

LEGAL ASPECTS OF THE EMISSIONS TRADING SCHEME BASED ON “CAP AND TRADE”

KIYOTAKA MORITA*

Introduction

Since the Industrial Revolution, which began in the 1750s, the concentration of CO₂ in the atmosphere has increased by around 40%, and it continues to rise¹. Consensus among the world's leading climate scientists is that the climate system is undeniably warming, and that it is extremely likely that emissions of greenhouse gases (GHGs) from human activities are the dominant cause. The global average temperature has risen by 0.85°C since the late 19th century and each of the past three decades has been warmer than any preceding decade since records began in 1850². An increase of 2°C compared to the temperature in pre-industrial times is seen by scientists as the threshold beyond which there is a much higher risk that dangerous and possibly catastrophic changes in the global environment will occur³. The need for GHG reduction is unequivocal.

With a view to cutting GHG emissions, the Kyoto Protocol obliges the Parties included in Annex I of the Protocol to reduce their overall emissions of GHGs by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012⁴. It was reaffirmed at the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol held in Doha in 2012 that the second commitment period will begin on 1 January 2013 and will end on 31 December 2020⁵.

Japan and the EU, both Annex I Parties to the Kyoto Protocol, have introduced domestic GHG reduction measures prior to the beginning of the commitment period in 2008 so as to meet their respective targets⁶. In this connection, the emissions trading scheme based on “cap and trade” is considered one such measure.

* Manager, Keidanren (Japan Business Federation), B.A. (1995), M.A. (1997) Hitotsubashi University Faculty of Law

¹ See http://ec.europa.eu/clima/policies/brief/causes/index_en.htm

² *Ibid.*,

³ *Ibid.*,

⁴ Article 3.1

⁵ Decision 1/CMP.8, *Amendment to the Kyoto Protocol pursuant to its Article 3, paragraph 9 (the Doha Amendment)*, I. para.4

⁶ The EU is now pursuing its GHG reduction measures under the second commitment period. On the other hand, Japan indicated that it does not have any intention to be under obligation of the second commitment period (See Decision 1/CMP.7, *Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its sixteenth session*, p. 7 at footnote q). Nevertheless, Japan is continuing its GHG reduction policies with a view to joining the Post 2020 new international framework under the United Nations Framework Convention on Climate Change (UNFCCC).

“Cap and trade” is a scheme in which a cap or limit is set on the amount of greenhouse gases that can be emitted by industry (power plants, steel, chemicals, cement industries etc.). Within the cap, each industry receives emission allowances that it can trade with one another as required. After each year, each industry must surrender sufficient allowances to cover all its emissions, otherwise fines are imposed. If an industry reduces its emissions, it can keep the surplus allowances to cover its future needs or else sell them to others that have a shortage of allowances. The total number of allowances available is limited in order to ensure that they have a value.

There has been debate as to whether “cap and trade” is compatible with the principles of international law including that of the WTO. This article examines the emissions trading scheme based on “cap and trade” scheme introduced in the EU. The article also focuses on GHG reduction measures implemented in Japan and controversies in Japan as regards the incorporation of “cap and trade.”

I. *EU Emissions Trading System*

1. Phase 1 and 2

With a view to reducing GHG emissions within the Region, the EU Emissions Trading System (hereinafter EUETS) has been introduced since 2005⁷. Details of the EUETS Phase 1 (from 1 January 2005 to 31 December 2007) and Phase 2 (from 1 January 2008 to 31 December 2012) are as follows:

- (1) For each period, each Member State shall develop a national plan stating the total quantity of allowances that it intends to allocate for that period and how it proposes to allocate them. The plan shall be based on objective and transparent criteria...taking due account of comments from the public⁸.
- (2) For the three-year period beginning 1 January 2005 Member States shall allocate at least 95% of the allowances free of charge. For the five-year period beginning 1 January 2008, Member States shall allocate at least 90% of the allowances free of charge⁹.
- (3) Member States shall ensure that any operator who does not surrender sufficient allowances by 30 April of each year to cover its emissions during the preceding year shall be held liable for the payment of an excess emissions penalty. The excess emissions penalty shall be EUR 100 for each tonne of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances. Payment of the excess emissions penalty shall not release the operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year¹⁰. During the three-

⁷ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC

⁸ *Ibid.*, Article 9.1

⁹ *Ibid.*, Article 10

¹⁰ *Ibid.*, Article 16.3

year period beginning 1 January 2005, Member States shall apply a lower excess emissions penalty of EUR 40 for each tonne of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances¹¹.

