enhance practical programs at universities and vocational schools, such as industry-academia partnership programs to acquire ICT skills that meet the needs of society, by implementing initiatives to develop and expand practical programs for

working adults, foster specialists to support recurrent education, and improve the learning infrastructure, including information dissemination to promote recurrent education.

- In addition to the efforts to develop value-creating human resources, the government will promote the discovery and development of immediately effective and high-quality recurrent programs in a collaborative system centered on universities nationwide to support non-regular workers, those unemployed and young people who have not been able to find their desired jobs based on the employment countermeasure packages for the “with/post-COVID-19” era.

(Promotion of recurrent education at companies and vocational training institutions)

- The government will strengthen the development of human resources in response to the needs of the fourth industrial revolution and other advancements in digital technology by promoting cooperation among the relevant ministries and agencies to enhance IT courses in education and training benefits and focusing vocational training (training for unemployed persons and training for employed persons) on digital-related fields.
- In order to make it easier for workers to relearn independently, the government will enhance online, weekend and night courses in the education and training benefit system, and strengthen the dissemination of information on courses covered by education and training benefits by increasing collaboration with portal sites related to relearning, etc., to promote the use of the system.
- The government will promote the use of education and training leave systems, shorter working hours for education and training and overtime exemption systems in companies so that workers can make time to learn independently.
- In addition to working to develop an environment that makes it easy for workers to use career consulting services using the Job Card, including online, weekend and nighttime, and to promote long-term career development, the government will support the introduction of a career consulting service (self-career dock system) within companies and carry the digitalization of the Job Card forward, including linking it to Myna Portal.
- Through the “Productivity Improvement Human Resource Development Support Center”, the government will establish new courses in collaboration with universities in fields that are in great need in industry, such as AI and data science.
- With regard to public vocational training, the government will implement training to acquire the ability to understand and utilize IT and promote the establishment of training courses that meet the needs of human resources desired in industry and regions, as well as the flexibility and diversification of training courses. Moreover, in order to upgrade the training contents and implement efficient training, the government will conduct a study towards the introduction of ICT and promptly reach a conclusion.

(Development of value-creating human resources)

- In order to provide recurrent education opportunities for working adults in their 20s to early 30s who are working in large corporations to brush up their creativity and step up their game, the government will implement the “Project for the Formation of Value Creating Human Resource Development Centers at Universities, etc.” and the “Project for the Promotion of New Business Creation by Human Resources from Large Corporations, etc.” from FY2021 to develop educational programs that connect creative ideas based on the inner characteristics of individuals and customer needs to business. At the same time, the government will provide intensive support over medium- to long-term to establish universities and other bases that will put these programs into practice as soon as possible.
- The government will consider the development of an environment that enables current students and graduates of these educational programs, as well as other individuals to demonstrate their creativity in the business world.

iii) Developing an environment that supports independent career development

- With regard to the “Japanese version of O-NET” vocational information site, which was renewed in February 2021 with the addition of a suitable job search function based on the occupational interest test and value test, and the “Vocational Ability Diagnostic Tool” and from the viewpoint of supporting the job-seeking activities of people looking for work and the recruitment activities of corporations, the government aims to build an organic system that can smoothly grasp vocational information and recruitment information by, in addition to collaborations between them, linking with existing systems, such as Hello Work Internet Service.
- With regard to a financial relief system for invalid dismissals, the government will compile a specialized study on the legal and technical issues by the end of FY2021, and, based on the results, take necessary institutional measures after obtaining the final conclusion of the Labor Policy Council.

(7) Enhancing individualized and collaborative learning by promoting the Giga School Program

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Human resource development for the Society 5.0 era in primary and secondary education

- Based on the systematic development of the 35-student class system in elementary schools and verification of its effectiveness, the government will study the desirable instructional

system in schools, including junior high schools, promote a homeroom teacher system in the upper grades of elementary school, making the ideal strategy of teacher education, recruitment, training, etc., and promote work style reforms, such as using ICT to improve school operations and enhance diverse support staff.

- For primary and secondary education, the government will develop the school ICT environment by FY2022, including one computing device per student at all grades in compulsory education and a high-speed and high-capacity internal network in school so that students can fully utilize the environment, including taking their devices home. In conjunction with this, the government will provide necessary support systems, such as improving the quality of teachers and developing human systems for utilizing ICT.
- Moreover, with regard to school facilities, the government will promote the formulation of cross-departmental action plans in each municipality and provide necessary support through repairs for extending the service life of buildings, from the perspective of promoting an integrated approach to qualitative improvement and securing a safe and secure educational environment to accommodate new learning, as well as promoting the use of combined and shared facilities that will lead to the appropriate size and placement of schools and regional revitalization. In addition, the government will present a vision and model for school facilities that is suitable for the era of Reiwa by the end of FY2021 and provide support to further roll out good practices.
- The government will advance preparations so that all local governments and schools that desire to use “SINET” will be able to do so, including the utilization of educational resources, such as universities in primary and secondary education as well as in education and academic research, and conduct trial implementations in FY2021. Additionally, based on the “Future Learning” development package formulated in February 2020, disseminate the 5G utilization model in order to realize individually optimized effective learning and instruction without time and distance constraints.
- Based on the recommendations of the expert panel on the utilization of educational data, the government will accelerate measures for continuous utilization of educational data, such as standardization of data.
- Based on the fact that an environment in which one computing device is provided for each school child will be established, we are promoting the spread of digital textbooks while conducting empirical research on a nationwide scale. In addition, based on the results of the empirical research, we will examine the ideal textbook system and linkage with digital materials with an eye to FY2024, which is the year for the revision of elementary school textbooks, and FY2025, which is the year for the revision of junior high school textbooks.
- With regard to the Compensation System for Public Transmission for Classes, the government will provide the necessary support to reduce the burden of compensation, with

full-scale implementation starting in FY2021, to facilitate the use of copyrighted works in education using ICT, such as on-demand classes.

- To foster the “ability to use information”, the government will conduct surveys, etc. in order to survey and research what contributes to improving teachers’ instructional ability and to quantitatively measure their ability to use information. Additionally, while taking into consideration the status of studies on teacher development, training, and licensing, the government aims for high schools to hire at least one person who is well acquainted with ICT per school, including diverse human resources from society, by FY2024. Furthermore, publicly seek a flagship university by the end of FY2021 that will take the lead in developing teachers to have high instructional abilities for Society 5.0., and begin efforts in FY2022.
- The government will develop EdTech that realizes effective learning with AI based on the efforts of the Advanced Educational Software Introduction Demonstration Project (EdTech introduction subsidy), etc., and create and collect good examples so that educational data, such as learning logs can be effectively utilized for school children’s learning and teachers’ instructions, and aim to deploy it nationwide.
- The government will enhance the educational content of the STEAM library, which was built in FY2020. At the same time, in order to foster the problem-solving and inquiry skills that are necessary in the age of Society 5.0, the government will present a model plan, including the use of the STEAM library, and promote its dissemination nationwide. In addition, the government will promote hands-on activities that contribute to improving non-cognitive abilities, which are particularly important in the digital society.
- Based on the “Future Strategy for Overseas Educational Facilities 2030” formulated in June 2021, the government will improve the environment to enhance instructional systems in overseas educational facilities and promote the use of ICT as a foundation for the global development of Japanese companies in the post-COVID era, and enhance support for educational reforms to strengthen the functions for developing global human resources and teachers.

ii) Human resource development for the Society 5.0 era at universities, etc.

- The government will provide necessary support for students to continue their studies at universities, etc. despite the spread of the COVID-19 pandemic. At the same time, in the higher education system based on the assumption of quality assurance in the “new normal”, the government will promote the digitalization of education, such as the use of Learning Management System (LMS) and remote and online education based on the recommendations⁴ of the Council for the Implementation of Education Rebuilding, and

⁴ “New Way of Learning in the Post-COVID Era (the 12th proposal)” (Meeting of the Council for the Implementation of Education Rebuilding held on June 3, 2021)

promote necessary studies and environmental improvements for the construction of a new university education based on well-being, including a shift to data-driven education to realize individually optimized learning.

- In addition to supporting resumption and continuation of international student exchange and internationalization efforts at universities, etc., which have been greatly affected, the government will examine the reconstruction of global strategies for higher education in the “new normal” based on the discussions of the Council for the Implementation of Education Rebuilding, while keeping an eye on international trends, and reach a certain conclusion by the end of FY2021.
- In order to develop digital human resources, the government will deploy educational materials based on model curricula in mathematics, data science, and AI to universities and technical colleges nationwide and promote students to acquire basic skills, in addition to literacy levels, that they can apply to their own specialized fields, regardless of whether in humanities or sciences. At the same time, the government will promote the creation of internationally competitive, cross-disciplinary doctoral education programs for the development of the top-level human resources capable of teaching and double majors in humanities and social sciences graduate education. Furthermore, the government will develop and steadily implement a system for early training of specialized teachers in data science education and statistics. In addition, taking into account the status of efforts, such as introducing mathematics, data science, and AI education into the curriculum, the government will actively support universities and technical colleges by focusing on operating expenses and private school grants, etc.
- The government will establish a system for universities and technical colleges to certify excellent educational programs in mathematics, data science, and AI based on the needs of industry, and put it into operation by the end of FY2021 for the basic applied level. At the same time, the government will promote the development of collaborative industry-academia programs centered on the fields of mathematics, data science, and AI at universities and specialized training colleges.
- With regard to the establishment of educational programs to develop human resources with broad education and deep expertise to support the Society 5.0 era and establishment of degree programs that combine the highest level of educational and research capabilities to develop doctoral personnel who will lead the world, the government will further accelerate the efforts of human resource development based on the needs of industry and other sectors and also taking into account the results of the mid-term evaluation to be conducted from FY2021.
- In order to evaluate the academic skills necessary for the Society 5.0 era, the government will steadily implement the Common Test for University Admissions, which places an

emphasis on solving problems by demonstrating the ability to think, judge and express oneself. In addition, examine the feasibility of including “Information” in the test from FY2024, reach a conclusion by the end of FY2021, and also study the way of using CBT in the future.

iii) Human resource development and utilization for the Society 5.0 era in industry

- In the “MITOU program”, the government will examine a new initiative to develop human resources capable of creating innovations by utilizing next-generation information processing technologies that are expected to be put into practical use in the future, with an aim to start in FY2023.
- Regarding cyber security human resources, in order to promote matching between companies and human resources, the government will work on clarification and promotion of required duties/roles and necessary skills/certifications, as well as development and regional deployment of core human resources who are well-versed in Information Technology and Operation Technology for critical infrastructure and industrial infrastructure. In addition, the government will work on the development of security human resources in regional areas and highly skilled human resources for cyber-attack analysis in regional areas, the establishment of a cyber exercise implementation platform that can be utilized by educational institutions, etc., and the implementation of “practical cyber defense exercises” for the person in charge of information systems of national and local governmental agencies, etc.
- In order to create a global-scale industry in the ICT field, the government will discover human resources who will take up the challenge of disruptive innovation through the Innovation Network, etc., and support the challenge of ambitious technological issues with a view to global deployment.
- The government will promote the further development of “Community ICT Clubs” that provide local children with opportunities to learn ICT skills, such as programming, by sharing successful cases good examples and building a nationwide network, etc.
- For the participation of core technical personnel from a wide range of industrial fields in world-class skills competitions held in the WorldSkills Competition, the government will support the strengthening of their skills through overseas training and domestic joint training, and also foster the momentum for respect for skills through publicly promoting and raising awareness of the competition.
- In Society 5.0, the government will continue to improve the environment so that all people can continuously learn the ICT skills that are necessary throughout their lives, even into adulthood.

(8) Implementation of the Policy for Social Security Reform for All Generations

Specific measures will be taken based on the Action Plan of the Growth Strategy.

5. Ensuring Economic Security and Concentrated Investment

(1) Promoting economic security policy

i) Ensuring technological superiority from the perspective of economic security

Specific measures will be taken based on the Action Plan of the Growth Strategy.

ii) Reduction of threats and improvement of autonomy related to core infrastructure and supply chains

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- As the vulnerability of Japan's supply chain has become apparent in the midst of the spread of COVID-19, the government will continue to provide support for Japanese companies to introduce production facilities overseas for products and materials whose production bases are highly concentrated and goods necessary for the healthy lives of people. At the same time, we will follow up on projects related to support provided for the introduction of facilities that have been implemented so far. In addition, the government will promote the visualization of supply chains using digital technology while utilizing the "Supply Chain Resilience Forum", which is organized by the industry, government and academia of Japan, Australia, India and ASEAN, and the "Supply Chain Resilience Initiative (SCRI)", which is a cooperative framework among the economic ministers of Japan, Australia, and India. With this, we will strengthen both the resilience of supply chain and industrial competitiveness in the region to lead to the economic growth in the region as a whole.

iii) Consideration of a framework for securing medium-to long-term financial contributions to promote the strengthening of economic security

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(2) Development of advanced semiconductor technologies and promotion of manufacturing locations

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The environment surrounding the digital industry, infrastructure and semiconductors is

changing due to factors, such as the progress of digitalization, tight global supply-demand for semiconductors and economic security. To realize Society 5.0, it is necessary to increase the competitiveness of the semiconductor and digital industries, which are the foundation of social and economic activities, by grasping the changes of the times. The government will implement the “Semiconductor and Digital Industry Strategy” to solve many of the issues Japan is facing and create a society that can achieve sustainable growth.

- In order to realize a digitalized and electrified society, the government will support the design and technological development of advanced logic semiconductors and highly energy-saving high-performance semiconductors, which will be used in information and communication infrastructure, such as 5G, post-5G and data centers, as well as in automated driving and robotics. In addition, the government will refine semiconductor production equipment and materials technologies, which are Japan’s strengths, and engage in domestic joint development with overseas advanced semiconductor foundries. At the same time, the government will work to strengthen domestic manufacturing infrastructure and resilience for the supply chain for semiconductors, such as memory, sensor and power.

(3) Promoting optimal deployment of next-generation data centers

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Development of next-generation battery technologies and promotion of manufacturing locations

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- With regard to lithium, which can also be used as a raw material for batteries, examination will be made for establishing basic technology to recover it from seawater, etc.

(5) Supply chain of key technologies and commodities, such as rare earths

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(6) Strengthening manufacturing infrastructure

Specific measures will be taken based on the Action Plan of the Growth Strategy.

6. Reviving the Dynamism of Japanese Firms in a “With COVID-19” and a “Post COVID-19” World: Creating an Environment that Both Creates and Scales Up Start-ups

(1) Review of the pricing process for initial public offerings (IPOs)

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(2) Consideration of a SPAC (special purpose acquisition company) system

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(3) Improvement of the environment for the revitalization of private placement transactions

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Promoting competition policy to optimize transactions between start-ups and large companies

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(5) Comprehensive support for the formation of start-up ecosystems

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to solve social issues through the creation of start-up companies, the government will compile the “Innovation Ecosystem Formation Package” by the end of FY2021, and based on this package, while utilizing the platform for unified support for start-ups (commonly known as Plus), promote initiatives by local governments, universities, and the private sector in an integrated manner. These efforts include expanding start-up companies overseas and fostering entrepreneurs in the start-up ecosystem hub cities and conducting research and development and implementing the results in society through the new Japanese SBIR system.
- To ensure that open innovation between start-up companies and business companies does not get weakened due to the impact of the spread of COVID-19, the government will improve the system and environment related to start-up funding and promote various types

of funding to start-up companies, which are the leaders of innovation.

- By the end of FY2021, the government will establish a consortium of VCs, staffing agencies, etc. to organize the requirements for management personnel, and examine efficient and effective measures to realize the smooth transfer of management personnel to start-up companies. In addition, the government will support the creation of new businesses (secondment entrepreneurship) by employees of large companies, etc., who establish a start-up companies by using capital independent of the companies they belong to without resigning the company, and run the new company in the form of temporary secondment.
- In the J-Start-up Program, the government will add 30 to 50 start-up companies by the end of FY2021, and provide intensive support to promising start-up companies in the region in cooperation with local governments through the expansion of the program to each region.
- At the Organization for Small & Medium Enterprises and Regional Innovation, Japan, the government will provide support for start-up companies to take on challenges by facilitating financing and reusing promising assets from the middle of FY2021, and support start-up companies that are having difficulty to continue business due to the impact of COVID-19.
- The world's largest technology conferences, "Web Summit" will be held in Tokyo from 2022, to promote Japan's promising start-up companies overseas and attract foreign investment.
- In order to develop human resources with entrepreneurial skills, the government will implement entrepreneurship education programs at institutions participating in the consortium of start-up city by FY2025, and consolidate the case studies and deploy them nationwide. In addition, through the support for the creation of a start-up ecosystem in startup cities, including local universities, strengthen the system to integrally promote the development of entrepreneurial human resources and creation of start-up companies.

7. Creating an Environment for Business Restructuring and Revitalization

(1) Improving the environment for business restructuring and revitalization of large and medium-sized companies

- i) Strengthening the supply of capital funds and promoting the subscription of preferred stock**

Specific measures will be taken based on the Action Plan of the Growth Strategy.

- ii) Consideration of legislative aspects to expand the convenience of private arrangements (out-of-court workouts), etc.**

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(2) Improving the environment for business restructuring and revitalization of SMEs

- i) Guidelines for private arrangements (out-of-court workouts) of SMEs**

Specific measures will be taken based on the Action Plan of the Growth Strategy.

- ii) Dealing with personal bankruptcy**

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to create an environment where businesses, such as venture companies, that do not have tangible assets, such as real estate, can raise funds without relying on management guarantees, and where financial institutions can focus on business improvement support measures, while supporting business continuation and development of companies, the government will examine a new collateral system that covers the entire business, including intangible assets, such as goodwill and intellectual property, with reference to overseas systems and practices, while paying attention to how to ensure convenience and protect other creditors.

- iii) Initiatives by financial institutions, etc.**

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(3) Recovery of corporate profitability

Specific measures will be taken based on the Action Plan of the Growth Strategy.

8. Competition Policy and Other Measures for New Growth

(1) Promoting regulatory reform

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Promoting National Strategic Special Zones

With regard to the National Strategic Special Zone system, the government will continue to work intensively on the reform of “bedrock” regulations. In addition, the government will accelerate the national deployment of special regulatory measures for special zones by focusing on conducting studies toward the nationwide deployment of the results of special measures that have no particular adverse effects and for which a certain period of time has passed since the use of special regulatory measures.

① Further regulatory reform items

(Special measures for acquisition of farmland by corporations)

- With regard to the “Corporate Farmland Acquisition Program” that is being utilized in Yabu City, the government will conduct a survey on the needs and problems of the special measure system for the program in areas outside the special zones by the end of FY2021, and based on the results, make adjustments for expanding the application of the system nationwide and submit the necessary bill as soon as possible.

(Measures to promote appropriate use of farmland)

- Given the rapid population decline, the government will broadly examine the measures to secure the number of farmers in each region and promote the appropriate use of farmland, including measures that allow agricultural corporations to smoothly raise funds to grow their farming business, and reach a conclusion by the end of FY2021 and take necessary measures as needed.

(Facilitating the establishment of simple accommodation facilities to promote “countryside stays”)

- In the case of developing the facilities necessary for innovation in rural areas, including the promotion of “countryside stays” where people stay in rural areas and enjoy meals and experiences using the rich local resources during their stay, the government will take necessary measures after reaching a conclusion by the end of FY2021 to allow procedures to be carried out quickly while maintaining harmony with farmland use.

(Simplification of the demonstration procedures for infrastructure inspection using high-speed PLC)

- In applying for permission under the Radio Act to conduct demonstration experiments using high-speed PLC (broadband power line communication) on power lines between robots and

control devices in pipes (limited to those on the surface or underground) or underwater, using an independent power source outdoors, the government will reach a conclusion by the end of FY2021 on how to respond to the need for quick installation permission for experimental facilities, such as eliminating the need for preliminary experiments, if measures are taken appropriately, such as quick response to the occurrence of interference.

(Promoting innovation by facilitating the employment of foreign engineers)

- For the purpose of strengthening the international competitiveness of industries by promoting the employment of foreign engineers, the government will reach a conclusion by the end of FY2021 regarding the shortening of the examination period for the applications for the issuance of the certificate of eligibility for foreign engineers who work in companies certified by local governments and meet certain requirements.

(Promoting the elimination of daycare waiting list through the use of nursing personnel)

- In nursery schools and certified childcare centers where four or more 0-year-olds are enrolled, only one nurse, etc. can be considered as a nursery teacher. However, for the purpose of promoting the elimination of daycare waiting list by further utilizing nurses, etc. in the childcare field, the government will consider allowing only one nurse, etc. to be considered as a nursery teacher on the condition that the nurse does not care for the children alone, regardless of the number of 0-year-olds enrolled, while paying attention to ensuring the quality of childcare, and reach a conclusion by the end of FY2021.

② Nationwide deployment of special regulatory measures for National Strategic Special Zones

With regard to the special regulatory measures for the National Strategic Special Zones, the Basic Policy for the National Strategic Special Zones (decided by the Cabinet on February 25, 2014 and partially amended on October 30, 2020) states “accelerate national deployment of special regulatory measures for special zones by focusing on conducting studies toward the nationwide deployment of the results of special measures that have no particular adverse effects and for which a certain period of time has passed since the use of special regulatory measures”. Based on this, the government will firstly implement or examine the nationwide deployment of the following items by the end of FY2021 and then proceed with other items as they become available.

(Shortening of the procedure period for the cancellation of the designation of safety forests)

- By the end of FY2021, the government will implement nationwide a special measure that allows the shortening of the procedure period for the cancellation of designation as a safety forest if certain requirements are met.

(Special measure to the Specified Experimental Station System)

- As a measure for the national deployment of this special measure, the government will establish an operational system by the end of FY2021 to promote smooth and prompt prior coordination related to the general license application system, etc., in the ministries and agencies with regulatory jurisdiction after the establishment of this special measure, in order to respond nationally to future needs for the use of frequencies that are not covered by the nationwide system established to simplify licensing procedures for the use of frequencies in demonstration experiments.

(Extension of the job search period after graduation from Japanese language education institutions)

- The special measure to promote the employment of talented foreign nationals in Japanese companies realizes the nationwide deployment of a special measure as early as possible in FY2021. This measure grants, under certain requirements, a status of residence for up to one year for international students, who have graduated from overseas universities, etc. and enrolled in an appropriate Japanese language education institution in Japan that is accredited by the relevant local government, if they wish to continue their job-hunting activities after graduation.

(Establishment of a new special additional item for the point-based system for highly skilled foreign professionals)

- In order to actively promote the acceptance of highly-skilled foreign professionals, the government will reach a conclusion by the end of FY2021 on the national deployment of a special measure to the “point-based system for highly-skilled foreign professionals”, which provides preferential treatments in terms of Immigration Control, for foreign nationals who work for companies whose establishment, etc. is supported by local governments.

(Expansion of the establishment of “Michi-no-Eki” roadside rest areas by the private sector)

- The government will reach a conclusion by the end of FY2021 on the nationwide deployment of a special measure that allows the establishment of “Michi-no-Eki” roadside rest areas to be expanded from municipalities or public entities that can replace municipalities, but also private businesses, on the premise of concluding an agreement with municipalities.

(Removal of the planning and provision of travel products by accommodation business operators, such as farmhouse inns)

- While conducting a fact-finding survey on regional travel agencies and interviews with related industries regarding the special measure, which allows those who completed training conducted by the Commissioner of the Japan Tourism Agency to be partially exempted from the subjects of the examination for Certified Domestic Travel Service Supervisors according to the regional needs, the government will reach a conclusion by the end of FY2021 on

reviewing the operation of the examination for examination for Certified Regional Travel Service Supervisors.

(Relaxation of bus-related regulations to improve airport access)

- From the perspective of enhancing airport access that responds quickly and flexibly to needs, the government will implement the nationwide deployment of a special measure, which allows the upper limit of approval for setting fares to be notified and the notification period for setting operation schedules to be shortened (from 30 days to 7 days in advance), for airport access bus services for airports in National Strategic Special Zones.

