

## **Section 2 Japan’s economic security strategies and challenges for businesses**

### **1. Japan’s economic security strategies**

As described in Part I, Chapter 2, Section 2, countries are strengthening economic security initiatives because supply chain vulnerabilities have been exposed by the COVID-19 crisis and Russia’s aggression against Ukraine, incidents that occurred against the backdrop of competition between the United States and China for technological supremacy.

Japan has strengthened economic security initiatives, such as enhancing investment screening and export controls, securing research integrity, and increasing supply chain resiliency. In November 2021, the Council for the Promotion of Economic Security held its first meeting and presented (i) increasing self-reliance, (ii) securing an advantage and indispensability, and (iii) maintaining and strengthening the international order based on basic values and the rule of law as objectives that indicate the broad direction of Japan’s economic security policy, and accordingly, preparations to develop a bill to promote economic security started. In response, in light of the discussions held by an experts’ panel, the Economic Security Promotion Act (Act on the Promotion of Ensuring National Security through Integrated Implementation of Economic Measures) was passed and enacted in May 2022.

#### **(1) Economic Security Promotion Act**

The Economic Security Promotion Act (hereinafter the “Act”) sets a basic policy for the promotion of security through integrated implementation of economic measures related to ensuring security in order to promote economic measures to ensure security in a comprehensive and effective manner in light of the fact that in order to ensure security, the importance of preventing economic activities that undermine the security of the nation and its citizens is growing due to the increasingly complex international situation and changes in social and economic structures. It also establishes necessary systems as an economic measure to ensure security. Specifically, in order to address urgent challenges that require legislative solutions, the following four systems have been established: (i) the “system for ensuring stable supply of critical products,” (ii) the “system for ensuring stable provision of essential infrastructure services,” (iii) the “system for enhancing development of specified critical technologies,” and (iv) the “system for non-disclosure of selected patent applications.” (Figure II-1-2-1).

