November 1, 2022

Japan Climate Leaders' Partnership (JCLP)

Statement on the growth-oriented carbon pricing architecture

Amid surging fossil fuel prices, now is the time to support the proliferation of decarbonisation technologies, such as renewables and energy conservation, as well as a just transition.

Introduction

Japan Climate Leaders' Partnership (JCLP) is a coalition of companies proactively committed to overcoming climate crisis and transiting to a decarbonised society. JCLP welcomes that the government has upheld climate change as one of the key pillars of the 'new capitalism' plan and is now creating systems to rectify negative economic externalities.[1] On this note, JCLP puts forward the following statement in the hope that the 'growth-oriented carbon pricing', of which a governmental panel on the green transformation (GX) is promoting the implementation, will help Japan to meet the 1.5℃ Paris goal and ensure sustainable economic growth through decarbonisation.

In compiling this statement, JCLP carefully examined what implications carbon pricing would have for businesses and society amid surging fossil fuel prices, i.e. the possibility of growing burden on companies and households. After a careful consideration, JCLP has concluded that as we have a very limited time left to overcome climate crisis, it is time for Japan to push ahead with the introduction of carbon pricing to promote the development and proliferation of zero carbon technologies such as renewable energy (hereafter 'renewables') and energy conservation because this will increase Japan's energy self-sufficiency and offer a fundamental solution to the crisis we are facing now. At the same time, it is also important to take measures to deal with various implications of carbon pricing and ensure a just transition by providing necessary support for hard-to-abate sectors and households susceptible to energy crisis. These are the underlying reasons why JCLP shares this statement as follows.

1. Background

(1) Climate action is a pressing need

Extreme weather events and devastating natural disasters caused by increasing global average temperature are threatening people's lives and inflicting serious damage on the economy.[2] While the world must slash greenhouse gas (GHG) emissions by 2030 and achieve carbon neutrality by 2050 to overcome climate crisis and safeguard social infrastructure essential for daily lives and businesses, current policies being taken by governments, including the government of Japan, are not enough to maintain the global temperature increase below 1.5℃.[3] We need to take action immediately as there is little time left before 2030.

(2) Carbon prices in Japan are not high enough to create emission reduction incentives

Explicit carbon pricing, such as carbon taxes and emissions trading, are the schemes to set a price on GHG emissions and impose a financial burden according to the amount of emissions, which creates incentives for a broad range of actors to reduce emissions and proliferate more cost-effective measures and technologies.[4] These schemes will enable significant emissions reduction and encourage innovation when they are broadly

applied in combination with other political measures.[5] Countries that have already introduced them are seeing a synergetic effect between emissions reduction and an alleviation of financial burden on net-zero or social welfare policies as governments are able to tap into revenue from carbon taxes and emissions trading to finance decarbonisation and social security measures.[6]

Carbon prices in Japan[7], however, are set at very low levels compared to the global standard, and are not functioning as drivers of emission reductions. Japan's carbon tax, or the Global Warming Countermeasures Tax (hereafter the 'Global Warming Tax'), is set at ¥289 per ton of CO2-equivalent (t-CO2), or less than a tenth of the level in Europe spearheading the global fight against climate change,[8] and the annual revenue from the tax is no more than ¥220 billion.[9] Though Japan is preparing to launch a voluntary emissions trading scheme under the GX League (hereafter the 'GX-ETS'),[10] the effectiveness of the scheme is questioned because it does not set the maximum limits of emissions unlike a cap-and-trade system, participation as well as goal-setting is voluntary, hence no guarantee for companies to reduce sufficient amount of emissions, and it does not impose any charge[11] according to the amount of emissions. Furthermore, the government does not sell emission allowances, so we cannot expect the GX-ETS to function as a system to secure a source of revenue.