(Opening up of area management to the private sector (relaxation of road occupancy standards))

- With regard to a special measure, which allows multilingual signboards, benches, sheds, open cafes, etc., which contribute to the formation of the international activity bases, to be exempted from the application of the room requirements related to the permission for occupancy of roads (permitted only when it is unavoidable because there is no room outside the road site), the government will reach a conclusion by the end of 2021 on the nationwide deployment of this special measure after also verifying the operational status of the Improving Pedestrian Convenience Road System.

(Special measure to the height restrictions of the Civil Aeronautics Act)

- For the height restrictions based on the Civil Aeronautics Act, which are subject to individual examination for each building, the government will implement a nationwide deployment by the summer of 2021, with regard to presenting a certain height as a guideline for the area as a whole, and then taking procedures for prompt approval in parallel with district plans that have been specifically reviewed.

(Special measures to the calculation of the employment rate for persons with disabilities)

- With regard to the nationwide deployment of a special measure to add limited liability partnerships (LLPs) to the list of partnerships that can be counted toward the employment rate of persons with disabilities, the government will conduct a study at the Labor Policy Council's Subcommittee on Employment of Persons with Disabilities, and reach a conclusion by the end of FY2021.

(Permitting the establishment of hospitals or the increase in the number of hospital beds by granting the exemption from the regulations on the number of hospital beds)

- The government will reach a conclusion by the end of FY2021 as to the nationwide deployment of the exemption on the ground of which a prefectural government can permit a medical institution to open a hospital or increase the number of hospital beds for the sake of the world's highest level of advanced medical care by adding the number of hospital beds required for the medical care to the existing standard number of hospital beds.

(Creation of "regional childcare workers" and implementation of examinations for

regional childcare workers by various entities)

- In order to solve the shortage of childcare workers, the government will examine the national deployment, including the regulatory arrangement of the special measures, which grant the qualification of regional childcare worker valid only in the area of operation for three years from the date of registration and allow various corporations, including joint-stock companies, to be used as the designated testing institutions for the regional childcare worker examination, and reach a conclusion by the end of FY2021.

ii) Utilization of sandbox system

(Making the system permanent)

The demonstration system for new technologies, etc. (regulatory sandbox system) restricts the duration and participants for the demonstration of innovative technologies and business models, such as AI, IoT, Big Data, blockchain, digitalization, automation and autonomy, remote control and the provision of digital platforms and gains the consent of participants. By doing so, it permits the implementation of demonstrations without the application of existing regulations, utilizes information obtained through the demonstrations, and realizes regulatory reforms and the swift social implementation of new technologies. Based on the Act on Special Measures for Productivity Improvement, from June 2018 to April 2021, 139 parties have been certified for 20 projects in fields, such as Fintech, healthcare, mobility, IoT, and real estate, leading to the subsequent review of laws and regulations, development of special measures, clarification of interpretation, and smooth commercialization.

Based on these achievements, the government will continue to actively utilize the demonstration system for new technologies, etc. while taking necessary measures to make it permanent.

(Major demonstrations for which ideal form of regulations will be examined in the future)

The competent minister will examine the ideal form of regulations based on the demonstrations and take necessary regulatory measures based on the results. In addition, follow-up will be conducted by the evaluation committee stipulated by law.

- Based on the results of the demonstrations, when a “motorized bicycle” equipped with pedals that meets certain requirements regarding its structure and appearance is switched to an operation mode in which it is driven by human power using the pedals in the same manner as a bicycle without using the power of the motor, it will be treated as a “bicycle” under the Road Traffic Act. Clarify the interpretation by issuing a notice, while taking into account the situation of product manufacturing and sales.

- Based on the results of the demonstration of non-face-to-face sales of over-the-counter drugs using vending machines, the government will examine the ideal form of regulations, and based on the results, take the necessary regulatory and other measures.

(2) Redesigning competition policy

i) Strengthening of the Japan Fair Trade Commission's advocacy

Specific measures will be taken based on the Action Plan of the Growth Strategy.

ii) Strengthening of the system and enforcement of the Japan Fair Trade Commission

Specific measures will be taken based on the Action Plan of the Growth Strategy.

9. Building Strong SMEs

(1) Support for business continuity and business restructuring of SMEs

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Support for business continuity (business succession, transfer, revitalization, etc.)

- Taking the opportunity of the start of one-stop support for business succession/transfer by the Business Succession/Transfer Support Centers in April 2021, the government will strengthen the centers' human resources and cooperation with private businesses in and outside the regions, and fundamentally revise business succession diagnosis in FY2021 and FY2022 to strengthen integrated support for business succession/transfer by providing push-type business support and a matching service between SMEs that have no successors with other businesses.
- Including the promotion of the use of corporate and individual versions of a business succession tax system and a tax system that contributes to the concentration of management resources of SMEs, the government will implement intensive publicity for business succession, including M&As, so that business succession/transfer is conducted smoothly even under the impact of COVID-19.
- From FY2021, the government will establish a system in each region to smoothly implement sponsor-based business revitalization by aligning the Business Succession/Transfer Support Centers with the SME Business Rehabilitation Support Co-operative through regular information exchange, training and the horizontal deployment of good practices.
- In addition to providing support for the cost required for any change or discontinuance of business following business succession and business transfer, the government will provide seamless support through the Business Succession/Transfer Support Centers in cooperation with specialized organizations, etc., so that professional consultation and support can be provided at an early stage in cases where change or discontinuance of business is unavoidable even after pursuing M&A.
- In order to support the financing of businesses affected by COVID-19, at the SME Business Rehabilitation Support Co-operative, the government will consult over the counter, request for deferment of principal payment for up to one year for existing debt, and provide supports to formulate financing plans for existing debt and new loans including coordination with relevant financial institutions. (COVID-19 special rescheduling support)
- At the SME Business Rehabilitation Support Co-operative, the government will launch an initiative to introduce experts in business revitalization support according to the request of businesses by the end of FY2021. In addition, the government will consider training experts in business revitalization support to strengthen the business revitalization support system.

- In order to promote loans that do not rely on management guarantees, the government will continue to disseminate the “Guidelines on Management Guarantees” and “Comprehensive Guidelines for Lifting Management Guarantees at Business Succession” to SMEs and financial institutions. In addition, the government will review the workflow in the Business Succession/Transfer Support Centers to further strengthen cooperation between the centers and external organizations so that data on the demand for management guarantees of financial institutions can be utilized and smooth support to meet the needs of businesses for management guarantees can be provided.

ii) Support for business restructuring

- With regard to the SME Productivity Reform Promotion Project, which supports SMEs’ capital investment, introduction of IT, development of sales channels, etc., based on the impact of COVID-19, the government will provide priority support to businesses that not only strive to improve productivity but also to try to control the spread of the infection. Among these, the government will continue to request the formulation of business plans to achieve an annual increase of 3.0% in value added for the subsidies for manufacturing and an annual increase of 3.0% in the labor productivity rate for subsidies for the subsidies for introduction of IT.
- The government will promote management support for SMEs affected by COVID-19 by the “Companionship Support-based Special Guarantee System”, under which credit guarantee fees are significantly reduced on the condition that financial institutions continue to provide one-on-one support.
- At the Japan Finance Corporation (JFC), etc., the government will support the financing necessary for business reconstructing, etc., by reducing the interest rates of applied to capital investment for the development of new business fields and changes in business categories.
- The government will promote the supply of capital funds, including the active use of capital subordinated loans at regional financial institutions, government-affiliated financial institutions, public-private partnership funds, etc.
- The government will continue to promote the growth of regional medium-sized companies and SMEs through business transformation, business succession, etc., by sharing know-how and developing human resources through joint funds with regional financial institutions, etc., utilizing DBJ’s Special Investment Operations, etc., and investing in LP investments for business succession funds, etc.
- In order to improve the management of major medium-sized companies and SMEs in the region whose financial base has deteriorated due to COVID-19, the Regional Economic Vitalization Initiative Corporation (REVIC) will provide support using the business revitalization framework and supplying capital funds in cooperation with regional financial

institutions.

- In order to promote the recruitment of young people from urban areas by regional medium-sized companies, the government will demonstrate an optimal method for a series of recruitment processes, from the formulation of recruitment strategies to the use of digital recruitment tools and remote interviews by 2021, and based on the results obtained, take measures to expand the matching market for human resources from urban to rural areas.
- As the impact of COVID-19 continues to spread, the government will continue the “Advanced Human Resource Matching Projects” with the aim of improving the growth and productivity of regional SMEs and building sustainable business models for regional financial institutions. In addition, the government will strengthen the business support system through measures, such as the full-scale operation of the “Business Support Know-how Sharing Website”, which was put into trial operation in FY2020 and the identification of distinctive examples of regional financial institutions at the “Re:ing/SUM (Regional Banking Summit)”.
- In order to sustainably provide services that are essential for local residents, such as the services for people who have difficulty with daily shopping and monitoring of elderly people, the government will deepen the study on building a collaborative system between organizations inside and outside the region by the end of FY2021, and establish about 10 new collaborative systems nationwide. At the same time, the government will identify regional and social issues that are common to multiple regions, and promote efforts to solve them by using business approaches.
- In order to provide nationwide and simultaneous support for businesses, relevant ministries and agencies will conduct research on efficient and effective support methods using AI and ICT, as well as on common and typical business revitalization methods for each industry.
- In order to promote the growth of companies and industries that will be the central figures in the region, the government will encourage regional financial institutions to support the establishment, expansion and succession of businesses in the region.

(2) Increasing labor productivity through the growth of SMEs

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

i) Support for the overseas business expansion of medium-sized companies and SMEs (Support for market development, human resources and financial support)

- Based on the fact that it is becoming more difficult to create overseas sales channels due to the spread of COVID-19, the government will expand overseas local support through the Consortium for New Export Nations and the SME Overseas Business Support Platform.

- The government will strengthen support for the use of Electronic Commerce (EC) web sites and online business negotiations by improving products based on the digital marketing information, improving PR methods on EC sites, exhibiting products at the “Japan Mall” of the Japan External Trade Organization (JETRO) set up on overseas major EC sites, and supporting product proposals that meet the needs of EC businesses.
- In order to significantly improve the success rate of overseas expansion of SMEs and the continuation rate of their business transactions, the government will provide support for the overseas expansion of SMEs through the Project to Support SMEs in Developing Japan Brand Products and Services on the premise of the collaboration with private support providers who are well-versed in local market development and have support know-how and experience.
- With the aim of developing a mechanism that will autonomously increase/expand the overseas expansion of SMEs, the government will support the demonstration of new business models, such as cross-border EC businesses by private businesses and the creation of new businesses in the SDGs fields.

(Support for overseas expansion)

- As there has been an increase in the number of contractual and labor-related problems in overseas locations and international travel has been restricted due to the spread of COVID-19, the government will promote corporate support using lawyers at overseas diplomatic missions and support using infrastructure advisors. In addition, the government will make efforts that contribute to further respect for human rights by Japanese companies at overseas locations, including efforts to improve the human rights situation and standards in destination countries.
- The government will disseminate a service launched by Nippon Export and Investment Insurance (NEXI) in January 2021 that provides a list of overseas trading companies (buyers) in specific countries and sectors free of charge to help medium-sized companies and SMEs gather information on potential business partners when they consider expanding their business overseas.
- In order to respond to the latest Model Law on International Commercial Arbitration issued by the United Nations Commission on International Trade Law (UNCITRAL) to revitalize international arbitration, the government will reach a conclusion by the end of FY2021 on the study conducted to revise the Arbitration Act, such as making provisional measures issued by arbitral tribunals enforceable, and promote human resource development, public relations, and awareness-raising, while utilizing arbitration facilities equipped with the state-of-the-art ICT.

ii) Improving labor productivity through expansion of scale

- The government will strengthen the functions of the “Business Succession/Transfer Support Centers” by reinforcing cooperation with M&A support organizations, including reviewing the ideal form of cooperation, as well as promoting standardization of operations and human resource development.
- The government aims to further improve the convenience of SMEs with regard to subsidies for business succession/transfer, which support new initiatives, such as capital investment and development of sales channels after business succession/transfer, costs of using specialists at the time of business succession, and insurance premiums for expressed guarantee insurance.
- In order to encourage SMEs that have no successors to start a new business with reduced risks and costs while utilizing their management resources, etc., the government will support the establishment of a new business by taking over the management resources of others (start-up with management resources taken over), while also utilizing subsidies for business succession/transfer.
- The government will formulate the guidelines on the ideal state of post-merger integration (PMI) after M&A by the end of FY2021 so that M&A will be considered as part of management strategy and integrated efforts, including management integration after M&A, will be encouraged.
- The government will promote efforts to expand the range of funds for SMEs, including the use of funds to support the strengthening of the management capabilities of SMEs, such as promotion of efforts in search funds and other new investment fields.
- In order to form a market view of transfer prices and fees for M&A involving SMEs and also to enable SMEs that do not have sufficient knowledge and experience in M&A to be able to judge the appropriateness of proposals from M&A support organizations, in FY2021, the government will promote trial efforts to provide corporate value evaluation tools and support efforts to obtain second opinions from other M&A support organizations.
- By establishing a registration system for M&A support organizations in collaboration with subsidies for business succession/transfer by the end of FY2021, together with the establishment of a self-regulatory organization by private intermediaries, etc., the government will develop an environment in which SMEs can receive appropriate support for M&A.
- The government will further promote efforts for SMEs, such as dissemination and awareness-raising and human resource development related to the use of IoT through collaboration between National Institute of Advanced Industrial Science and Technology (AIST) and prefectural public testing/research laboratories (Kosetsushi), which started in FY2020, in order to support productivity improvement and digitalization that leads to collaboration between companies under the appropriate collaboration and role sharing

between the AIST and prefectural Kosetsushi for SMEs and medium-sized companies.

(3) Appropriate transactions between large companies and SMEs

i) Appropriate subcontracting transactions

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will consider strengthening the enforcement system of the Act on Prohibition of Private Monopolization and Maintenance of Fair Trade and Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors. The government will also consider strengthening the collection of information related to the actual status of transactions by SMEs by strengthening the system of subcontracting inspectors and subcontractor G-Men at the Small and Medium Enterprise Agency in FY2022. At the same time, the government will strengthen the collaboration between the Small and Medium Enterprise Agency and the Japan Fair Trade Commission and reinforce the system to link the collected voices of SMEs to law enforcement.
- The relevant ministries and agencies will work together to correct trade and business practices based on the guidance and advice given by the ministers with jurisdiction over industries based on the “promotion standards” by utilizing investigations by the subcontractor G-men based on the Amended Subcontracting Promotion Act. In addition, lead this to the formulation of new subcontracting guidelines and voluntary action plans by industries that are facing problems.
- Based on the Amended Subcontracting Promotion Act, the government will establish a system to certify businesses that create transaction opportunities utilizing the strengths of SMEs through the use of digital technology, etc. At the same time, by providing financial support, etc., promote the creation of new transaction opportunities for subcontracting SMEs that do not rely on conventional business relationships and transparency of transactions through appropriate price pass-through, etc.

ii) Promotion of cooperation between large businesses and SMEs

Specific measures will be taken based on the Action Plan of the Growth Strategy.

iii) Abolition of the use of promissory notes

Specific measures will be taken based on the Action Plan of the Growth Strategy.

iv) Expansion of transactions beyond corporate affiliates

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Support for local SMEs and small businesses, etc.

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will determine how to handle the implementation of the Go To Shopping Street Campaign based on the future status of the COVID-19 pandemic, after thoroughly implementing measures to prevent its spread.
- In order to promote sustainable regional development, in FY2021, the government will provide support for the demonstration of the introduction of attractive functions that will lead to the creation of new demand by SMEs in collaboration with local governments through the project to revitalize the functions of SMEs for sustainable regional development.

(5) Enhancement of management support through public-private partnerships

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to promote the growth of medium-sized companies, the government will establish a new network of support organizations, which will also include the private sector, at “Yorozu Support Centers” in each prefecture. For this purpose, the government will select a model demonstration center that will provide active support to motivated SMEs in FY2021 and expand it nationwide after FY2022.

(6) Improving labor productivity through digitalization

- By the end of FY2021, the government will develop 600 human resources with the skills to implement AI and verify how to collaborate with SMEs, and establish a mechanism to improve the productivity of companies through human resources with the skills to implement AI, and disseminate it through local universities, etc.
- In addition to disseminating the “AI Introduction Guidebook” (visual inspection and demand forecasting edition), the government will examine and publish new themes of the guidebook by the end of FY2021.

- In order to promote the introduction of telework in SMEs, taking into account the impact of COVID-19, the government will provide support for the introduction of software and communication devices that contribute to telework.
- In order to promote the transformation of business operations and business models utilizing digital technologies in local companies, such as the companies driving regional growth, the government will promote the development of a framework in each region in which people from industry, academia, government and finance work together to support local companies, promote support for activities of local companies, and foster digital human resources.
- The government will digitize all administrative procedures of the Small and Medium Enterprise Agency by FY2023 and open up the data owned by the government, such as the status of utilization and results of SME measures, to private businesses, with an aim to create and activate the private-sector service market to support SMEs.
- In addition to encouraging the creation of private-sector services to support SMEs by opening up the data owned by the government, such as subsidy data, to the private sector, the government will establish a mechanism that enables SMEs to find management consultation and new business partners online by FY2022 to form a community involving SME management support experts and support business operators.

10. Strengthening Investment in Innovation

(1) Promoting reverse innovation

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(2) Promoting the integration of the humanities and sciences

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

(Strengthening research capabilities through the reform in competitive research funding, etc.)

- With regard to “comprehensive knowledge” that contributes to the comprehensive understanding and problem solving of human beings and society through the fusion of knowledge from the humanities and social sciences and the knowledge from the natural sciences, the government will compile the basic concept and measures to strategically promote its creation and utilization by the end of FY2021.
- In order to strengthen basic research capabilities, the government will ensure that competitive research funds, such as the Grant-in-Aid for Scientific Research and JST’s Strategic Basic Research Programs are seamlessly allocated based on the research phase and career stage of researchers. At the same time, from FY2021, the government will accelerate the review (review of allocation, examination, etc.) of the system so that support for young researchers can be enhanced, including flexible step-up for talented young researchers, and stable and sufficient research funding can be secured for talented mid-career and above researchers.
- In order to maintain and strengthen Japan’s international competitiveness in science, technology and innovation, the government will formulate a strategy for the international expansion of science and technology by the end of FY2021, and strongly promote the establishment of an international research network by supporting participation in international joint research funded by Grants -in-Aid for Scientific Research and international projects and promoting interactions among researchers.
- Under the new mission, which includes the development of young researchers linked to higher education, the government will systematically and continuously promote the formation of hubs for international brain circulation, including new hubs to be established by the end of FY2021 based on the World Premier International Research Center Initiative.
- In order to formulate effective science, technology and innovation policies, the government will advance the analysis of the relationship between research funds and research results by

utilizing consolidated data of public research funds, papers, university finances, etc. from the evidence data platform constructed by Council for Science, Technology and Innovation (e-CSTI) , as well as by extracting and analyzing factors that significantly affect research productivity through the use of Artificial Intelligence.

(Realizing Research DX)

- In order to promote AI/data-driven research to realize Research DX, the government will strengthen efforts to strategically collect, share and utilize data in various fields, such as materials, life sciences and global environment from FY2022 by also effectively and efficiently utilizing advanced shared facilities and large research facilities nationwide. In addition, continue to promote the development of research facilities and equipment that enable automation of experiments and remote access.
- By utilizing the supercomputer “Fugaku”, the government will focus on conducting research that contributes to measures against COVID-19, etc., and research in the next-generation computing field in FY2021. In addition, with regard to next-generation computing resources, by the end of FY2021, the government will review the evaluations conducted on the supercomputer to date and the direction of next generation computing resources, and promptly implement necessary actions, such as research and studies based on the review.
- In order to provide the forefront research and education environment as a next-generation scientific research platform, the government will start integrated operation of the ultra-high-speed and high-capacity network infrastructure (SINET) and the research data infrastructure in April 2022, and continue to advance the platform as well as promote research and development on necessary technologies.
- In preparation for the operation of the next-generation synchrotron radiation facility in FY2023, the government will promote the steady development based on public-private regional partnerships.

(3) Accelerating R&D of cutting-edge technologies, such as quantum technologies

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to address various important issues that need to be resolved to realize safety and security, the government will strengthen science and technology capabilities, which will be the basis for comprehensive security, taking into account the ambiguity of science and technology. As for the following issues that require urgent actions, the government will sequentially establish a policy to address them, and take necessary actions, while

coordinating with existing projects.

In order to promote necessary international joint research amid concerns over new risks associated with the internationalization and opening of research activities, the government will revise the guidelines, etc. related to competitive research funding early in FY2021 based on the “Policy for Ensuring Research Integrity for New Risks Associated with Internationalization and Opening of Research Activities” (decided by the Integrated Innovation Strategy Promotion Council on April 27, 2021).

In order to secure and maintain Japan’s technological superiority, the government will clarify critical technologies, allocate resources to critical technological fields, and implement appropriate countermeasures against the outflow of technologies. In particular, the government will collect the necessary information and examine the establishment of a framework/system, including institutional aspects, to take countermeasures against the outflow of technologies in a gradual and appropriate manner according to the actual situation of various types of technology outflow.

In order to realize the safety and security of Japan and its people, the government will establish a think tank function by the end of FY2021 to make recommendations on policies related to critical technologies that should be strategically fostered, and based on the status of the think tank function, examine the establishment of an organization to take on this think tank function by FY2023. In addition, in order to strengthen economic security, the government will create new projects that will provide strong support for the practical application of critical advanced technologies that Japan should secure, while also utilizing this think tank function.

- In order to respond to changes in socioeconomic conditions caused by COVID-19, the government will set a new moonshot goals around the fall of 2021 making use of ideas of young researchers, etc., and launch R&D projects to achieve the goals around the spring of 2022. In addition to this, the government will drastically strengthen research and development projects in the fields of moonshot goals, such as environment, agriculture, AI, robotics, quantum and health and medicine, by strengthening collaboration with other countries and flexibly changing targets.
- With regard to the Cross-ministerial Strategic Innovation Promotion Program (SIP), the government will identify social issues to be tackled in the medium term based on the “Sixth Science, Technology, and Innovation Basic Plan” (decided by the Cabinet on March 26, 2021), investigate and examine technological development themes to be tackled across government ministries and agencies while utilizing comprehensive knowledge to solve the identified issues, and select the candidates by the end of 2021.
- The government aims to establish innovative technologies that will enable the reduction of CO2 emissions based on past carbon stock (“beyond zero”) in accordance with the

Environment Innovation Strategy (decided by the Council for Integrated Innovation Strategy on January 21, 2020), and develop resource utilization using cutting-edge biotechnology, technology for the absorption/fixation of CO₂ by agricultural land, forests, and oceans, and products utilizing highly functional materials, such as cellulose nanofiber. In addition, work to strengthen international joint research and international collaboration by AIST, etc.

- Based on the “AI Strategy 2021” (decided by the Integrated Innovation Strategy Promotion Council on June 11, 2021), the government will take the following initiatives and formulate a new AI strategy by the end of 2021.
 - The government will conduct research and development of theoretical systems for deep learning, knowledge integration AI technology, and simultaneous multilingual interpretation for use at the Expo 2025 Osaka, Kansai, Japan.
 - In order to solve the black box problem of AI, the government will start the research and development of explainable AI, etc. by the end of FY2021, after examining the collaboration of core centers related to AI.
 - By the end of FY2021, the government will compile the efforts of government agencies that contribute to ensuring the reliability and fairness of AI, and start AI-related education for government officials on a trial basis by the end of FY2021.
- Based on the “Follow-up on Bio Strategy” (decided by the Integrated Innovation Strategy Promotion Council on June 11, 2021), the government will strongly promote the following initiatives.
 - In addition to conducting public recruitment and accreditation of global bio-communities in the Tokyo area and Kansai area by the end of FY2021, taking into account the status of public recruitment and accreditation of regional bio-communities, the government will promote biodata collaboration and utilization to accelerate the expansion of the market area.
 - The government will have the results of the Tohoku Medical Megabank (TMM) Project, Biobank Japan (BBJ), and the National Center Biobank Network (NCBN) linked and developed to promote the establishment of a large-scale genome and data infrastructure.
- Based on the “Quantum Technology Innovation Strategy” (decided by the Integrated Innovation Strategy Promotion Council on January 21, 2020), the government will strongly promote the following initiatives.
 - The government will establish a council that aims to create new industries based on quantum technology in the first half of FY2021, and examine the practical application of quantum computers, quantum communication, cryptography, etc.
 - The government will step up the activities of the Quantum Technology Innovation Hubs, including the deepening of collaboration between the hubs, and vigorously promote

research and development in critical technological areas, such as quantum computing, quantum measurement and sensing, and quantum communication and cryptography for the establishment of a global quantum cryptography communication network.