**Figure II-1-2-1. Outline of the Economic Security Promotion Act**

<b>Outline of the Economic Security Promotion Act</b> (Act on the Promotion of Ensuring National Security through Integrated Implementation of Economic Measures)											
<b>Purpose of the Act</b>											
<p>With the increasing complexity of the global landscape and changes in the world's socio-economic structure, and in light of the growing importance of preventing economic activities that cause harm to the security of the nation and its citizens, the Act stipulates that the government formulates a basic policy and introduces necessary systems as economic measures related to ensuring national security, in order to comprehensively and effectively promote economic measures related to ensuring security.</p>											
<b>Outline of the Act</b>											
<p><b>1. General Provisions Including the Formulation of a Basic Policy (Chapter I)</b>                      - Formulates basic policies related to the promotion of national security through integrated implementation of economic measures.                      - Considering their impact on economic activities, regulatory measures must be taken to the extent reasonably necessary to ensure national security.</p>											
<p><b>2. Systems for Ensuring Stable Supply of Critical Products (Chapter II)</b>                      In order to ensure the stable supply of critical products whose supply disruption would cause a significant impact on the survival of the citizens, or on their daily lives or the economic activities, the Act introduces designation of specified critical products, the plan approval and support measures for the business entities, and supplementary government initiatives.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Designation of Specified Critical Products</th> <th style="width: 33%;">Plan Approval and Support Measures for the Business Entities</th> <th style="width: 15%;">Government Initiatives</th> <th style="width: 19%;">Others</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">                     - Designating critical products which are vital for the survival of the citizens or on which their daily lives or the economic activities depend, and of which stable supply is particularly necessary                 </td> <td style="vertical-align: top;">                     - Business entities may elaborate and apply a plan for ensuring supply of specified critical products or their raw materials, parts, etc., which is subject to approval by the competent ministers.                      - For approved business entities, grant by stable supply support corporations, etc. or support such as "two-step loans", etc. are provided.                 </td> <td style="vertical-align: top;">                     - Stockpiling and other necessary measures are taken by the competent ministers when it is necessary to take such supplementary measures.                 </td> <td style="vertical-align: top;">                     - Surveys of business entities by the competent ministers                 </td> </tr> </tbody> </table>				Designation of Specified Critical Products	Plan Approval and Support Measures for the Business Entities	Government Initiatives	Others	- Designating critical products which are vital for the survival of the citizens or on which their daily lives or the economic activities depend, and of which stable supply is particularly necessary	- Business entities may elaborate and apply a plan for ensuring supply of specified critical products or their raw materials, parts, etc., which is subject to approval by the competent ministers. - For approved business entities, grant by stable supply support corporations, etc. or support such as "two-step loans", etc. are provided.	- Stockpiling and other necessary measures are taken by the competent ministers when it is necessary to take such supplementary measures.	- Surveys of business entities by the competent ministers
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<p><b>3. System for Ensuring Stable Provision of Essential Infrastructure Services (Chapter III)</b>                      In order to prevent critical facilities of essential infrastructures from being misused as a means of disrupting the stable provision of services from outside Japan, the government conducts prior screening and makes recommendations or orders related to the installation or the entrustment of maintenance, etc. of critical facilities.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Scope of Screening</th> <th style="width: 33%;">Prior Notification and Screening</th> <th style="width: 34%;">Recommendations and Orders</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">                     - Specified essential infrastructure business: the covered business sectors (e.g., electric power business) are narrowed down by Cabinet Order after the outer boundary is indicated by the Act.                      - Specified essential infrastructure service providers: the entities conducting specified essential infrastructure business that satisfy the criteria stipulated by Order of the competent ministries are designated.                 </td> <td style="vertical-align: top;">                     - Requires prior notification of plans for the installation and entrustment of maintenance, etc. of critical facilities                      - Period for screening: 30 days, in principle (may be shortened or extended)                 </td> <td style="vertical-align: top;">                     - Based on screening results, the government makes recommendations or orders to the business entities on necessary measures (e.g., change, cancellation, etc. of the plan for installation or entrustment of maintenance, etc. of critical facilities) to prevent disruptive actions                 </td> </tr> </tbody> </table>				Scope of Screening	Prior Notification and Screening	Recommendations and Orders	- Specified essential infrastructure business: the covered business sectors (e.g., electric power business) are narrowed down by Cabinet Order after the outer boundary is indicated by the Act. - Specified essential infrastructure service providers: the entities conducting specified essential infrastructure business that satisfy the criteria stipulated by Order of the competent ministries are designated.	- Requires prior notification of plans for the installation and entrustment of maintenance, etc. of critical facilities - Period for screening: 30 days, in principle (may be shortened or extended)	- Based on screening results, the government makes recommendations or orders to the business entities on necessary measures (e.g., change, cancellation, etc. of the plan for installation or entrustment of maintenance, etc. of critical facilities) to prevent disruptive actions		
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<p><b>4. System for Enhancing Development of Specified Critical Technologies (Chapter IV)</b>                      In order to promote R&amp;D of specified critical technologies (SCTs) and their social implementations, this framework introduces measures such as a funding mechanism; the Public-Private Cooperation Council (the PPCC); and entrustment of surveys and research (research institutions), etc.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Government Support</th> <th style="width: 40%;">The Public-Private Cooperation Council (the PPCC)</th> <th style="width: 35%;">Entrustment of Surveys and Research (Research Institutions)</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">                     - The Act mandates, as appropriate, the government to provide SCTs researchers with necessary information and financial support through designated funds.                 </td> <td style="vertical-align: top;">                     - The Act authorizes Ministers to establish the PPCC for each project, with the consent of research representatives.                      - Members: The heads of relevant administrative organs, research representatives/workers, etc.                      - Confidentiality obligation is imposed on the members with respect to sensitive information shared under mutual consent through the PPCC.                 </td> <td style="vertical-align: top;">                     - Conducting technological surveys and research of SCTs can be entrusted to capable research institutions, imposing confidentiality.                 </td> </tr> </tbody> </table>				Government Support	The Public-Private Cooperation Council (the PPCC)	Entrustment of Surveys and Research (Research Institutions)	- The Act mandates, as appropriate, the government to provide SCTs researchers with necessary information and financial support through designated funds.	- The Act authorizes Ministers to establish the PPCC for each project, with the consent of research representatives. - Members: The heads of relevant administrative organs, research representatives/workers, etc. - Confidentiality obligation is imposed on the members with respect to sensitive information shared under mutual consent through the PPCC.	- Conducting technological surveys and research of SCTs can be entrusted to capable research institutions, imposing confidentiality.		
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<p><b>5. System for Non-Disclosure of Selected Patent Applications (Chapter V)</b>                      In order to prevent disclosure or divulgence of inventions that are likely to be detrimental to national security through patent procedures, as well as to ensure rights under the Patent Act without compromising national security, the Act introduces measures to suspend publication of patent applications by security designations, and to restrict filing of such an application in a foreign country, etc.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Review from a Perspective of Technology Fields, etc. (primary review)</th> <th style="width: 25%;">Security Review (secondary review)</th> <th style="width: 25%;">Security Designation</th> <th style="width: 25%;">Foreign Filing Restrictions</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">                     - The Japan Patent Office sends patent applications that include inventions in specified technology fields to the Cabinet Office.                 </td> <td style="vertical-align: top;">                     Review from perspectives of:                      (1) the risk of detrimental impact to the security of the nation and its citizens; and                      (2) impact on the industrial development due to non-disclosure of the invention, etc.                 </td> <td style="vertical-align: top;">                     - Effect of the designation: prohibition on application withdrawal, requirement of permission to work a patent, prohibition on disclosure, requirement of appropriate management of information, etc.                 </td> <td style="vertical-align: top;"> <b>Compensation</b> </td> </tr> </tbody> </table>				Review from a Perspective of Technology Fields, etc. (primary review)	Security Review (secondary review)	Security Designation	Foreign Filing Restrictions	- The Japan Patent Office sends patent applications that include inventions in specified technology fields to the Cabinet Office.	Review from perspectives of: (1) the risk of detrimental impact to the security of the nation and its citizens; and (2) impact on the industrial development due to non-disclosure of the invention, etc.	- Effect of the designation: prohibition on application withdrawal, requirement of permission to work a patent, prohibition on disclosure, requirement of appropriate management of information, etc.	<b>Compensation</b>
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<b>Effective Date</b>											
<p><b>- Within 6 months to within 2 years after promulgation (18 May 2022) (enforced in stages)</b></p>											

Source: CAO.

Regarding (i) “securing stable supply of critical products,” in order to ensure the stable supply of critical products whose supply disruption would have a significant impact on the survival of citizens, or their daily lives or economic activities, the Act introduces measures for the designation of specified

critical products and authorization of plans formulated by private-sector business operators, support for the business operators, and supplementary government initiatives. With respect to products designated as specified critical products, the competent ministers who have jurisdiction over those products should set the direction of measures regarding individual product items and a policy prescribing the specifics of support. In light of the policy set, private-sector business operators should formulate plans for ensuring supply, and if the plans are approved by the competent minister, the business operators become eligible to receive subsidies and other support.