Since most of the allowances were allocated free of charge in the case of the EUETS Phase 1 and 2, there was room for arguments as regards "cap and trade" and subsidies. For example, if allowances offered to Industry A free of charge exceed the business-as-usual (BAU) emissions of Industry A, it could profit from selling the surplus allowances to Industry B, which has a shortage of allowances. This could *de facto* result in subsidizing Industry A, drawing attention to the compatibility of "cap and trade" with the WTO Agreement on Subsidies and Countervailing Measures (hereinafter SCM Agreement) Article 3.1 (a) that prohibits subsidies upon export performance.

There is a view that "cap and trade" is compatible with the SCM Agreement for the following reasons. Firstly, allocating an assigned amount of allowances is a decision about allocating national responsibilities to comply with an international regulatory regime and identifying allocations as subsidies could be tantamount to saying that any allocation of any responsibility would constitute a subsidy¹². Secondly, surplus allowances would not be deemed a "financial contribution"¹³. However, in order to fulfill the international responsibility, allowances must be allocated so as to reduce emissions and offering surplus allowances would in no way contribute to this end. Also, in the *US-Softwood Lumber* decision, the WTO Panel ruled that a financial contribution is not limited to a money-transferring action, but also encompasses an in-kind transfer of resources that can be valued such as the "right" to harvest public trees¹⁴. This ruling might suggest that the giveaway of surplus allowances by a government is a subsidy.

Prior to the introduction of the EUETS, Denmark and the United Kingdom notified the European Commission on their planned emissions trading schemes, both of which envisaged free allocation of allowances. Against this, the Commission held the following view¹⁵:

- (1) Through the schemes, intangible assets were provided for free and they were expected to have market value and thus allocation would be advantageous to the receiving entities.
- (2) Therefore, these schemes would fall under the scope of state aid, which EC Treaty Article 87 (1) declares incompatible with the common market.

The Commission, however, observed these schemes could be justified under the exceptions rule, namely, EC Treaty Article 87 (3) (c), which authorizes aid to facilitate the development of certain economic activities in cases where such aid does not negatively affect trading conditions to an extent contrary to the common interest¹⁶.

¹¹ *Ibid.*, Article 16.4

¹² Annie Petsonk, *The Kyoto Protocol and the WTO: Integrating Greenhouse Gas Emissions Allowance Trading into the Global Marketplace*, Duke Environmental Law and Policy Forum, Vol. 10, 1999, pp. 208-209

¹³ *Ibid.*

¹⁴ *United States: Preliminary Determinations with Respect to Certain Softwood Lumber from Canada*, Report of the Panel, WT/DS236/R, 1 November, 2002, paras. 7.17-7.29

¹⁵ EU Commission letter to Denmark and the UK on 12 April 2000 and 28 November 2001, State Aid Cases N653/99 and N416/2001

¹⁶ *Ibid.* See also Stefan Weishaar, *The European CO2 Emission Trading System and State Aid — an assessment of the*

Considering the above, we may conclude that “Cap and Trade” incorporated in the EUETS could be compatible with the SCM Agreement if it is appropriately designed to include a *de facto* obligation to limit GHG emissions¹⁷. Or more precisely, “Cap and Trade” *as such* would not be regarded incompatible with the SCM Agreement; however, in the case that free allowances are allocated to a certain industry in a manner exceeding the business-as-usual (BAU) emissions of that industry, it might be considered incompatible with the SCM Agreement *as applied*¹⁸.