(3) Delaying decarbonisation could hurt Japanese companies' competitiveness

In recent years, there has been widespread system build-up of emissions trading and carbon taxes to achieve climate targets by 2030 mainly in the EU countries and Canada. The EU's emissions reduction goal by 2030: at least 55% cut from 1990 levels, has translated into various plans such as a gradual reduction in the supply of free emission allowances allocated to sectors that could lose competitiveness in the international market, and the kickoff of pilot period for the Carbon Border Adjustment Mechanism starting in 2023 as a countermeasure against carbon leakage, which is a situation where companies decide to move their production from a country with stringent climate policies with higher energy cost to a country that is more lenient.[12] Similar system build-up is also seen in Asian countries such as China, South Korea, Indonesia, Vietnam and Singapore[13]. A study by an international organization shows that carbon prices will be on an upward trajectory going forward.[14] Now that a growing number of nations are accelerating their shift to decarbonisation including the hard-to abate industries, and companies are competing to seize new opportunities in the market, any further delay in Japan's climate policies will hurt the competitiveness of Japanese companies.

(4) Addressing current challenges

Corporate goods prices as well as consumer prices have been high due to the global sharp hikes in fossil fuels prices and the weak yen since last year. While the provision of temporary subsidies is an important measure to mitigate price increases, it will not serve as a fundamental solution. What the government is expected to do simultaneously is to help companies and people with the uptake of existing decarbonisation technologies including renewables, energy-saving products/buildings, storage batteries, and EVs, and shift priorities to these measures so we can eventually reduce our dependence on fossil fuels.[15]

2. Statement on the growth-oriented carbon pricing architecture

(1) Creating emissions-reduction incentives and accelerating the energy shift to achieve the 1.5℃ goal

JCLP calls on the government to immediately design schemes for carbon taxes and emissions trading in order to place an adequate price on GHG according to the amount of emissions and bring about the benefit of emitting less. The schemes will help Japan to meet the 1.5℃ goal as well as Japan's emissions reduction target by 2030: a 46% cut by 2030 from 2013 levels with efforts towards the higher goal of 50% (hereafter 'NDC'), and also proliferate more cost-effective measures and technologies. Also, in designing the schemes, the government should clearly show mid-and-long-term pathways and targets regarding carbon prices in line with the 1.5℃ goal, and encourage transformation in the energy system and the industrial structure. If the government sends a clear signal of mid-and-log-term targets on carbon prices in advance, companies will be able to invest in decarbonisation systematically. If decarbonised products and services outweigh those made from fossil fuels in terms of price competitiveness, suppliers will have more chances to generate new demand and/or shift to new businesses while consumers will be able to select decarbonised products and services from more diversified options, and reduce the cost of purchasing them as a result of increase in investment. For these reasons, JCLP agrees with the Prime Minister Kishida's perspectives about carbon pricing: 'it is important to create carbon pricing schemes that gradually increase the prices of carbon, enhance predictability in business, and stimulate large-scale GX investment'.[16]

Furthermore, considering there is little time left before 2030, JCLP values the implementation of carbon prices in the immediate future as a way to achieve its NDC at the level ambitious enough to realise an agile energy transition in the electric power generation industry as a prerequisite for decarbonisation in the other sectors. An analysis shows that carbon taxes in Japan should be at least set at around ¥3,000 t-CO2 now, rising to ¥6,000 by 2025, and ¥8,000 by 2030 in order to accelerate renewable introduction through the power-sector energy transition.[17] JCLP, as a business coalition committed to the growth of renewables, has truly learnt the necessity of putting prices on carbon to expand renewables in Japan, and therefore calls on the government to examine carbon prices set at the standards to promote an energy transition. In addition, it is critical for Japan to consider a 1.5℃-aligned carbon prices for all the sectors including the electricity generation sector, and explain their fairness and appropriateness at home and abroad. The International Energy Agency (IEA)'s 1.5℃ scenario suggests that carbon prices for the electricity generation, industry and energy production sectors in the OECD member states should be set at USD 75 (approx. ¥8,000) t-CO2 by 2025 and USD 130 (approx. ¥14,000) t-CO2 by 2030.[18] [19] Based on this, JCLP requests that the discussion on carbon prices should be positively carried out with an eye to putting them into practice in the future so that decarbonised products made by Japanese heavy industries such as the steel, cement and chemical sectors, will be competitive in the international market.

