

Urgent Policy Proposal toward Achieving Green Growth

June 15, 2021

Keidanren

This year in April, Prime Minister Suga announced that Japan would reduce greenhouse gas (GHG) emissions by 46% by fiscal 2030, following his declaration in October 2020 to achieve carbon neutrality (CN) by 2050. In order to achieve these ambitious goals, collective efforts of both public and private sectors are essential. It is important that these efforts lead to Japan's economic growth and that a virtuous cycle of the economy and the environment (Green Growth) is thus created. Given large geographical constraints, Japan is not rich in energy resources. Therefore, Japan is faced with a crucial moment now, as time is pressing for Japan to be able to pass down a prosperous national life to the next generation while aiming to achieve carbon neutrality by 2050. Japan must advance the fundamental transformation of the entire society and economy (GX: Green Transformation) through innovation, a virtuous cycle of investment, and realizing a next-generation energy system.

The Government needs to present a clear path to green growth – how it intends to dispel concerns over the hollowing out of industry, reduce rising energy cost and thus strengthen Japan's industrial competitiveness, while fully considering the differences among the measures that can be taken in difference timeframes. We seek to strongly request the Government to formulate policies based on both natural and social sciences by mobilizing the knowledge embraced by various sectors and at various levels.

With the strong acknowledgement that aiming to achieve carbon neutrality by 2050 while creating a virtuous cycle of the economy and the environment is an important agenda for building sustainable capitalism, the business community is also determined to work closely with the Government with an unwavering resolve. As a part of these efforts, we are determined to strongly support the proactive initiatives of the business community by renewing the “Keidanren's Commitment to a Low Carbon Society” that we have been engaged in for a long period of time

into the “Keidanren Carbon Neutrality Action Plan”.

Keidanren has already announced “. The NEW Growth Strategy” (November 2020) ¹ and the policy proposal “Toward Realizing Carbon Neutrality by 2050 (Society 5.0 with Carbon Neutral)” (December 2020)². Now that climate change countermeasures have entered a new phase, Keidanren provides our new initiatives, as well as proposals on the necessary policy measures to achieve green growth, as below.

[Overview —Basic approach to achieving green growth—]

1. Strongly promoting proactive initiatives by the business community (the Carbon Neutrality Action Plan)

Keidanren has engaged in the “Voluntary Action Plan on the Environment” and the “Commitment to a Low Carbon Society” for almost a quarter of a decade since 1997. Constituting a pillar of the measures to be taken by the business community under Government plans to date, including the current Plan for Global Warming Countermeasures, these initiatives have played an important role in achieving Japan’s greenhouse gas (GHG) emission reduction targets.

The Keidanren Commitment to a Low Carbon Society comprises four pillars: 1) emission reductions from domestic business operations; 2) strengthening co-operation with other interested groups (e.g., contribution through low-carbon/energy-saving products and services); 3) promoting contribution at the international level (e.g., deploying and supporting products and technologies on a global scale, including developing countries); and 4) development of innovative technologies. Under these pillars, industries, which have the best knowledge of technological trends and production forecasts, have successfully produced robust results by following the PDCA cycle, which involves voluntarily committing to

¹ <https://www.keidanren.or.jp/en/policy/2020/108.html>

² <https://www.keidanren.or.jp/en/policy/2020/123.html>

maximized reduction targets, promoting reduction efforts, receiving third party verification of results every fiscal year, and thus reviewing and improving measures for the next year. In fiscal 2019, for which the most recent performance results are available, CO2 emission reductions of 10.7% relative to fiscal 2013 levels were achieved (collectively by all participating industries).

On the other hand, the Commitment to a Low Carbon Society has laid emphasis on CO2 reductions toward 2030 with a view to contributing to Japan's mid-term reduction target under the Paris Agreement. As the world's concerns and expectations become increasingly focused on achieving CN by 2050, Keidanren will newly position the achievement of CN as the most important goal to reach for. Therefore, it will renew the "Keidanren's Commitment to a Low Carbon Society" as the "Keidanren Carbon Neutrality Action Plan", which it will strongly promote as provided below:

- (1) Developing and introducing visions and innovative technologies toward carbon neutrality by 2050: Identify the visions (basic policy, etc.) for carbon neutrality by 2050 that have been mapped out by each industry and advance the development of the innovative technologies required for their achievement with multiple options.
- (2) Reducing emissions from domestic business operations: Contribute to achieving Japan's renewed 2030 target by constantly reviewing the 2030 targets, which were set up under the Commitment to a Low Carbon Society, while steadily advancing reduction efforts through the maximized deployment of BAT (best available technologies) toward 2030 and seeking further technology development and deployment.
- (3) Strengthening co-operation with other interested groups and promoting contribution at the international level: Contribute to the transition to decarbonization and the achievement of CN by 2050 at the global level through not only reducing CO2 emissions from one's own business operation, but also taking measures at the use phase of products and services, across the entire supply chain, and technology transfer to overseas.

By strongly promoting the Keidanren Carbon Neutrality Action Plan, with

the engagement of the Government and citizens, we will maximize our efforts toward achieving CN by 2050.

2. Mobilizing policy resources toward a virtuous cycle of the economy and the environment

In order to achieve a virtuous cycle of the economy and the environment (i.e., advancing sustainable development and decarbonization at the same time), climate and energy policy and the growth strategy need to be addressed in an integrated manner as a national strategy, and policy resources should be mobilized under the Green Growth Strategy.

Improving the current economic environment is a precondition for self-directed investment by the private sector.

Then, firstly, with a view to long-term use, the Government should support investment in large-scale infrastructure, such as next-generation electric power systems and hydrogen supply systems, which will be utilized over a long period of time, as well as the deployment of transport equipment, buildings and housing. Investment in large-scale infrastructure, in particular, should be designed and implemented in such a way that contributes to increased demand in the near future, to increased efficiency across society as a result of the investment, and to enhanced competitiveness.

Secondly, in order to enhance individual companies' competitiveness through improved energy efficiency, the Government should support the deployment of facilities that will help companies to save energy and decarbonize.

Thirdly, the Government should strongly support corporate challenges to create innovations for achieving CN by 2050 – for example, the development of innovative technologies and their society-wide deployment – through schemes such as tax incentives, financial support, and deregulation measures, that will facilitate the harnessing of corporate creativity. This should lead to the strengthening of Japan's industrial competitiveness.

Fourthly, the Government should foster new industries, such as those supplying

renewable energy, hydrogen and other energy, energy management, and providing decarbonized products and services, that will emerge as the economy aims to achieve CN.

The U.S. and Europe have already made climate change policy an important pillar of their national strategy and are taking measures such as financial support measures of unprecedented scales³. With only nine more years to achieve the 2030 target, we need to maximize the large-scale deployment and utilization of BAT, as well as strongly promote the development of innovative technologies and their early society-wide deployment and investment in large-scale infrastructure that will be utilized over the long term. These measures need to be taken on both sides of supply and demand. The Government should not fall behind the U.S. and Europe; it is required to take concrete action on its 2030 target and its determination toward achieving CN by 2050 by securing policy resources of a scale that matches the ambition of its targets and injecting the resources effectively and efficiently.

When the proactive initiatives of the business community and effective Government policies generate synergetic effects, we will be able to achieve a virtuous cycle of the economy and the environment (Green Growth).

3. Presenting a concrete future vision and fostering public understanding for matters including costs

Reaching the new 2030 target and later achieving CN by 2050 is a nationwide challenge; therefore, in order to promote behavior change among various actors, it is essential to foster public understanding on various matters, including the additional public burden that the society-wide deployment of new technologies

³ The EU has announced that it will allocate around 35 trillion yen for climate change measures through the COVUD-19 pandemic recovery fund. In the U.S., the Biden Administration has pledged during the Presidential election that it would make investments of more than 2 trillion dollars in clean energy during the four years of his first term of office.

entail. The Government is required to provide a clear-cut narrative explanation of the significance of aiming to achieve CN by 2050, the future vision of the economy, society and the energy mix, the measures that need to be taken for the achievement of the milestone 2030 targets and the accompanying advantages and costs, by presenting roadmaps in order to earn public understanding. Then, it will be required to also consider how costs should be shouldered across society as whole and what measures would serve the smooth transition to decarbonization, including that of small and medium-sized supply chains,

On the other hand, the feasibility of the measures themselves and the uncertainty of social acceptance will increase in accordance with the ambition level of the new 2030 target. Furthermore, we cannot dismiss the risk that great amounts of money will be invested in less cost-effective measures. If we were to force the promotion of measures simply for the purpose of achieving the target, it may leave serious problems for future generations. While we should naturally work with integrity toward achieving the 2030 target, it is important to be committed to the flexible implementation of individual measures based on constant review and verification, considering their feasibility and cost-effectiveness and their impacts on stable supply and economic efficiency.