- Based on the joint statement issued at the Japan-U.S. Summit Meeting in April 2021, the government will strategically strengthen international collaboration through joint research and researcher exchange on quantum technology by international symposiums (Japan, the U.S., and Europe) scheduled to be held in the second half of FY2021.
- In order to strengthen material innovation power, the government will vigorously promote the following initiatives based on the “Strategies for Enhancing Material Innovation Power” (decided by the Integrated Strategy Promotion Council on April 27, 2021).
 - With the aim of promoting data-driven research in the materials field, the government will develop shared facilities and equipment that can acquire high-quality data and implement AI analysis functions.
 - The government will accelerate research and development from FY2022 by embodying technological issues to be tackled preferentially from the perspective of decarbonization and overcoming resource constraints.
 - In addition to working to build a database of manufacturing processes from FY2022, which is the source of competitiveness in the materials field, the government will promote the development of fundamental technologies that contribute to the improvement of the performance of ultra-high-performance ceramics and resist, which are required for 6G electronic devices and high-performance semiconductors.
- Based on the “Industrial Technology Vision 2020” (Ministry of Economy, Trade and Industry, May 29, 2020), a research and development base for next-generation computing technology contributing to Society 5.0 will be established in AIST, a core institute of the base, by the end of FY2021, where formulation of a technology strategy and research and development according to the strategy are conducted.
- With the aim of promoting open innovation that will lead to solving social issues of post-COVID-19, the government will form a base for backcast research and development and social implementation of the results while sharing the vision with local universities, local governments and companies, and build a mechanism for sustainable activities in the regions from FY2021.

In addition, the government will work on the production of radioisotopes using test and research reactors, etc.

(4) University reform through the creation of the University Endowment Fund, etc.

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken

in addition to the measures described in the plan.

- In order to appropriately reflect the opinions of universities and industry in the systemic reforms necessary for the establishment of university endowment funds, the government will compile recommendations at the “PEAKS University Support Forum” by the summer of 2021.
- By the end of FY2021, the government will review the accounting standards for national university corporations based on the recommendations of the PEAKS University Support Forum for the 4th medium-term target period and the final report of the Study Council for the Realization of Strategic Management of National University Corporations.
- With regard to the allocation rules for operating expense subsidies for the 4th medium-term target period of national university corporations, the government will organize the direction of the review by around the summer of 2021 and take the measures by the end of FY2021 in order to allocate subsidies in a more balanced manner, such as by carefully reviewing the common performance indicators by utilizing e-CSTI, etc., to make them more objective and quantitative, while taking into account the missions of each university, such as world-class research and regional development hub functions.
- The government will review the mechanisms for the strategic accumulation of diverse financial resources acquired by national university corporations themselves and the carry-over of the appropriated surplus to the next medium-term target period, and reach a conclusion by the end of FY2021.
- In order to create attractive regional universities that develop human resources, social implementation of research outputs and world-class research in specific fields based on regional characteristics and needs, the government will examine measures that integrally conduct university reform, and support for human resource development, and improvement of research capabilities, by the end of FY2021, including a review of existing projects.
- With the aim of realizing a campus that can flexibly respond to education and research in anticipation of post-COVID-19, the government will work to improve the environment of universities, etc., based on “ the Fifth Five-Year Program for Facilities of National Universities” (decided by the Minister of Education, Culture, Sports, Science and Technology on March 31, 2021).

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

- The government will steadily promote the support for doctoral students, which was reinforced in FY2020, to improve the treatment of outstanding doctoral students and expand their career paths, and to create an environment in which young researchers can play an active role and secure time for research.
- In addition to steadily implementing support through Fusion Oriented Research for

disruptive Science and Technology program, which provides financial support for creative research continuously up to 10 years, the government will promote verification of the effects of new mechanisms introduced in the program to deepen the efforts to ensure an environment in which researchers centered on young researchers can focus on free and challenging research.

- From FY2021, the government will strengthen the matching function between young researchers and companies by utilizing the know-how of the professional coordinators, etc., and develop human resources who are highly needed in industry by supporting internships and cross-appointments for young researchers to gain experience in social implementation.

(5) Promoting intellectual property strategy

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to expand the investment and utilization of intangible assets, such as intellectual property, including human capital, technology and know-how, which are factors that determine a company's competitiveness and profitability, the government will encourage companies to disclose their strategies for investing and utilizing intangible assets through the Guidelines for the Disclosure of Intangible Assets, which are planned to be formulated by the end of 2021, based on the revision of the Corporate Governance in June 2021 and the revision of the Guidance for Collaborative Value Creation. At the same time, through dialogue with investors and financial institutions, the government will establish a mechanism to visualize the companies' investment and utilization performance of intangible assets and reflect it in investment and finance decisions. In addition, the government will develop human resources capable of performing specialized evaluation and analysis.
- Based on the "Basic Guidelines for the Dissemination of Value Design Management", the government will promote the dissemination and utilization of the Management Design Sheet. In addition, the government will further expand its use as a tool to assist companies in the disclosure of their investment and utilization strategies for intangible assets, such as intellectual property.
- With the Task Force for the Promotion of Standardization of the Integrated Innovation Strategy Promotion Council playing a central role, from FY2021, the government will promote the strategic utilization of standards including in areas, such as smart cities, Beyond 5G, green growth and smart agriculture, which will be the focus of cross-agency efforts, and provide support for accelerating the development of standards, conducting research and

analysis, and activities necessary for the formation of international standards.

- In order for the public and private sectors to share the recognition of issues regarding the strategic utilization of standards in terms of national and management strategies and also to embody the measures to address these issues, the government will hold a conference to promote collaboration between the public and private sectors in FY2021 to share successful and unsuccessful examples and to encourage companies to raise their awareness and develop human resources so that the utilization of standards will be promoted as a management strategy.
- From FY2021, in order to support the private sector's standardization activities, the government will start providing test beds for demonstrations and dispatching experts through the standardization support service platform.
- From FY2021, the government will secure strategic standardization efforts in government research and development projects by examining the open and close strategy in management, etc. from the initial stage and conducting follow-up inspections of the status of strategic utilization of standards.
- With regard to disputes over licensing of standard essential patents (the patents essential in implementing standards) between different parties, which are expected to continue to increase in the future against the backdrop of the progress of the IoT, the government will examine the enhancement of the "Guide to Licensing Negotiations Involving Standard Essential Patents" based on judicial precedents and trends of governments in each country on clarification of good faith negotiations, and reach a conclusion by the end of FY2021. In addition, in order to create a transaction environment that makes it easier to resolve disputes between the parties concerned, the government will examine a mechanism to increase the transparency and predictability of the license negotiation process, including the rules for the provision of information between the parties concerned, and reach a conclusion by the end of FY2021.
- In order to further promote the dissemination and practice of education for creating intellectual property, the government will select schools to serve as promotion bases and teachers to play a central role in its dissemination and practice in a community-led consortium from FY2021.
- Based on the "Menu of Comprehensive Measures against Piracy Distributed Online and Time Schedule of the Measures" updated in April 2021, the government will implement comprehensive measures, such as strengthening international cooperation and enforcement of measures against piracy through bilateral consultations, etc. and promoting the introduction of access control functions in security software.
- In order to promote the utilization of intellectual property by medium-sized companies and SMEs, the government will provide hands-on support for the establishment of intellectual

property strategies for the utilization of intellectual property, based on the “Second Regional Intellectual Property Revitalization Action Plan” (formulated in July 2020), and dispatch experts, such as attorneys, as necessary in cooperation with the National Center for Industrial Property Information and Training.

- In order to achieve both the facilitation of the use of copyrighted works and the appropriate return of compensation to right holders in the context of the structural changes in the content market accompanying the progress and spread of digital technology, the Agency for Cultural Affairs will work to realize a system that enables the simple and unified processing of rights based on the expanded centralized licensing system, etc., assuming various usage situations for a vast and diverse range of copyrighted works, including past content, UGC, works with unknown right holders and other works that are not centrally managed by businesses managing copyrights, etc. In doing so, with the cooperation of the Cabinet Office (Intellectual Property Strategy Promotion Bureau), the Ministry of Economy, Trade and Industry, and the Ministry of Internal Affairs, the Council for Cultural Affairs will examine and reach a conclusion during by the end of 2021, while obtaining consent from right holders, such as creators, users, and businesses, and take necessary measures in FY2022.
- In order for content creators, etc. to be able to gain appropriate profits, the government will work on the dissemination of guidelines for appropriate production transactions and improvement of working environment and survey on the status of compliance with them by the end of FY2021, and for the film industry, establish a certification system, etc. to ensure appropriate transactions.

(6) The 2025 World Exposition in Japan as a testing ground for society of the future

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

- Based on the theme of “Designing Future Society for Our Lives”, we will use the 2025 World Exposition (Expo 2025 Osaka, Kansai, Japan) as a place to present the ideal state of society after COVID-19 as well as a “People’s Living Lab” where Society 5.0 can be experienced by demonstrating new technologies and systems. Specifically, we will take the following initiatives to enhance the content of the Expo 2025 Osaka, Kansai, Japan. If there is any regulation that hinders the promotion of these initiatives, such regulation will be actively reviewed.
 - Toward the realization of carbon neutrality in 2050, Japan will present to the world models for utilization of innovative technologies, such as negative emission technologies, next-generation solar cells, carbon recycling, hydrogen and ammonia power generation, and the development of sustainable food systems through innovations, such as zero CO2

emissions in agriculture, forestry, and fisheries. At the same time, utilize renewable energy, hydrogen and ammonia, distributed energy, and energy-saving and environment-related technologies for energy at the venue.

- Toward the Expo, efforts to present to the world Japan's cutting-edge technologies will be promoted, such as mobility technologies on land, sea, and air, including the experience of moving in a flying car, space development and food production system that support it, marine science and technology, practical level AI-based "simultaneous multilingual interpretation", Beyond 5G (so-called 6G), ultra-labor-saving smart agricultural technology systems, next-generation robots, etc.
- The Expo will present to the world the charm of Japan, such as various types of art, design, and pop culture using traditional Japanese culture and cutting-edge technologies, Japanese food, food culture, Japanese food ingredients and sake brewing, and promote visits to Japan.
- The government will strengthen the customs, immigration control, and quarantine systems to accept foreign visitors, and in addition to the safe and smooth transportation of visitors and management staff, it will strengthen the functions of the transportation infrastructure and the infrastructure around the venue so that they will serve as the platform for the growth of Osaka and Kansai after the expo.
- In addition to implementing invitation activities with an all-Japan effort, including overseas diplomatic missions to secure the participation and exhibitions from countries around the world, the government will promote efforts to realize "the safest Japan in the world" and take measures to ensure security.

(7) Creating new industries in Fukushima

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

- Based on the "Fukushima Plan for a New Energy Society" (revised in February 2021), the government will promote the further expansion of the introduction of renewable energies, including wind power, strengthening of the functions of research and development centers, creation of hydrogen innovation centers and development of models for a hydrogen society. At the same time, the government will promote the development of future-oriented urban areas under the cooperation agreement signed between the Ministry of the Environment and Fukushima Prefecture (August 2020).
- Toward the social implementation of drones, "flying cars", etc., the government will improve the environment for test flights, etc. at the Fukushima Robot Test Field, which should be made to be a base for the development and demonstration of next-generation

mobility as well as for the development and operation of systems. At the same time, the government will develop new technical standards for disaster operation guidelines for drones, and support the development of practical applications in Fukushima Hamadori in close collaboration with related organizations by FY2021.

11. Corporate Governance Reform

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will work to improve the environment for dialogue between companies and investors by encouraging the use of electronic means in the shareholders' meeting process, including further penetration of hybrid virtual shareholders' meetings and promotion of the use of virtual-only shareholders' meetings based on the Amended Industrial Competitiveness Enhancement Act.
- In order to promote the spread of M&As in which companies use their own shares as consideration, the government will disseminate the series of systemic amendments and promote their use. These systems include share delivery established by the Amended Companies Act, tax deferral on capital gains or losses through the transfer of shares related to share delivery, which was implemented in the FY2021 Tax Reform, and exception from the application of share purchase request under the Amended Industrial Competitiveness Enhancement Act.
- With regard to the market structure reform of the Tokyo Stock Exchange, the government will promote the necessary system development, such as market selection procedures by listed companies based on the revision of the Corporate Governance Code, etc. in June 2021, and at the same time, separate the Tokyo Stock Price Index (TOPIX), which currently matches all stocks listed on the First Section of the Tokyo Stock Exchange to shift to a new segmentation/index in April 2022.
- In addition to promoting financial and economic education by utilizing ICT, such as creating digital contents for each age group, to help households to build stable assets, the government will promote the spread of Tsumitate NISA, disseminate and publicize the introduction of a new NISA system in 2024, and promote the introduction of electronic procedures at financial institutions in order to establish long-term, installment-type diversified investment and improve financial literacy. In particular, the government will work to improve the financial literacy of young people in anticipation of the lowering of the age of adulthood from April 2022.
- DBJ will continue to contribute to strengthening corporate governance as a responsible investor by utilizing its Special Investment Operations, etc. and making joint investments with regional financial institutions and investments in private funds. Moreover, through LP investments, such as VCs and search funds, strengthen the supply of risk money for the private sector and the development of investment human resources in the private sector, and promote the establishment of an ecosystem for the growth capital market. In addition, the

government will steadily implement specific measures for public-private funds based on the improvement targets and plans formulated based on the “Reform Time Schedule for the New Economic and Fiscal Revitalization Plan 2020”.

- At the Financial System Council, the government will comprehensively examine the ideal disclosure system that contributes to constructive dialogue between listed companies and investors, while listening to the opinions of a wide range of stakeholders, including those on the disclosure related to sustainability and governance.
- In order to improve the quality of accounting standards used in Japan, the government will work to improve the quality of Japanese standards and promote the expansion of companies that voluntarily adopt IFRS by making further efforts to make it easier for Japanese companies to make the transition to IFRS, including strengthening efforts to reflect Japan’s viewpoint in IFRS in discussions on future projects related to IFRS. In addition, the government will develop human resources for international accounting and participate in the formulation of international standards.
- From the perspective of ensuring the reliability of accounting audits, the government will review the standards related to quality control at audit companies, etc., examine the ideal form of non-audit work and the further promotion of IT utilization, and reach a certain conclusion by the end of FY2021.
- With regard to consumer-oriented management, the government will examine how objective evaluation standards and systems should be based on the concept of ESG investment, etc. to facilitate fund procurement in the market, and reach a conclusion by the end of FY2021.

12. Initiatives in Important Fields

(1) Development and production of vaccines in Japan

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

- Based on the “Strategy for Strengthening the Vaccine Development and Production System” (decided by the Cabinet on June 1, 2021), the government will work together to rebuild the necessary systems and take the following initiatives as a long-term, continuous national strategy. In addition, the government will secure stable financial resources for the initiatives necessary for this purpose.
 - From the perspective of strengthening vaccine-related research, the government will form an unprecedented world-class research and development flagship center that conducts cross-disciplinary research and utilizes new modalities in collaboration with clinical practice and industry, and utilize, strengthen and maintain the research infrastructure of the flagship center and other distinctive centers that can be expected to generate synergistic effects, such as BSL-4 facilities. In addition, in order to strengthen the funding function of research funds with a strategic approach, the government will establish a new system in the Japan Agency for Medical Research and Development (AMED) that strategically allocates research funds together with the government toward the practical application of vaccines, based on the status of research and development in industry and trends in new modalities in and outside Japan.
 - From the perspective of strengthening vaccine-related development and in order to improve and expand the clinical trial environment, the government will improve the system of the Clinical Research Core Hospitals, etc. by promoting the employment of biostatisticians, etc.; require the Clinical Research Core Hospitals to cooperate in clinical trials in times of emergencies; secure clinical trial beds, etc. in normal times; enhance the environment for international joint clinical trials in Asia. In addition, as part of system and standard development to expedite the pharmaceutical approval process, the government will develop procedures regarding the framework for clinical trials in advance to be prepared for new infections. At the same time, the government will examine the ideal form of a system to allow special use in emergency situations, and reach a conclusion on the direction of the system by the end of 2021 while the government as a whole discusses how to deal with emergency situations when the spread of COVID-19 becomes under control in the future.
 - From the perspective of strengthening the vaccine-related production system and fostering the industry, the government will develop dual-use facilities used for vaccines and biopharmaceuticals in order to develop vaccine manufacturing bases, and raise the

level of the entire drug discovery venture ecosystem by finding and fostering excellent venture companies in order to develop drug discovery venture companies. In addition, with regard to the development and promotion of the vaccine development and manufacturing industry, the government will examine ways to ensure the smooth supply of vaccines in Japan, such as the purchase of vaccines by the government in the case of an outbreak of a new infectious disease, and with regard to vaccines that have been successfully developed, examine their global supply through international frameworks and the use of ODA according to the support needs of developing countries. At the same time, the government will establish a system to support companies that develop vaccines, domestic production of raw materials, stockpiling, etc. at the Ministry of Health, Labour and Welfare.

- To respond to the urgent threat of COVID-19, the government will preempt consensus for pharmaceutical approval based on discussions by the ICMRA (International Coalition of Medicines Regulatory Authorities), support the initiation and prompt completion of validation tests, and promote the participation of medical institutions conducting clinical trials in order to promote validation tests of vaccines produced in Japan.

(2) Growth strategies for the pharmaceutical industry

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Strengthening of life sciences and international expansion

(Strengthening of life sciences)

- Based on the “Healthcare and Medical Strategy” (decided by the Cabinet on April 9, 2021), and other policies, the government will promote consistent research and development from groundwork to practical application, under “Integrated Projects” that are focused on themes, such as modality that enables flexible and swift response to a wide range of diseases.
- In response to COVID-19, the government will strengthen the inspection and treatment systems and also promote the development of a data bank through collaboration between the National Institute of Infectious Diseases and the National Center for Global Health and Medicine to drastically strengthen the development of therapeutic drugs and vaccines.
- By the end of FY2021, the government will form a global biocommunity in the Tokyo area and the Kansai area to promote collaboration among academia, pharmaceutical companies, venture companies and venture capitalists.
- In order to promote the practical application of Software as a Medical Device, the government will accelerate the approval process based on the Act on Securing Quality,

Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices. Specifically, the government will identify sprouting seeds of Software as a Medical Device at an early stage, and organize and announce the concept of review based on their characteristics by the end of FY2021. At the same time, the government will study the introduction of a new approval review system that takes into account the characteristics of Software as a Medical Device, such as a system that designates innovative Software as a Medical Device to be granted priority review, and reach a conclusion by the end of FY2021.

- Based on the Medical Engineering Collaboration Innovation Promotion Project established in FY2020 and other initiatives, the government will strengthen collaboration with academic associations, support for benefactors of young researchers, and support for venture businesses, as well as promote new entry into the medical equipment and healthcare service sectors. Furthermore, the government will provide support for medical ventures, such as consultation on their pharmaceutical applications and business plans, through the Medical Innovation Support Office (MEDISO) and strengthen networks within and outside Japan in the field of life sciences through the Healthcare Innovation Hub (InnoHub).
- With regard to the cancer treatment system using heavy-ion beams that Japan is leading the way in its research and development, the government will promote efforts for the widespread deployment of the system based on the basic design for groundbreaking miniaturization and sophistication that will be started in FY2021.
- By utilizing the “DBJ Innovation Life Science Fund” established in March 2021 as part of DBJ’s Special Investment Operations, the government will further strengthen the supply of capital funds for initiatives that contribute to strengthening the competitiveness and promoting innovation in the life science industry (especially drug discovery and biotechnology), which is gaining rising importance in the wake of the spread of COVID-19.
- The government will examine the use of medical containers, which can be transported and connected and can be used as medical facilities for medical treatment, etc., for flexibly providing medical care in times of emergencies, such as a large-scale natural disaster, as well as for providing mobile medical services in depopulated areas, remote islands and various events during normal times.

(International expansion)

- Under the “Asia Health and Wellbeing Initiative” and “Africa Health and Wellbeing Initiative”, the government will promote the international expansion of Japan’s healthcare-related industries with a view to contributing to the achievement of Universal Health Coverage (UHC). In particular, in order to realize “smart healthcare” through the utilization of ICT in ways that are related to Japanese corporations, the government will engage in the development of soft infrastructure, including measures against infectious diseases. In addition, in order to contribute to the promotion of the pharmaceuticals and medical

equipment industries as well as to the practical application of vaccines produced in Japan, in collaboration with the Strategy for Strengthening Vaccine Development and Production System, the government will further promote the harmonization of regulations for pharmaceuticals and medical equipment in Asia based on the “Implementation Strategy for the ‘Grand Design for Asian Pharmaceutical and Medical Device Regulatory Harmonization’” (decided by the Headquarters for Healthcare Policy on July 14, 2020), as well as the establishment of an international clinical trial system within and outside Japan toward the enhancement of a clinical development system.

- While continuing to ensure consistency with the measures related to COVID-19, the government will steadily implement the international expansion of medical care centered around Medical Excellence Japan (MEJ) and JETRO and inbound medical tourism through the Japan International Hospitals (JIH) system, and improve the international response capabilities of Japan’s medical system, while taking into account the “Comprehensive Measures for Securing Appropriate Medical Care for Foreign Visitors to Japan”.
- With regard to countermeasures for infectious diseases, which poses an international threat, the government will strongly and urgently promote the development, manufacturing and delivery of diagnostics, therapeutics and vaccines, including contributions to the international framework, ACT Accelerator and its COVAX Facility, as well as strategic international joint research strongly and urgently. At the same time, the government will promote the strengthening of outbreak trend surveys, testing systems, and medical care systems in preparation for the Olympic and Paralympic Games Tokyo 2020.
- In anticipation of the post-COVID-19 era, the government will promote the international expansion of medical and healthcare products and services that will see high demand in various countries in the future. In addition, work to promote the spread of health management, including initiatives for prevention and health promotion and the introduction of systems based on Japan’s medical and nursing care initiatives.
- Through international conferences and other means, the government aims to promote UHC and boost Japan’s international status in the area of response to global public health emergencies, as well as to strengthen cooperation with other countries through bilateral assistance and assistance to organizations, such as the World Health Organization (WHO), the Global Fund to Fight AIDS, Tuberculosis and Malaria, Unitaid, Global Health Innovative Technology Fund (GHIT Fund), Gavi, the Vaccine Alliance, Coalition for Epidemic Preparedness Innovations (CEPI), World Bank Group, Asian Development Bank, and United Nations Children’s Fund (UNICEF). At the same time, the government will from the perspective of infectious disease measures, including zoonotic diseases, consider the establishment of a global hub for attracting global human resources and financial technology through industry-academia-government collaboration, and review systems that can cope

with emergency situations in the future. In addition, the government will promote measures for antimicrobial resistance (AMR) through the “One Health” approach. Furthermore, strengthen the development of human resources to contribute to international infectious disease control, as well as dispatch human resources to international organizations.

- Based on the global response to COVID-19, the government will strengthen the command-and-control functions of the government, formulate a strategy for global health by June 2022, work to support the achievement of UHC, and aim to expand related funding from the public and private sectors.

ii) ii) Data -based health and DX in health medical, and long-term care

The spread of COVID-19 has brought about renewed recognition of the importance of making testing and treatment widely available to those who need it, and of collecting and analyzing data quickly. Hence, the government will promote, with a greater sense of urgency and in a “holistic” manner, individual policies in the fields of medical care and welfare. This will be achieved by harnessing technological innovation and ensuring a high level of cost effectiveness, so as to promote health among the people, enhance the quality of medical care and nursing care as well as raise productivity, and bring about work style reforms on the ground.

