

# Outline of “Proposal For Future Global Warming Countermeasures”

## <Recent developments in Global Warming Countermeasures>

- (1) After the Paris Agreement entered into force with the participation of all major emitters, the U.S. announced its withdrawal. Amid efforts to work out detailed rules by 2018, there is increased uncertainty regarding the effectiveness and international fairness of the agreement.
- (2) In Japan, both the government and business community are taking measures to achieve the mid-term target for fiscal 2030 (26% reductions relative to fiscal 2013), but yet face challenges. On the other hand, the government will likely begin full-scale discussions on the formulation of the long-term strategy.

## 1. The future of the Paris Agreement without U.S. participation

### (1) Evaluation of the U.S. announcement to withdraw from the Paris Agreement and future approaches

- ① The U.S. announcement to withdraw from the Paris Agreement will unfortunately undermine the foundation of the Agreement that promised that all major emitters would pledge to take measures. Keidanren appreciates the strong commitment to the Agreement expressed by other major economies at G7 and G20 meetings.
- ② Japan needs to closely observe and analyze the impact that U.S. trends may have on international partnerships. Japan should join forces with other major economies to convince the U.S. to remain in the Agreement as well as seek new approaches for cooperation, including technological cooperation.

### (2) Measures to ensure the effectiveness and international fairness of the Paris Agreement

- ① Japan should make efforts to push back pressures based on developed/developing dichotomy to differentiate between developed and developing countries the detailed rules regarding mitigation, transparency, market mechanisms and global stocktake.
- ② Japan's business community will engage in close dialogue and collaboration with the public and private sectors of major economies and communicate its experiences with “pledge and review” and contribute to ensuring the effectiveness of the international framework.
- ③ Important measures to reduce emissions on a global scale include facilitating the use of the Joint Crediting Mechanism (JCM) and visualizing overseas avoided emissions, establishing a framework to encourage monetary contributions from both developing and developed countries and strengthening partnerships for innovative technology development.

## 2. Japan's efforts and contribution to global warming countermeasures on a global scale

### (1) Toward achieving the mid-term target for fiscal 2030 (26% reductions relative to fiscal 2013)

- ① Despite the U.S. announcement to abandon its NDC commitments, the Japanese government and business community should continue their efforts to achieve Japan's mid-term target in accordance with the Plan for Global Warming Countermeasures. Keidanren will ensure the promotion of the Commitment to a Low Carbon Society.
- ② Important measures include achieving the fiscal 2030 energy mix (nuclear 20-22%, renewables 22-24%, thermal 56%) and conducting follow-ups by sector and policy instrument. In particular, the Ministry of the Environment should responsibly promote public campaigns based on verifications of cost efficiency in order to reduce emissions in the household sector by 40%.
- ③ Keidanren is opposed to both the introduction and enhancement of explicit carbon pricing (emissions trading, carbon taxes) as there is little need for Japan to further raise its carbon prices and because of the multiple serious drawbacks of explicit carbon pricing instruments. <see Supplementary Notes>

### (2) Basic approach to formulating a long-term strategy

Japan should formulate a distinctive and effective strategy that will contribute to significant emission reductions on a global scale and promote it through public-private partnership so that other countries will follow.

#### ① Presumptions of a long-term strategy

- ( i ) Pursue “sustainable development” on the premise of “harmonizing environment and economy.”
- ( ii ) Flexibly respond to various uncertainties instead of managing rigid targets premised on the “carbon budget\*”  
\*maximum cumulative greenhouse gas emissions allowed to keep global warming to below a given temperature
- ( iii ) Verify the validity of the long-term goal of “80% reduction by 2050” while clarifying that the goal represents the “basic direction” for Japan's long-term strategy under the 3 conditions and 3 principles which include compatibility with the economic growth explicitly provided in the Plan for Global Warming Countermeasures.
- ( iv ) Ensure compatibility with other important policies, including energy policy.

#### ② Direction of Japan's approach

- ( i ) Seek contribution on a global scale
- ( ii ) Seek contribution through entire product or service lifecycles or corporate value chains
- ( iii ) Seek innovative creation by harnessing the vitality of the private sector

# <Summary>Supplementary note: Basic approach towards carbon pricing

1. Carbon pricing (CP: putting a price on carbon emissions) should not be limited to explicit instruments such as carbon taxes and emissions trading but should also include implicit instruments such as energy taxes and support measures for renewable energy. (Same definition used under OECD). Japan has developed various policy instruments, including voluntary approaches in the private sector, at different levels.
2. When introducing new policy instruments, the characteristics of global warming issues, balancing environment, economy and energy, circumstances unique to Japan, including energy and industrial structure, impact on international competitiveness and the cost efficiency of measures should be comprehensively considered.
3. We continue to oppose the introduction and enhancement of explicit CP. Given the high level of energy costs in Japan, companies are already strongly incentivized to reduce emissions; and therefore there is little need to raise carbon prices. In addition, emissions trading and carbon taxes embrace multiple serious drawbacks.
4. For drastic reductions of GHGs on a global scale, we expect realistic and effective policy development that takes an industrial policy approach and contributes to reduction through innovation, global value chains and overseas expansion of energy-saving technologies.