(2) Using carbon taxes and emissions trading differently based on their characteristics

A carbon tax and emissions trading have different qualities.[20] Under a carbon tax, the government can set clear and stable carbon fees on a broad range of products and services, which will secure revenue sources and reduce administrative costs. Emissions trading, on the other hand, can control the amount of emissions and flexibly design systems to deal with related issues such as carbon leakage. This means that it is effective to creatively

use carbon taxes or emissions trading according to their characteristics: applying emissions trading on carbon-intensive industries to encourage them to steadily reduce emissions to the 1.5℃-aligned level, while imposing carbon taxes on the other sectors, which will give the whole society incentives to reduce emissions and secure revenue to be used for decarbonisation.

In order to use carbon taxes and emissions trading strategically as mentioned above, the planed GX-ETS should change its volunteer-based participation and target-setting to a cap-and-trade system aimed at large emitters[21] gradually sector by sector, so that it can set emission caps and quotas based on the 1.5℃ goal and carbon budgets.[22] [23] This measure will enable us to steadily reduce emissions in line with the 2030 target. It is extremely important to establish reporting and verification systems before the start of the GX-ETS scheduled in the next fiscal year, carry out performance assessments immediately after the launch, and continue improving the GX-ETS so it can shift early on to a cap-and-trade system to make sure to achieve Japan's NDC based on the 1.5℃ goal.

As for a carbon tax, it needs to be designed in a way that promotes an actual change in behaviour of a broad range of actors including households and small emitters by utilizing the existing Global Warming Tax[24] and creating a system where carbon prices charged upstream are passed along to actors downstream according to the amount of emissions.[25]

(3) Taking measures based on socio-economic situations and concerns

The recent surge in corporate goods and consumer prices are squeezing budgets of businesses and households. These increases have been caused by a combination of factors; however, the main drivers behind the current price increases are the rising imported fossil fuels prices and the changes in an exchange rate (the yen's depreciation)[26], and a fundamental solution will be to lower the dependence on imported fossil fuels, which are vulnerable to price fluctuations. Therefore, what is required now as a countermeasure against this issue is to implement carbon pricing that is carefully designed to prevent business costs from soaring at once by raising carbon prices step by step as well as sending a signal of what mid-and-long term carbon prices will be like, and to allocate revenue from the GX economic transition bonds, carbon taxes, and emissions trading to the introduction of the existing decarbonisation technologies to lower our dependency on imported fossil fuels. This will limit the capital outflow of over ¥20 trillion that goes abroad annually in exchange for importing fossil fuels,[27] drive fund flows inside the domestic market, rejuvenate the domestic renewable energy market, and eventually lower renewable prices further owing to economies of scale. Finally, the whole process will produce access to affordable energy, which is not subject to carbon pricing, and a positive economic growth cycle.

Concerns over carbon leakage have been also expressed.[28] This issue must be addressed, otherwise low-emission products and services might unfairly lose competitiveness in the market home and abroad. To prevent this from happening, Japan needs to examine effective measures such as a carbon border adjustment mechanism that includes rebates of carbon prices in exporting as part of policy packages to drive decarbonisation in the industry sector.

Furthermore, a carbon pricing system must be designed in a transparent and just manner. An emissions trading

scheme, for example, needs to adopt methods for allocating emissions quotas that will never leave companies that have been committed to climate change earlier than others at a one-sided disadvantage, e.g. a benchmark allocation method, and also set target periods to abolish free emissions quotas according to sectors and industries in a way that is aligned with the 1.5℃ goal.

(4) Leveraging revenue to develop and proliferate decarbonisation technologies

As mentioned repeatedly in this statement, the fundamental solution amid the surging corporate goods and consumer prices is to decrease dependence on imported fossil fuels, which are vulnerable to price fluctuations. With this in mind, JCLP requests that a substantial portion of revenue from the GX economic transition bonds, carbon taxes, and emissions trading be allocated to projects to accelerate technological innovation in the infrastructure such as off-shore wind power generation and next-generation photovoltaic cells, and to proliferate existing decarbonisation technologies as exemplified by renewables, buildings, storage batteries, and EVs. In addition, financial resources should be used in a transparent and convincing manner so that burdens or support will not be disproportionately placed on certain sectors (e.g. a case where the residential and commercial sectors shoulder disproportionate burdens while support is concentrated mainly in the industrial sector.)