① Promotion of data -based health (utilization of data in health, medical care, and long-term care)

(Online confirmation of health insurance qualification)

- By October 2021, start the full-scale operation of the “Online Confirmation System for Health Insurance Qualification”, which enables medical institutions and pharmacies to immediately check the most recent eligibility information of patients. At the same time, the government will steadily advance system development for medical institutions and pharmacies, aiming to introduce the system by virtually all medical institutions and pharmacies by the end of March 2023.

(Coordination and utilization of health and medical information in medical institutions, etc.)

- With regard to frameworks that enable medical institutions nationwide to verify patients’ health and medical information based on claims, such as information on medicines and specific health checkup information, the government will make the specific health checkup information available by October 2021 at the latest, and also make the information on medicines available from the same month. Furthermore, the government will expand the scope of information, such as information pertaining to surgeries, so that it can be verified by the summer of 2022.

- With regard to the standardization of electronic medical record information and exchange methods, it was decided in December 2020 to consider using the HL7 FHIR standards based on international data cooperation specifications, etc. that can respond to technological developments, taking into account the usefulness in the medical field. Based on this, the government will reach a conclusion on concrete measures for promoting the standardization of electronic medical records based on practical coordination and design, as well as their introduction, including small and medium-sized medical institutions, by utilizing the Medical Information Support Fund and other sources.
- With regard to the electronic prescription system based on the “Online Confirmation System for Health Insurance Qualification”, the government will establish an environment for the safe and accurate operation, including verification during implementation, and start operating it from FY2022.

(Coordination and utilization of medical and long-term care information)

- In order to promote coordination between medical care and long-term care through the use of ICT, the government will advance the creation of standard specifications for sharing patients’ medical and long-term care information between medical institutions and long-term care facilities at the time of admission and discharge. At the same time, the government will promote the creation and dissemination of standard specifications, etc. as necessary, based on the necessity of other coordination between medical and long-term care and the possibility of the use of ICT considered.

(Promotion of PHR)

- The government will continue to promote Personal Health Records (PHR). These enable individuals and their families to obtain, from a central source, their personal health checkup and prescription records, as well as facilitate improvements in their everyday life, medical consultation and treatment where necessary, and accurate communication in medical settings.
- With regard to the provision of personal data through the “Mynportal” and other sources, in addition to information on vaccination history, information related to medical checkups for infants, and other data, the government aims to start providing information on specific health checkups by October 2021 at the latest, and pharmaceutical data from the same month. As for other medical checkup and screening information, the government aims to start providing the information in electronic and standardized format by around 2022 by creating an environment for its realization, such as support for local governments, etc. based on the “Intensive Data-based Health Management Initiatives” formulated in the summer of 2020. With the aim of promoting the use of PHR services, the government will disseminate the “Basic Guidelines for the Management of Health and other personal data by Private-sector PHR Business Operators” compiled in April 2021, request compliance with the guidelines,

and formulate guidelines for high quality service levels in cooperation with the public and private sectors by the end of 2022. In addition, the government will provide the necessary support to establish a system to certify the status of compliance with the guidelines.

(Utilization of health, medical, and long-term care information as Big Data)

- In order to extend the healthy life expectancy of the people and provide world-class medical care, examine a system at AMED for the safe, the government will secure and efficient utilization of quality-controlled data in industry-academia research and development as a platform for the utilization of data obtained from research and development supported by AMED and aim to start operating it at an early stage.
- In order to improve the accuracy of the concatenation between medical and long-term care information, such as the National Database of Health Insurance Claims and Specific Health Checkups of Japan (NDB) and the Comprehensive Database for Long-term Care Insurance (Long-term care DB), the government aims to start operating from March 2022 a system, which enables the Social Insurance Medical Fee Payment Fund, etc. to utilize the history of the numbers of insured people to provide the information necessary for accurate concatenation, while ensuring safety, based on the “Online Confirmation System for Health Insurance Qualification”.
- It is important to promote the effective use of the NDB, which accumulates the information of the public’s medical treatment covered by health insurance, in order to formulate evidence-based medical policies. Therefore, the government will allow researchers conducting research using the NDB to conduct analysis on the attributes of regions, income groups, medical institutions and pharmacies, on the premise that the individual patients will not be identified. Specifically, the government will add the patient’s zip code and income group information (applicable categories for maximum copayment amount for high-cost medical care) to the claim information, and allow the provision of codes that reveal the attributes of medical institutions and pharmacies.
- In consideration of the convenience of researchers who conduct research using the NDB, the government will modify the NDB to shorten the time required from the request for provision to the provision of the information as much as possible, and make the public fund records be also available to enable research and analysis of the actual situation of COVID-19, medical assistance and intractable diseases. In addition, the government will develop a medical and long-term care linkage analysis infrastructure that can be operated in a public cloud to create an environment where researchers can research and analyze NDB data more quickly.
- In order to promote the utilization of medical information in research and development in the medical field, the government will work to improve the environment for the business operation of certified businesses with regard to the Next-Generation Medical Infrastructure

Act, and examine how pseudonymized information should be handled by certified businesses based on the status of enforcement by the end of FY2023.

② Promotion of the use of technology, such as ICT, robots, and AI in medical and long-term care settings

(Promotion of telemedicine)

- In cooperation with the relevant academic societies and business operators, etc., the government will promote efforts to collect data related to the safety and effectiveness of online medical consultations, and to understand the actual status of case studies. At the same time, based on the specific evidence, the government will examine the contents of permanent measures, taking into account the issues that were revealed by the temporary measures for the spread of COVID-19 and convenience for patients. As for the permanent framework for temporary measures, including the handling of initial consultations, the government will compile the structure by the summer of 2021 based on the results of the temporary measures, and revise the “Guidelines for the Appropriate Implementation of Telemedicine” by the fall of the same year.
- Toward the next revision of medical treatment fees, the government will survey and verify how widespread telemedicine is, and consider the addition of diseases for which safety and effectiveness have been verified to the scope of coverage by the telemedicine fee system. In addition, the government will ensure appropriate spread and promotion of telemedicine by conducting the necessary reviews of the telemedicine fees, including the review of the requirements for the implementation method and system of telemedicine, based on the results of verification for making telemedicine permanent taking into account the results of the temporary measures for telemedicine to be implemented by the summer of 2021.
- The government will prepare a “Telemedicine Model Reference Book” as a reference for doctor-to-doctor telemedicine (DtoD) using ICT to promote the spread and deployment of safe and effective telemedicine. As a system to support telemedicine, the government will promote the development and spread of a system that enables the verification of the health status of individuals over time, remotely and without face-to-face contact. Furthermore, to support difficult surgeries that can only be performed by doctors who are available remotely, the government will promote the development of high-performing, high-precision equipment, as well as the creation of a high-capacity, ultra-low-latency communications environment, which is a prerequisite for the use of such equipment.
- Based on the results of the temporary measures taken for the spread of COVID-19, the government will review the rules regarding online drug administration guidance based on the Pharmaceutical and Medical Device Act by the summer of 2021, and verify evaluation of medical treatment fees for online drug administration guidance to consider necessary

reviews.

(Utilization of technologies, such as AI)

- In order to reduce the burden of medical practitioners and improve the quality of medical services, the government will build a platform for promoting the development and utilization of AI. In addition, from FY2021, the government will strengthen the development of early detection and diagnostic technologies that utilize AI through medical-engineering collaboration. Furthermore, in order to resolve the issues identified in the development of AI, the government will put in place initiatives based on the “Process Chart for Eliminating Roadblocks” and “Process Chart for Promoting AI Development Based on a Bird’s Eye View” formulated in June 2020, and aim to expand AI technologies developed in Japan overseas and accumulate AI technologies in and outside Japan through collaboration with overseas medical institutions in Asia and other regions.

(Promotion of genomic medicine)

- The government will continue to promote genomic medicine for cancers, intractable diseases, etc. by making use of all genomic information, etc. From the perspective of significantly enhancing the precision of treatment for each individual and providing new treatment methods to patients for whom no treatment methods are available, the government will promote analysis based on the “Action Plan for Whole Genome Analysis” (formulated in December 2019) and “Roadmap 2021” (formulated in June 2021). In the analysis, the government will first utilize the main biobank specimens and new specimens to be provided in the future by FY2023, and target a maximum of nearly 100,000 cases of cancer and intractable diseases for analysis, after carefully examining those that can be utilized for research. For cancer, the government will target cancers and intractable cancers with a high incidence rate, rare cancers, and hereditary cancers, and for intractable diseases, target single gene diseases, multifactorial diseases, and diseases that are difficult to diagnose.
- Based on the progress of the analysis, the government will make an interim summary of issues by the end of FY2021, and identify issues, such as human resource development, the stance on system development and cost sharing, and addressing ethical, legal and social issues, to establish a system that enables smooth analysis and is beneficial to patients with a view to FY2024 and beyond. At the same time, the government will accumulate genome information obtained from whole genomic analysis, etc., and clinical information and establish a system that enables industry and academia stakeholders to apply it to drug discovery for a wide range of diseases and development of treatment methods.

(Ensuring cyber security in medical devices)

- In order to further strengthen countermeasures against cyber attacks on medical devices that are conducted beyond national borders, the government will take collective defensive measures by developing technical requirements, such as international resistance standards

against cyber attacks and guidance on cyber security measures for medical institutions when introducing medical devices, based on the activities in international frameworks, such as the International Medical Device Regulators Forum (IMDRF). In addition, the government will improve the international competitiveness of domestic manufacturers by introducing international standards into the standards for approval review and post-marketing surveillance of medical devices in Japan.

- The government will formulate the development targets and evaluation standards for the cyber security of medical devices according to the systems of medical institutions, etc., and compile the guidelines by the end of FY2022 to further enhance the level of cyber security in manufacturing and sales of medical devices. At the same time, the government will establish a system that enables verification of the cyber security of medical devices in licensing and approval at the Pharmaceuticals and Medical Devices Agency (PMDA).
- The government will establish a system that enables prompt collection and evaluation of domestic and international incidents and accidents caused by cyber attacks on medical devices, and disseminate information and create guidelines that contribute to enhancing cyber security measures to promote the development of medical devices with security features to defend against cyber attacks and the enhancement of systems in medical institutions when using medical devices.

(Realizing scientific long-term care)

- To bring about the realization of long-term care with the scientifically-backed effectiveness of self-reliance support, the government will implement a full-scale analysis using information from the database (LIFE) that collects and analyzes data, such as the status and contents of care of elderly persons, which commenced operation from FY2020. Then, the government will use the data for discussions on the revision of long-term care fees from the next fiscal year, and conduct evaluation and optimization based on the results of the verification. In addition, the government will provide the acquired data to long-term care facilities, and promote efforts to improve the quality of care, including the formulation of best practices for long-term care services. Furthermore, the government will conduct a review on the evaluation of outcomes to ensure that incentives will work to encourage efforts to support the independence of the elderly and prevent them from becoming severely ill.

(Development and introduction of robots, sensors, etc.)

- In order to realize sustainable care systems to overcome major diseases by 2040, for enjoying ones' life with relief and release from health concerns until 100 years old, the government will promote challenging research and development and accelerate the prompt social implementation of advanced technologies. In addition, the government will promote the development of evaluation methods to allow the people to understand their own health

status, etc.

- With the aim of spreading technologies that are effective in increasing work efficiency in the long-term care sector, the government will develop models for the provision of care at trial demonstration facilities, conduct demonstrations at long-term care settings, and disseminate and promote nationwide the models with verified effectiveness in the platform for the development, demonstration, and dissemination of long-term care robots established in August 2020.
- Alongside with promoting long-term care robots through the utilization of the Fund for Medical and Long-Term Care as well as support for the adoption of ICT, the government will accumulate and analyze evidence data obtained through large-scale demonstrations in long-term care settings and demonstrations on the effectiveness of the introduction of long-term care robots, and use this data for evaluation in the next revision of long-term care fees. At the same time, the government will promote initiatives on the introduction of long-term care robots and ICT in the field of welfare for people with disabilities, based on the situation in the long-term care sector.

③ **Organizational reform of medical and long-term care settings**

- In order to promote work style reform for doctors, etc., the government will promote management reform for medical institutions by means, including promoting thorough labor management and task-shifting, and the lateral expansion of measures for utilizing ICT, which contributes to streamlining work processes in ways, such as reducing working hours for doctors. In addition, the government will undertake a radical review of the medical information network that allows users to search for medical institutions, disseminate and raise awareness on the consultation hotline for emergencies, and strengthen initiatives that contribute to individual behavioral changes, such as the lateral expansion of advanced, outstanding practices.
- In order to solve the shortage of medical personnel capable of responding to social needs, such as infectious diseases that have become apparent due to COVID-19, the government will review the training courses for doctors at university medical schools and promote the review of educational programs.
- In order to reduce the burden on long-term care staff and provide high-quality long-term care services, the government will provide support for the spread of long-term care robots and ICT by utilizing the Fund for Medical and Long-Term Care. At that time, the government will apply the “Guidelines for Improving Productivity” and disseminate them effectively to long-term care settings, with a view to realizing the integral promotion of initiatives to enhance the efficiency and productivity of long-term care settings.
 - From the perspective of maintaining and improving the quality of long-term care services,

the government will promote the lateral expansion of pilot projects implemented in FY2019 and FY2020 as well as the convention of a prefectural version of the “Conference on the Innovation of Long-term Care Settings” to support efforts to enhance the work efficiency of long-term care settings in accordance with local needs.

- In order to implement efficient work management functions that enable diverse work styles from the perspective of work style reforms for long-term care settings, the government will strongly promote the development of Wi-Fi environments in long-term care facilities as well as the introduction of tablet devices in long-term care settings, and based on the conclusions of the harmonization and standardization of items related to efficient work management functions compiled in March 2021, promote the harmonization and standardization of work management functions.
- As for initiatives to reduce paperwork, the government will take necessary actions sequentially in the long-term care sector, based on the conclusions reached on the direction of reviews toward the establishment of more simplified, standardized formats for documents, as well as the utilization of ICT and other tools, based on the interim report (December 2019) of the Expert Committee on Reducing Burdens Related to Documents in the Long-term Care Sector of the Social Security Council. In the medical and welfare sectors as well, the government will successively advance the reduction of the volume of paperwork and standardization, while taking into consideration the characteristics of each sector.
- The government will make comprehensive efforts to secure long-term care personnel by utilizing the Fund for Medical and Long-Term Care and providing support for the utilization of diverse human resources, such as “long-term care assistants”, and the practice of diverse work styles, such as second and side jobs.

iii) Preventing diseases and the need for long-term care

The citizens are increasingly recognizing the importance of health, which is the foundation for the establishment of a 100-year life society. In order to advance reforms toward the establishment of a social security system oriented to all generations, the government will promote initiatives on evidence-based prevention and health promotion.

(Strengthening incentives for prevention and health promotion, etc.)

- With regard to the incentives for insurance premium rates for each prefectural branch according to the status of efforts for preventive and health promotion projects at the Japan Health Insurance Association, the government will conduct a review on expanding performance indicators and increasing the explicitness of allocation criteria, and reach certain conclusions by the end of FY2021.
- In reviewing each evaluation indicator and point distribution for incentives for insurers in each medical insurance, the government will review the appropriate indicators, such as

increasing the explicitness of point distribution, through a thorough PDCA cycle in order to ensure that prevention and health promotion initiatives are further strengthened with consideration given to the characteristics of the insured under the respective medical insurance.

- Under the collaboration with various sectors, such as industry, academia, government, and their partnerships, including the Committee on the Promotion of a Healthy and Sustainable Food Environment, the government will continue to consider comprehensive measures, including the collection and analysis of evidence on effective approaches to reducing salt intake and addressing other nutritional issues, taking into consideration the possibilities of making a commitment for the “Nutrition for Growth Summit”, and of international expansion to other countries including Asian countries.
- In order to elucidate the effects of chemical substances on children’s health, growth and development, the government will steadily conduct the Japan Environment and Children’s Study (JECS) and other surveys, examine a policy to effectively return the results to society by the end of FY2021, and promote efforts to encourage people to take actions to reduce risks.

(Strengthening efforts for early detection of diseases)

- In order to improve the uptake rate of various medical checkups and screening tests with established evidence, the government will roll out good examples, such as creating an environment for receiving medical checkups that match the lifestyles and needs of people, and examine effective measures to encourage medical checkups based on the results of large-scale demonstrations to promote the implementation of appropriate preventive health services for insurers, etc. In addition, based on the results of the investigation into the causes of the reluctance to receive medical checkups and screening tests due to the spread of the COVID-19 pandemic, the government will examine measures to implement medical checkups and screening tests corresponding to COVID-19.
- In order to establish a framework for the early detection and treatment of cancer and to achieve a dramatic improvement in the 5-year survival rate, the government will promote the development of simple, minimally-invasive screening methods, such as liquid biopsy and other methods based on blood or saliva, and the development of treatment methods for intractable cancers. In addition, the government will conduct an impact analysis on initiatives toward improving screening rate, such as through the application of the nudge theory, and based on the results, consider measures to improve the screening rate. As for risk-based screening, the government will promote the accumulation and analysis of scientific evidence that contributes to its realization.
- From the perspective of early detection of cancer, the government will conduct demonstration tests to quickly establish screening technologies that can easily, precisely,

and quickly detect cancers with high incidence, such as breast cancer, esophageal cancer, and colorectal cancer, and based on the results, promote the practical application of the cancer detection technology. In addition, the government will promote the improvement and enhancement of diagnostic accuracy through techniques, such as image analysis using AI.

- In order to strengthen measures for dental diseases that are also related to overall health, such as periodontal disease, the government will conduct a review on expanding the opportunities for dental checkups (screening) that are currently held every 10 years, based on the results of verification through the Dental Health Checkup Promotion Project, and reach a conclusion on the direction of reviewing the implementation method of dental checkups (screening) by FY2021. At the same time, while working to raise the uptake rate of dental checkups (screening), the government will collect and analyze effective measures to encourage people to receive necessary checkups based on the results of their checkups (screening) and evidence related to the relationship between oral health and general health, and promote medical and dental collaboration.

(Collaboration between insurers and companies and promoting health management, health investment and health services)

- In order to further deepen efforts for prevention and health promotion in collaboration with companies and insurers (“collaborative health”), from FY2021, the government will implement the health scoring reports at the employer level for health insurance societies and the Federation of National Public Service Personnel Mutual Aid Associations, in addition to the current reports at the insurer level, and strengthen the approach to health insurance societies and employers.
- In order to establish a system in which companies engaged in health and productivity management are recognized in the capital and labor markets, the government will develop an environment for the disclosure of the results of health and productivity management and publish a summary of the evaluation results for initiatives of 500 or more companies on the website of Ministry of Economy, Trade and Industry from the first half of 2022.
- In order to respond to an increase in mental health problems during the COVID-19 pandemic, the government will launch a demonstration project on the efforts to improve mental health in the workplace in FY2021 and collect and analyze evidence.
- The government will work on the promotion of FemTech⁵, which addresses issues specific to women, such as menstruation and menopause, with products and services using advanced technologies. In particular, the government will provide support from FY2021 for the creation of a system to encourage the use of FemTech products and services to prevent unwanted turnover caused by life events specific to women.
- With regard to “beyond2020 My Best Program,” an initiative triggered by the Olympic and

⁵ A coined term that combines Female and Technology.

Paralympic Games Tokyo 2020 (decided by the liaison/joint meetings of the relevant ministries and agencies on measures to create momentum through culture toward the Olympic and Paralympic Games Tokyo 2020 on December 21, 2018), the government will announce the results promptly by the end of FY2021 after the games and promote health promotion among the citizens with a view to creating a legacy.

- The government will continue to implement demonstration projects to confirm and accumulate evidence related to the health promotion effects of prevention and health promotion using data to make it available for preventive health projects of insurers and local governments. Based on the results, the government will promote efforts for appropriate prevention and health promotion by insurers, etc.
- In order to promote the development of an environment for establishing a distribution structure for health care services that ensure a certain level of quality, the government will support the voluntary development of industry and cross-industry guidelines and achieve the use of such structure by 1,000 companies, organizations, etc. by FY2025.

(Strengthening incentives for long-term care prevention)

- With regard to the evaluation indicators in FY2022 for the subsidy to promote the strengthening of insurers' functions and the subsidy to support the efforts of long-term care insurance insurers for long-term care insurance insurers and prefectures, the government will conduct necessary reviews, including strengthening the outcome indicators and focusing and simplifying the system in the direction of evaluating indicators that lead to municipal efforts to support independence, prevent people from becoming severely ill, and optimize the cost of long-term care, with an eye to reduce regional differences.
- With regard to health services for the elderly aged 75 and above, the government will apply insurers' incentive measures for medical treatment for the latter-stage elderly, and enhance detailed support, including measures against frailty.

(Strengthening comprehensive measures for dementia)

- Based on the National Framework for Promotion of Dementia Policies (decided by the Ministerial Council on the Promotion of Dementia Policies on June 18, 2019), the government will promote comprehensive dementia measures based on the pillars of "coexistence" and "prevention," and at the same time, advance initiatives to realize a barrier-free approach to dementia in cooperation with the Japan Dementia Public-Private Council. Toward the establishment of the methods to prevent dementia, strengthen the research and development efforts, such as the establishment of a system that can enable immediate response to drug trials by FY2021. In addition, the government aims to establish evaluation indicators and preventive methods through public-private collaboration in the field of dementia by FY2022. Furthermore, with the aim of realizing a society in coexistence with dementia, the government aims to operate a system in which the people concerned are

proactively involved in product development by FY2022.

(3) Oceans

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will strengthen the abilities to collect and systems to aggregate and share marine information and promote international collaboration and cooperation to enhance the capacity to understand the marine situation.
- In order to improve the sophistication and efficiency of marine observation technologies, which are indispensable for utilizing Japan's Exclusive Economic Zone (EEZ) and ensuring safety and security, the government will promote the development of unmanned marine observation systems using autonomous unmanned vehicles (AUVs) and submarine optical fiber cables, based on the "6th Science and Technology Basic Plan".
- In order to strengthen the international competitiveness of Japan's marine industries, including shipping, shipbuilding, and offshore wind industry, the government will work to improve productivity in the shipbuilding industry through business restructuring, etc., such as DX at shipyards and intercompany collaboration and cooperation across the supply chain, including the marine equipment industry.
- In order to contribute to securing an open and stable maritime order, including "free and open Indo-Pacific", and maintaining global supply chains, the government will strengthen the support for improving coast guard capabilities in addition to the export of ships, including government vessels and infrastructure for port maintenance and operation for the sea lane's littoral countries.
- In order to improve the business environment with shippers, etc., the government will increase the management efficiency and reform the work styles of sailors to transform into new coastal shipping, develop the necessary laws and regulations and establish guidelines for proper transactions by the end of FY2021.
- In order to improve the convenience of the MDA Situational Indication Linkages (MSIL) system and to share and utilize marine data among the national government, local governments and marine-related businesses, such as shipping, fisheries and resource development, the government will promote the following efforts integrally so as to create an environment to facilitate the steady progress of cooperation on marine data by FY2022.
 - The government will enhance the real-time information of the "MSIL" on seawater temperature, ocean currents, etc. by utilizing the function to accept data requests from users of marine data.

- The government will review the rules related to API collaboration and standardization of data based on the opinions of users.
- The government will make efforts to build a network with private organizations and local governments that have marine data and needs, hold forums that involve the participation of stakeholders from both the public and private sectors, and encourage the registration of data on the “MSIL”.
- In order to address global issues, such as climate change and to contribute to the utilization of the Arctic region, the government will ensure that an Arctic research vessel is built by around 2026, and engage in international collaboration and cooperation by continuing to conduct observation and research in the Arctic region and develop research personnel based on the Joint Statement of Ministers that was adopted at the Third Arctic Science Ministerial Meeting⁶.
- The government will promote the use of next-generation mobility in the sea, such as small autonomous surface vessels (ASVs), AUVs that are expected to be used as underwater drones, and remotely operated unmanned underwater vehicles (ROVs) to solve the problem of marine use in coastal areas and remote islands. In FY2021, the government will promote the development of an environment that will lead to concrete utilization and commercialization, in addition to conducting on-site demonstrations.