In this connection, the national allocation plan under the EUETS Phases 1 and 2 needs to be examined. According to the Approved National Allocation Plan of the United Kingdom under Phase 1, total annual allocation was set at 245.43 Mt-CO₂, -9.6% in comparison to its annual emissions in 2003. However, regarding the allocations to each industrial sector, the iron and steel sector received 23.70 Mt-CO₂ of allowances, which accounted for +19.4% compared to the annual emissions of the sector in 2003, while the power sector received 136.90 Mt-CO₂, -21.5% compared to the annual emissions of the sector in 2003¹⁹. Under Phase 2, the allocation of allowances to the iron and steel sector increased to 24.38 Mt-CO₂ while allocation to the power sector decreased to 107.42 Mt-CO₂²⁰. It could be assumed that the obligation to cut emissions was imposed on the power sector, which can pass on the reduction cost to customers, while surplus allowances were offered to the iron and steel sector, which is facing export competition.

Since EUETS Phase 1 and 2 have already ended and no case has been brought to the WTO Panel, there would be no legal significance in arguing the compatibility of the scheme with the WTO jurisprudence. However, it should be noted that if any Member of the WTO were to incorporate “cap and trade” hereafter, this sort of free allocation may be deemed incompatible with Article 3.1 (a) of the SCM Agreement, which prohibits subsidies upon export performance.

2. Phase 3

The EUETS Phase 3 started in January 2013, amending the previous schemes²¹.

grandfathering allocation method and the Performance Standard Rate system—, University of Maastricht, 04-01-2006, pp.15-23

¹⁷ Magnus Lodefalk and Mark Storey, *Climate Measures and WTO Rules on Subsidies*, Journal of World Trade 39 (1), 2005, p.43

¹⁸ For example, “*as such*” and “*as applied*” was an issue in the *Canada–Export Credits and Loan Guarantees for Regional Aircraft*, Report of the Panel, WT/DS222/R, 28 January, 2002. In this case, it was disputed whether or not the use of “EDC Canada Account,” an account of the Canadian 100% state owned company, for supporting an aircraft industry would be inconsistent with the SCM Agreement. The WTO Panel ruled that the EDC Canada Account *as such* is not inconsistent with the SCM Agreement because the conditions for use of the Account did not demonstrate the existence of mandatory subsidization (paras. 7.95-7.97). However, *as applied* to a specific case of the Account financing to Air Wisconsin, the Panel contended that it is a subsidy contingent upon export performance, since Canada has failed to show that it is in conformity with the interest rate provisions of the OECD Arrangement (paras. 7.180-7.182). In the same manner, the “cap and trade” *as such* would not be WTO incompatible because surplus allowances are not mandatory. It would be considered WTO incompatible only when surplus allowances are given to a certain industrial sector.

¹⁹ DEFRA, *EU Emissions Trading Scheme, Approved National Allocation Plan 2005-2007*, May 2005, p.20

²⁰ DEFRA, *EU Emissions Trading Scheme, Approved National Allocation Plan 2008-2012*, p.22

²¹ *The EU Emissions Trading System (EUETS)*,

- (1) From 2013 onwards, the cap on emissions from power stations and other fixed installations is reduced by 1.74% every year. This means that in 2020, greenhouse gas emissions from these sectors will be 21% lower than in 2005²².
- (2) From 2013, power generators must buy all their allowances. Eight of the member states that joined the EU since 2004 are allowed to continue granting free allowances to existing power plants until 2019, while they will, in return, invest at least as much as the value of the free allowances in modernizing their power sector²³.
- (3) In sectors other than power generation, the transition to auctioning is taking place progressively. The manufacturing industry will receive 80% of its allowances free of charge in 2013 but this will decrease annually to 30% in 2020²⁴.
- (4) At least half of the auctioning revenues, and all of the revenues from auctioning allowances to the aviation sector, should be used to combat climate change in Europe or other countries. Member states are obliged to inform the Commission of how they use the revenues²⁵.

Under Phase 3, free allowances are limited while transition to auctioning is progressing. However, according to the European Commission, surplus of nearly 1.8 billion EUAs can be observed at the end of the second trading period²⁶. Since banking is allowed between Phase 2 and Phase 3, this surplus is carried over to the next stage of the scheme. Therefore, it is important that the scheme is operated so as to avoid the possibility of surplus allowances functioning as *de facto* subsidies. Also, when Member states use auctioning revenues for tackling climate change, such as exporting environmentally friendly infrastructures to developing countries, they should be distributed in an equitable and transparent manner so as not to subsidize a specific industry or company.