(5) Leveraging revenue to realise a just transition such as a shift from coal-fired power generation to renewable energy generation

Industries that stand to suffer significantly due to climate change need to change their business strategies and invest in human resources based on the concept of a just transition.[29] [30] For example, it is important not only to support a shift from high-emitting facilities and equipment such as coal-fired power plants to renewable electricity generation and storage battery systems, but also to provide job-placement/ skill-learning assistance for workers who would be adversely affected by the transition.[31] It will be desirable that companies create business transition plans in cooperation with labour unions and local communities from a just transition perspective, and the government give financial support when they put the plans into practice. JCLP expects that a just transition as a key component of climate action will be accelerated following the Prime Minister Kishida's recent announcement: 'the government is planning to spend ¥1 trillion, or nearly USD 7 billion, over the next five years for reskilling programs for individual workers.'[32] Additionally, more direct support and benefits for people that are particularly vulnerable to climate change, such as low-income earners[33], will be essential to reduce our dependence on fossil fuels so that they will not be left behind as we move towards a decarbonised society.[34]

Conclusion

JCLP strongly calls on the government to undertake corrective action against negative economic externalities by way of carbon pricing as a cornerstone of the new capitalism plan, and accelerate a shift towards a decarbonised society as a fundamental approach to achieve both the Paris-aligned 1.5℃ goal and sustainable growth through decarbonisation. Considering the significant impact on the Japanese economy made by the global surge in fossil fuel prices and the weak yen, JCLP fervently believes that Japan needs to put extra efforts in a transition to

renewables and energy conservation, shit away from fossil fuels, and promote changes in the industrial structure, which will contribute to Japan’s national interests and our endeavor to overcome climate crisis.

JCLP is determined to continue spearheading climate action, proposing climate-related policies, and collaborating with our stakeholders going forward.

References

[1] JCLP held a dialogue with the Prime Minister Kishida in April this year and urged that the grand design for the 'new capitalism' plan should include carbon pricing to rectify negative economic externalities.

[2] An annual report by Aon, one of the world's leading insurance and reinsurance broker, shows that 96% of the total economic losses (USD 329 billion, or approx. ¥3.6 trillion) caused by significant natural disasters in 2021 were related to weather and climate disasters.

An annual report by the World Meteorological Organisation (WMO) says the period between 2015 and 2021 was the warmest seven years on record.

[3] The Synthesis Report of the Sixth Assessment Report finds that the combined climate pledges of 193 Parties under the Paris Agreement could put the world on track for around 2.5℃ of warming by the end of the century. It also estimates that even if these pledges are fulfilled, the global GHG emissions will increase by 10.6% by 2030, compared to 2010 levels.

IPCC Six Assessment Report-Working Group Ⅲ-(hereafter 'IPCC AR6 WG Ⅲ'), assesses that limiting warming to around 1.5°C requires global GHG emissions to peak before 2025 at the latest, and be reduced by 43% by 2030 compared to the level of 2019.

[4] Japan is estimated to have more room for emissions reduction in inexpensive ways than the EU, and it needs to proliferate cost-effective reduction measures by way of explicit carbon pricing. A handout for the green transformation promotion subcommittee (March 23, 2022)

[5] 諸富徹『資本主義の新しい形』岩波書店 (January, 2022), IPCC AR6 WG Ⅲ

[6] The total amount of revenues from explicit carbon pricing collected by governments across the world last year was USD 84 billion (approx. ¥9.2 trillion, 1.6 times increase from last year). Out of this, revenue from the EU-ETS was approx. ¥ 4 trillion.