(4) Space

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

Based on the “Basic Plan on Space Policy” (decided by the Cabinet on June 30, 2020), space development and utilization will be expanded through the following measures.

- Under the satellite development and demonstration platform in collaboration with various ministries and agencies, while clarifying exit strategies based on future needs, the government will conduct the development and high frequency demonstration of basic technologies, such as satellite digitalization, underlying technologies related to small satellite constellations, and quantum cryptographic communications, and promote the development of satellites, such as meteorological satellites and Earth observation satellites.
- In addition to steadily developing and improving the fifth to seventh satellites and ground facilities for the Quasi-Zenith Satellite System to establish a seven-satellite constellation capable of ensuring sustainable positioning by FY2023, the government will launch the

⁶ The first meeting of the Arctic Science Ministers Meeting (ASM) was convened by the US and held in 2016 to strengthen collaboration with countries engaged in Arctic research and Arctic indigenous people’s organizations. The third meeting was held in May 2021 in Japan for the first time in Asia and co-hosted by Japan and Iceland.

development of the successor satellites necessary to maintain and improve the capability to realize sustainable positioning. In addition, the government will steadily improve the functions of the GNSS Earth Observation Network System (GEONET) and provide high-quality data through stable operations. At the same time, the government will use these infrastructures to advance demonstration projects in a wide range of fields, such as agriculture, transportation and logistics, and construction, and accelerate their social implementation.

- The government will establish a ten-satellite constellation of information gathering satellites to improve the immediacy and responsiveness and expand and strengthen their functions to improve the quality of information.
- In order to realize a geospatial society with the advanced use of geospatial information to achieve disaster prevention and mitigation, resilient national land and smart agriculture, the government will formulate the next Basic Plan for the Advancement of Utilizing Geospatial Information by the end of FY2021.
- In addition to strengthening the development of advanced technologies for space security and space science and exploration, while incorporating the cutting-edge knowledge of AI, etc., the government will promote the development of specialists who will drive the creation of new industries, and transfer the results of the development to industrial fields.
- With regard to suborbital flights⁷ that are expected to enable space travel and airborne launch of small satellites, the government will develop the institutional environment for the expansion of new space businesses based on the trends of private companies that aim to commercialize suborbital flights in the early 2020s. In addition, the government will examine the development of necessary systems for the exploration and development of resources in space, including the moon's surface, by private businesses.
- With regard to measures against space debris, the government will conduct research and development in collaboration with private companies to demonstrate technologies to remove space debris, and aim to formulate Japan's mid- to long-term policies for the creation of international rules for orbit use by the end of FY2021.

(5) Strengthening promotion of PPP/PFI

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

⁷ The Space Activity Act only regulates the launch of satellites to an altitude of 100km or higher, and suborbital flights (flying to an altitude of about 100km) are not subject to the Act. Meanwhile, suborbital flights are also not subject to the Civil Aeronautics Act since the Act does not regulate aircraft flying at an altitude of about 100km. Therefore, it is necessary to establish a new system for suborbital flights.

The government will promote initiatives toward achieving the numerical targets for the priority areas for the key areas of public facility management (concession) projects (airports, waterworks and sewerage, roads, educational facilities, public housing, passenger terminals for cruise ships, MICE facilities, public hydropower generators, and industrial waterworks) set out in the PPP/PFI Promotion Action Plan (2021 revision) (decided by the Council for the Promotion of Private Finance Initiatives on June 18, 2021). In addition, the government will promote the utilization of the timber harvesting rights system. Furthermore, the government will utilize the know-how of the private sector while suppressing the financial costs of the government, and promote the utilization and popularization of the PFS (Pay For Success, an outcome-based private consignment contracting method), which is a mechanism to solve social issues and enhance administrative efficiency.

With regard to the index-linked system for infrastructure that does not generate usage fees, investigate and organize advanced domestic cases and overseas systems and based on these results, the government will formulate practical guidelines that describe how to utilize the system by the end of FY2021. In addition, recruit national agencies and local governments that are considering the use of this method, and implement feasibility studies for at least 10 cases by FY2022 to move forward on project formation.

(Promotion of the priority areas for public facility management projects and the timber harvesting rights system)

- The government will examine how to respond to the fact that the COVID-19 pandemic is significantly affecting public facility management projects. While taking into account the results of the examination, the government will submit a bill to revise the PFI Act to the ordinary Diet session in 2022 to enable public facility management operators to carry out not only “maintenance” but also “construction”, “manufacturing” and “renovation” that are closely related to the PFI project so that operators can operate more efficiently.
- The government will verify the purpose and mechanism of the public facility management project for airports by the end of FY2021, taking into account the impact of the COVID-19 pandemic.
- The government will examine the feasibility of introducing a benchmarking system in Japan that compares the business conditions, service levels, and sustainability of each waterworks and sewerage project side by side based on the investigation results of the systems in other countries.
- With regard to the timber harvesting rights system, with a view to designating specific timber harvesting areas from FY2022, the government will examine the amount of supply from national forests necessary to ensure a stable supply of 100,000m³ of raw timber, which is the volume required by large-scale lumber mills, and the duration of timber harvesting rights based on market soundings.

(Promoting the spread of the Pay For Success contracting model)

- From FY2021, the government will implement a project that provides multi-year subsidies to local governments that implement PFS projects for the outcome-linked portion of the contracting costs that are required to produce greater outcomes, and supports the evaluation of the outcomes required for the PFS projects by specialized evaluation organizations. In addition, through this project, the government will verify how the government support should be for PFS projects implemented by local governments and work to enhance the support.
- In order to promote collaboration and information sharing among parties involved in PFS projects, such as local governments, service providers, intermediary support organizations, evaluation institutions, such as universities, and fund providers, the government will establish a “PFS Public-Private Partnership Platform” in 2021.
- In order to smoothly promote the formation of PFS projects, the government will conduct research and surveys on domestic and overseas precedent cases on how to calculate the reduction amount in social costs (public costs) as an effect of the implementation of PFS projects, and prepare and provide data necessary for the calculation.

(6) Realizing an international financial center

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- The government will review the issuance of unlisted stocks and revitalization of the secondary market and regulations regarding the policy of financial institutions executing customer orders on exchanges and the proprietary trading system (PTS) for trading without going through an exchange. In addition, while ensuring investor protection and fair trading as a precondition, the government will consider reviewing the auction system, such as easing the criteria for transferring from PTS to exchanges.
- The government will work to promote awareness and disseminate tax measures for the establishment of an international financial center, and for the measures with a time limit, verify their effectiveness in the middle of their applicable period and consider reviewing them as necessary.
- In addition to overseas asset management companies, the government will conduct prior consultation, registration and licensing examinations, and supervision, etc. in English for new foreign businesses in the securities and banking industries that mainly deal with customers in English.
- Through the joint efforts of the private and public sectors, the government will build a

financial business start-up support network that eliminates silos, and disseminate information about related measures, opening an office and helpful tips for living. Promote in collaboration with overseas diplomatic missions.

(7) Promoting direct investment in Japan

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- For the business platform, “Japan Innovation Bridge (J-Bridge)”, which promotes cooperation and M&As between Japanese companies and foreign companies and start-ups in Asia and other regions, we will expand the number of overseas bases to strengthen inbound and outbound matching, especially in the carbon neutral and digital fields. With this, we will create new business models that incorporate outstanding technologies and business methods from Japan and abroad.
- The government will launch a new “Project for Supporting Regional Brand Building” to enhance the creation of key concepts and the advancement of strategies for attracting foreign companies to a region.
- With the “Regional Business Conference”, we will strengthen pre-matching between foreign companies and local governments, local companies and universities through the use of an online platform.
- The government will form an international startup ecosystem base cities centered on universities, and integrally and comprehensively promote the accumulation of foreign human resources (faculty members, researchers, entrepreneurs, etc.) and foreign start-ups and investors.
- We will hold a Japan Business Conference participated by top executives of foreign companies and relevant Japanese ministers, and actively communicate to the world Japan’s open business environment and efforts toward “carbon neutrality by 2050”.
- Through the “Japanese Law Translation Project” which will set the goals for translation of new laws and regulations by utilizing machine translation, we will promote efforts to speed up the release of translated laws and regulations and to enrich their contents.
- In principle, support should be provided also in English from the time of the next renovation for the systems related to incorporation of corporation, taking into account cost effectiveness.
- For the procedures related to incorporation of corporation,
 - Guidebooks for applications in English and sample forms will be prepared by the end of FY 2021, and
 - For online application procedures, consideration and determination will be made on

adding an automatic translation system to the registration information system used in the procedures for applying for incorporation registration by the end of FY 2021.

Moreover, in cooperation with professional experts who offer services to execute procedures, it will be possible to smoothly submit the applications for incorporation to the Labour Standards Inspection Office, Hello Work, and the Pension Office after the application for registration is filed.

(8) Institutional reform in individual fields

i) Institutional development for automated delivery robots

Specific measures will be taken based on the Action Plan of the Growth Strategy.

ii) Institutional development for electric kickboards

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In addition to promoting initiatives based on the Action Plan of the Growth Strategy, the government will examine how to ensure the safety of the traffic environment and vehicle bodies based on the reviews of traffic rule systems.

iii) Institutional development for drones, etc.

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

(Social implementation of drones)

- In order to overcome various challenges faced by Japan, such as declining birthrate and aging society, depopulation, and labor shortage, the government will realize a system that allows drones to fly “beyond visual line of sight” flights (Level 4) in populated areas by the end of FY2022. At that time, the government will develop systems and structures necessary for the smooth operation of the system. In addition, examine how the operation of drones should be controlled for more efficient drone flights. Along with these efforts, the government will promote the practical application and spread of drones in fields, such as logistics, disaster response, infrastructure and plant maintenance and inspection, to make our daily lives safer, more secure, more comfortable and convenient. Furthermore, under the recognition that drones are an important field that will support the future of Japan,

including the perspective of strategic autonomy and indispensability, the government will foster the industry from a technological aspect, including the development of underlying technologies and the development and international standardization of evaluation methods for aircraft performance.

(Realization of Level 4)

- In order to realize a system that enables Level 4 by the end of FY2022, the government will organize the requirements necessary for the enforcement of a system for certifying the safety of aircraft and a system for certifying the skills of pilots, and formulate requirements for private organizations that undertake inspection, testing and training to ensure the effectiveness of these systems.
- In preparation for the enforcement of the registration system around the summer of 2022, the government will formulate and publish technical standards for remote ID to identify registration codes remotely by the summer of 2021, and establish an input system for outgoing information by the end of FY2021.
- In order to reduce the burden and speed up the procedures related to flight, the government will realize the functional linkage between various application systems related to the Civil Aeronautics Act by the end of FY2022. In addition, the government will promote the provision of online and one-stop services for procedures based on the Civil Aeronautics Act and the Radio Act by utilizing private services. Furthermore, the government will determine the necessity of providing online and one-stop services for other various legal procedures and examine how they should be coordinated.

(Contribution to daily life)

- In order to achieve the practical application of various drone services to solve logistics issues, such as maintaining the last-mile delivery network in remote islands and mountainous areas, through the use of drones, the government will take the necessary measures, such as revising the “Guidelines for Delivery of Goods Using Drones” around the summer of 2021 to organize the methods and safety measures to ensure business profitability as well as to clarify the handling of pharmaceuticals.
- For prompt and effective understanding of the disaster situation, evacuation guidance, search, etc., at the time of a disaster, the government will collect the examples of the use of drones and promote their introduction and horizontal deployment through the “Disaster Prevention and Technology Public-Private Partnership Platform” to be established in 2021.

(Promotion of technological development)

- The government will develop technologies for safe and secure drones with the goal of bringing them to market in 2021 and promote their use in Japan and abroad. In FY2021, the government will develop drones with high payload capacity for transporting emergency supplies at the time of a disaster. By 2025, the government will develop drone technologies

that enable even higher payload capacity and longer flight distances that contribute to ensuring carbon neutrality and the supply chain. For advanced use of drones in agriculture, the government will integrally develop high-performance drones for agriculture and technologies for utilizing drones, such as data-driven cultivation management technologies that effectively utilize data, and put them into practical use by FY2023.

- Targeting for FY2022 and FY2024, the government will develop performance evaluation methods for Level 4 aircraft and multiple aircraft operations that will lead to further manpower saving.

(Realization of “flying cars (eVTOL)”)

- With the aim of launching the “flying car (eVTOL)” project from FY2023, the government will continue to examine the development of systems, such as safety standards for aircraft and flight operation and competence certification standards for pilots, based on the “Roadmap toward Air Mobility Revolution”, and revise the roadmap by the end of FY2021. In addition, the government will promote the full-scale development of automatic and autonomous flight technologies and flight control and safety technologies, and conduct flight demonstrations in the water areas around Osaka after 2023, with the aim of introducing “flying cars” at Expo 2025 Osaka, Kansai.

iv) Development of a cashless environment

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

- In addition to following up on the status of handling of interchange fees in the “Survey on Credit Card Market” released by Japan Fair Trade Commission in March 2019, the government will work to achieve further transparency of commission-related costs to encourage competition within the industry through the deeper discussions at the Ministry of Economy, Trade and Industry and fact-finding surveys of the Japan Fair Trade Commission on on-us transactions, interchange fees, etc.

(9) Fintech/Finance

- The government will continue to encourage financial institutions to keep on providing financing support that is aligned with their customers’ needs by actively checking their business and financial conditions and to provide support for business improvement and revitalization with a view to the post-COVID-19 era in collaboration with government-affiliated financial institutions and regional support organizations.
- The government will conduct fine-grained data analysis on the financial and funding situations of companies in the COVID-19 pandemic from the perspective of industry, region,

etc., and use the results to promote financial support for companies through dialogue with financial institutions. In order to advance such data analysis in financial administration, the government will work to establish frameworks and rules for data collection, management, and utilization and to develop human resources for data analysis.

- By the end of FY2021, the government will conduct research and demonstrations to realize quantitative visualization of the benefits of introducing cashless payments for stores, etc.
- In order to improve the convenience of users by promoting competition and ensuring interoperability of payment services, the government will make steady progress on the study to expand the eligibility of non-bank payment service providers to participate in the Zengin System by the end of FY2022. At the same time, the government will follow up on the initiative of the small-lot payment infrastructure concept, which aims to be operational by early FY2022, while continuing discussions from a medium- to long-term perspective on the establishment of a new low-cost fund payment system based on the premise of frequent small-lot payments. With regard to expanding the eligibility for participation in the Zengin System, the government will take the necessary measures from the perspective of ensuring the safety of payments, such as monitoring of businesses connected to the payment system.
- The government will continue to explore Central Bank Digital Currency (CBDC) while coordinating with other countries by, for example, conducting a Proof of Concept on additional functions by the end of FY2022, following the ongoing Proof of Concept on the basic functions by the Bank of Japan.
- The government will promote digital innovation in the financial sector by collecting information on trends among financial institutions and technology companies, including start-ups, and actively contributing to the activities of the Blockchain Governance Initiative Network (BGIN), which is an international network for blockchain technologies.
- In order to improve the responses of the entire financial industry in Japan to money laundering and terrorist financing, the government will strengthen the inspection and supervision systems by ensuring inspection personnel, etc. and inform users by using government public relations, etc., and examine and implement the necessary measures for the practical application of a joint system and related regulations and supervision.
- With regard to sensitive information held by financial institutions, such as their customer information, the government will strengthen the monitoring system to understand the actual situation of risk management systems, including those of subcontractors, and to conduct more in-depth verification.
- The government will strengthen the information sharing system by improving the ability to collect and analyze information on the trends of cyber threats, disseminating information to financial institutions, and holding seminars. In addition, expand the participation of small and medium-sized financial institutions and fund transfer companies in the cross-industrial

cyber security exercises, and strengthen the operational resilience of the entire industry by referring to the examples of overseas exercises.

(10) Resolving issues in infrastructure, disaster prevention, logistics, and cities

In order to cope with changes in the socioeconomic conditions caused by infectious disease and other factors, and to support economic growth, the government aims to strengthen the functions of industrial infrastructure through the early development and utilization of infrastructure including high-speed transportation networks, such as high-standard highways, projected Shinkansen lines, and the Linear Chuo Shinkansen Line, as well as international hub airports, international container bulk strategic ports. Furthermore, as the government has the important responsibility of protecting the lives and livelihoods of the people from increasingly severe and frequent flood disasters, imminent large-scale earthquake disasters⁸, and volcanic disasters that can occur at any time, the government will strongly promote initiatives that integrate the structural and nonstructural aspects through the united and collective efforts of all stakeholders, such as the national and local governments, to open up a “new era of disaster prevention/mitigation and national land resilience”, while at the same time moving toward digitalization and the development of smart infrastructure. In addition, the government will take advantage of new technologies of the Fourth Industrial Revolution to advance initiatives in areas, such as “invest wisely, use wisely” strategic infrastructure management and the Compact Plus Network, and advance efforts to maximize the stock effect of infrastructure, such as improvements in productivity and convenience, and stimulation of private investment.

i) Development, maintenance, and management of infrastructure

- In order to improve productivity at construction sites, the government will enhance the environment for small and medium-sized construction companies to use ICT construction by creating a system to certify ICT construction equipment and establishing standards necessary for promoting the introduction of ICT construction by the end of FY2021. At the same time, the government will promote i-Construction by expanding the introduction of construction methods and materials, such as precast products, and promoting overseas expansion.
- In order to promote DX in the infrastructure sector, the government will formulate an action plan by the end of FY2021 for promoting the introduction of power-assisted suits, the sharing of 3D data and other information between contractees and contractors, and the promotion of unmanned construction using local 5G.

⁸ Massive earthquakes, such as the Nankai Trough earthquake, a Tokyo near-field earthquake, and an earthquake along the Japan Trench and Chishima Trench (including the tsunamis caused by these earthquakes).

- Based on the “Guidelines for BIM Standard Workflows and Their Application in the Architectural Field (Version 1)” (decided by the Architectural BIM Promotion Council on March 31, 2020), the government will introduce BIM in architectural design and construction projects ordered by the public and private sectors on a trial basis, verify its effects, such as cost reduction and productivity improvement, and identify operational issues, and based on the results, conduct a review to revise the guidelines by the end of FY2021.
- In order to ensure the smooth execution of public works projects, as well as to secure the necessary human resources based on the improvement of working conditions and the reform of working styles, in FY2021, the government will promote the leveling of construction schedule and optimization of construction period by facilitating the use of “unified format for leveling” in all municipalities. In addition, the government will use the Construction Career Up System to visualize the construction capabilities of construction companies, set wage ranges by job category, and revise standard quotations by the end of FY2021 in order to build a market structure where construction workers are paid appropriate wages.
- The government will work to improve productivity through the use of an electronic application system for construction permits and other procedures by FY2022, back-office collaboration with other organization’ systems, and the streamlining of the engineer system based on the use of ICT technology.
- In order to attract private investment, the government will research investment and technological development through the utilization of data, promote the generalization and implementation of underlying technologies for the “MLIT Data Platform” and work to expand cooperation with data other than that of the Ministry of Land, Infrastructure, Transport and Tourism.
- In order to improve the efficiency of infrastructure maintenance, the government will examine a system that enables the introduction of new technologies, data utilization, and comprehensive private sector contracting by FY2024, and strengthen the functions of the Japanese Congress for Infrastructure Management to promote technology matching between the public and private sectors. In addition, the government will make public the location map and the number of road facilities, such as bridges, that have been determined to require early and urgent actions by FY2021.
- The government will speed up the development of necessary standards to promote the introduction of new technologies that can be used for road bridges and tunnels. In addition, the government will expand the catalog of new technologies that can be used for road facility inspections, and revise the periodic inspection guidelines in preparation for the third inspection of road facilities starting in FY2024.
- In addition to developing standards for the creation of 3D maps, which are indispensable for the realization of digital twin by FY2023, the government will prepare 3D point cloud

data, including buildings that will serve as the basis for 3D maps, in advance for 38,000km² centered on urban areas by FY2025.

- In order to improve the efficiency of maintenance of erosion control facilities, the government will develop a new maintenance and management method by the end of FY2021 that incorporates AI analysis technology that automatically analyzes any deformation of the facilities based on the obtained data by utilizing green laser-equipped UAVs, etc. that can monitor the condition of the facilities, including underwater areas.

ii) Disaster prevention and disaster response

- In order to promote “river basin management” in which all stakeholders work together to control flood by taking a bird’s eye view of the entire basin, including upstream, downstream, main river and branch rivers, the government will formulate the “River Basin Management Project” for rivers nationwide, and reduce flood damage in 20 to 30 years against the largest postwar floods. In addition, based on the Act Related to River Basin Management, the government will enhance the effectiveness of the “river basin management” by promoting well-designed urban development and living styles against water disasters, strengthening rainwater storage measures including the use of state-owned land, and eliminating blank areas of flood risk information.
- In order to strengthen the flood control functions of existing dams, the government will improve the accuracy of weather forecasting, including the development of rainfall forecasting technology focused on the basin of the dam, develop technologies to support dam operation and assessment using AI, and improve facilities to increase the pre-release amount of water, such as dams for water utilization. In addition, from 2021, the government will expand the operation of pre-release also for Class B rivers nationwide, and establish a statutory council to improve the flood control functions of dams for water utilization, etc.
- In order to improve the sophistication and efficiency of river management, the government will prepare guidelines for river patrols using drones and image analysis technologies by the end of FY2021, and utilize the 3D point cloud data obtained from airborne laser scanning survey to identify deformations of embankments.
- As measures against heavy rain disasters, the government will disseminate “meteorological information on significant heavy rainfall” related to linear precipitation belts from FY2021; utilize the predicted water levels of rivers for up to a day and a half ahead on a trial basis; introduce new technologies, such as the next geostationary meteorological satellite and next-generation supercomputer; expand the number of meteorological disaster prevention advisors; further improve the sophistication of flood forecasting; strengthen support for regional disaster prevention. In addition, in order to improve the accuracy of storm surge and tidal wave prediction, the government will introduce a wave overtopping detection

technology using AI video analysis, and compare and verify the prediction and observation results. The government will examine the application of a sensing technology using terahertz waves that NICT has been researching and developing to contribute to the relief of disaster victims and prevention of secondary disasters.

- The government will establish a data sharing environment utilizing cloud computing technology to improve the efficiency and effectiveness of meteorological services, and consider reviewing the system to enable the use of the latest technologies of IoT and observation equipment in meteorological services by the end of FY2021, and take the necessary institutional measures.
- With the aim of promoting the introduction of advanced technologies in disaster response, the government will establish a website for matching local governments and private companies with technologies by the end of FY2021, and conduct demonstrations in FY2022 to promote the creation of advanced examples.
- In addition to examining the information items necessary for prompt lifesaving and rescue activities immediately after a disaster occurs, as well as how to obtain such information by the end of FY2021, the government will examine the establishment of a new system for aggregating and utilizing information based on the information items sorted out, and in FY2022, demonstrate the technologies necessary for estimating and understanding damage at an early stage.
- In order to ensure the smooth flow of people and distribution of goods at the time of disaster, the government will promote the removal of utility poles on emergency transportation roads in urban areas where there is a risk of utility poles collapsing, based on the plan to promote the removal of utility poles. In addition, in accordance with the Act on Promotion of Railway Crossings, the government will designate about 500 railway crossings on important roads, for which the management method in case of disaster should be specified, by FY2025, and implement measures, such as providing road users with information of the blockage of railway crossings and opening railway crossings on a priority basis. Furthermore, the government will promote the designation of automobile parking lots as disaster prevention bases and the formulation of BCP to strengthen the disaster prevention functions of Michino-Eki roadside rest areas.

iii) Transportation and logistics

- Toward the realization of “AI terminals that support people”, the government will introduce face recognition technology and improve the efficiency of container damage checks so that verification and procedures required in person or on paper at ports can be performed efficiently without contact. At the same time, the government will promote the deployment of the new port information system (CONPAS), which began full-scale operation at the Port

of Yokohama in April 2021, to other ports. In addition, the government will directly link the “Cyberport”, which is a platform for computerizing port logistics procedures among private businesses, with the Nippon Automated Cargo and Port Consolidated System (NACCS), and computerize port administrative procedure information and port facility information by the end of FY2022.