With respect to (ii) “ensuring stable provision of essential infrastructure services,” in order to prevent critical facilities of essential infrastructure (e.g., electricity, gas, and waterworks) from being misused as a means of disrupting the stable provision of services from outside Japan, the Act introduces measures for prior screening and issuance of recommendations and orders related to the installation or the entrustment of maintenance, etc. of critical facilities.

With respect to (iii) “enhancing development of specified critical technologies,” in order to promote research and development on specified critical technologies and appropriate use of the results, the Act introduces measures for the provision of information and financial assistance, and establishment of a consultative council for public-private cooperation and entrustment of surveys and research (entrustment to research institutions).

With respect to (iv) “non-disclosure of selected patent applications,” in order to prevent disclosure or divulgence of inventions that are sensitive from the national security perspective and to ensure the acquisition of rights under the Patent Act without compromising national security, the Act introduces measures to suspend publication of patent applications through security designation and to restrict application filing in foreign countries.

The Act is scheduled to be gradually put into force during the two years from the date of promulgation. In August 2022, in addition to the general provisions, the provisions related to two of the above four systems, namely (i) the “system for securing stable supply of critical products” and (iii) “enhancing development of specified critical technologies,” were put into force. In addition, the Economic Security Promotion Office was established at the Cabinet Office as an organization in charge of administrative work based on the Act.

In September 2022, cabinet decisions were made on the basic policy for enforcing the whole of the Act (the Basic Policy for Promoting National Security through Integrated Implementation of Economic Measures) and on the basic policies for (i) “securing stable supply of critical products” (the Basic Policy for Securing Stable Supply of Specified Critical Products) and the basic policy for (iii) “enhancing development of specified critical technologies” (the Basic Policy for Promotion of Research and Development on Specified Critical Technologies and Appropriate Use of the Results). The basic policies indicated the basic idea that with a free and open economy as a principle, the government should increase its involvement with economic security in terms of both support and regulation, rather than excessively relying on market forces or competition, while continuing to pursue economic development driven by the vitality of the private sector. The basic policies also called attention to the importance of striking a balance between economic security and free economic activity, the principle of international cooperation, and collaboration with business operators.

The Basic Policy for Securing Stable Supply of Specified Critical Products prescribed the following four criteria for the designation of specified critical products: criticality, dependence on the outside world, the probability of supply disruption due to activities conducted from outside Japan, and the necessity of implementing measures to secure stable supply under this system. In response, in December 2022, the following 11 products were designated as specified critical products under a cabinet order (Table II-1-2-2): antibacterial preparations, fertilizers, permanent magnets, machine tools/industrial robots, aircraft parts, semiconductors, storage batteries, cloud programs, natural gas, critical minerals, and ship parts. The competent ministers who have jurisdiction over those products formulated and published policies on initiatives for securing stable supply.<sup>218</sup>

**Table II-1-2-2. Specified critical products designated in the Cabinet Orders**

Products	Applications, etc.	Structures of supply chains and challenges therein
Antibacterial preparations	- Treatment of infectious diseases and prevention of infection during surgery	- Japan depends on overseas countries for almost all of the raw materials for $\beta$ -lactams, which are often used in antibacterial agents for injection.
Fertilizers	- Production of agricultural products	- The resources of raw materials for fertilizers are unevenly distributed in certain regions, and Japan depends on the imports of such materials for most of its supplies. - The risk of supply disruptions of raw materials has become apparent due to the changes in the international situation, such as increase in global demand for grains and the outbreak of conflicts.
Permanent magnets	- Key components that define the performance of motors used in a wide range of use, including automobiles and other transportation equipment, industrial equipment, wind power generation, electronic and telecommunications equipment, and home appliances	- Japan depends on certain countries for the raw materials (rare earths) of, in particular, neodymium and samarium-cobalt magnets. - The major magnet manufacturers are mainly dominated by two countries, China and Japan, and the global share of Japanese companies has been declining. (The share of Japanese companies in the global market (production volume) for neodymium magnets is about 15% in 2021.) - As for neodymium magnets, no progress has been made in recycling waste magnets from consumers.

<sup>218</sup> The website of the Cabinet Office ([https://www.cao.go.jp/keizai\\_anzen\\_hosho/sc\\_houshin.html](https://www.cao.go.jp/keizai_anzen_hosho/sc_houshin.html)).

