Carbon Markets and Carbon Pricing in Japan

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Carbon pricing

It is effective to introduce substantial carbon pricing (e.g. carbon tax, levy, emissions trading scheme) that influences citizens’ and business sectors’ actions towards 80% emissions reduction target by 2050, as a measure which can internalize environmental value and accommodate flexibility to respond an uncertainty in future.

For example, substantial carbon tax could be implemented along with social security reform and/or corporate tax reform having the view of addressing climate change and socioeconomic issues at the same time. In this case, some tax exemption for the sector which would suffer from significant negative impact on international competitiveness could be considered until when social innovation will be materialized.

In addition, it is also important to explore a carbon pricing with the international views including consideration of co-benefits of international relocation of industries. Although there is a view that many of Japanese companies have manufacturing bases in the Asian countries which is causing negative environmental impact on those countries, it would be not the case if common carbon pricing is introduced across the countries.

Excerpt, and unofficial translation by IGES
The Plan for Global Warming Countermeasures
Cabinet decision on May 13, 2016

Carbon tax *Chapter 3, Section 2, 2 (2)(f)*
Making environment related tax systems greener is an important measure for preventing global warming such as promoting low-carbon system. Thus, the government tackles measures to prevent global warming by conducting comprehensive and structured research on the environmental impact of environment related tax system including case studies of other countries. The government will firmly implement the various policies to mitigate energy-related CO₂ emissions such as energy saving, dissemination of renewable energies and clean and efficient use of fossil fuel, by utilizing the tax revenue from special rate for “Tax for Climate Change Mitigation” which has been in effect since October 2012.

Domestic Emissions Trading Scheme *Chapter 3, Section 2, 2 (2)(h)*
The Government will explore an emissions trading scheme carefully, taking into consideration such as the burden on domestic industry and associated impacts on employment, situation of developments of emissions trading schemes abroad and their effectiveness, and evaluation of existing major measures to prevent global warming including voluntary actions implemented by the industry.

Excerpt, and unofficial translation by IGES
The government of Japan establishes and implements the “Joint Crediting Mechanism (JCM)” in order both to appropriately evaluate Japan’s contributions to GHG emission reductions or removals in a quantitative manner achieved through the diffusion of low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions in developing countries, and to use them to achieve Japan’s emission reduction target. Apart from contributions achieved through the projects by private companies, accumulated emission reductions or removals by FY2030 through governmental JCM programs to be undertaken within the government’s annual budget are estimated to be ranging from 50 to 100 million t-CO₂.
Tax for Climate Change Mitigation

- Government imposes JPY 289 per ton of CO$_2$ on each fossil fuel.
- The tax revenues have been used for energy-saving measures, promotion of renewable energy, etc.

Gradual enforcement

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 2012</td>
<td>1/3</td>
<td>c.a. 400 million USD</td>
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<tr>
<td>Oct. 2012</td>
<td></td>
<td>c.a. 900 million USD</td>
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<tr>
<td>Apr. 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr. 2014</td>
<td></td>
<td>c.a. 1,700 million USD</td>
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<tr>
<td>Apr. 2015</td>
<td></td>
<td>c.a. 1,700 million USD</td>
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<tr>
<td>Apr. 2016</td>
<td></td>
<td>Full tax rate</td>
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<tr>
<td>Apr. 2017</td>
<td></td>
<td>c.a. 2,600 million USD</td>
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</table>
The Joint Crediting Mechanism (JCM)

- Facilitates greenhouse gas emission reduction/removal projects by companies, cities, etc. in partner countries.
- Japan and partner countries contribute to additional emission reductions/removals.
- As a result of emission reductions, “JCM credits” will be issued and utilized to achieve the Japan’s emission reduction target and may be utilized to achieve a Partner country’s NDC.

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Japan

- e.g. Financial Support
- Private Investment
- Technology Transfer

“Contribution”

Used to achieve the Japan’s emission reduction target

Partner country

JCM project

- Emission Reductions
- Credits Issuence

Credits to Japan

Credits to partner country

Utilized in partner country accordingly

Partner country’s contribution

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Institute for Global Environmental Strategies
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Japan acquired 144 million tCO₂ of CERs during KP-CP1. 61% of the total CERs were from China and 6% were from Republic of Korea.

Source: IGES (2016) IGES Kyoto Mechanism First Commitment Period (CP1) Summary Data
Japan is the second largest user of CERs from China and the third largest user of CERs from Republic of Korea.

Source: IGES (2016) IGES Kyoto Mechanism First Commitment Period (CP1) Summary Data