(Individual topics —Policy measures for the achievement of green growth—)

4. Pursuing reduction efforts centered on the proactive initiatives of the business community

As abovementioned, the Commitment to a Low Carbon Society has successfully produced robust results thorough the maximized deployment of BAT in the business community, and has thus played an important role in Japan's achievement of its reduction targets. The Commitment has its reliability and transparency by having the Third Party Evaluation Committee and the

Government committees annually conduct strict follow-ups; therefore, it has functioned as a social system that extends beyond a mere framework of voluntary approaches. This scheme needs to be passed on to the Carbon Neutrality Action Plan which sets out the achievement of CN by 2050 as the most important goal.

Working toward achieving the renewed 2030 target, the Government should continue to position the Carbon Neutrality Action Plan as a pillar of the measures to be taken by the business community, and thus support the maximized deployment of BAT and other measures for the decarbonization of both energy supply and demand, as well as promote bold policy measures in order to lead the world in innovative technology development with a view to achieving CN by 2050.

Keidanren will pursue maximized reduction efforts, under the four pillars of reducing emissions from domestic business operations, reducing emissions across the product life cycle, international cooperation and innovative technology development, while seeking to increase the coverage of the Carbon Neutrality Action Plan. We request that the Government implement not penalties but incentives that will promote proactive initiatives led by the business community. Such incentives should include policies relevant to each sector, as provided below:

5. Promoting further initiatives in the industry, transport and consumer sectors

(1) Industry sector

With the world's highest energy efficiency levels, the industry sector is required to seek to accelerate energy saving through further improvements to the energy efficiency of facilities, improved operations and processes through DX, and energy recovery, as well as to promote energy transition through electrification, the increased deployment of distributed energy resources, utilizing hydrogen and methanation. The Government is required to provide policy support measures, including enhancing various subsidies and tax benefits that support proactive corporate initiatives.

On the other hand, for the decarbonization of hard-to-abate industries, not only the development of innovative technologies for the innovation in production processes, such as carbon recycling and hydrogen direct reduction steelmaking

technologies, but also the stable and low-cost massive procurement of green energy, including hydrogen, is essential, as discussed below. While effectively using the Green Innovation Fund, the Government should strongly promote additional and continued financial support, including expansion of the Fund, and improve the business environment. These measures should be taken on a scale that is comparable with other countries that strongly encourage the transition to carbon neutrality by 2050.

Furthermore, the burden shouldered by the general public through the renewable energy power promotion surcharge has reached 2.7 trillion yen. This has pushed up commercial electric power tariffs, which were already high on an international basis, by more than 15%, and has thus greatly affected electric power-intensive industries. With the increased deployment of renewable energy, integration costs are also expected to increase. In order not to undermine the international competitiveness of industries that will bear large additional costs, the Government needs to consider measures to boldly reduce commercial electric power tariffs, with reference to measures that have been adopted in other countries⁴.

(2) Transport sector

In the transport sector, it is important to take robust measures, including those for the deployment of automobiles, ships, aircrafts, and railroad vehicles, etc. with high environmental performance, their efficient operation, and the streamlining of logistics. Automobiles, in particular, are the main source of CO₂ emissions; therefore, it is important to increase the options available to take toward achieving carbon neutrality. It is necessary to take in CASE ("Connected" cars, "Autonomous / Automated" driving, "Shared", and "Electric"), and at the same time, accelerate electrification and fuel-related measures in a technology-neutral way and implement support measures for deployment as required, in order to

⁴ For example, in Germany, which is advanced in the deployment of renewable energy, businesses are granted exemptions from taxes and public dues, charges and wheeling fees, according to the business category.

promote decarbonization. Promoting shared distribution and modal shifts are also effective solutions, while measures such as enhanced support under the Act on Advancement of Integration and Streamlining of Distribution Business and the promotion of infrastructure improvements for the accommodation of large containers with a view to the increased use of railway cargo are also expected.