3. Inclusion of Aviation Sector in the EUETS

As seen above, "cap and trade" may not be compatible with the SCM if surplus allowances function as *de facto* subsidies. On the other hand, obligation to surrender allowances could also bring about an issue of incompatibility with the international legal framework in certain sectors such as aviation.

From January 2012, the aviation sector has been included in the EUETS²⁷. All the aircraft operators of international flights that arrive at or depart from aerodromes situated in the territory of the Member states²⁸ are obliged to surrender a number of allowances equal to their

http://ec.europa.eu/clima/publications/docs/factsheet_ets_en.pdf

²² *Ibid.*, p. 2

²³ *Ibid.*, p. 3

²⁴ *Ibid.*, p. 4

²⁵ *Ibid.*, pp. 3-4

²⁶ SIXTH NATIONAL COMMUNICATION AND FIRST BIENNIAL REPORT FROM THE EUROPEAN UNION UNDER THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC), SWD (2014) 1 final, Brussels, 10. 1. 2014, p. 27

²⁷ DIRECTIVE 2008/101/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community

²⁸ *Ibid.*, ANNEX 1. (c)

total emissions during the preceding calendar year.

In the *Air Transport Association of America and Others v. Secretary of State for Energy and Climate Change*²⁹, claimants accused the EU legislature of having exceeded the bounds of State jurisdiction in breach of the principles of customary international law. They argued that the inclusion of flight sections that take place in airspace outside the EU has created an extraterritorial rule that contravenes the sovereign rights of third countries and the freedom of the high seas. The judgment of the Court of Justice of the European Union was as follows:

- (1) Application of the scheme does not infringe the principle of territoriality or the sovereignty that the third States from or to which such flights are performed have over the airspace above their territory, since those aircraft are physically in the territory of one of the Member States of the European Union and are thus subject on that basis to the unlimited jurisdiction of the European Union³⁰.
- (2) Nor can such application of European Union law affect the principle of freedom to fly over the high seas since an aircraft flying over the high seas is not subject, in so far as it does so, to the allowance trading scheme³¹.
- (3) It is only if the operator of such an aircraft has chosen to operate a commercial air route arriving at or departing from an aerodrome situated in the territory of a Member State that it will be subject to the allowance trading scheme³².

Advocate General Kokott, in her opinion regarding this issue, mentions that greenhouse gases contribute towards climate change worldwide irrespective of where they are emitted, and that they can have effects on the environment and climate in every State and association of States including the European Union³³, implying the extension of jurisdiction to foreign aircraft operators may be justified in terms of the “effects doctrine.”

Whether the effects doctrine has been established as a principle of international law is uncertain. The International Law Association found that the effects doctrine provided authority for a State to establish a regulatory framework for actions that occurred outside its borders, but that nevertheless had effects within its territory.³⁴ However, neither recognition by an academic body nor adoption by some States including the EU would necessarily demonstrate the maturity of the doctrine. Indeed, in the Amicus Curiae Brief of *Nippon Paper Industries Co., Ltd., vs. United States of America*, Japan took the position that the effects doctrine has never been accepted as a legitimate basis for extraterritorial reach³⁵.

Even if the effects doctrine is not applicable, extension of jurisdiction could still be

²⁹ Case C-366/10

³⁰ *Ibid.*, para. 125

³¹ *Ibid.*, para. 126

³² *Ibid.*, para. 127

³³ Air Transport Association of America and Others, Opinion of Advocate General Kokott delivered on 6 October 2011, para. 154

³⁴ The International Law Association, *Report of the Fifty-Fifth Conference Held at New York, August 21st to August 26th, 1972*. The effect doctrine allows for the extraterritorial application of domestic laws if the following tests are met: (a) The actions and their effects constitute activities that would fall under the scope of regulation within the law; (b) There are significant domestic effects; and (c) The effects are the direct and primarily intended result of extraterritorial actions.

³⁵ *Nippon Paper Industries Co., Ltd., vs. United States of America*, Brief of Amicus Curiae the Government of Japan in Support of the Petitioner p. 14.

justified under the so-called "residual negative principle," which regards "what is not prohibited is permitted" as stated in the *Lotus Case*³⁶. In other words, foreign aircraft operators are not opposable to the jurisdiction of the EU as long as those aircrafts arrive at or depart from aerodromes in the EU unless there is a principle of international law that limits it.

