

# Enactment of GX Promotion Act and its Impact on Corporate Decarbonization

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## I. Introduction

On May 12, 2023, the Act Concerning the Promotion of a Smooth Transition to a Decarbonized Economic Structure (the "Act" or "GX Promotion Act") was enacted by the House of Representatives. This Act is designed to implement part of the necessary legal measures based on the "Basic Policy for the Realization of GX" (the "Roadmap") approved by the Cabinet on February 10, 2023<sup>1</sup>.

The following is an overview of the GX Promotion Act and its impact on corporate decarbonization.

## II. Background

Based on the Paris Agreement, the Japanese Government set a target of reducing greenhouse gas ("GHG") emissions, including carbon dioxide, by 46% from its FY 2013 levels by FY 2030 (the so-called "Nationally Determined Contribution"), and declared that it will achieve carbon neutrality by FY 2050<sup>2</sup>.

<sup>1</sup> [https://www.meti.go.jp/press/2022/02/20230210002/20230210002\\_1.pdf](https://www.meti.go.jp/press/2022/02/20230210002/20230210002_1.pdf) (Japanese only)

<sup>2</sup> Japan's Emission Reduction Targets (October 25, 2022 [https://www.mofa.go.jp/mofaj/ic/ch/page1w\\_000121.html](https://www.mofa.go.jp/mofaj/ic/ch/page1w_000121.html))

This is also stated in the 6<sup>th</sup> Strategic Energy Plan<sup>3</sup>.

In addition to reducing GHG emissions as described above, the acceleration of "Green Transformation" ("GX"), where fossil-fuel-centered industrial and social structures are transitioned to those to be driven by clean energy, is now attracting attention as a trigger to return the Japanese economy to a growth track again and as a means to secure a stable supply of energy in Japan where resources are scarce, by taking advantage of the strength of decarbonization technologies possessed by Japanese companies. In order to consider measures for the realization of GX, the meetings for the implementation of GX were held since July 2022, and as described above, the Roadmap was formulated and approved by the Cabinet on February 10, 2023<sup>4</sup>.

In the Roadmap, the Government estimates that GX investment of more than 150 trillion yen will need to be realized over the next 10 years through cooperation between the public and private sectors in order to achieve international commitments, including carbon neutrality by FY 2050, and to simultaneously strengthen industrial competitiveness and achieve economic growth. To this end, it is necessary for the Government to present the outlook for support measures and regulatory and institutional measures over the long term and multiple fiscal years (so-called "comprehensive measures to promote investment by the integration of regulation and support") and to enhance predictability for private businesses. The Roadmap sets out measures that require legal action and matters to be specified in legislative bills, and the GX Promotion Act can be regarded as one of the key pieces of legislation for such matters.

Prior to the enactment of the GX Promotion Act, GX League<sup>5</sup> was launched in April 2023 as a system to promote voluntary efforts by companies to decarbonize. GX League supports the decarbonization efforts of companies through carbon credit transactions as a type of carbon pricing, and the GX Promotion Act and GX League have the same objective of achieving the Japanese Government's goal of achieving carbon neutrality.

### **III. Formulation of GX Promotion Strategy by the Government**

The measures described below are intended to encourage companies to make investments for decarbonization by providing various kinds of support from the Government for areas that cannot be covered solely by each company's own capital investment. Companies can consider investment for decarbonization, taking into account various government support.

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<sup>3</sup> Strategic Energy Plan (October 2021)

[https://www.enecho.meti.go.jp/category/others/basic\\_plan/pdf/20211022\\_01.pdf](https://www.enecho.meti.go.jp/category/others/basic_plan/pdf/20211022_01.pdf)

<sup>4</sup> For a detailed explanation on the Roadmap, see "Cabinet Approval on the 'Basic Policy for the Realization of GX' (February 10, 2023)" by Kenji Miyagawa and Mai Kurano, Shojihomu Portal, February 28, 2023.

<sup>5</sup> For details of the GX League and carbon credit transactions, see the following Newsletter.