Machine tools/industrial robots	<ul style="list-style-type: none"> <li>- Integral part of the industrial manufacturing process, which is utilized in the production of a wide variety of industrial products, including automobiles, aircraft, and electrical appliances</li> </ul>	<ul style="list-style-type: none"> <li>- Japanese manufacturers are highly competitive internationally and provide a stable supply.</li> <li>- Ensuring a stable supply of machine tools, industrial robots, and other products (by strengthening domestic production capacity and developing technologies for control-related equipment, which is key parts or raw materials) to meet needs growing in response to trends, such as digital transformation (DX) and carbon neutrality (CN)</li> </ul>
Aircraft parts	<ul style="list-style-type: none"> <li>- Ensuring the normal and safe operation of aircraft</li> </ul>	<ul style="list-style-type: none"> <li>- The following issues are particularly relevant to the parts or raw materials used in bodies and engines, which are key components. Large forgings: Only a few countries, including Japan, have manufacturing capacity. The risk of supply disruptions is increasing due to the international situation, and it is essential for Japan to strengthen its supply capacity. CMC and SiC fiber: CMC used in current engines is dependent on overseas suppliers. Although Japan has an advantage in SiC fiber as a raw material, its competitive production base is vulnerable. Carbon fiber: Need to meet growing demand. The risk of enclosure expected in case of emergency</li> </ul>
Semiconductors	<ul style="list-style-type: none"> <li>- Being incorporated into all types of products, including automobiles, home appliances, and information and communications equipment and being indispensable to people's daily lives and industry</li> <li>- An important foundation for supporting a digital society and a green society</li> </ul>	<ul style="list-style-type: none"> <li>- While global demand for semiconductors is increasing and other countries are making strategic and aggressive investments, the competitiveness of Japan's semiconductor industry is declining. In 2018, Japan's import share of semiconductors was as high as about 79.9%.</li> <li>- As for semiconductor production equipment, Japan has strengths in such fields as cleaning and etching equipment, but some equipment is overly dependent on overseas suppliers. As for raw materials, Japan is already excessively dependent on overseas countries, and the risk of supply disruptions has become apparent.</li> </ul>

Storage batteries	<ul style="list-style-type: none"> <li>- Power sources for mobility, such as electric vehicles; adjustment of output fluctuations of renewable energies, such as solar and wind power generation; backup power sources for critical facilities, such as 5G communication base stations and data centers; and power sources for a variety of IT devices</li> </ul>	<ul style="list-style-type: none"> <li>- As for in-car and stationary storage batteries, overseas manufacturers have rapidly been expanding supply, and Japan's share has been declining (from 51.7% in 2015 to 21.1% in 2020 for in-car storage batteries, and from 27.4% in 2016 to 5.4% in 2020 for stationary storage batteries).</li> <li>- Some storage battery materials have a certain share of the market, but overseas makers are in hot pursuit in terms of cost and quality, and many materials tend to be dependent on external suppliers.</li> </ul>
Cloud programs	<ul style="list-style-type: none"> <li>- One of the elements that determine the functions of cloud services</li> </ul>	<ul style="list-style-type: none"> <li>- Japan is dependent on overseas countries for the supply of platform cloud programs.</li> <li>- In the domestic platform cloud market, the share of businesses with a domestic business base is about 30%, while the remaining 70% or so do not have a domestic business base.</li> </ul>
Natural gas	<ul style="list-style-type: none"> <li>- LNG accounts for about 40% of the composition of energy sources and almost all of city gas in Japan.</li> </ul>	<ul style="list-style-type: none"> <li>- Japan is dependent on overseas countries for about 98% of the supply of combustible natural gas, including LNG.</li> <li>- The world is facing increasing uncertainties that the economic world and private companies cannot address by their own efforts alone, including risks of supply disruption stemming from war, the lack of upstream investment, troubles at LNG plants, and investment uncertainty surrounding decarbonization.</li> </ul>
Critical minerals	<ul style="list-style-type: none"> <li>- Lithium-ion batteries used in electric vehicles and stationary storage batteries, high-performance motors, turbines for wind power generation, etc.</li> <li>- Growth of the demand for battery metals, rare earths, and other critical minerals that are necessary to manufacture storage batteries, motors, and other products to achieve carbon neutrality</li> </ul>	<ul style="list-style-type: none"> <li>- Many critical minerals are unevenly distributed among certain countries in terms of reserves and producers, and Japan is dependent on imports from such countries. &lt;Major import sources (trade statistics in 2021)&gt; Lithium: about 55% from China; about 30% from Chile Nickel: about 28% from Indonesia; about 26% from the Philippines Cobalt: about 37% from Finland; about 35% from the Philippines Graphite (natural graphite): about 96% from China Manganese: about 40% from South Africa; about 20% from Australia Rare earths: about 60% from China; about 16% from Viet Nam</li> <li>- Competition for resources is intensifying, while the grades and conditions of new deposits are deteriorating.</li> </ul>

Ship parts	- Ensuring stable marine transportation	<ul style="list-style-type: none"> <li>- Over 90% of the worldwide ships are built in Japan, China, and the ROK, and 90% of marine equipment is procured domestically.</li> <li>- In particular, marine engines, navigational equipment (sonar), and propulsion systems (propellers) are key marine equipment whose specifications are studied and adjusted as an integral part of ship design and construction. Japan needs to ensure a stable supply of these products in its own country.</li> </ul>
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Source: Data from policies on initiatives for each product released on the CAO website ([https://www.cao.go.jp/keizai\\_anzen\\_hosho/sc\\_houshin.html](https://www.cao.go.jp/keizai_anzen_hosho/sc_houshin.html)).

The Basic Policy for Research and Development on Specified Critical Technologies and Appropriate Use of the Results indicated 20 technology fields that should serve as a reference when surveys and research are conducted to identify specified critical products, including biotechnology, AI and quantum technology.<sup>219</sup> It also stipulated that with respect to specified critical products that should be developed as a special priority, research and development should be promoted through the use of designated funds. The Research and Development Vision Related to the Key and Advanced Technology R&D through Cross Community Collaboration Program (1st round), which was determined in September 2022 by the Council for the Promotion of Economic Security and the Council for Integrated Innovation Strategy Promotion, indicated 27 technologies in four domains—the “oceans domain,” the “outer space/airspace domain,” the “inter-domain and cyberspace domain,” and the “bio domain” as critical technologies that should be supported.<sup>220</sup> In order to promote research and development related to those technologies, public invitations for applications are gradually starting.