## 1. Defining carbon pricing and status of adoption in Japan

- The OECD defines carbon pricing (putting a price on carbon emissions) to include explicit and implicit CP. An example of explicit CP introduced in Japan is the Global Warming Tax, while examples of implicit CP include the Petroleum and Coal Tax, FIT, and the Energy Saving Act, etc. Other measures such as the Commitment to a Low Carbon Society are implemented at multiple levels.
- Discussions of CP should not be limited to explicit CP but should cover a wider concept including implicit policies and measures.

<Definition and types of CP>		
	Policy instruments	Instruments introduced in Japan
Explicit CP	Carbon taxes, emissions trading schemes	Global Warming Tax
Implicit CP	Energy taxes, support measures for renewables, energy-related regulations, etc.	Petroleum and Coal Tax; energy taxes including the Gasoline Tax, feed-in-tariff (FIT) scheme for renewable energy, regulations including the Energy Saving Act and Act on Sophisticated Methods of Energy Supply Structures

(Source Keidanren Secretariat)

## 2. Issues to be considered when addressing carbon pricing

### (1) Characteristics of global warming issues

The ideal response to global warming, a global diseconomy, is to appropriately price carbon and globally equalize marginal mitigation costs across countries worldwide, but the feasibility of such an approach is very low.

### (2) Balancing environment, economy and energy

Global warming countermeasures and energy policy are inextricably linked; and therefore, balancing environment, economy, and energy is indispensable in considering explicit CP. Target reduction levels and socially acceptable cost levels should be given realistic consideration.

### (3) Country-specific circumstances

The effects and impacts of introducing and enhancing CP should be determined based on comprehensive consideration of country-specific macro-economic situations, industrial and energy structures, available amount of resources, energy prices, electric power mix, implementation status of measures, etc. The validity and feasibility of measures should be based on such considerations.

### (4) Verifying the effectiveness of the Global Warming Tax and other existing policies

CP measures in other countries are not necessarily designed to be proportional to carbon emissions and tend to reflect country-specific circumstances. Japan has developed many policies and measures that contribute to coping with global warming and should therefore verify the effects of existing policies and measures in light of policy aim. Results should be announced.

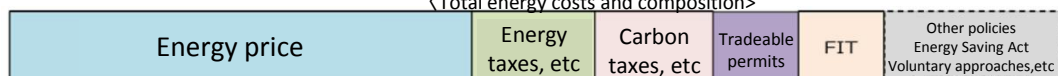
### (5) International competitiveness and carbon leakage

Japan should compare its share of cost burden with other Asia-Pacific countries and check for adverse impacts on Japan's international competitiveness, economy and for carbon leakage by analyzing the actual situation of companies based on information gained directly in thorough interviews.

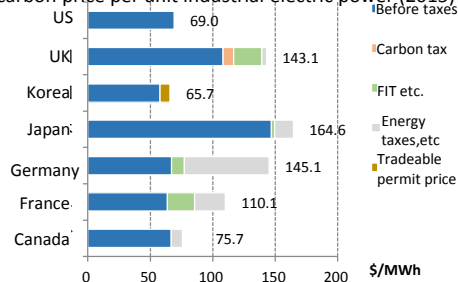
### (6) Total energy costs, including not only tax burdens but also energy prices

Approximately, ninety percent of Japan's GHG emissions are attributable to energetic origin CO2. Since energy consumption by companies and households can be affected in total energy costs, international comparisons should be conducted for total energy costs. Japan's energy costs for electricity and natural gas for industrial use are the largest among major economies. Given the strong incentive to reduce emissions on the part of companies, there is find no need for additional CP.

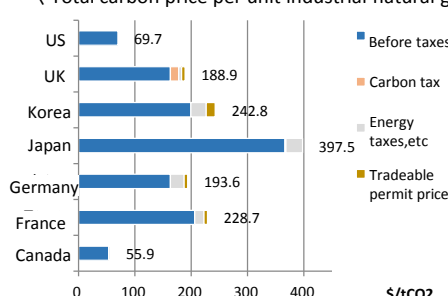
<Total energy costs and composition>



<Total carbon price per unit industrial electric power (2015)>



<Total carbon price per unit industrial natural gas (2015)>



Source: Ministry of Economy, Trade and Industry, Long-term Global Warming Countermeasures Platform (April 2017)

## 2. Issues to be considered when addressing carbon pricing

### (7) Innovation

Incessant innovation is indispensable in achieving drastic GHG reductions. Imposing additional direct economic burden upon companies will deprive companies of their resources for R&D and undermine their enthusiasm for investing in decarbonizing society.