[https://www.amt-law.com/asset/pdf/bulletins12\\_pdf/230221.pdf](https://www.amt-law.com/asset/pdf/bulletins12_pdf/230221.pdf)

## 1. Clarification of GX promotion measures by the Government

Under the GX Promotion Act, the Government is required to formulate a strategy for promoting structural transition based on decarbonization (the "GX Promotion Strategy") in order to comprehensively and systematically promote measures for GX (Article 6, Paragraph 1 of the Act). Matters to be determined in the GX Promotion Strategy include the goals of GX, basic direction, matters concerning business areas that are expected to have a high impact on GX policy and support measures, matters concerning each measure stipulated in the GX Promotion Act, and matters concerning the evaluation of the achievement status of the GX Promotion Strategy (Article 6, Paragraph 2 of the Act).

## 2. Description of business areas important for GX promotion and support measures

It should be noted that in practice, the GX Promotion Strategy includes determining the business areas that are expected to have a big political impact on GX and formulating support measures for GX. Measures such as the introduction of tax incentives and subsidies are expected to be implemented for certain businesses as described in the GX Promotion Strategy, which are extremely important for companies to consider and implement new businesses.

Specifically, it is expected that the business areas mentioned in the Roadmap<sup>6</sup> will be designated as such. Since policies to promote such business areas are expected to be adopted in the future, it is necessary to pay attention to investment and financing for future businesses and the establishment and amendment of legal systems relating to such businesses.

## IV. Issuance of GX Transition Bonds and Introduction of Fossil Fuel Levy and Specified Business Emissions Allowance System

The measures described in IV 1 below are intended to encourage companies to make investments for decarbonization by providing various kinds of support from the Government for areas that cannot be covered solely by each Company's own capital investment. On the other hand, the measures described in IV 2 below are intended to impose economic burdens such as levies on carbon emissions, and is a type of carbon pricing. Even if the Japanese economy aims to promote corporate activities that do not emit any GHG in the medium to long term, it is difficult to stop using fossil fuels in the course of that process. However, when considering the use of fossil fuels, it is necessary to consider the economic burdens such as the levies described below.

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<sup>6</sup> Specifically, it includes (1) the conversion of the manufacturing industry (conversion of fuel and raw material), (2) the use of renewable energy as a main power source, (3) the utilization of nuclear power, (4) the promotion of the use of hydrogen and ammonia, (5) the storage battery industry, (6) GX in the transportation sector, (7) digital investment for decarbonization, (8) infrastructure (promotion of renewable energy using various infrastructures such as airports, roads, dams and sewerage systems, reduction of energy consumption, and promotion of urban and regional development that contributes to decarbonization), and (9) carbon recycle/CCS.

## 1. Issuance of GX Transition Bonds of approximately 20 trillion yen over the next 10 years

Bonds for the transition to a decarbonized economic structure (the "GX Transition Bonds") are issued in order to promote long-term investment and improve predictability from the private sector's viewpoint (Article 7 of the Act).

The GX Transition Bonds will be an upfront investment of approximately 20 trillion yen over 10 years from FY 2023, and will be used as funds for the costs of measures to promote GX.

According to the Roadmap, the basic principle of the national investment promotion policy is that the Government should support, in terms of technology development and capital investment, projects for which it is difficult for the private sector to make investment decisions in support of the projects, and should also support the business sectors that contribute to both (i) the strengthening of industrial competitiveness and economic growth and (ii) emissions reduction. Specifically, (1) projects that satisfy the following basic conditions will be eligible, and (2) projects that conform to the types that satisfy one of the requirements of A through C below for industrial competitiveness and economic growth, and one of the requirements of 1) through 3) below for emissions reduction, will become candidates that are eligible to receive government support and will be ranked in order of priority.