In April 2023, cabinet decisions were made on the basic policy for (ii) “ensuring stable provision of essential infrastructure services” (the Basic Policy for Ensuring Stable Provision of Specified Social Infrastructure Services by Preventing Specified Acts of Obstruction) and the basic policy for (iv) “the system for non-disclosure of selected patent applications” (the Basic Policy for Measures Related to Special Cases of Patent application Publication under the Patent Act, for Appropriate Management of Statements Related to Patent Applications and Information Related to the Scope of Patent Claim and Inventions-Related Information Described in Drawings Based on Article 36, Paragraph 1 of the Same Act, and for Measures to Prevent Divulgence of Information Related to Inventions with High Risk of Undermining the Security of the Nation and Its Citizens Due to Activities Conducted from Outside

<sup>219</sup> The 20 technology fields are as follows: biotechnology, medical care/public health technology (including genom science), artificial intelligence/machine learning, advanced computing, microprocessor/semiconductor technology, data science/analysis/accumulation/operation, advanced engineering/manufacturing technology, robotics, quantum informtion science, advanced surveillance/positioning/sensor technology, neural computing/interface technology, advanced energy/energy storage technology, advanced information and communication/networking technology, cybersecurity technology, space-related technology, ocean-related technology, transportation technology, hypersonic technology, chemical/bio/radioactive substances/nuclear technology, and advanced material science.

<sup>220</sup> Research and Development Vision Related to the Key and Advanced Technology R&D through Cross Community Collaboration Program (first round) (September 2022) [https://www8.cao.go.jp/cstp/anzen\\_anshin/2\\_vision.pdf](https://www8.cao.go.jp/cstp/anzen_anshin/2_vision.pdf).



Japan When Made Public). In the future, relevant cabinet and ministerial orders will be developed, and the operation of both systems is scheduled to start around the spring of 2024.

## **(2) National Security Strategy**

In December 2022, a cabinet decision on the new National Security Strategy was made.<sup>221</sup> The National Security Strategy, which is treated as the most important policy document concerning Japan's national security, provides strategic guidelines for various policies in fields related to Japan's national security, including diplomacy, defense, economic security, technology, cyber, oceans, outer space, information, official development assistance (ODA), and energy. The National Security Strategy provides for the promotion of economic security measures as a strategic approach and stipulates that necessary economic measures to enhance Japan's self-reliance and to secure its advantage and indispensability concerning technologies. Specifically, it prescribed that in addition to steadily enforcing the Economic Security Promotion Act, Japan should increase supply chain resiliency, consider strengthening measures to ensure security in critical infrastructure sectors, ensure information security, including the protection of data and information and security clearance, nurture and secure technologies, and take effective countermeasures against acts of economic coercion by foreign countries while cooperating with its ally and like-minded countries as well as the private sector.

## **(3) Initiatives by the Ministry of Economy, Trade and Industry, etc.**

The Ministry of Economy, Trade and Industry established the Task Force on Strategic Goods and Energy Supply Chains in March 2022 in order to resolve vulnerabilities related to the supply of strategic goods and energy indispensable to Japan's survival, people's lives, economy and industry in light of the globalization of supply chains, the COVID-19 pandemic, and acts of unilaterally altering the status quo by using force in violation of international law and also in order to acquire and maintain an advantage in choke point technologies essential to supply chains. At its first meeting, held in the same month, the task force conducted an analysis concerning goods whose supply disruption would have broad effects on social and economic activities, such as energy, including oil, coal and natural gas, and semiconductors, and product items for which Japan depends heavily on Ukraine and Russia and identified the goods that require quick implementation of measures to secure stable supply and considered and adopted necessary measures as the Emergency Measures in Response to the Situation in Ukraine. In June of the same year, the task force held its second meeting, at which it identified the goods and technologies that are critical from the economic security perspective and considered necessary measures with a view to designating specified critical products under the Economic Security Promotion Act. The task force will continue to take every possible measure while assuming future changes in the circumstances and paying attention to potential risks that could threaten supply chains.

Following the designation of critical products under the Economic Security Promotion Act, under the FY2022 secondary supplemental budget, 958.2 billion yen was appropriated for the provision of necessary support to initiatives to secure a stable supply of the goods critical for economic security—

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<sup>221</sup> National Security Strategy (December 2022) <https://www.cas.go.jp/jp/siryou/221216anzenhoshounss-j.pdf>.



such as semiconductors, cloud programs, storage batteries, permanent magnets, machine tools/industrial-use robots, aircraft parts, critical minerals and natural gas—that are suited to each of the goods. Those initiatives include developing production infrastructure, diversifying supply sources, stockpiling, introducing, developing, and improving production technology, and developing alternative goods.<sup>222</sup>

Regarding the development of critical technologies, in order to promote research and development on and social implementation of technologies that are critical for economic security, including AI and quantum technology, funds totaling 250 billion yen were secured through the Key and Advanced Technology R&D through Cross Community Collaboration Program<sup>223</sup> under the FY2021 supplementary budget and the FY2022 second supplementary budget.