- In view of the rapid recovery and reconstruction from disasters, the realization of fast and smooth logistics while there is a shortage of truck drivers, and the government’s goal of automated driving on expressways, the government will promote the elimination of missing links on high-standard highways, the conversion of temporary two-lane sections into four-lane sections, and the strengthening of a double network of high-standard highways and directly controlled national roads that can function as alternatives. At the same time, the government will promote the development of loop roads in three major metropolitan areas, improve access to airports and harbors, and strengthen the road network with high standards.
- As measures to promote the use of double-connected trucks and address the shortage of parking spaces, the government will increase the parking spaces at SA/PA, introduce a parking reservation system, and promote the use of rest areas outside highways.
- Aiming to ensure safe and secure traffic on roads and provide advanced services, the government will implement the following initiatives to promote the DX in the road system.
 - In addition to aiming to nearly complete the conversion to ETC exclusive lanes in 5 years in urban areas and 10 years in rural areas, the government will promote the utilization of ETC2.0 data in cooperation between the public and private sectors, both in normal times and in times of disasters, such as by using the expressway bus location system, providing ETC2.0 data to private companies, and using the “passable road map”.
 - In addition to starting to operate a new traffic system for special vehicles from 2022 to establish a system to allow registered special vehicles to pass through immediately, the government will promote effective measures against overloading using ICT, such as automatic weight measuring devices and in-vehicle load measuring devices.
 - By FY2022, the government will start examining the repair of the road occupancy system so that the location information of the properties occupying the roads can be converted to 3D data and the applicants for road occupancy permits can easily check the locations. At the same time, the government will start examining the use of online application procedures for stop permits for facilities where special vehicles are allowed to stop.
 - In addition to obtaining 3D data of government-managed roads by FY2025, the government will share various road-related data through API and partially disclose data to the private sector.
 - In addition to aiming for the nationwide deployment of an automatic traffic obstacle

detection system using image analysis technology, the government will share images from the cameras installed in road patrol vehicles in real time, and complete the installation of CCTV cameras on about 50% of the sections of emergency transportation roads (primary) that require real-time monitoring by FY2025.

- The government will select the areas to which traffic demand management (TDM) is to be applied to eliminate traffic congestion by the end of FY2021, and analyze changes in traffic conditions due to the spread of telework and other factors by using big data.
- In order to address the shortage of technicians to operate snow removal vehicles, the government will conduct a demonstration test to introduce snow removal technology using ICT, and deploy it nationwide from FY2026.
- By taking advantage of the current low-interest rate situation, the government will work to develop, as soon as possible, high-speed transportation networks, such as high-standard highways and the Linear Chuo Shinkansen Line, as well as airports and major urban rail networks.
- As part of DX in the logistics sector, the government will promote the introduction of equipment and systems using AI and IoT for achieving automation and manpower saving through collaboration among related businesses to improve the transportation efficiency of the entire supply chain, and launch social implementation of initiatives that utilize logistics and commercial distribution data infrastructure by the end of FY2021. In addition, the government will start conducting detailed verification by establishing a forum for industry, government, and academia to examine the standardization of pallets, slips, etc. related to logistics by the end of FY2021, and hold a symposium to foster and secure advanced logistics personnel through public-private collaboration.
- In order to realize work style reform and improve efficiency in truck transportation, the government will work on optimizing the trading environment, such as the “White Logistics” promotion campaign, and examine the institutional development to expand the number of offices that can use a real-time roll call system from FY2021, on the condition of using advanced IT equipment, etc. At the same time, by the end of FY2021, the government will survey advanced efforts to remotely and efficiently manage truck allocation and disseminate best practices for realizing the optimal truck allocation.
- In order to speed up and improve the efficiency of transportation even in times of disasters, the government will formulate guidelines by the end of FY2021 on the ideal way of relay trucking, in which multiple drivers are assigned different parts of one long-distance transportation, and establish a platform for the transportation of emergency relief supplies that enables the national government, local governments, and designated public institutions to share information on the optimal routes, transportation status, etc.

iv) Improving the competitiveness of cities

- In order to promote the development of walkable cities that are compact, comfortable, and lively for revitalizing local economies and realizing various ways of working and living, the government will examine the utilization of urban infrastructure, private facilities and digital technologies, and take the necessary institutional measures by the end of FY2022. In addition, the government will promote the support for environmentally friendly, outstanding private urban development projects and reconstruction of the plaza in front of the station to strengthen the international competitiveness of cities and create decarbonized cities.
- In order to create an environment in which various urban services, such as mobility and disaster prevention, are provided by diverse public and private entities by making full use of digital technologies and data, such as 3D urban models (PLATEAU), aiming for DX in urban development, the government will promote the development of use cases and the nationwide deployment of initiatives. In particular, the government will convert 3D urban models of nationwide cities into open data by the end of FY2021.
- In order to further promote ESG investment in the real estate investment market in Japan, the government will promote the disclosure of information related to the responses for climate change risks, and examine the ideal way of disclosing information related to social issues (S) based on the actual situation in Japan. Summarize the reference items for disclosure in FY2021, and prepare basic reference materials (guidance) for the disclosure of information on the responses of the real estate sector for social issues by the end of FY2022.
- With regard to the Building Standards Act, the government will examine the rationalization of standards by the end of FY2021, and take the necessary institutional measures from 2022 to promote the use of wood, make effective use of existing buildings, and facilitate the location of facilities that meet the “new normal”.
- In order to promote the universal design of roads, the government will compile the guidelines for the facilitation of mobility on roads by the end of FY2021, organize future issues and measures for utilizing technologies based on the progress of new mobility and technological development, and examine the review of standards.
- In order to establish a 5G communication environment in the road space and verify the feasibility and effectiveness of upgrading road management through the use of high-resolution images from in-vehicle cameras, etc., the government will launch a demonstration test through public-private collaboration by the end of FY2021.
- In addition to disseminating the pedestrian-friendly road system (Hokomichi) to create liveliness in the regions, the government will organize the division of functions of each road by the end of FY2021 to meet the various needs of roads, and examine the necessity of new standards and systems by compiling measures for the flexible use of each road, etc.

(11) Mobility

i) Social implementation of autonomous driving

(Spreading and promoting autonomous driving)

- In order to make it possible for one remotely monitoring operator to simultaneously drive three or more vehicles in a specified area by FY2022, the government will continue to conduct technological development and verification, and make the necessary institutional development as early as possible in FY2022 after reaching a conclusion on how the remotely monitoring operator should be involved, etc.
- With regard to driverless automated driving transport services in specified areas on public roads, the government will formulate guidelines that will contribute to the demonstration by the end of FY2021, and introduce the services in at least 40 locations by 2025 and 100 locations across Japan by 2030.
- Toward the development of a driving environment for autonomous vehicles and vehicles equipped with advanced technologies, such as a lane-keeping assist system on national expressways, the government will conduct demonstrations related to vehicle infrastructure integration through public-private partnerships from 2021, and based on the results, formulate specifications for the information provision system for autonomous vehicles, etc. required for Level 4 autonomous driving.
- To realize Level 4 automated driving in complex driving environments, such as mixed traffic in urban areas, the government will establish an international collaboration base by industry, academia, and government research institutions that will consistently carry out research and development, demonstration tests, standardization and commercialization from FY2021. In addition, by FY2025, the government will examine and implement the environmental arrangements, such as business models and data collaboration schemes, for automated driving using road-to-vehicle and vehicle-to-vehicle communication systems.
- By the end of FY2021, the government will launch automated driving services between locations, such as “Michi-no-Eki” roadside rest areas in rural area, in at least five regions.
- With the aim of introducing Level 4 autonomous driving within the restricted areas of airports by 2025 for achieving further labor-saving and automation in airport ground handling operations, the government will start demonstration tests for the introduction of Level 4 autonomous driving at Narita Airport from FY2021. At the same time, the government will conduct technical verification and examine the necessary infrastructure and operational rules to revise the guidelines and guidance by 2024.
- In order to put autonomous ships into practical use by 2025, the government will formulate guidelines that organize the concept of safe ship operation and make international proposals to lead international standardization by the end of FY2021, and start reviewing related laws

and regulations. In addition, in order to promote digitalization of ship operations, etc., the government will formulate technical standards for remote monitoring technology and secure technical competence for the active use of autonomous ships after 2025.

(Formulation of international standards)

- Based on the results of Level 3 automated driving technology, which has already been put into practical use, the government will lead the formulation of international standards at the UNECE World Forum for Harmonization of Vehicle Regulations (WP29) for Level 4 automated driving technology and its safety evaluation methods, in collaboration with international standardization efforts.
- With regard to connected cars, the government will examine initiatives to lead international discussions on performance requirements for in-vehicle communication devices that enable advanced automated driving and information provision to drivers in the event of a disaster, and reach a conclusion, including institutional measures by the end of FY2022.

ii) Promotion of a Japanese version of MaaS

(Regional mobility services)

- The government will promote efforts to introduce and spread MaaS in the Council for Promoting the Smart Mobility Challenge Project, and based on the demonstration results of MaaS linked to medical care, organize and disseminate from FY2021 the issues and examples of providing online medical care using automobiles.
- In order to implement MaaS in society, the government will develop the infrastructure to promote new mobility services, such as the introduction of an AI on-demand transportation system, which effectively allocates vehicles by using AI and the introduction of cashless payment for public transportation.

(New urban development and mobility)

- Toward the diversified use of roads that contribute to improving the convenience of new mobility services, such as ultra-compact mobility, personal mobility, and bicycle sharing, the government will formulate guidelines for the sharing of functions and flexible use of roads, such as securing driving space for new mobility services and providing parking spaces on sidewalks and road shoulders, by the end of FY2021.
- In order to promote the spread of bicycle sharing, the government will compile guidelines that contribute to securing locations for cycle ports, improving the efficiency of business operations through the use of IT, and increasing convenience through the expansion of search, reservation, and payment services in collaboration with public transportation by FY2021. In addition, the government will improve spaces for bicycle traffic by formulating development plans centered on urban areas to correspond to the increased volume of bicycle traffic.

iii) DX of mobility systems and social implementation of next-generation technologies

- Considering the fact that compliance with international standards for the use of advanced emergency braking systems will become mandatory in phases from November 2021, the government will examine the introduction and spread of advanced safe driving support technologies using high-performance sensors, etc. for Safety Support Cars (Suppocars), and implement those that are feasible in a sequential manner. In addition, in order to prevent traffic accidents involving elderly drivers, the government will grasp and analyze the actual status of the use of Suppocars and strengthen public awareness through the collaboration between the public and private sectors.
- The Ministry of Land, Infrastructure, Transport will promote the institutional design for the introduction of a software taximeter that can replace the current taximeter. Specifically, we will carefully examine the remaining issues, including the assurance of accuracy, at the “Study Group for the Introduction of Software Taximeter” established in March 2021, and reach a conclusion by the end of FY2021. In addition, we will examine the functions that the software taximeter should have and how they should be used with the participation of taxi dispatch application providers, etc., and work on advancing taxi services by utilizing transportation and other data.
- The Ministry of Land, Infrastructure, Transport and Tourism will examine the ideal approach to the dynamic pricing system from 2021, and will take measures as soon as it reaches a conclusion. At that time, we will carefully conduct an overseas fact-finding survey, demonstration using actual vehicles, and understanding of the intention of users. In addition, we will obtain supply and demand matching data for various cases, such as regions, days of the week, time of day, and weather conditions, and hold discussions based on evidence with the participation of taxi dispatch application providers. Furthermore, we will ensure that the range of price fluctuation is reasonable and understandable to users for public transportation.
- The Ministry of Land, Infrastructure, Transport and Tourism will promote the advancement of operation management by expanding the current real-time roll call system, which is allowed only between sales offices and garages at adjacent sites and close range, to be implemented even between offices at long distances based on the progress of IT technology by the end of 2021. Specifically, we will set the performance requirements for equipment to expand the scope of the real-time roll call system and establish a certification system for roll call equipment for the introduction of automatic roll calls through the demonstration tests conducted by the “Study Group on the Advancement of Operation Management” established in March 2021.

(12) Social implementation of robotics technology

- The government will promote standardization and normalization related to user-oriented robot development, data cooperation, communications, and facility design, etc. to realize remote, labor saving, and unmanned operations in service fields, such as facility management, retail, food and drink, and food products. In FY2021, the government will formulate standards for communication linkage between elevators and robots in the facility management field.
- With the aim of creating a technological foundation for future robotics and IoT in Japan, the government will support the implementation of robot contests, including regional efforts that contribute to robot-related learning and education for high-school students, vocational school students, and university students.
- By the end of FY2021, the Consortium of Human Education for Future Robot System Integration will provide support for robotics training for teachers and students, and for the formulation of educational curricula at technical colleges, polytechnic colleges, and polytechnic centers.
- The government will hold the “World Robot Summit”, where robot technologies from around the world come together to hold an award-based competition to promote social implementation and research and development, at Aichi International Convention & Exhibition Center and at Fukushima Robot Test Field in FY2021.

13. Regional Development

(1) Realizing a tourism-oriented country

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

In the tourism-related industries, there are approximately 9 million workers nationwide who play an important role in supporting local economies. Since the spread of the COVID-19, there has been a significant decline in domestic and international tourism demand, severely affecting the tourism industry, and it is extremely important to maintain employment and business continuity. The government firstly implements support measures such as financial assistance and employment adjustment subsidies, delivering in push-type to businesses through District Transport Bureaus, etc.

As for the Go To Travel Campaign, the government determines the handling of the campaign taking into account the infection situation in the future. For now, while thoroughly implementing measures to prevent the spread of COVID-19 at accommodation facilities and tourist spots at first, support for regional tourism projects are provided. In addition, the government takes measures to smooth out the travel demand, etc, and reduce crowded places and close-contact settings by popularization of “workation”.

In preparation for the recovery of tourism demand, strengthening the structure of the tourism industry is an urgent matter. the government makes short-term intensive efforts to revitalize accommodation facilities and tourist spots in order to improve the attractiveness and profitability of the regions as a whole.

The COVID-19 pandemic has not affected various attractions that Japan can offer, such as “nature”, “climate”, “culture”, and “food”. By making full use of these tourism resources, rediscovery of the regional charm by domestic tourists, and increase of the average spending money and day per tourist will be realized. Furthermore, the government steadily improves the environment for receiving tourists at tourist spots, etc., and promotes efforts for the gradual revival of inbound tourism assessing the infection situation in and outside Japan. Tourism is a pillar of the growth strategy and a trump card for regional development, Japan will realize a tourism-oriented country through the united efforts of the public and private sectors.

i) Thorough prevention of the spread of COVID-19, recovery of domestic demand, and revitalization of the tourism industry

- While requesting accommodation facilities, travel agencies, charter buses, and other tourism and transportation businesses to thoroughly follow the guidelines for each industry, the government will support the introduction of measures to prevent the spread of COVID-19,

and work to establish a safe and secure travel style by thoroughly informing travelers of the “new travel etiquette”.

- The government will determine the handling of the Go To Travel Campaign taking into account the infection situation in the future, and implement support for regional tourism projects at first.
- The government will provide support to about 100 regions nationwide to revitalize accommodation facilities and tourist spots mainly through government subsidies for adding value to facilities and removing abandoned buildings that remain in the city so that the entire local tourist facilities, including accommodation facilities, restaurants, and souvenir stores, can offer tourists a high-quality environment to stay, as well as through loans from Japan Finance Corporation, etc.
- The government will provide support to the accommodation and travel industries through the dispatch of experts, etc. for diversifying profits by developing new businesses through collaboration with restaurants, transportation, etc., promoting DX, separating meal service from the accommodation plan, integrating businesses, improving productivity through the separation of ownership and management, and responding to inbound tourism. At this time, the government will work to develop human resources for core and practical operations, and also promote the use of human resources with second and side jobs to match human resources from different industries, such as IT workers, with the tourism industry.
- In order to smooth out travel demand, the government will work together with economic organizations to promote workers to actively take days off. Implement model projects to improve the environment for both companies and local communities to promote “workation”, “bleisure”, and satellite offices. In particular, the government will support collaboration between local governments and tourism businesses to develop an environment that accommodates people with children. Furthermore, the government will implement campaigns to promote “decentralized travel”, which encourages decentralized times and places for traveling, through collaboration between the public and private sectors to smooth out travel demand.
- In order to promote short trips to nearby destinations (so-called micro-tourism), the government will support efforts that will lead to refinement of local tourism resources and rediscovery of local attractions. In addition, support the development of a safe and secure environment for school trips, etc. through the united efforts of the public and private sectors, and support the creation of content that is meaningful for learning to realize the steady implementation of school trips, etc.

ii) Creation of attractive tourist destinations and content

- The government will support efforts to break down silos within the region, and discover and

refine the region's potential tourism resources through collaboration among various tourism-related businesses rooted in the region.

- In order to promote adventure tourism, the government will train and secure human resources, such as guides, and at the same time, market tourism content that has been discovered and refined.
- In order to create snow resorts that are unique to Japan, the government will make region-wide improvements, such as improving ski resort infrastructure, refining base towns, and enhancing content for after skiing.
- The government will expand the initiatives of the Project to Fully Enjoy National Parks to all national parks in Japan, and improve the quality of the environment for visitors by promoting nature activities in accordance with the Amended Natural Parks Act, improving the landscape by removing abandoned buildings, and introducing the vitality of the private sector.
- In order to develop about 400 cultural tourism hubs and regions nationwide, the government will provide support for initiatives based on the Cultural Tourism Promotion Act and for raising the level of Japanese heritage sites as a whole, and promote high value-added cultural facilities and resources. The government will expand public access to the artworks related to the Imperial Family that are stored at the Museum of the Imperial Collections by implementing regional deployment efforts, such as actively lending them out and holding their exhibitions at local museums. In addition, the government will promote the nationwide deployment of the “Japan Cultural Expo”, its dissemination in both Japan and abroad, and the use of museums, etc. for tourism.
- In order to promote the conversion of historical resources, such as old traditional Japanese houses, shrines, temples, and castles, into accommodation facilities, the government will dispatch experts to the local governments to assist the renovation of such resources into accommodation facilities. At the same time, the government will discover and support local leaders, provide know-how to local communities, and promote the extended use of old traditional Japanese houses, shrines, and temples around the local communities. In addition, the government will create contents that allow people to fully enjoy rural experience with countryside stays, as well as contents that take advantage of outdoor activities, martial arts, and urban sports.
- With regard to tourism facilities owned by local governments, the government will provide support for the renovations to improve profitability and attractiveness by using the vitality of the private sector and the creation of tourism contents using these facilities.
- In addition to promoting efforts to use locally unique food ingredients, the government will provide more attractive cuisine, offer vegetarian and vegan options, and refine souvenirs, work on creating contents and disseminating information for inbound tourism utilizing food,

food culture, and Japanese alcoholic beverages.

- The government will promote efforts that contribute to DX in tourism services, such as refining tourism resources and creating tourism contents using advanced technologies and advancing the management of tourist areas using data and other information on tourist behaviors.
- The government will improve the environment for tourists to have pleasant travel experience, such as providing multilingual support, free Wi-Fi access, cashless payment system, barrier-free design, CIQ system, and strengthened airport ground handling and security systems at tourist spots, national parks, cultural properties, cultural facilities, public transportation systems, and airports.
- The government will support the collection and analysis of tourist data by destination management organizations (DMOs), etc. to improve the marketing capacity of regions and their ability to attract repeat visitors. In addition, the government will support efforts to improve the environment for distributing travel products online to distribute tourism contents as travel products.
- In order to attract tourists who seek high-quality services, the government will develop human resources, create content, improve the use of business jets, and promote visits to Japan. At the same time, the government will conduct the matching between developers, hotel management companies and local governments to promote the development of high-quality accommodation facilities.
- Through the airline and airport support packages, the government will support the capital investment of airlines and airport companies, which is indispensable for achieving the target of attracting 60 million foreign tourists to Japan by 2030, and at the same time, promote aviation innovation and strengthen the functions of airports.
- While thoroughly implementing measures to prevent the spread of COVID-19, the government will promote the development of an environment where people can enjoy cruising with peace of mind, such as supporting the safe operation of cruise ships and improving tourism at ports of call.

iii) Phased recovery of inbound tourism, etc.

- In addition to disseminating information on Japan's efforts for safety and security through the Japan National Tourism Organization (JNTO), etc., the government aims to create a safe and secure travel environment for both tourists visiting Japan and regions visited by tourists by implementing small-scale package tours on trial, while monitoring the status of the COVID-19 pandemic in and outside Japan.
- Through the use of JNTO's digital marketing and other means, for the time being, the government will strengthen efforts to attract repeat visitors and other groups who are highly

motivated to visit Japan, as well as to attract visitors to local regions through dissemination of various attractions that Japan can offer and collaboration with local communities.

- For the phased recovery of outbound tourism, the government will examine the necessary measures for creating a safe and secure environment for outbound tourism in collaboration with the public and private sectors, such as preparing guidelines to enable schools to go on overseas school trips safely.

(2) Realizing vibrant rural villages through the development of growth industries in agriculture, forestry and fisheries

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

As Japan's agriculture, forestry, and fisheries industries are faced with a declining domestic market due to the declining population and the declining and aging population of agricultural, forestry, and fishery workers, we must establish a system that allows us to make the most of the enormous overseas markets created by economic partnership agreements, such as TPP11 and the Regional Comprehensive Economic Partnership (RCEP) Agreement.

In addition, while there are major issues to be addressed on a global scale, such as addressing global climate change and ensuring biodiversity, as well as addressing the growing public interest in food and health-conscious lifestyles due to the COVID-19 pandemic, it has become even more important for Japan's agriculture, forestry, and fisheries, and food industries to appropriately respond to these issues to ensure their sustainable development.

By vigorously promoting reforms for this purpose, and recognizing the agriculture, forestry, and fisheries industries as a growing industry, the government will work to improve local incomes and realize vibrant rural villages.

i) Creation of “new markets” through promoting exports, etc.

① Promotion of exports of agricultural, forestry, and fishery products, and food

Based on “The Strategy to Realize Export Expansion of Agricultural, Forestry, Fishery, and Food Products” (decided by the Headquarters on Creating Dynamism through Agriculture, Forestry, and Fisheries, and Local Communities on December 15, 2020), the following initiatives will be taken to support 27 priority items and more than 1,200 exporting areas and businesses to achieve the export value targets for each priority item.

(Strengthening of overseas marketing capabilities through united efforts of the public and private sectors)

- While taking into account examples of other countries, the government will examine the

following initiatives to strengthen overseas marketing capabilities, including the revision of the Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act by the end of FY2021: formulation of standards for export on behalf of industry stakeholders from production to export and development of national brands; organization of product groups that conduct joint marketing, strengthening of their activities, and review of the ideal financial resources; formulation of a platform and establishment of local advisors to strengthen collaboration between product groups, diplomatic missions overseas, JETRO, and the Japan Food Product Overseas Promotion Center (JFOODO).

- By the end of FY2021, the government will disseminate cooking videos using Japanese food ingredients that meet the demand for home cooking through SNS, and provide virtual trips where people can have a simulated experience of Japanese food and food culture. In addition, by 2025, the government will examine measures to strengthen sales of local products on private EC sites across borders, mainly targeting the destination countries (about five countries) of priority export items.