### Basic conditions

- I. Projects for which it is difficult for private companies to make investment decisions due to the uncertainty of technological innovation and the nature of their businesses, subject to the premise that such companies are committed to management innovation, including innovation in financing methods.
- II. Projects that contribute to both the strengthening of industrial competitiveness and economic growth and emissions reduction, considering comprehensively the size of the market and the scale of emissions reduction, and the necessity of domestic supply which is indispensable for achieving GX. Such projects will be ranked in order of priority and given government support accordingly.
- III. Projects that implement regulatory and institutional measures in an integrated manner that creates a mechanism for changing corporate investment and demand-side behavior.
- IV. Projects that lead to the expansion of human resource and physical asset investments in Japan (including investments that encourage the circulation of value in the domestic economy, such as resources recycling and markets for domestic demand only). Projects that do not reduce domestic emissions such as overseas capital investments or projects that only help achieve targets such as carbon credit transactions are excluded from the scope of government support.

### Strengthening industrial competitiveness and economic growth

- A. Growth investment with technological innovation or business innovation that is expected to acquire external demand or expand domestic demand.
- B. Growth investment that contributes to both (i) the reduction in the use of fossil fuels and energy and (ii) improvement of profitability (such as by integration, restructuring and markup) through

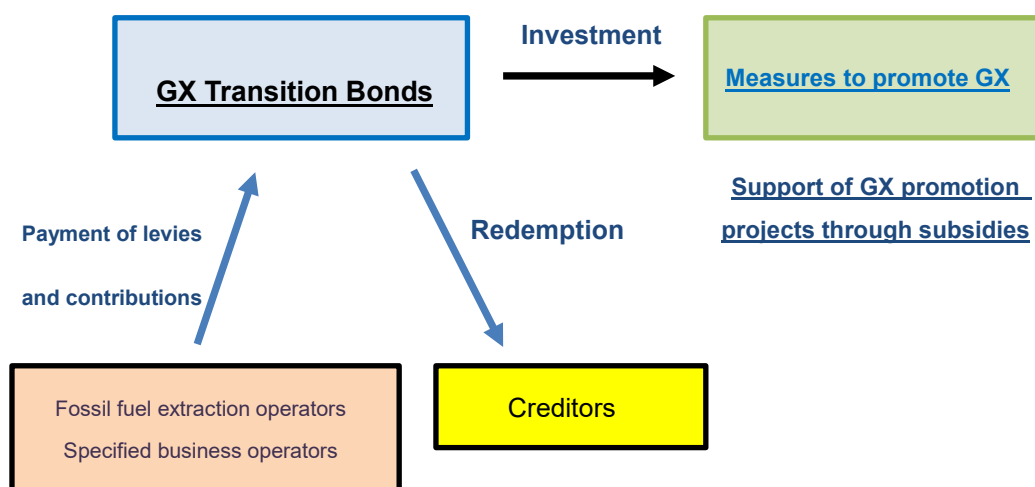
advanced technologies.

- C. Measures to address domestic demand in the early stage of the launch of major products that are expected to have a nation-wide market (those accompanied by investment from the supply side).

### Emissions reduction

- 1) Research and development investment that will contribute to future domestic reductions through technological innovation.
- 2) Capital investment that is technically effective in reducing emissions and directly contributes to the reduction of domestic emissions.
- 3) Measures to address domestic demand in the early stage of the launch of major products that have a high demand nationwide and have a high effect on the reduction of emissions over a long period of time.

The GX Transition Bonds are expected to be redeemed by 2050, and will be funded by the Fossil Fuel Levy and the Specified Business Contributions discussed below. In this way, funds collected from business operators that are expected to emit carbon dioxide are used to support decarbonization projects, and enable the economy to move toward decarbonization.



## 2. Obligation of fossil fuel extraction operators to pay Fossil Fuel Levy

The Fossil Fuel Levy is a system in which levies are collected from fossil fuel extraction operators in proportion to their GHG emissions. According to the Roadmap, the Fossil Fuel Levy and the Specified Business Contributions described below aim to provide business operators with incentives for GX efforts, together with support measures. The following is an overview of the Fossil Fuel Levy.