Is there then, such a limit? In this case, claimants also contended that extending the trade allowance scheme infringes the obligation laid down in Article 11 (1) and (2) (c) of the Open Skies Agreement to exempt the fuel load from taxes, duties, fees and charges³⁷. Would the Open Skies Agreement function as a limit to the jurisdiction of the EU? The judgment of the Court is as follows:

- (1) There is no direct and inseverable link between the quantity of fuel held or consumed by an aircraft and the pecuniary burden on the aircraft's operator in the context of the allowance trading scheme's operation. The actual cost for the operator, resulting from the number of allowances to be surrendered, a quantity that is calculated *inter alia* on the basis of fuel consumption, depends not directly on the number of allowances that must be surrendered, but on the number of allowances initially allocated to the operator and their market price when the purchase of additional allowances proves necessary in order to cover the operator's emissions³⁸.
- (2) Nor can it be ruled out that an aircraft operator, despite having held or consumed fuel, will bear no pecuniary burden resulting from its participation in the allowance trading scheme, or will even make a profit by assigning surplus allowances for consideration³⁹.
- (3) It is therefore clear that, in extending the application of Directive 2003/87 to aviation, Directive 2008/101 does not in any way infringe the obligation, applicable to the fuel load, to grant exemption, as laid down in Article 11(1) and (2)(c) of the Open Skies Agreement, given that the allowance trading scheme, by reason of its particular features, constitutes a market-based measure and not a duty, tax, fee or charge on the fuel load⁴⁰.

However, the Judgment of the Court was rather misleading. Although the total cost that the aircraft's operator must bear depends on the market price, the quantity of allowances to be surrendered is calculated on the basis of fuel consumption. Therefore, it seems natural to regard that the burden on the aircraft's operator is closely linked to the quantity of fuel consumed, and should be interpreted in the same line as taxes, duties, fees and charges exempted by the Open Skies Agreement. As the Court points out, the aircraft's operator may profit from surplus allowances. Therefore, it may not be appropriate to contend that inclusion of aviation in the EUETS *as such* is incompatible with the Open Skies Agreement. However, in the case where the aircraft's operator bears the burden of surrendering allowances, the EUETS may be regarded incompatible with the Open Skies Agreement.

In October 2013, the International Civil Aviation Organization (ICAO) Assembly agreed to develop a global market-based mechanism to address international aviation emissions by 2016,

³⁶ PCIJ Series A, No.10, p. 19

³⁷ Case C-366/10, at para. 136

³⁸ *Ibid.*, para. 142

³⁹ *Ibid.*,

⁴⁰ *Ibid.*, para. 147

and to apply it by 2020. In response, the EU decided to limit the scope of the EUETS to flights within Europe until 2016⁴¹. Exemptions for operators with low emissions have also been introduced⁴². Measures by the EU would certainly ease the burden of foreign aircraft operators; however, these would by no means lead to the fundamental solution of the issue as regards the incompatibility of EUETS with the Open Skies Agreement.

II. *Discussion on the Emissions Trading System in Japan*

1. **Controversies on the Emissions Trading System**

The introduction of the emissions trading system has been discussed in Japan as well. The industrial sector has persistently opposed the introduction of the system mainly for the following reasons⁴³:

- (1) Since future economic conditions, such as the industrial structure, cannot be accurately forecast, establishing a system that assigns emission allowances in an equitable manner will be significantly difficult.
- (2) Companies and industries whose products are well received by the market and whose emissions are rising as production increases will need to buy emission allowances. In contrast, companies and industries in decline will be able to profit from the sale of their surplus emission allowances. Such a situation will hamper fair competition.
- (3) What is most important in emissions reduction is the development of technology from a long-term perspective. Using funds that should be invested in the development of technology to buy emission allowances is contrary to this objective.
- (4) As inter-industry partnerships and life cycle assessment (LCA) approaches gain in importance, capping individual emission sources will be to merely aim for sub-optimization.