In addition to issues such as reducing the cost, size and weight of batteries, a bottleneck in decarbonizing the transport sector is building a low-cost and stable supply chain of decarbonized energy, including carbon-free electric power and hydrogen, synthetic fuels, SAF (Sustainable Aviation Fuels), etc. Considering the current international situation, it is also important to secure a stable supply of rare earth, which is essential for the production of storage batteries. These measures need to be taken in good balance with energy demand-side measures. We hope that the Government will implement incentive measures, such as bold subsidies and tax incentives, to promote research and development and capital investment.

(3) Consumer sector

Among the consumer sector (consisting of commercial and residential sectors), the commercial sector, which participates in the Commitment to a Low Carbon Society, has achieved robust results. Further measures also need to be taken in existing buildings and housing. These include proactively promoting refurbishment and reconstruction, and thus promoting ZEB/ZEH (net zero energy buildings/housing) through improved thermal insulation, higher energy savings and efficiency, and onsite energy production, increasing electrification, greening the electric power consumed, and introducing BEMS/HEMS (building / housing energy management systems) in individual buildings, as well as introducing AEMS (area energy management systems) to enable area-wide electric power interchange. Furthermore, while DX is expected to further increase electric power consumption mainly at data centers, its ripple effects of improved efficiency will also be significant. We seek Government-led initiatives that position DX as a pillar of the national growth strategy, while being committed to reducing energy consumption from data use.

In the residential sector, the penetration of new lifestyles, including teleworking, has caused a rising trend in electric power consumption. Taking such emerging challenges into consideration, the Government should importantly lead public campaigns to increase public awareness and encourage behavioral change regarding efficient energy use and decarbonization.

The Government is required to organically collaborate with urban, regional, and housing policies, as well as digitalization policies, to implement comprehensive support measures for the residential sector. These measures should include new subsidies and tax measures or the extension of existing measures, including those that promote the deployment of energy saving and decarbonizing facilities.

6. Securing a low cost and stable supply of hydrogen and accelerating its wide application

With a view to achieving CN by 2050, it is evident that we need to make renewable energy a major power source while securing the balancing power required, and to decarbonize our electric power sources through the maximized use of nuclear power on the premise of ensuring safety.⁵ In addition, hydrogen promises to play a central role in the decarbonization of energy demand, such as heat demand for industrial use, which is difficult to decarbonize. Hydrogen currently embraces major technological and economic challenges that allow only its limited utilization today, and we need to accelerate efforts on both demand and supply sides with a view to achieving the new 2030 target.

The Government should support improvements in technologies that are close to commercialization, such as power generation using hydrogen and ammonia, and technology development for wider application, including fundamental innovations in production processes such as hydrogen direct reduction steelmaking, which we have only started to explore. At the same time, in order to secure a low cost and stable massive supply of zero-emission hydrogen, which will

⁵ Refer to *Policy Proposal on Japan's Electricity System for Achieving Carbon Neutrality by 2050* (March 2021) for details. <https://www.keidanren.or.jp/en/policy/2021/025.html>

be indispensable for the society-wide deployment of these technologies, we need to accelerate the building of an international supply chain, including infrastructure development, and the crafting of institutional foundations. Moreover, it is essential that we utilize existing energy supply infrastructure when building the supply chain, from the viewpoint of reducing support costs and early completion. Furthermore, Japan's institutional finance bears a critical role in proactively supporting the development and production of hydrogen and ammonia overseas as well as the development of overseas supply chains.

In particular, as abovementioned, whether or not we can realize a low cost and abundant hydrogen supply will be an extremely important factor that will determine the success of achieving zero emissions in the industrial sector. As the government that formulated the world's first "Basic Hydrogen Strategy", the Japanese Government should take the initiative, with a view to green growth, in offering full support, including using the general account budget to support infrastructure development, for domestic industries and companies that will lead the hydrogen energy field.

Methanation is an effective means of decarbonizing gas and heat demand in the industrial and commercial/residential sectors. Since existing infrastructure and facilities, such as city gas pipes can be utilized, methanation has high potential from an economic perspective as well; therefore, with a view to future commercialization, we should immediately engage in technology research, development and demonstration to reduce costs.