- (1) Scope of "fossil fuel extraction operators" = " persons who extract crude oil or take it from a bonded area"

The Fossil Fuel Levy, which is used for the redemption of the GX Transition Bonds, is imposed on fossil fuel extraction operators who are defined under the GX Promotion Act as persons who extract crude oil or take it from a bonded area (Article 11, Paragraphs 1 and 2 and Article 2, Paragraph 4 of the Act).

## **(2) Amount of Fossil Fuel Levy (calculated by multiplying the amount of crude oil handled by a prescribed coefficient)**

The amount of the Fossil Fuel Levy to be imposed on fossil fuel extraction operators in each fiscal year is calculated by the following formula (Article 11, Paragraph 1 of the Act).

$$\text{Amount of Fossil Fuel Levy} = (\text{Carbon dioxide emissions from crude oil handled}^7 \text{ by fossil fuel extraction operators}) \times (\text{Amount to be borne per ton by fossil fuel extraction operators (the "Unit Price of Fossil Fuel Levy"*)})$$

\* The Unit Price of Fossil Fuel Levy will be specified by Cabinet Order in consideration of (1) the need to reduce the energy burden in the medium to long term and (2) the fact that the GX Transition Bonds are scheduled to be redeemed by FY 2050 (Article 12, Paragraph 1 and Article 8, Paragraph 1 of the Act).

## **(3) (i) Fiscal year in which the scheme is applied and (ii) practical considerations**

The Fossil Fuel Levy will be collected from FY 2028 (Article 11, Paragraph 1 of the Act). (i) Fossil fuel extraction operators and (ii) business operators who (a) conduct business transactions with such fossil fuel extraction operators and (b) are expected to be affected by the addition of the amount equivalent to the Fossil Fuel Levy regarding the terms and conditions of the transactions will need to pay attention to the level of the Unit Price of Fossil Fuel Levy for each fiscal year to be specifically stipulated by Cabinet Order<sup>8</sup> in the future. Matters concerning the collection of the Fossil Fuel Levy and other necessary matters concerning the Fossil Fuel Levy are separately stipulated by other laws (Article 14 of the Act). According to the Roadmap, the Fossil Fuel Levy "will be introduced with little burden initially, which will be gradually increased, and such policy will be presented in advance to encourage private companies

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<sup>7</sup> The legislative definition is "crude oil transferred from an extraction site or taken from a bonded area".

<sup>8</sup> It is permitted under the law to charge fossil fuel extraction operators an amount sufficient to maintain the level of revenue from petroleum and coal tax in FY 2022 and the level of the levy for FY 2032 under the Act on Special Measures Concerning Renewable Energy (Article 40, Paragraph 1 of the Act on Special Measures Concerning Promotion of the Use of Electricity from Renewable Energy Sources), as the Fossil Fuel Levy (Article 12, Item 1 of the Act). It is therefore important to note that as a result of the advancement of GX funded by the GX Transition Bonds, (1) the economic burden of fossil fuel extraction operators will not decrease even if the revenue from petroleum and coal tax itself decreases, and (2) even if the social cost for the introduction and promotion of renewable energy (specifically, costs for maintenance and installation of the systems arising from the introduction of renewable energy, procurement prices for FIP/FIT and subsidies for promoting supply) decreases, the Government may require fossil fuel extraction operators to bear the difference so as to maintain the level of the levy for FY 2032.

to advance their GX investments." The scheme is designed to reduce the total energy burden over the medium to long term after setting a period of time for business operators to implement measures for GX. As described above, it aims to provide business operators with incentives for GX efforts, together with support measures.

### **3. Obligation of Specified Business Operators to pay Specified Business Contributions under the Specified Business Emissions Allowance System**

The Specified Business Emissions Allowance System is a type of emissions trading system. According to the Roadmap, it is a "paid auction" which is similar to the system already in place in the EU, that is, a system of paying a certain amount of contributions according to carbon dioxide emissions ("Specified Business Contributions"). The following is an overview of the Specified Business Emissions Allowance System.