- The World Bank State and Trends of Carbon Pricing 2022 (May, 2022)

- ICAP Emissions Trading Worldwide: 2022 ICAP Status Report (March, 2022)

A report by the European Commission states that the EU-ETS collected revenue of €65.5 billion in total from 2013 to 2022 (approx.¥8.5 trillion at the rate of ¥130 to the euro) from the auctioning of the EU-ETS allowances. It is estimated that about 75% of the total revenue was used for climate and energy purposes, and out of this, 33% was used for renewables, 31% for energy conservation, or energy productivity, 13% for transportation, 15% for R&D, and 8% for others.

[7] Specifically, carbon pricing here refers to tax rates in the carbon tax system, and standard trading prices for emissions quotas in the emissions trading scheme.

[8] As of April 1st 2022, approx. USD 130 (Sweden and Switzerland), approx. USD 87 (the EU-ETS) The World Bank （May, 2022）

The effective carbon rates, or the sum of carbon taxes, emissions trading and energy taxes, do not live up to the international standard. The Ministry of Environment A handout for the carbon pricing subcommittee (March 2nd, 2021)

[9] The revenue is used for various measures to reduce energy-related CO2 emissions, such as schemes for improving energy conservation, increasing the uptake of renewables, promoting cleaner and effective use of fossil fuels. The Ministry of Environment A handout for the carbon pricing subcommittee (March 28th, 2022)

[10] The GX League 'How the emissions trading scheme under the GX League, scheduled to be launched next fiscal year, is being designed to function' (September 6th, 2022)

[11] A charge here refers to a penalty.

[12] The EU is planning to gradually phase out free allocation of emission allowances to the sectors that could lose competitiveness in the international market, and at the same time, kick-start a pilot period for the Carbon Border Adjustment Mechanism starting in 2023 as a countermeasure against carbon leakage, a situation where companies decide to move their production from a country with stringent climate policies with higher energy cost to a country that is more lenient. Council of the European Union (Fit for 55), Council of the European Union (CBAM)

[13] The World Bank (May, 2022), The Ministry of Environment A handout for the council for the promotion of greener tax system (March, 4th, 2022)

[14] Please refer to 2(1)

[15] Resources for the Future finds that the Inflation Reduction Act enacted in the US this year would save American households up to USD 220 (¥31,000) per year over the next decade by driving energy transition, and improving energy self-sufficiency in the US.

[16] Council on Economic and Fiscal Policy (October 5th, 2022)

[17] Carbon Tracker, a financial think tank based in the UK, analyses that if carbon prices are set at ¥ 3,300 in Japan, the costs of coal-fired power generation will outweigh the costs of new solar photovoltaic energy and onshore wind power generation. If set at ¥6,600, the costs of coal-fired power generation will outweigh the costs of renewables with storage batteries including offshore wind power generation. Furthermore, if set at ¥8,800, larger amount of revenue from carbon taxes will be allocated to renewables investment, which will reduce the costs of importing fossil fuels. (At the rate of ¥110 to USD) Carbon Tracker (2022) Put a Price on it

[18] The International Energy Agency (IEA) presupposes that governments will introduce and raise carbon taxes according to their economic levels. The IEA's scenario in line with the 1.5℃ goal suggests that OECD member states should impose carbon prices of USD 75/t-CO2 by 2025 (approx. ¥8,250) and USD 130/t-CO2 by 2030 (approx. ¥14,300) on the power generation, industry and fuel production sectors (at the rate of ¥110 to USD). IEA Net Zero by 2050 (May, 2021)

Several analyses by international organisations show that developed countries need to set carbon prices at USD 50-150 (¥5,000-16,000) by 2030 to keep the temperature rise to 1.5-2℃. IEA Net Zero by 2050, IRENA World Energy Transitions Outlook 2022: 1.5℃ Pathway (March, 2022), OECD Effective Carbon Rates 2021 (May, 2021), CPLC Report of the High-Level Commission on Carbon Prices (May, 2017), IMF Proposal for an International Carbon Price Floor Among Large Emitters (June, 2021)

[19] Canada has announced that it will raise the national minimum carbon prices step by step generally in line with IEA's standard. Government of Canada Update to the Pan-Canadian Approach to Carbon Pollution Pricing 2023-2030 (August, 2021)

[20] IMF Carbon Taxes or Emissions Trading Systems?: Instrument Choice and Design (July, 2022)

[21] One of the options to determine the scope of the emissions trading will be to expand the subjects to the scheme in a phased manner so that it will eventually cover around half of the entire emissions in Japan in line with the scope of 'the Manual for the Calculation and Reporting of Greenhouse Gas Emissions' based on the Act on Promotion of Global Warming Countermeasures. Additionally, if small and medium-size companies join the emissions trading, some measures to assist their participation, such as support from the government, should be devised.