(Encouraging agriculture, forestry, and fisheries companies to take on the challenge of exporting with a market-oriented mindset)

- In addition to enhancing support through the formulation of export business plans in exporting areas that produce products that meet the needs of destination countries and regions, the government will establish a strategic supply chain that connects priority markets with exporting areas with the aim of creating profitable export businesses. In order to encourage the export of local processed foods, the government will promote capital investment to comply with the regulations of destination countries, and market research, sales channel development, and product development, which are conducted in collaboration with local food businesses. At the same time, the government will promote the utilization of ports and airports, the development of logistics facilities that will serve as bases for cargo collection, and the development and securing of cold chain bases overseas to establish export logistics, and examine measures, such as the amendment of the Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act, including the use of financial support and tax incentives.
- In order to uncover and develop exporting areas, the government will provide detailed support according to the level of maturity of businesses engaged in export, such as rolling out good practices for export expansion based on the export diagnosis, etc. conducted on agriculture, forestry, and fisheries businesses in FY2020, through the Global Farmer/Fisherman/Forestry/Food Manufacturer Project (GFP).
- With regard to support, including loans and guarantees, to mitigate risks specific to exports of agricultural, forestry and fishery products and food, such as the outbreaks of swine fever and avian influenza and tightening of import regulations by destinations countries, the

government will examine measures, including the amendment of the Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act, by the end of FY2021.

- In order to further expand the export of Japanese alcoholic beverages, the government will implement online business meetings, disseminate and utilize Geographical Indications (GI), and provide support for solving technical issues, such as preventing quality deterioration, and improving brand value. In addition, the government aims to have cultural resources, such as Japanese sake, shochu, and awamori registered as UNESCO Intangible Cultural Heritage.

(Overcoming obstacles to exporting through the united efforts of the government beyond the organizational boundaries of ministries and agencies)

- Based on the Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act and through the unified efforts of the government, the government will promote discussions with destination countries and regions to lift import restrictions / measures on Japanese food, and to accelerate the accreditation of facilities that conform to the standards of destination countries and regions (for example, by 2025, increase the number of beef processing facilities for the U.S., EU, Hong Kong, etc. to 25, and the number of fish processing facilities for the U.S. and EU to 760 and 135, respectively). In addition, the government will actively expand the number of accredited facilities by strengthening the accreditation system, such as by increasing the number of registered accreditation bodies that accredit conforming facilities based on the Agricultural, Forestry, and Fishery Products and Food Export Facilitation Act to six or more by the end of FY2021.
- In order to further facilitate export procedures, the government will make the one-stop application and issuance system, which has been used for many export certificates since 2020, available for all export certificates by the end of FY2021, and examine adopting an online payment method for fees.
- With regard to the restrictions on taking protected plant varieties to foreign countries based on the Amended Plant Variety Protection and Seed Act, the government will complete the restrictions for more than 90% of the protected varieties that have been developed by public institutions by the end of September 2021, and protect Japanese high-quality varieties, such as Shine Muscat, by promoting the registration of new plant varieties overseas and establishing a system to make countermeasure against infringement.
- In order to encourage further expansion of exports and create diverse ways of earning money overseas, the government will implement a market-making system, such as disseminating the correct evaluation of Japanese products, and also examine measures to address the issues of each stage of overseas expansion of the food industry by FY2022.
- The government will develop export specialists within the government and build a network with public and private stakeholders in and outside Japan.

② Expansion of domestic share of vegetables for processing and commercial use

- Since a high percentage of vegetables supplied in Japan for processing and commercial use are imported, the government will promote the transition to domestic production and aim to increase the shipment volume of domestically produced vegetables for processing and commercial use to 1.27 million tons by FY2025. In FY2021, the government will designate commodities, for which there is a need for domestic production by buyers and there is an established production system with a high cost reduction effect through the full utilization of agricultural machinery, as priority promotion commodities, and develop new production areas using paddy fields and primary processing facilities in production areas to expand the production of domestically produced vegetables.

③ Development of new business fields

- In order to promote commercialization of FoodTech, which is a field using new technologies of the food sector and businesses using those technologies, the government will formulate a vision and roadmap for promoting FoodTech at the Council for Public-Private Partnership in Food Technology by FY2022, and promote the provision of funds for business activities of FoodTech by utilizing investment schemes based on the Amended Agricultural Corporation Investment Facilitation Act.
- In order to ensure that soybean meat products are properly evaluated, the government will establish JAS by 2022, which will serve as a standard for names (definitions), etc. that make it easy for consumers to understand their content rate.
- With regard to long-term care foods (“smile care food”, etc.) whose market is expanding, medicinal plants used as raw materials for Kampo medicines, and new functional foods that contribute to extending healthy life expectancy, the government will promote research and other activities that integrate agriculture, forestry, fisheries, and food industries with medical and social welfare focused on the perspective of health-conscious consumers. In addition, the government will introduce production technologies for medicinal plants (peony, etc.) found through research and development into production areas, share information on supply and demand, and promote the matching between places of production and Pharmaceutical companies for contract cultivation.
- We promote research and development, verification, and social implementation for the commercialization of wood derived materials such as glycol lignin and cellulose nanofibers, as alternatives to petroleum-based plastics, such as fiber reinforced plastics for automobile interior and exterior materials, to aim at the market creation of after FY2026.

ii) Strengthening agricultural production infrastructure

① Securing and strengthening production infrastructure

(Improvement of productivity, human resource development, etc. to address the declining population)

In promoting the development of agriculture as a growth industry and the improvement of income in agriculture, the following initiatives will be integrally promoted, while ensuring soundness, to maximize the sustainable use of farmland, which is the basis of production.

- The government will position the Farmers and Farmland Plan, which is important for the accumulation of farmland, as a rule to be continuously followed, including making it statutory, and clarify the concrete image of the future farmland use that regions should aim for (“target map”), with emphasis on the consolidation of farmland.
- In order to realize the “target map” of the Farmers and Farmland Plan, the government will take measures to vigorously promote systematic lending and borrowing, including agricultural work outsourcing, encouraged by related organizations, with the cropland intermediary management institution (farmland bank) being the central figure.
- In order to secure and develop new young farmers who will drive the future of regional agriculture, the government will provide detailed support for communicating the attractiveness of agriculture, acquiring farmland, etc., and promote the matching of human resources over a wide area.
- In order to develop motivated farmers with management skills, the government will enhance efforts to improve the management skills of farmers, and review the promotion system, such as the proactive encouragement of incorporation of agricultural management by relevant organizations with clear targets.
- In cases where a community-based corporation, which is qualified to own farmland, intends to improve its performance while gaining the trust of the local community to transform its farming into a growth industry, it should be able to flexibly raise funds through equity investment, after securing the right to decision-making by agricultural stakeholders regarding the farmland, etc., and taking measures to dispel concerns of the rural site.
- The government will examine a system for sustainable farmland use, including grazing, buffer-zone areas for birds and animals, and organic farming, as well as a system for boldly promoting the development of new businesses in rural areas.

(Rice policy reform)

- The government will achieve the goal of lowering the production cost of rice for the bearers to about 9,600 yen/60kg in 2023 so that it leads to the development of new demand in and outside Japan. Specifically, the government will promote the elimination and consolidation of small-scale scattered farmland by farmland integration and consolidation, and the reduction of production material costs by reducing production material prices, etc. In

particular, from FY2021, the government will promote the nationwide expansion of low-cost production technologies, such as direct seeding and the introduction and sharing of smart agricultural machinery through technological demonstrations and horizontal deployment of advanced cases.

- To enable the selection of agricultural produce based on the management decisions of the farmers themselves, the government will establish rice policy reform, such as by creating 500 highly profitable crop producing areas by FY2025 through support for the provision of detailed information and the full utilization of paddy fields.
- By FY2023, the government will create model production areas that carry out integrated cultivation of rice, wheat, and soybeans in almost all prefectures in the main production areas.
- Toward the digitalization of rice inspection and distribution, the government will formulate standards that assume machine appraisal separately from the current agricultural inspection standards, and apply them from the inspection of rice produced in 2022. In addition, the government will establish a JAS led by the private sector that utilizes the smart food chain with an aim for its use from the rice produced in 2023.

(Strengthening production infrastructure)

- Aiming to increase the proportion of women in agricultural committees to 30% and the proportion of women among officers of agricultural cooperatives to 15% by FY2025, the government will take measures to create an environment where female farmers can freely demonstrate their abilities and play an active role, as well as an environment where women can easily choose agriculture as a career in FY2021.
- With regard to the reform of agricultural cooperatives, the government will establish a cycle for practicing self-reform through dialogue with members at agricultural cooperatives, and continue and strengthen efforts to improve the income of farmers by ceaselessly promoting self-reform at agricultural cooperatives.
- Based on the Act on the Support for Strengthening Agricultural Competitiveness, the government will promote the reorganization of the materials and distribution industry, while disseminating the direction of policies, such as the reduction of the use of chemical pesticides and fertilizers to agricultural production-related businesses, including agricultural material wholesalers and retailers.
- The government will strengthen the livestock production infrastructure by providing support to introduce labor-saving machinery to address labor shortages and support for new farmers to invest in facilities and so forth, in addition to increasing the number of Wagyu, in order to stabilize the supply and expand the export of domestically produced livestock products. Moreover, disseminate farmers the information of the Act on Special Provision of the Building Standards Act concerning Building Standards of Livestock Facilities and the

benefits of using them, which contribute to the reduction of its building cost which arise with the expansion of production scale.

- With regard to land improvement, the government will promote the conversion to crops for which demand can be expected, such as crops with high profitability, and the enlargement of farmland plots and multi-purpose use of paddy fields for the implementation of smart agriculture, etc., while reducing costs. At the same time, in addition to launching disaster prevention measures for highly urgent agricultural reservoirs with a disaster prevention priority by FY2025 based on the Act on Special Measures for Agricultural Reservoir Construction Projects, the government will promote measures to strengthen the resilience of irrigation facilities, accelerate the expansion of rice paddy dams, realize labor-saving and advanced infrastructure management, such as ICT water management, and establish an information and communication environment that contributes to the implementation of smart agriculture, etc.
- For the conservation and effective use of urban farmland by motivated urban farmers, the government will compile and disseminate examples of efforts by urban farmers to expand and diversify their management scale through the use of the Urban Farmland Leasing Act by the end of FY2021 to achieve the target of 255 ha of leased area by FY2024 through the use of the same Act.

(Establishment of a new system)

- Towards the establishment of a sustainable food system based on the “Strategy for Sustainable Food Systems”, the government will examine a policy mechanism and take necessary measures by the end of FY2021 to promote the behavioral change of each entity in each process from sourcing and production to consumption as well as increasing private investment.

② Improving productivity of the food industry and strengthening the linkage between households and agriculture

- For improving the productivity of the food industry, which is facing a labor shortage, the government will promote the introduction of labor-saving and automation technologies, digitalization, streamlining and advancement of food distribution, and review of business practices, such as the one-third rule and lead time (the period from the placement of an order to delivery).
- For creating sustainable business models that address both social issues and economic efficiency in the regions, starting in FY2021, the government will promote efforts to develop and sell new local cuisine products using long-term preservation technologies that correspond to the significant decrease in tourism demand due to COVID-19, with the participation of the main food companies in the regions, as well as other various businesses,

including tourism and finance.

- While the impact of the COVID-19 pandemic drags on, the government will provide support for efforts to cope with the “new normal”, including compliance with the “Guidelines for Business Continuity of the Food Service Industry” formulated by food service organizations, as well as for “ghost kitchen”, which is a shared kitchen specialized for delivery, and food delivery initiatives that allow new entrants to the delivery business without capital investment. In addition, the government will provide support for the transformation of business formats in the food service industry through the remodeling and reorganization of existing restaurants and opening of new restaurants.
- The government will strengthen the creditworthiness of medium-sized food service businesses, etc. that are facing a severe business environment due to the impact of the COVID-19 pandemic through debt guarantees so that they can smoothly procure funds, and encourage them to develop businesses adapting to the “new normal”.
- With regard to home cooking, which has increased due to the COVID-19 pandemic, the government will examine the provision of recipes through SNS and strengthening of partnerships with businesses that provide food ingredients related to such recipes and domestic agricultural producers.
- The Go To Eat Campaign has contributed to raising the level of the regional economy so far. Based on the future situation of the COVID-19 pandemic, etc. and after taking thorough measures to prevent its spread, prefectures will determine how to handle the implementation of the project.

iii) Transforming forestry into a growth industry

In anticipation of the Green Growth Strategy towards Carbon Neutral in 2050, the government will promote the transformation of forestry and wood industry into a growth industry, which will also lead to CO₂ absorption and emission reduction.

- With the aim of reinforcing the structure of municipalities responsible for the forest management system, the government will provide information on technical personnel necessary for securing human resources in municipalities, and implement various training programs to develop technical personnel in prefectures, etc. that support municipalities. Collect, analyze, and horizontally spread advanced examples of system operation across the country, including examples of the establishment of councils to support municipalities. By doing this, the government will ensure that almost all municipalities with privately-owned planted forests will implement initiatives related to the forest management system, such as setting the forest management right to municipalities based on intention surveys for forest owners, by the end of FY2023.
- In order to develop forestry managers who will play a key role in the forest management

system for privately-owned forests and from the perspective of securing a stable volume of business, the government will designate about 10 tree-harvesting areas nationwide by FY2022 on a pilot basis based on the National Forest Land Utilization Act, and conduct a review based on market soundings towards the designation of tree-harvesting areas from FY2022, including large-scale ones.

- With the aim of securing and developing forestry management entities capable of conducting sustainable management over the long term, from FY2022, the government will develop and horizontally deploy model management entities that integrally work to strengthen management capabilities and ensure occupational safety through the use of smart technologies, such as drones, securing of business volume, and development of implementation systems for reforestation.
- In order to respond to an increase in the scale of timber mills, etc., and to promote the export of wood products, the government will promote the use of new methods of cooperation in the sales business among forest cooperatives based on the Amended Forestry Cooperative Act, and expand the sales lots by forest cooperatives.
- In addition to promoting initiatives, such as integrated logging and afforestation operations, low-density planting of the “elite tree” species, etc. that grow fast, and the omission of weeding, the government will ensure the implementation of reforestation after logging and the elimination of unplanted areas by promoting reforestation in specified planting promotion areas based on the Amended Act on Special Measures for Thinning, etc. from FY2022. In addition, the government aims to increase the supply of seedlings of the “elite tree” species, etc. to 30% of the total supply of forestry seedlings by FY2030. Furthermore, the government will promote reforestation with the participation of the public, such as tree planting.
- In order to promote the use of wood in non-residential buildings, etc., the government will provide support for the establishment of a network of private companies engaged in the use of wood and for the raising of awareness of consumers. At the same time, the government will promote the development and spread of technologies for fire-resistant wood materials, CLT, JAS structural materials, etc., to create demand for wood in medium- and large-scale buildings and to improve the environment for the expansion of wood use.
- In order to achieve 71.8 billion yen in exports of forest products targeted by 2025, the government will develop export production areas through collaboration between upstream and downstream sectors with the aim of expanding exports of high value-added wood products, such as lumber and plywood.

iv) Transforming fisheries into a growth industry
(Promotion of new resource management)

- In addition to expanding the number of target species for the stock assessments of fishery resources to about 200 in FY2021 and collecting necessary data for the assessments, perform MSY (maximum sustainable yield)-based stock assessments, and publish their the government will results one by one by the end of FY2021.

The government will expand the scope of TAC (total allowable catches) management system to cover 80% of the fisheries production by FY2023, based on the management aiming at the achievement of MSY.

- In addition to introducing resource management by the IQ (individual quota) system under the Amended Fisheries Act into the large and medium-scale purse seine fisheries in the management year starting from July 2021, the government will hold consultations with the aim of introducing the IQ management into other fisheries managed under the permitting system by the Minister of Agriculture, Forestry and Fisheries, in the fishing season of FY2022.
- In order to address issues, such as the medium- to long-term stagnation of stock status and responses to global environmental issues, in light of poor catches of squid, saury, salmon, etc. in recent years, the government will examine an operational system and management structure that can flexibly respond to environmental changes by diversifying and adapting to risks, such as introducing multiple species and fishing methods and cooperative operations. At this time, the government will conduct the examination also with an eye to the introduction of multiple fisheries that can catch not only specific species of fish but also multiple species of fish, and reach a conclusion by the end of FY2021.
- In preparation for the enforcement of the Amended Act on Special Measures Concerning Conservation of the Environment of the Seto Inland Sea, the government will make efforts on elucidating the relationship between nutrient salts, such as nitrogen and phosphorus, which are in short supply and fishery resources, such as sand lance and seaweed, whose productivity is declining, and propose management measures for the supply of nutrient salts to coastal councils and other entities by FY2023.

(Transforming aquaculture into a growth industry)

While aquaculture production accounts for about 50% of the total production in the world, it accounts for only about 20% in Japan. Unlike natural fishery resources, which are vulnerable to impacts, such as climate change and operations of foreign vessels, aquaculture enables producing fish on time with fixed quality, fixed quantity, and fixed price, and is highly compatible with various smart technologies, such as remote automatic feeding. Therefore, while fully utilizing these technologies, the government will promote the transformation of aquaculture into a growth industry with a view to significantly expanding exports, by integrally promoting the following initiatives and shifting from a product-oriented to a market-oriented approach.

- For yellowtail and red sea bream, which are strategic aquaculture commodities, the government will gradually increase the production volume to achieve the export targets (160 billion yen for yellowtail and 60 billion yen for red sea bream) and production targets (240,000 tons for yellowtail and 110,000 tons for red sea bream) for 2030.
- To that end, the government will work on the introduction of large-scale offshore aquaculture using remote automatic feeding systems; the securing of calm waters suitable for aquaculture by using floating breakwaters, etc.; the efficient utilization of land for fishing ports for onshore aquaculture by reorganizing and consolidating the functions of fishing ports; the reduction of costs by using local geothermal, wind power, etc. In addition, given the fact that feed costs account for at least 60% of the production cost, the government will promote the development of low-cost compound feed using soybeans, etc., that can replace fishmeal, and yields high growth efficiency, based on scientific data. Furthermore, the government will promote research and development for the realization of complete aquaculture of yellowtail and bluefin tuna using artificial seedlings, which is not reliant on natural resources.
- Based on the Amended Fisheries Act and from the perspective of appropriate and effective use of fishing grounds, the government will utilize investment schemes based on the Amended Agricultural Corporation Investment Facilitation Act to promote new entrants to the aquaculture industry. In addition, the government will disseminate the guidelines for business feasibility evaluation of the aquaculture industry to regional financial institutions, etc., to promote financing based on the business feasibility evaluation without relying on real estate collateral.
- By FY2022, the government will work to create model management entities by aquaculture management entity type (for example, entities that work in collaboration with business operators in production areas and those that conduct all operations by themselves).
- In order to speed up measures against fish diseases in aquaculture, advance telemedicine for farmed fish, the government will promote the use of a list of veterinarians specialized in fish diseases, and review the standards for the use of aquatic drugs based on the needs of aquaculture businesses by the end of FY2021.

v) Creating new businesses in rural areas through collaboration with various fields other than agriculture, forestry, and fisheries

- In order to secure income and employment opportunities in rural areas, the government will create 300 model cases of “Innovation from Rural Areas” by FY2025, which is an initiative to create new value by discovering and refining available local resources and combining them with tourism, healthcare, and other fields. At the same time, taking into account the growing interest in returning to the countryside and diverse working styles due to COVID-

19, the government will promote the accumulation of diverse human resources regardless of generation or gender by creating Region Management Organizations for rural areas to take on the flow of people and communicating the attractiveness of rural areas through videos and SNS.

- With the aim of creating attractive countryside stays, the government will expand the population related to rural areas by developing attractive accommodation facilities using old traditional Japanese houses and refining attractive tourism content using various local resources in rural areas, such as food and scenery.
- In order to continue to strengthen countermeasures for wildlife and further reduce damage to agriculture, the government will promote wide-area capture by prefectures and the participation of farmers and other various people, as well as the advancement of capturing techniques using ICT. In addition, in order to increase the amount of gibier used to 4,000 tons in FY2025, which is double the amount in FY2019, the government will promote efforts to expand the use of gibier through public relations activity using video and other media, improved hygiene management, and collaboration between processing facilities and distribution and sales personnel.
- With regard to the Japanese agricultural direct payment system, the government will intensively promote the formulation of village strategies that define the future vision of each village by FY2022, and promote various initiatives, such as the conservation of rice terraces, making value-added agricultural products utilizing the characteristics of mountainous regions, and the introduction of multiple management.
- With the aim of achieving the goal of creating 3,000 entities involved in agriculture and welfare partnerships by FY2024, the government will promote matching of the needs of both the agriculture, forestry, and fisheries and the welfare parties, nurturing of professionals, and supporting the acquisition of skills related to agriculture, forestry, and fisheries by people with disabilities. At the same time, the government will promote such partnerships nationwide by presenting awards for excellent initiatives in FY2021. In addition, through agriculture and welfare partnerships, the government will promote employment of people with disabilities based on their characteristics, mainly for mushroom cultivation and wood processing, and support and horizontally deploy initiatives to develop high-value added local wood products that are conducted through collaboration between welfare and local stakeholders.
- In addition to setting mountainous regions that intend to engage in the “forest service industry”, which utilizes forest spaces in various fields, such as health, tourism, education, and sports, as model areas, and providing them support, such as giving advice on how to solve problems, the government will horizontally deploy excellent practices through industry-academia-government platforms, etc., to create forest service industries in more

than 30 regions by FY2022.

- In order to strengthen economic activities in fishing villages to improve local employment and income, the government will create about 10 new districts to engage in the “marine industry”, which is an industry related to the sea, such as sales and processing of marine products, fishing business experience, fishing, and beachside stays, by the end of FY2021. At the same time, the government will reorganize and improve the land for fishing ports and examine measures to promote the use of fishing ports by fishing cooperatives and private businesses to further expand the number of these districts.

(3) Strengthening the foundations of regional financial institutions

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(4) Promoting the matching of management personnel for local companies

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(5) Expanding the flow of people from urban areas to rural areas by promoting telework and other measures that contribute to regional development

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- In order to secure new human resources in the regions, the government will encourage the introduction of the “Regional Project Manager” system established in FY2021 through the horizontal deployment of the examples of initiatives. At the same time, the government will further promote the “Local Vitalization Cooperators” by expanding the range of applicants through the dissemination of the “Regional Development Cooperator Internship” program, which was also established in FY2021, and the “Trial Regional Development Cooperator” program.
- In order to promote the further expansion of the initiatives of local governments to support the repayment of scholarships for students who will be the leaders of local industries, and to facilitate the use of the support systems, the government will work in collaboration with the Japan Student Services Organization, etc. to promote the flow of young people to local areas by actively disseminating information, such as strengthening public relations activities.

(6) Revitalizing local public transportation

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

- Looking ahead to the post-COVID-19 era, the government will support efforts by public transportation operators to improve profitability through the use of new technologies to maintain and revitalize regional public transportation services through the unified effort of the government and private sector. In addition, the government will support local governments to prepare 1,200 or more regional public transportation plans by FY2024, and promote the improvement of public transportation services from the perspective of users by reviewing routes, schedules, and fares based on the same plans. At the same time, the government will promote the introduction of low-carbon transportation systems that utilize new technologies to realize carbon neutrality.

(7) Promoting the Super City Initiative, etc.

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

The government will vigorously promote the Super City Initiative to realize future lifestyles ahead of time through bold regulatory reforms and the provision of progressive services through multi-field data collaboration.

- From the perspective of contributing to achieving a digital society and the “new normal”, the government will steadily work toward the early realization of the Smart City concept, which will realize future lifestyles ahead of time through bold regulatory reforms and the provision of progressive services through multi-field data collaboration. Specifically, the government will designate areas through deliberations by the Expert Committee on the Designation of Super City Areas and the Council on National Strategic Special Zones, and immediately after designation, prepare a basic concept, including regulatory reform for each area at the area meetings.

(8) Securing human resources for community development

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(9) Land policy

The following specific measures will be taken based on the Action Plan of the Growth Strategy.

- Based on the “Basic Policy on Promotion of Measures for Unclaimed Land” (Decision on June 7, 2021 at the relevant ministerial meeting to promote measures against unclaimed land, etc.), the government will promote necessary studies for the review of the Act on Special Measures for unclaimed land, including a mechanism for the utilization and management of insufficiently managed land and under-used or unused land, and submit a necessary bill to an ordinary session of the Diet in 2022, as well as enhance support measures. In addition, including securing the capacity of relevant organizations, the government will prepare for the introduction of a new system related to the review of the basic civil law system and a mechanism to facilitate the registration of description of land with unknown adjacent land ownership. At the same time, the government will promote land registry surveys, etc., utilizing survey methods that can also respond to the new normal.