With respect to semiconductors, the government is promoting the development of manufacturing technology for next-generation semiconductors through Japan-U.S. and other international collaboration, technology development intended to achieve further advancement of semiconductor-manufacturing equipment, in which Japan has an advantage, and the creation of a domestic production base for advanced semiconductors indispensable to data centers and AI and other cutting-edge technologies (as for semiconductor-related initiatives, see Part II, Chapter 1, Section 1.4).

Furthermore, in order to increase the resiliency of supply chains of minerals, the government is providing support, in the form of investment, for private-sector companies engaging in the development of mines and refining of battery metals and rare earths, for which demand is expected to grow in the runup to the realization of carbon neutrality. In March 2023, Japan's first acquisition of rare earths (heavy rare earths) interests was announced.<sup>224</sup> Regarding dysprosium and terbium, which are rare earths used in magnets for EVs and wind power generation motors, Japan Organization for Metals and Energy Security (JOGMEC) and Sojitz Corporation signed an agreement on investing in a major Australian rare earths company and supplying up to 65% of those rare earths produced by the Australian firm in an Australian mine to Japan. The supply amount is expected to be equivalent to around 30% of the overall demand in Japan, so this deal will contribute to the stable supply of rare earths to the country.

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<sup>222</sup> Regarding antibacterial preparations, fertilizers, and ship parts, necessary measures have been taken by the Ministry of Health, Labour and Welfare, the Ministry of Agriculture, Forestry and Fisheries, and the Ministry of Land, Infrastructure, Transport and Tourism, respectively.

<sup>223</sup> In this program, the Cabinet Secretariat, the Cabinet Office, the Ministry of Education, Culture, Sports, Science and Technology, and the Ministry of Economy, Trade and Industry play the central role, under the advisory of the Council for the Promotion of Economic Security and Council for Integrated Innovation Strategy Promotion, in promoting research and development projects for advanced technologies critical for economic security across the organizational barriers of ministries and agencies. Specifically, following debates at a program conference comprised of experts and other people, the types of technology needed by Japan (Research and Development Vision) are determined at ministerial meetings of the abovementioned two councils, and research and development projects for realizing those technologies are promoted through public invitation for application. The government-wide budget amount for the program is 500 billion yen in total (a fund worth 250 billion yen will be established at each of the Japan Science and Technology Agency and the New Energy and Industrial Technology Development Organization).

<sup>224</sup> Obtained from the website of the Ministry of Economy, Trade and Industry (<https://www.meti.go.jp/press/2022/03/20230307001/20230307001.html>).

The government will strengthen systems for stable supply, including support measures to secure rare earths interests, including initiatives like this, and will also make efforts to secure domestic maritime resources, such as methane hydrates, sea-floor hydrothermal deposits, and rare earth clays.

## **2. Status of initiatives by companies and challenges**

At a time when various threats posed through economic measures are emerging, raising awareness about economic security in and outside Japan, the development of institutional systems related to economic security is proceeding in various countries. This may also affect corporate activities in various aspects as the scope of economic security is very wide-ranging. In particular, it is difficult to exercise control over foreign laws and regulations, so Japanese companies need to change their behavior in accordance with those laws and regulations. For companies, it is necessary to closely examine and judge economic security risks, including supply chain risk, and it is also important to develop systems necessary for doing that.

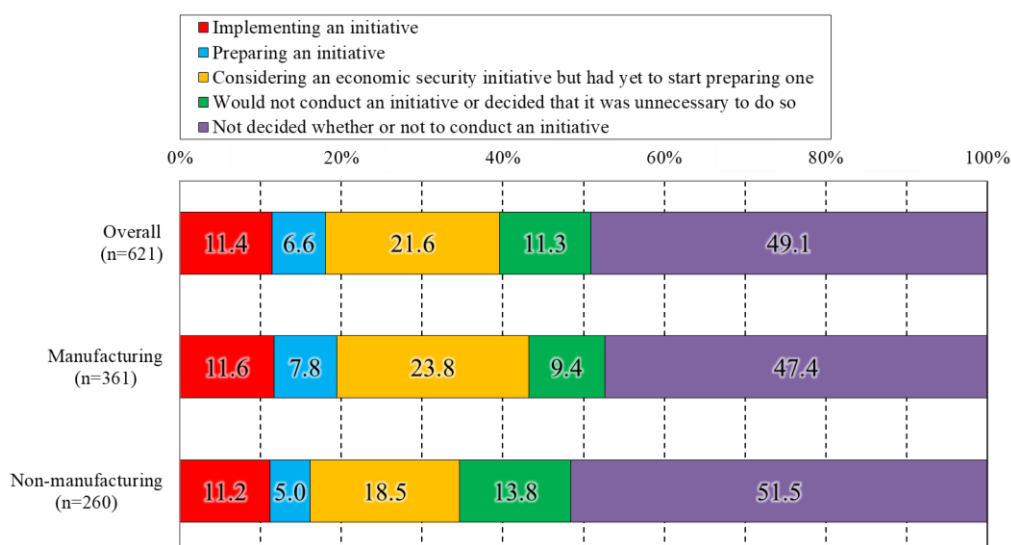
According to the Questionnaire Survey Regarding the Situation of Japanese Companies' Overseas Operations and Challenges (FY2022),<sup>225</sup> conducted by Nomura Research Institute Singapore Pte., Ltd., the percentage of companies that replied they were “implementing an initiative” related to economic security was 11.4%. If this figure is added up with the percentage of companies that replied that they were “preparing an initiative” (6.6%), the total is only 18%. Companies that replied that they had “not decided whether or not to conduct an initiative” accounted for the largest percentage, nearly half (49.1%), of all respondent companies. In short, at the moment, many companies have not developed a definite policy for how to address economic security. The percentage of companies that replied that they were considering an economic security initiative but had yet to start preparing one was 21.6%. Meanwhile, 11.4% replied that they would not conduct an economic security initiative or decided that it was unnecessary to do so.