#### **(1) Scope of "Specified Business Operators" = "Electricity Generation Utilities" as defined in the Electricity Business Act whose carbon dioxide emissions levels are high**

The Specified Business Contribution, which is used for the redemption of the GX Transition Bonds, is imposed on specified business operators (the "Specified Business Operators") under the GX Promotion Act. Specifically, "Specified Business Operators" refers to "Electricity Generation Utilities" as defined in Article 2, Paragraph 1, Item 15 of the Electricity Business Act that is specified by Cabinet Order as persons who emit high levels of carbon dioxide in their electricity generation business (Article 2, Paragraph 5 of the Act)<sup>9</sup>.

#### **(2) Allocation of carbon dioxide emissions allowance to Specified Business Operators (contributions for paid allocation)**

The Government will allocate a carbon dioxide emission allowance (the "Specified Business Emissions Allowance") to each Specified Business Operator on a free or charged basis from FY 2033<sup>10</sup>. The amount of the Specified Business Contribution imposed on each Specified Business Operator is calculated according to the following formula (Article 15, Paragraph 1 and Article 16, Paragraph 1 of the Act). Based on the design of the system, if a Specified Business Operator emits carbon dioxide in excess of its Specified Business Emissions Allowance, a penalty at a level equal to or greater than the Unit Price of the Specified Business Contribution may be imposed on such Specified Business Operator for the excess.

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<sup>9</sup> According to the Roadmap, the Specified Business Contribution is imposed on "electricity generation utilities who emit a high level of carbon dioxide in the power generation sector where alternative means such as renewable energy sources are available."

<sup>10</sup> According to the Roadmap, the Specified Business Emissions Allowance will be issued free of charge first, based on each Specified Business Operator's emissions forecast and power generation efficiency (benchmarks), taking into account the status of implementation of GX measures by such Specified Business Operators, and such allowance will be gradually decreased (i.e., the paid ratio will be increased).

Amount of Specified Business Contribution = (Amount of Specified Business Emissions Allowance allocated with compensation) x (Amount determined by bidding to be borne per ton of carbon dioxide emissions (the "Unit Price of Specified Business Contribution"))
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### **(3) Determination of Unit Price of Specified Business Contribution by bidding process**

(i) The party to which the Unit Price of the Specified Business Contribution described above (\*) is allocated and (ii) the unit price of the Specified Business Contribution will be determined by a bidding process (Article 17, Paragraph 1 of the Act). Matters concerning the implementation of bidding are separately stipulated by other laws (Article 19, Paragraph 1 of the Act).

### **(4) Relationship between GX-ETS and Specified Business Emissions Allowance**

In GX League, a voluntary emissions trading system ("GX-ETS") will be utilized, and preparations for GX-ETS are under way. Some argue that GX-ETS does not clearly define the obligations of participating companies, compared to the emissions trading system in the EU. However, the Specified Business Emissions Allowance System described above is expected to enhance the regulatory effect of GX-ETS.

## **V. Conclusion**

As for each system discussed above, the necessary legal measures will be taken within two years of the enactment of the GX Promotion Act with respect to the implementation of (1) the Specified Business Emissions Allowance System and (2) the Fossil Fuel Levy and the Specified Business Contribution (Article 11, Paragraph 2 of the Supplementary Provisions to the GX Promotion Act).

In addition to the above, policies will be reviewed in light of the implementation of the GX investments and domestic and overseas economic trends relating to CO<sub>2</sub> emissions and necessary revisions will be made based on the results of the review (Article 11, Paragraph 1 of the Supplementary Provisions). Although the goal of GX itself is to reduce GHG emissions, it is also positioned, in the Roadmap, as part of Japan's future strategy for strengthening industrial competitiveness and economic growth. Investment and industrial development by the public and private sectors are expected to be advanced in the future, and business opportunities are expected to be created for business operators in Japan.

GX and decarbonization were discussed in detail at the G7 Ministers' Meeting on Climate, Energy and Environment held in Sapporo in April 2023. It was reaffirmed at the said meeting that all companies in Japan should implement their own decarbonization strategies by utilizing government support under the GX Promotion Act.



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