Furthermore, there is increased attention on synthetic fuels (e-fuels)⁶ as a lever for achieving carbon neutrality in the energy demand for power sources mainly in the transport sector and in feedstock for petrochemicals, from the viewpoint that existing oil supply infrastructure and equipment for production and utilization can be utilized. In addition to efficiency improvements and cost reduction of existing e-fuel production technologies, we need to engage in applied research for the establishment of an integrated production process for commercialized use,

⁶ A liquid fuel made by combining hydrogen and CO₂ recovered from power generation plants and factories.

through the development of innovative new technologies and processes.

7. Considering carbon pricing schemes that will benefit growth

The Green Growth Strategy that aims to achieve CN by 2050 identifies that there are various types of carbon pricing, not only carbon taxes and emissions trading schemes which entail various problems as pointed out by many, but also voluntary carbon credit markets. It is important that the Strategy provides clear direction that the government should adopt a scheme that will benefit growth among the abovementioned carbon pricing schemes. The Ministry of the Environment and the Ministry of Economy, Trade and Industry are currently discussing carbon pricing schemes based on evaluations of whether they will serve economic growth. Keidanren has also proactively contributed to this discussion.

Keidanren believes that it is important to continue expert and technological discussions from the following perspectives, based on an assessment of existing taxes on fossil fuels:

Firstly, carbon pricing schemes should incentivize proactive corporate initiatives toward achieving CN, instead of penalizing businesses for their CO₂ emissions. In particular, against the backdrop of the Government's emphasis on creating innovation as a national strategy, as seen as the recent establishment for the Green Innovation Fund, a scheme that will further encourage, instead of undermining, corporate investment in the research and development of innovative technologies and increase capital investment capacity toward the society-wide deployment of such technologies is called for.

Secondly, given that Japan faces high energy costs in the world and continued stagnant economic activity induced by the COVID-19 pandemic, carbon pricing schemes should not adversely affect the lives of Japanese citizens or the international competitiveness of Japanese industry.

Until recently, the Government had discussed carbon pricing from the standpoint that companies would not internalize the cost burden related to CO₂ reductions. However, recently, there is an increasing trend among mostly global

companies to internalize such costs by self-pricing based on credit market prices, from the acknowledgement that reducing CO2 emissions is a value in itself. ESG investment has further encouraged such trends.

Of the various types of carbon pricing schemes discussed by the Government, credit trading, including non-fossil fuel energy certificates and J-Credits, if appropriately designed, could complement the proactive corporate initiatives as potential options for voluntary and market-based carbon pricing. Internal carbon pricing is another promising lever for integrating environment value with the management or investment decisions of individual companies.

The Government should continue, as indicated in the Green Growth Strategy, to pursue the optimal policy mix by carefully considering and evaluating from the abovementioned perspectives which of the various types of carbon pricing schemes will truly benefit growth, without limiting its options to introducing a carbon tax or an emissions trading scheme.

Regarding carbon border adjustment mechanisms considered by the EU and others, as indicated in the “Basic Approach to Carbon Border Adjustment Measures” (April 2021)⁷, such mechanisms are required to be consistent with WTO rules and must motivate all countries around the world, including emerging economies, to engage in climate action, while avoiding adverse impacts on international trade. Japan should encourage all countries to maximize their reduction efforts in accordance with their capabilities through proactive climate change diplomacy, as well as prepare to act flexibly based on the abovementioned “Basic Approach” taking into consideration the viewpoint of securing the international competitiveness of domestic manufacturing industries.

⁷ Refer to p.28 of the below material compiled by the METI (Japanese language)

https://www.meti.go.jp/shingikai/energy_environment/carbon_neutral_jitsugen/pdf/004_02_00.pdf

8. Promoting sustainable finance

Sustainable finance, which aims to build a sustainable society through financial resource mobilization, has recently become a major global trend, especially in the climate change field. From the perspective of encouraging efforts toward achieving carbon neutrality from a financial aspect, the issuer of securities should proactively engage in information disclosure and constructive dialogue with investors and financial institutions; at the same time, investors and financial institutions should engage in investment and loans based on a consideration of the real situation of the company, instead of a uniform and formal evaluation.