(10) Carving out a future for the sports industry

The prolonged spread of the COVID-19 pandemic has cast a significant impact on sports activities. In order to connect sports to the future, the government will take all possible measures against COVID-19 at present and continue to steadily promote fundamental initiatives, such as strengthening the management capabilities of sports organizations. Furthermore, in anticipation of the world with and after COVID-19, the government will actively support sports organizations trying new initiatives to generate revenues even during this pandemic. In addition, in preparation for the Olympic and Paralympic Games Tokyo 2020, the government will engage in the effective and efficient implementation of a wide range of relevant measures, while strengthening Japan’s ability to compete in international games, and promote measures to encourage people to participate in sports and develop communities using sports so that there will be a “sports legacy” left behind after the Games.

i) Transforming sports into a growth industry in the with-COVID-19 and post-COVID-19 world

- Based on the results of the conformity audit conducted to National Federations by the organizing bodies (Japan Sport Association, Japan Olympic Committee, and Japanese Para-Sports Association) in accordance with the “Governance Code for National Sport Federation Members”, the government will provide advice to the organizing bodies and National Federations, and examine measures to further strengthen sports organizations.
- In order to reinforce the business infrastructure of National Federations, the government will develop a dissemination strategy model according to the size of each federation, and conduct research for the sharing of administrative work common to each federation. At the

same time, the government will hold a national conference to share the knowledge and know-how of each federation on reinforcing the business infrastructure about twice by the end of FY2021. In addition, the government will support National Federations that formulate advanced business plans, such as business plans that actively adapt to the “new normal”, in materializing their plans for up to four years.

- In order to further promote the “Sports Open Innovation Platform (SOIP)”, which aims to create new businesses and solve social issues through the fusion of the sports sector and other industries, the government will hold the “Acceleration Program” to support commercialization through the fusion of the sports sector and other industries, the “Sports Open Innovation Contest (SOIC)” to commend advanced initiatives of the sports sector and other industries to improve the value of sports and solve social issues, and conferences to disseminate information on the latest trends in and outside Japan. In addition, from FY2021, the government will collect best practices of sports businesses and present them at overseas exhibitions in addition to introducing advanced examples originating from Japan, which were created by the SOIP.
- The government will provide support for new initiatives that lead to profits even during this COVID-19 pandemic, such as creating and distributing sports content using the latest digital technologies.
- In addition to conducting sectoral and international comparisons on the trends of the size of the sports market and analyzing the impact of the COVID-19 pandemic, the government will examine the strengthening of the fund circulation system for the sports industry taking into account changes in the environment, such as the progress of DX, and formulate strategies for the independent growth of the sports industry in the with-COVID-19 and post-COVID-19 world by the end of FY2021.
- To ensure that large-scale sports events, such as professional sports, can be held safely and securely even during the COVID-19 pandemic, the government will support efforts to identify the areas in the venue that are likely to become crowded by using various technologies when operating events, analyze the flow of people, effectively disperse or let people out of the venue, and use the knowledge gained for further measures to tackle the pandemic.

ii) Regional revitalization centered around sports

- In order to promote people to engage in sports in the “new normal” through the collaboration between the public and private sectors, the government will expand the number of member organizations of the consortium established under the “Sport in Life Project” and promote cooperation among them, and promote the provision of sports opportunities in various forms, such as horizontally deploying best practices collected in FY2020. At the same time, taking

advantage of the momentum of the Olympic and Paralympic Games Tokyo 2020, develop campaigns that involve public participation for the creation of a “Sport in Life” movement after the Games.

- Taking into account the importance of stadiums and arenas as the interaction hubs where various generations can gather, the government will develop 20 stadiums and arenas by 2025, and establish a new cooperation between them, including the main and candidate ones, to further strengthen the functions of stadiums and arenas.
- In order to promote the development of “regional SOIP” that encourages community development and the creation of high value-added services through collaboration between local professional sports teams, companies, universities, etc., the government will create advanced examples by supporting acceleration programs in about three regions by the end of FY2021. In addition, the government will prepare and publish a guide for the establishment of regional SOIP in FY2021 for the purpose of horizontally deploying “regional SOIP”.
- With the aim of securing and enhancing the local sports environment, the government will support the creation of model examples for the effective use of local school sports facilities through collaboration among local governments, private businesses, etc., and compile and publish the results by the end of FY2021. At the same time, the government will enhance sports websites related to local sports facilities, such as “Kokospo” and coordinate these websites so that people doing sports can easily find and use sports facilities.
- In order to promote college sports, the government will promote initiatives to ensure safety and security in college sports in collaboration and cooperation with the safety and security guideline certification system, which is to be newly implemented by the Japan Association for University Athletics and Sport by the end of FY2021. At the same time, the government will promote regional development using local college sports, and compile and publish the results by the end of FY2021.
- In addition to continuing to support efforts to develop organizations that play a role in implementing initiatives, such as the Host Town, into the “regional sports commissions”, the government will support efforts to diversify the management of “regional sports commissions” from FY2021, and compile and publish the results. In addition, the government will establish a cooperation system between sports administration and medical care to help people, including those with disabilities, to engage in physical exercises and sports as a habit, and promote the development of an environment in which elderly people and others who have not been able to engage in physical exercises and sports due to the impact of the COVID-19 pandemic can safely and securely start exercising and doing sports again.
- The government will work on the development of outdoor sports that can be conducted even

during the COVID-19 pandemic, as well as experience-based programs and contents that make use of martial arts originated in Japan, with an eye to the post-COVID-19 era, and support sports tourism and other multiple initiatives conducted by “regional sports commissions”, etc., and compile and publish the results by the end of FY2021.

(11) Economic revitalization leveraged with cultural and arts resources

i) Promotion of the “Basic Plan on the Promotion of Culture and the Arts”, and the “Cultural Economy Strategy”

- While respecting the unique significance of culture and arts, the government will accelerate the building of positive economic cycles through culture and arts.
- In order to keep the light of hope shining brightly through cultural and artistic activities, the government will support organizations related to culture and arts that were affected by the COVID-19 pandemic and establish the foundations necessary for the continued creation, development, and succession of culture and arts by supporting initiatives to nurture artists and other human resources in the field, secure opportunities for performances, strengthen foundations for sustained activities, and gain viewers through the use of ICT. At the same time, from FY2021, the government will promote efforts to understand the actual situation of the activities of those involved in culture and arts, including freelance artists, and to improve their business environment.
- With regard to the Go To Event Campaign, which aims to stimulate demand while balancing the prevention of the spread of the COVID-19 and social activities, the government will determine how to handle project after thoroughly implementing measures to prevent the spread of the virus taking into account the infection situation in the future. At the same time, in anticipation of the post-COVID-19 era, the government will promote efforts to strengthen the revenue bases of performances to be held in Japan, such as diversifying and strengthening the source of revenue by delivering performances with advanced technologies.
- The government will promote the “Japan Cultural Expo”, which is a large-scale program embodying the beauty of Japan, and other initiatives based on the “Basic Plan for the Promotion of the Implementation of International Cultural Exchange Festivals” (decided by the Cabinet on March 29, 2019), such as the project to create centers for the dissemination of international culture and arts, to establish a national brand.
- Through the “Culture, Industry, and Government Partnership Council”, which is a forum for dialogue among the three parties of the culture and arts sector, the business circles, and the government, we will promote the reform of corporate culture and the creation of innovation through the use of arts and cultural resources and the relevant technologies. At the same time, the government will develop a virtuous cycle of investment in arts and culture and economic growth. In particular, with an aim to realize the internationalization and

revitalization of Japan's art market, from FY2021, work to attract international art fairs and auctions to Japan and develop an environment to attract customers from overseas markets.

- The government will make efforts to disseminate the appeal of Japanese culture that harnesses advanced technologies to adapt to the “new normal”, promote the utilization of museum collections, and improve the quality of curators at museums across the country, by horizontally deploying the experiments of the Tokyo National Museum and other national museums. At the same time, the government will steadily advance initiatives to promote understanding of the Ainu culture at the National Ainu Museum that opened in 2020, such as by enhancing its video content to adapt to the with-COVID-19 era. As for the Japan Arts Council, the government will advance reviews to strengthen its functions as a national center, such as advancing reviews for the redevelopment of the National Theater of Japan in collaboration with related organizations to contribute to the promotion of cultural tourism.
- In order to promote the creation and dissemination of Japan's outstanding media arts, such as manga, anime, and games, organize the Japan Media Art Festival, the government will support the creative activities of young creators, and spread such arts overseas in cooperation with global festivals. At the same time, the government will establish information hubs to archive art works. In addition, the government will promote creative activities, such as film production, disseminate them in and outside Japan, and develop young human resources to promote Japanese films.

ii) Regional revitalization which centers around cultural and arts resources

- In addition to the nationwide expansion of cultural programs based on the “Japan Cultural Expo”, the “beyond2020 program”, and the results of these programs, the government will strengthen the dissemination of Japanese culture and arts both in and outside Japan through initiatives to enhance the brand power of diverse Japanese food and food culture and promote international cultural exchange among artists and cultural facilities.
- In order to promote the strengthening of the functions of local cultural facilities, which play a central role in regional revitalization, the government will examine the review of measures related to museums, etc., including institutional measures, from 2021.
- In order to develop about 400 tourism hubs and regions which centers around cultural resources, the government will promote the development of cultural tourism hubs and regions based on the Cultural Tourism Promotion Act, improve the attractiveness of cultural resources, such as Japan Heritage, strengthen the dissemination of these cultural resources, and promote support for the approval and preparation of “Regional Plan for the Protection and Utilization of Cultural Properties”. In addition, the government will promote efforts to utilize cultural facilities, such as art galleries and museums, for tourism, including the development of an environment to receive inbound visitors in anticipation of the post-

COVID-19 era.

- In addition to adding high value to local cultural facilities and resources as cultural tourism resources and promoting local food culture, the government will promote the creation of a strategic preservation and utilization cycle for cultural properties that have a core presence in the regions, through initiatives including the utilization of private funds. In addition, taking the opportunity of the Amended Act on the Law for the Protection of Cultural Properties, the government will promote efforts to hand down the cultural heritage and lifestyle of the regions, such as traditional events, while accelerating the survey and registration of intangible cultural properties, etc. At the same time, the government will strategically implement initiatives, such as carrying out of repairs at appropriate intervals, securing of traditional repair tools, raw materials as well as technicians, and taking measures to prevent disasters and crimes, to ensure that cultural properties are handed down to the next generation.
- The government will further enrich hands-on cultural and artistic activities for children, such as appreciation classes conducted by cultural and arts organizations that have been impacted by the COVID-19 pandemic, and promote arts education in schools, etc. At the same time, the government will promote the creation of an environment to support cultural and arts activities for people with disabilities and to enable them to continue to enjoy culture and art.

14. Realizing a Vibrant Japanese Economy in a New Environment of Global Competition

(1) Leading the free, fair and rule-based international economic system

Based on the Action Plan of the Growth Strategy, the following specific measures will be taken in addition to the measures described in the plan.

i) Maintaining and strengthening the multilateral trading system

- In order to build a risk-resilient international economic system, such as driving a strong economic recovery and boosting the resilience of the global supply chain affected by the COVID-19 pandemic, Japan, in cooperation with other concerned countries, will promote WTO reforms towards the 12th WTO Ministerial Conference (MC12) in the areas of restraining trade-restrictive measures for medical supplies, establishing rules in new fields, such as e-commerce or trade and climate change, and rules to ensure a level playing field, reforming dispute settlement procedures, and strengthening of reporting and improving transparency.
- In order to take the lead in rule-making in the digital field, Japan will accelerate efforts, including the strengthening of the negotiation team, in cooperation with each country. In particular, in the negotiations on electronic commerce with other concerned countries, the government aims to achieve a high-standard outcome with as many WTO members as possible, and will make substantial progress by the 12th WTO Ministerial Conference (MC12).

ii) Economic partnership negotiations and investment-related agreements

- In addition to working to ensure the early entry into force of the RCEP Agreement and its reliable implementation, Japan will lead discussions for the steady implementation and expansion of the TPP11 Agreement as the chair of the TPP Commission in 2021. The government will also promote other economic partnership negotiations speedily taking into account strategic perspectives. Domestically, the government will work to promote the utilization of the EPA, and as part of such effort, promote the development of a business environment related to trade, including the digitalization of certificates of origin, while considering the systems of partner countries.
- While considering that the goal of concluding investment-related agreements with 100 countries and regions, which has been set in the “Action Plan to Promote the Conclusion of Investment-Related Agreements to Consolidate the Investment Environment” announced in 2016, the government will continue to promote initiatives that take into account the strategic and quality assurance perspectives with the aim of developing potential future investment destinations and creating a business environment that is not inferior to that for investors in

other countries. With regard to the agreements that are currently under negotiation, the government will continue to work to achieve early conclusion, utilizing various diplomatic opportunities. And when negotiating, ensuring the highest possible quality level is pursued. With regard to new investment-related agreements, the government will make efforts to start negotiations taking into account the specific needs of Japan's business circles and the policies of the partner countries regarding investment agreements. The focus will be on Latin America and Africa when examine the feasibility of starting negotiations with countries that have potential as future investment destinations will be considered. In order to promote further utilization of agreements that have been concluded, the government will strive to actively disseminate information on investment-related agreements.

iii) Establishment of international rules for DFFT

- In order to realize the concept of “Data Free Flow with Trust (DFFT)” agreed at the G20 Osaka Summit held in June 2019, the government will promote the establishment of international rules that will serve as the basis for global data governance. To that end, promote initiatives in each field, such as trade, environment for data use, privacy, security, reliability and infrastructure, based on the direction of Japan's international data strategy, which will lead to the creation of new value brought about by data.
- The government will strengthen international partnerships centered on like-minded countries that seek to preserve “a free and open Internet space” to protect the right of people to freely access data, work to include stakeholders in and outside Japan to strengthen Internet governance, and lead international discussions for the Internet Governance Forum (IGF), which will be hosted by Japan in 2023.
- In order to regulate data localization and unrestricted government access, which are new risks to the distribution of personal data, with the OECD Privacy Guidelines, while promoting dialogue between the US, EU, and Japan on the development of an international framework for the reliable distribution of personal data, the government will promote discussions on data localization and lead the discussions towards the formulation of higher-level principles related to government access.

In anticipation of the post-COVID-19 era and also keeping in mind the growing interests in green and digital transformation, the government will examine new KPIs to measure the progress of policies on trade.

(2) Expanding cooperation with like-minded countries that share our fundamental values

Specific measures will be taken based on the Action Plan of the Growth Strategy.

(3) Supporting overseas business expansion of Japanese companies

i) Overseas expansion of infrastructure systems

In order to realize economic growth through the export of infrastructure systems, various measures have been promoted based on the “Infrastructure System Export Strategy” (former strategy) formulated in 2013. Taking into account the recent changes in the environment surrounding the overseas expansion of infrastructure, the government will promote various measures based on the “Infrastructure System Overseas Promotion Strategy 2025” (new strategy, December 2020), which sets the objectives of overseas expansion of infrastructure systems into three key pillars: a) achieve economic growth through carbon neutrality and digital transformation; b) contribute to resolving social issues and achieve SDGs in partner countries; c) realize Free and Open Indo-Pacific, and the “Policy for the Steady Promotion of the New Strategy in Anticipation of Post-COVID-19 Era” (June 2021).

(Specific measures)

- Promptly respond to changes in the environment caused by the COVID-19 pandemic. While utilizing each function of public financial institutions and multilateral development banks, the government will continue to handle suspended projects, etc., provide international cooperation in the fields of medical care, health, and public health according to the needs of partner countries, and provide support for supply chain resilience.
- Toward realizing carbon neutrality by 2050, the government will work to capture overseas markets through joint development and demonstration for the utilization of Japan’s superior technologies and the provision of support for the formation of overseas infrastructure projects, while also promoting support for decarbonization transition policy-led infrastructure exports. In addition, while also utilizing the JBIC Post-COVID-19 Growth Facility and ODA, support the efforts of Japanese companies with decarbonization technologies to strengthen their international competitiveness and develop sales channels. At the same time, the government will promote the overseas expansion of infrastructure systems in fields, such as disaster prevention and meteorology.
- Efforts for the strategic overseas expansion of 5G and other safe, secure and highly reliable ICT infrastructure, in cooperation with partner countries, will be promoted the advancement of infrastructure development, maintenance and operation using digital technologies; the formation of projects to develop digital solutions, including services that utilize data acquired from infrastructure; active use of FS and demonstrations that support these projects; the expansion of support to Japanese companies that utilize the “Japan Platform for Driving Digital Development”; the international standardization of Japanese technologies and systems. The overseas expansion of ICT-based model infrastructure systems in the fields of transportation software infrastructure, such as smart cities and MaaS,

and medical and health care, disaster prevention, and agriculture will be promoted.

- The development and operation of ports, airports, railroads, etc. that contribute to enhanced connectivity with the regions, and the development of roads to access these ports, etc., and the overseas expansion of government ships will be promoted.
- In order to spread and practice the “G20 Principles for Quality Infrastructure Investment”, which includes openness, transparency, economic efficiency, and debt sustainability, the government will utilize public financial institutions and multilateral development banks to form high-quality projects, and also strengthen efforts to develop human resources. In addition, collect, aggregate, and analyze information on local projects, and use advisors, lawyers, etc. to strengthen their expertise. Furthermore, support for the development of legal systems in each country, including the dispatch of legal personnel to support the establishment, operation, and improvement of legal systems and the development of human resources in each country will be promoted.
- Public financial institutions, multilateral development banks, and public-private funds, etc. will be utilized for the overseas expansion of Japanese companies, including PPP, environmental measures including decarbonization, building partnerships with foreign governments, and achieving SDGs. The formation of projects will be actively promoted by NEXI through the LEAD Initiative.

ii) Business development of Japanese companies through promotion of SDGs and economic and social development of friendly nations and areas

(Strengthening connectivity that contributes to the realization of a “Free and Open Indo-Pacific”)

- In addition to strengthening connectivity through the development of high-quality infrastructure in the Indo-Pacific region and promoting development of the area which is free and open, the government will encourage the business development of Japanese companies in the region. Specifically, for the ASEAN region, we promote the development of infrastructure, such as major roads, railroads, ports, and airports that will serve as junctions within and outside the region, develop human resources and strengthen networks that support economic development, and implement industrial cooperation to build a crisis-resilient economy through the “Japan-ASEAN Connectivity Initiative”, “Initiative on Overseas Loan and Investment for ASEAN”, “Mekong SDGs Investment Partnership”, and “ASEAN-Japan Economic Resilience Action Plan”, etc. Also for the Pacific island countries, Japan will promote initiatives on climate change and infrastructure development, which are planned to be discussed at the 9th Pacific Islands Leaders Meeting. As for India, the government will encourage Japanese companies to expand their operations to strengthen their industrial competitiveness through the “India-Japan Industrial Competitiveness

Partnership”. The reinforcement of diplomatic implementation structures, including overseas diplomatic missions, which provide a platform for these initiatives will be promoted.

(Support for the development of Africa for the 8th Tokyo International Conference on African Development (TICAD8))

- With a view to TICAD8, which will be held in Tunisia in 2022, the government will strongly support the development of Africa both by the public and private sectors in anticipation of the post-COVID-19 era, while promoting the expansion of Japanese companies to Africa, including SDGs businesses, to expand business opportunities for Japanese companies. To that end, we will promote close cooperation among JICA, JETRO, and private businesses, taking advantage of such events as the “Japan-Africa Public-Private Economic Forum” and the “Public-Private Joint Mission” and also taking into account the discussions at the Japan Business Council for Africa. At the same time, the government will continue to make efforts to develop industrial human resources and improve the business environment in Africa, while also utilizing ODA.

(Promotion of the Program for Supporting SDGs Business and Japanese SMEs)

- Through the JICA’s “Program for Supporting SDGs Business and Japanese SMEs”, we will utilize ODA to match the development needs of developing countries and advanced products and technologies of Japanese companies , and provide support for surveys on local and market situations by companies to contribute to both the overseas expansion of Japanese SMEs and the development of developing countries.

(Acceleraton of STI for SDGs)

- In order to promote the “Science, Technology and Innovation (STI) for implementing the SDGs (STI for SDGs)”, the government will support the formulation of the STI for SDGs Roadmapofy Kenya in collaboration with India through the contribution to the World Bank. In addition, we will consider the utilization of Japan’s know-how in science, technology, and innovation to solve social issues in India, etc. through the contribution to the United Nations Development Programme (UNDP). Furthermore, we will conduct verification studies on the approaches of Japanese companies to tackle specific issues related to the SDGs at the STI for SDGs Platform, which aims to promote business creation in developing countries.

(4) Cool Japan, etc.

- The government will steadily implement the necessary measures to support Cool Japan (CJ) sectors that have been severely impacted by the COVID-19 pandemic, such as the restaurant business, tourism, culture and arts, and event and entertainment, and to ensure their survival and further development.

- The government will restructure the “CJ Strategy” (decided by the Intellectual Property Strategy Headquarters on September 3, 2019), promote the cooperation between the related ministries and agencies through the CJ Strategy Council, etc., and promote CJ initiatives by digging deeper into the charm of individual fields, such as tourism, food, culture, art, national parks, long-established businesses, and regions, strengthening cooperation between sectors, and building a virtuous cycle of inbound tourism and exports.
- In order to keep people around the world interested in Japan and to develop new fans of Japan, we will strengthen Japan’s ability to communicate as a whole by carefully examining the contents of disseminating information, devising ways to tell stories, and utilizing means appropriate in the digital age and projects, such as the Japan Cultural Expo. In addition, we will support initiatives that optimally combine the real and online worlds to establish new business models, taking into account the accelerating shift to a digital and online society.
- In order to ensure sustainable development of the content industry and other industries related to culture and art, the government will examine the necessary measures for the development of human resources, the optimization of transactions related to production, and the improvement of working environment, etc., while also keeping in mind the expansion into overseas markets. In addition, from FY2021, it will further promote the development and demonstration of systems that contribute to improving the efficiency of content production and distribution processes, and disseminate the systems in cooperation with various industries.
- With regard to the overseas expansion of broadcasting content, the government will analyze and examine measures to address rapid changes in the environment, such as the growth of video streaming services, and with this, promote the charm of Japan, including the regions. Additionally, initiatives to provide programs to overseas broadcasting stations free of charge will be promoted.
- The government will verify the effects of attracting international film productions to Japan as their shooting destination, such as the promotion of the film industry through human resource development, regional vitalization, and an increase in inbound tourism, while taking into account the filming and release status due to the impact of the COVID-19 pandemic, and reach a conclusion on sustainable measures for attracting foreign film productions to Japan as a shooting destination, including financial support.
- In order to further expand the export of Japanese alcoholic beverages, the government will actively support the efforts of alcoholic beverage businesses to increase recognition, expand sales channels, develop brands, and sake brewery tourism through online and other means, and make efforts to disseminate and utilize Geographical Indications (GI) and to provide technical support for developing high-value added products. Efforts will be made to inscribe cultural resources such as Japanese sake, shochu and awamori, etc., on the Representative

List of the Intangible Cultural Heritage of Humanity of UNESCO.

- The government will develop the necessary environment for the healthy and multifaceted development of esports, while also taking into account the social significance of esports, such as its contribution to the realization of regional vitalization and symbiotic society, as well as its utilization in education and social welfare.
- Overseas offices of Japanese diplomatic missions, Japan House, the Japan Foundation, JETRO, JNTO, and other organizations are utilized to promote the charm of Japan to lead to exports and inbound tourism. The funds supplied by the Cool Japan Fund Inc are also utilized.
- In order to ensure cooperation among a wide range of stakeholders for the “CJ Public-Private Partnership Platform”, it will revitalize the activities of its members and strengthen its networking and research functions to develop the platform into a more a systematic activity.
- the government will promote preparations for the realization of the International Horticultural Exposition to be held in Yokohama in 2027 to make it an opportunity to disseminate the Japanese model of green infrastructure for the realization of the SDGs and the development of a green society.