[22] The permitted amount of CO2 emissions to keep the global temperature rise within 1.5℃ above pre-industrial levels. (JCLP Column)

[23] For example, the EU says that the sectors covered by the EU-ETS must reduce their emissions by 43% compared to 2005 levels to achieve the EU's overall GHG emissions reduction target for 2030: 55% cut compared to 1990 levels. The European Commission Revision for phase 4 (2021-2030)

[24] If it is not feasible to integrate energy-related taxes, such as the Petroleum and Coal Tax, into the Global Warming Countermeasures Tax in proportion to the amount of carbon emissions, a review of energy-related tax systems should be carried out in accordance with the gradual increase of the Global Warming Countermeasures Tax. The Ministry of Environment A handout for the carbon pricing subcommittee (March 2nd, 2021)

[25] It is important to encourage consumers to change their behaviours and examine supportive measures for an energy transition in order to prevent the costs or burden of carbon pricing passed on to consumers from increasing disproportionately. A similar proposal has been submitted by the Japan Association of Corporate Executives. The Japan Association of Corporate Executives 'Proposals for the introduction of carbon pricing that conduces to economic growth' (March 31, 2022)

[26] A handout for the task force for commodity prices, income, and livelihood (September 9, 2022)

[27] The total value of fossil fuel imports to Japan range from ¥10 trillion to ¥20 trillion annually. The import value in an eight-month period between January and August this year already exceeded ¥20 trillion due to the rising fossil fuel prices. The Trade Statics of Japan, Ministry of Finance

[28] The Japan Business Federation 'Statements on the tax reform in FY 2023 (September 13th, 2022)

[29] A just transition seeks to ensure a green economy transition while supporting workers who stand to lose economically due to the implementation of climate action by generating and offering better quality jobs to them. ILO World Employment and Social Outlook 2018: Greening with jobs (May, 2018)

[30] 諸富(2020), IRENA (2022) Socio-economic Footprint of the Energy Transition: Japan

[31] Rocky Mountain Institute Financing the Coal Transition (November, 2021)

[32] A policy Speech by Prime Minister Kishida to the 210th Session of the Diet (October 4th, 2022)

[33] For example, subsidies to retrofit home insulation and provision of public rental accommodation with high energy-saving systems. Likewise, measures should be taken to mitigate the impact of price increases in consumer goods such as food caused by the act of passing higher costs along to consumers.

[34] IPCC emphasises the importance of providing low-income households with support by making the most of government revenue in order to make explicit carbon pricing a just scheme. IPCC AR6 WGⅢ

About Japan Climate Leaders' Partnership (JCLP):

JCLP is a coalition of businesses in Japan launched in 2009 to encourage the business sector to develop a sound sense of urgency on climate action. It aims to become leading companies necessary on the pathway towards a decarbonised society. As a cross-sectoral business group, it has a membership of 225 including major companies in Japan (as of November, 2022), its total sales are estimated to be ¥130 trillion, and electricity demand together amounts to approx. 65 TWh (including overseas businesses).

Since April 2017, JCLP has been the Climate Group's Regional Delivery Partner on RE100, EP100 andEV100 initiatives in Japan. The group is actively working on collaboration with various actors from local governments to international organisations as seen in the signing of a comprehensive partnership agreement with Yokohama City and co-hosting of RE Action, Japan's unique initiative to support small and medium enterprises and other organisations to declare 100% renewable electricity. For further information and inquiries: http://www.japan-clp.jp/

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