Japan has the world's largest number of organizations (401 organizations, as of May 28, 2021) that have declared support for the TCFD (Task Force on Climate-related Financial Disclosures) recommendations, which can be described to be a platform for sustainable finance. The revised Japan's Corporate Governance Code includes an explicit call for the enhancement in the quality and quantity of climate-related disclosure based on TCFD recommendations or equivalent international frameworks by listed companies on the Prime Market that will be launched in April 2022. Japan should continue to further improve the foundations for sustainable finance by raising awareness among ESG investors in Japan and overseas, increasing the number of companies that engage in TCFD-based disclosures, and establishing evaluation metrics, as well as accumulate best practices in corporate disclosure. At the same time, Japan should proactively join discussions on the development of sustainability reporting standards at the IFRS Foundation and contribute to the development of global infrastructure for reporting.

In order to promote effective measures to counter climate change, in addition to financing technologies that emit effectively no greenhouse gases, it is important to mobilize resources for a wide range of technologies and activities that are required for the transition to CN, as well as for innovation. The Government should seek to mobilize global resources by seeking to foster understanding for financing innovation and transition, through the wide domestic dissemination and

its overseas communication of the Basic Guidelines for Climate Transition Finance⁸ compiled in May this year, and the list of “Zero Emission Challenge”⁹, including its update, which aims to promote financing for businesses that are engaged in innovation; besides, the government should secure reliance and transparency on such finance by the formulation of sector-specific roadmaps based on the Basic Guidelines. Furthermore, from the viewpoint of pursuing “S + 3E,” we need to appropriately secure the financing required to improve the resilience of our energy supply.

9. Advancing proactive climate diplomacy

Climate change is a global issue that is not closed to a particular country or region, and cannot be solved without the ambitious and dedicated efforts of all emitters, including all developed, emerging and developing economies. Amid Japan’s dedicated efforts to achieve its 2030 target, it is important to secure the effectiveness and international equitableness of the measures taken by each country, while respecting the diversity of measures in accordance with different national circumstances, from the perspectives of preventing carbon leakage and moreover maintaining a free and fair trade system.

We highly appreciate the coinciding events of agreement on the Japan-U.S. Climate Partnership on Ambition, Decarbonization, and Clean Energy at the Japan-U.S. Leaders' Summit held in April this year that announced the two countries’ intention to lead on decarbonization efforts in the international community, and agreement on the Japan-EU Green Alliance at the Japan-EU Summit meeting in May that set out that Japan and the EU would work to facilitate the developing countries’ transition to climate-neutral and resilient societies. Japan should be further involved in enhancing global ambitions, including those of emerging and developing economies, through proactive climate diplomacy

⁸ <https://www.meti.go.jp/press/2021/05/20210507001/20210507001-3.pdf>

⁹ https://www.meti.go.jp/english/press/2020/1009_001.html

under the Paris Agreement, while partnering with major countries and regions such as the U.S. and the EU.

Furthermore, in parallel to maximized domestic reduction efforts, Japan should promote the overseas expansion and deployment of its advanced energy efficient/decarbonizing technologies, products and services, and infrastructure systems and seize large business opportunities for Japanese businesses, as well as contribute to significant greenhouse gas emission reductions at the global level. It is also important to utilize frameworks such as CEFIA (Cleaner Energy Future Initiative for ASEAN) to proactively develop the business environment in Asian countries through public-private partnership. At the same time, it is also important to play an active role in the development of international standards and criteria so that technologies that truly contribute to countering climate change are properly evaluated. With this understanding, Keidanren will take part in the framework design of the Blue Dot Network, led by Japan, the U.S. and Australia to develop a certification scheme for high-quality infrastructure.

By establishing and deploying a system and metrics for visualizing avoided emissions overseas, including contributions under the JCM (Joint Crediting Mechanism), Japan should seek to serve as a game changer of the global emission reductions race, so that countries will compete over globally avoided emissions, instead of domestic emissions reductions. The JCM should also be used more intensively in order to pursue both international contributions by Japanese businesses and the achievement of Japan's emissions target. Japan should strategically expand its target countries from the current 17, implement large-scale projects where massive emissions reductions can be expected, and improve institutional operations in order to accelerate project organization.

At the same time, Japan should reopen negotiations on the WTO Environmental Goods Agreement (EGA) at an early time for the multilateral promotion of spreading goods that benefit environmental protection and climate action, while also seeking the conclusion of negotiations at COP26 on the detailed rules of the Paris Agreement (Article 6) on market mechanisms.