### (8) Government-led failure and administrative costs

In other countries, the introduction of explicit CP has resulted in “government-led failure” and enormous operational costs. Challenged with serious fiscal constraints, Japan should estimate the operational costs and cost-efficiency of each policy instrument and make comparisons with alternative policies.

### (9) Japan’s approach to global warming countermeasures

In light of Japan’s contribution distinctive to our country to drastic emission reductions on a global scale, Japan should continue its incessant efforts to create innovation and at the same time consider distinctive approaches such as the achievement of reductions through the global value chain of products and services and overseas expansion of energy-saving technologies in practical use; and therefore adopt policy instruments in line with such approaches.

## 3. Validity of introducing carbon pricing in Japan

### (1) Emissions trading schemes

- Challenged with difficulties such as surplus credits and low tradeable emission permit prices, the EU-ETS and other overseas predecessors have not been successful. Once such schemes are introduced, credits are counted as assets, therefore making it difficult to abolish the scheme.
- Japan has promoted voluntary approaches led by the business community, such as the Keidanren’s Voluntary Action Plan on the Environment in 1997 and the Commitment to a Low Carbon Society launched in 2013, which have steadily produced results and embrace more advantages compared to emissions trading schemes.

	Emissions trading scheme	Commitment to a Low Carbon Society
Balancing environment, economy and energy	Built on environmental perspectives of achieving emission reduction targets. Issues including international competitiveness are resolved by applying exceptions	Built on business decisions to balance the environment economy and energy, including corporate decisions on domestic and international market development, energy strategy, and technological development.
Reduction targets	Set up using a top-down approach. High levies are often imposed when targets are underachieved.	Targets are set up by each industry. Strong commitment by companies and industries, with progress checked in third-party reviews (pledge and review).
Reduction costs	In theory, the market decides reduction cost levels. Requires enormous political and administrative adjustment costs for emission allocation, as allowances will greatly affect corporate and industrial activity.	Cost-effective measures are individually selected from the viewpoint of corporate management. Involves no adjustment costs for allocation.
Range of reductions	Covering domestic business operations, unexpected increases in production require securing emission allowances and avoided emissions are difficult to conceive at the consumer level or overseas.	Reductions are also possible through product lifecycle and supply chains as well as international cooperation on disseminating energy-saving and environmental technologies.
Innovation	Long-term investment in technology development is hindered by fluctuation of credit prices.	Long-term and stable investment in technology development is possible due to little impact of carbon price changes.

(Source Keidanren Secretariat)

- The Commitment to a Low Carbon Society is consistent with the drastic global emission reductions that Japan should seek to achieve under the Paris Agreement because it (a) enables companies to take effective measures based on strong corporate and industrial commitment while also pursuing business operations, and (b) addresses life cycle-based emissions, international contribution, and innovative technology development.

### (2) Large-scale carbon taxes

- Price elasticities of energy use are generally low. According to MoE estimates, the price effects of the Global Warming Tax will contribute to only 0.2% of total reductions in 2020.
- Companies have continued efforts to reduce GHGs for many years and Japan’s marginal mitigation cost is high in an international context. Therefore, a high carbon tax would be required to expect price effects. Drastic increases in energy costs, carbon leakage and weakened international competitiveness of companies will seriously impact national life.
- Measures to avoid the adverse impact of high carbon taxes on the international competitiveness of specific industries will not only undermine the intended effects but entail additional administrative costs.
- Discussions on tax revenue performance should focus on verifying whether Global Warming Tax revenue is being effectively used. Tax revenue should not be discussed before clarifying what it will be used for.

<Marginal abatement costs for INDCs>

	Marginal abatement cost (\$/t-CO <sub>2</sub> eq)	
	Low	High
Japan: -26% relative to 2013 (2030)	around 380 (around 260 when estimated only for CO <sub>2</sub> emissions of energy origin)	
US: -26%~ -28% relative to 2005 (2025)	76	94
EU: 40% relative to 1990 (2030)	210	
Switzerland: -40% relative to 1990 (2030)	380	
Norway: -40% relative to 1990 (2030)	70	
Australia: -26%~ -28% relative to 2005 (2030)	33	
Canada: -30% relative to 2005 (2030)	166	
Russia: -25%~ -30% relative to 1990 (2030)	1	7
China: -60~ -65% CO <sub>2</sub> emission intensity relative to 2005 (2030)	~0	~0
Korea: -37% relative to BAU (2030)	144	

(Source RITE compiled by Keidanren Secretariat)