By industry, manufacturing industries were slightly ahead of non-manufacturing industries in addressing economic security: the percentage of companies that replied that they were “conducting an initiative” or that they were “preparing an initiative” was 19.4% in manufacturing industries and 16.2% in non-manufacturing industries (Figure II-1-2-3).

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<sup>225</sup> The questionnaire survey period: February-March 2023; the survey subjects: the questionnaire was sent to companies whose main businesses exclude finance and insurance and whose companies with capital relation include foreign companies (relevant companies are those with an investment ratio of 50.1% or higher); the survey method: sending the questionnaire by postal mail and requesting response via the website; the number of companies that gave a valid response: 621; the recovery rate: 6.6%.

**Figure II-1-2-3. Status of an initiative related to economic security**

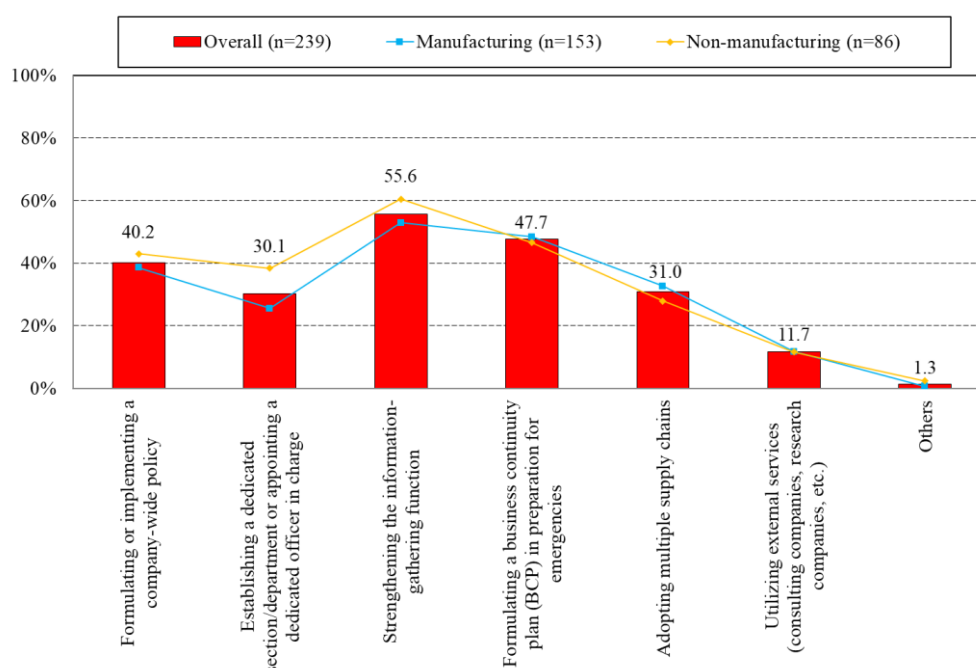


Note: The term “initiative” refers to the addition to and changes in organizational structures and functions, and other corporate actions related to economic security.

Source: *Questionnaire Survey Regarding the Situation of Japanese Companies’ Overseas Operations and Challenges (FY2022)* (Nomura Research Institute Singapore Pte. Ltd)

As for specific initiatives (including planned ones), more than half (55.6%) cited “strengthening the information-gathering function.” Companies that pointed to “formulating a business continuity plan (BCP) in preparation for emergencies” accounted for the second-largest percentage (47.7%) and companies which cited “formulating or implementing a company-wide policy” for economic security made up the third-largest percentage (40.2%). The percentage of companies that mentioned “adopting multiple supply chains” was 31.0%, while the percentage of companies that cited “establishing a dedicated section/department or appointing a dedicated officer in charge” was 30.1%. Some companies replied that they were “conducting information analysis at an executive meeting or a strategy meeting” (Figure II-1-2-4).

**Figure II-1-2-4. Current status of systems developed related to economic security**



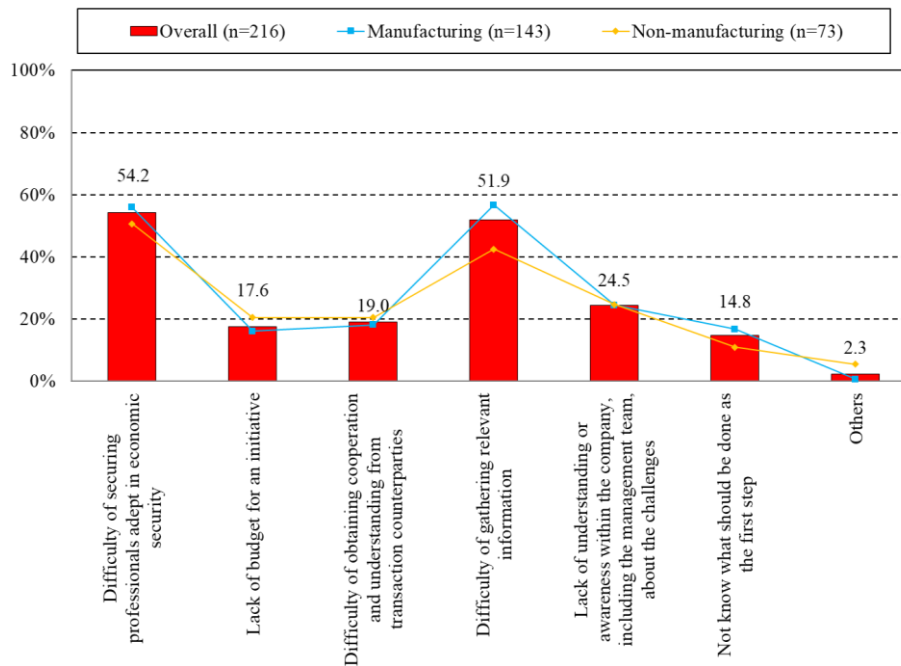
Note: Multiple answers allowed; The data includes plans.

Source: *Questionnaire Survey Regarding the Situation of Japanese Companies' Overseas Operations and Challenges (FY2022)* (Nomura Research Institute Singapore Pte. Ltd).

On the challenges for developing systems related to economic security, more than half cited the “difficulty of securing professionals adept in economic security” (54.2%) or the “difficulty of gathering relevant information” (51.9%), indicating that there are struggles with efforts to secure professionals and gather information. The percentage of companies that cited a “lack of understanding or awareness within the company, including the management team, about the challenges,” was 24.5%, while the percentage of companies that pointed to the “difficulty of obtaining cooperation and understanding from transaction counterparties” was 19.0%, which means that promoting understanding within the company and among transaction counterparties is also a challenge. The percentage of companies that mentioned a lack of budget for an initiative was 17.6%.

Meanwhile, around 15% replied that they did “not know what should be done as the first step.” Some companies cited “a lack of useful information, such as information on initiatives conducted by other firms,” while others replied that it was “unclear to what extent the initiative should be expanded,” indicating the presence of companies that remain in the dark when it comes to economic security. Other challenges cited included “a lack of manpower to spare” and “the large amount of time necessary for conducting an initiative” (Figure II-1-2-5).

**Figure II-1-2-5. Challenges in systems developed related to economic security**



Note: Multiple answers allowed.

Source: *Questionnaire Survey Regarding the Situation of Japanese Companies' Overseas Operations and Challenges (FY2022)* (Nomura Research Institute Singapore Pte. Ltd).

The Institute of Geoeconomics (IOG) conducted a survey (2023) with 100 Japanese companies on economic security.<sup>226</sup> The 100 Japanese companies (including research institutions) targeted by the survey are ones that are considered to occupy an important position in Japan's economic security and to be sensitive to economic security dynamics, and around 90% of them replied that they were conducting an economic security initiative. Therefore, respondent companies are presumed to be conducting an initiative with a high level of awareness about economic security. The sorts of economic security initiatives conducted by more companies compared with the survey in the previous fiscal year were "production base transfer" and "strengthening information management." As for new initiatives following the entry-into-force of the Economic Security Promotion Act, many companies cited "establishment of specialized departments" and "strengthening efforts toward advanced technologies."

Meanwhile, according to the Survey on Supply Chains and Management of Technical Know-how<sup>227</sup> conducted by Okazaki, Saito, Tsuchiya and Sahashi (2023), 67% of the respondent companies replied that they were conducting management of technical knowhow. The approach to management of technical knowhow differed depending on the workforce size: among companies with a workforce size of 50 employees or more, more than 60% were conducting management of technical knowhow, while among companies with a workforce size of less than 50 employees, less than 50% were doing so.

<sup>226</sup> Institute of Geoeconomics (IOG), "Second Survey Results of 100 Japanese Companies on Economic Security Announced" (<https://apinitiative.org/en/2023/02/16/43943/>).

<sup>227</sup> Okazaki, Y., K. Saito, T. Tsuchiya, and R. Sahashi (2023) "Survey on Supply Chains and Management of Technical Know-how," RIETI Discussion Paper Series 23-J-013 (<https://www.rieti.go.jp/jp/publications/summary/23030015.html?id=nl>).

The Ministry of Economy, Trade and Industry is providing guidance and assistance and promoting awareness and enlightenment by holding explanatory meetings and dispatching professionals to offer one-on-one consultation in order to help small and medium-size enterprises develop and improve the operation of a comprehensive technology management system based on various institutional systems, including the security management system, technology information management certification system, and the Unfair Competition Prevention Act. Using the abovementioned support measures is considered to be an effective means to address economic security.

As described in the previous subsection, the Economic Security Promotion Act and the National Security Strategy of Japan contain such elements as the balancing of economic security and free economic activity and collaboration with the private sector. The basic policy under the Economic Security Promotion Act stipulates as follows: “In order to implement economic measures related to ensuring national security in a comprehensive and effective manner, it is essential not only that the government perform its role but also that the entire population, including business operators actually engaging in economic activity, cooperate with the government. In other words, in various aspects of economic activity, it is important that as a result of an increase in business operators, etc. that make efforts to take voluntary actions taking account of the national security perspective, including maintaining and improving technological expertise and preventing leakage of technologies, combined with governmental measures, the security of the nation and its citizens be ensured.” In short, it is important for the public and private sectors to cooperate with each other to ensure economic security.