The Government of Japan, while regarding the emissions trading scheme as the key climate change policy, was aware that it triggers concerns on excessive interference in corporate management, investment deterrence to growing sectors, and over-speculation, and will impose new regulations on large emitters⁴⁴. The Government was of the view that it needs to consider this scheme carefully, by evaluating the burden on Japanese industry, associated impacts on employment, developments and effects of emissions trading schemes in other countries, and global warming countermeasures that have already been implemented in Japan (e.g. voluntary actions by industry)⁴⁵.

It was stipulated in Article 13 of the Bill for the Basic Act on Climate Change Countermeasures approved by the Cabinet in March 2010 that the Government shall investigate

⁴¹ See http://ec.europa.eu/clima/policies/ets/index_en.htm

⁴² *Ibid.*,

⁴³ *Keidanren's Proposal for a Post-2012 International Framework on Preventing Climate Change*, Attachment 2, On Emissions Trading Systems, October 16, 2007

⁴⁴ Ministerial Committee on the Climate Change Issue, *Three Major Policies to Counter Climate Change*, 28 December 2010

⁴⁵ *Ibid.*,

legislative measures necessary for establishing a domestic emission trading scheme and produce an agreed draft within one year of the enactment of this act as a milestone. However, the Bill failed to pass during the Diet Session and was dropped in December 2012. Substantial action towards introducing the scheme has not been taken since.

2. Voluntary Action Plan

In Japan the Voluntary Action Plan, initiated by Keidanren (Japan Business Federation) is greatly contributing to cutting emissions. Under the philosophy that positive involvement in environmental issues is essential to the survival of companies as well as their activities, Keidanren established the Voluntary Action Plan on the Environment in June 1997 prior to adoption of the Kyoto Protocol. Since then, it has declared that it will "endeavor to reduce average CO₂ emissions from the industrial and energy-conversion sectors between Fiscal 2008 and 2012 to below the level of Fiscal 1990" as the uniform target, while participating industries and companies have set their own targets and have been striving to achieve those targets as their social commitment⁴⁶. The 34 industries in the industrial and energy-conversion sectors that participated in the Fiscal 2013 Follow-up together emitted 505.51 million t-CO₂ in Fiscal 1990, the base year. The emissions accounted for approximately 44% of Japan's total emissions of 1,141.20 million t-CO₂ in that year. Moreover, they represented approximately 83% of the total amount of CO₂ emitted by Japanese industrial and energy-conversion sectors in Fiscal 1990 (612.30 million t-CO₂)⁴⁷. According to the Fiscal 2013 Follow-up, CO₂ emissions in Fiscal 2012 were 453.69 million t-CO₂, representing a 10.3% decrease compared to Fiscal 1990⁴⁸. Since the Voluntary Action Plan is very effective in cutting emissions, it could be said that there is no need to introduce "cap and trade" in Japan at this point.

3. Bilateral Offset Credit Mechanism

However, having no need for "cap and trade" does not necessarily mean opting out of all types of emissions trading. While not introducing "cap and trade," Japan has been signing bilateral agreements on the offset credit mechanism with developing countries⁴⁹. Japan's Bilateral Offset Credit Mechanism (BOCM) is similar to the Clean Development Mechanism (CDM) under the United Nations Framework Convention on Climate Change (UNFCCC) in that a funding country (Japan) invests in emissions reduction projects in developing countries and gains offset credits according to the amount of GHG reduction achieved. The BOCM is regarded as a framework authorized by the UNFCCC since it "acknowledges that Parties, individually or jointly, may develop and implement various approaches, including opportunities for using markets and non-markets, to enhance the cost-effectiveness of, and to promote, mitigation actions⁵⁰." Use of any mitigation projects registered under the BOCM for the

⁴⁶ Keidanren (Japan Business Federation), *Results of the Fiscal 2013 Follow-up to the Voluntary Action Plan on the Environment* (Summary), Section on Global Warming Measures, Performance in Fiscal 2012, p. 1

⁴⁷ *Ibid.*, p. 2

⁴⁸ *Ibid.*, p. 3

⁴⁹ Japan has held consultations with developing countries since 2011 and signed a bilateral document with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Vietnam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia and Mexico. See *Recent Development of the Joint Crediting Mechanism (JCM)*, October 2014, Government of Japan, p. 11

purpose of any other international climate mitigation mechanisms is prevented in order to avoid double counting on GHG emission reductions⁵¹.

The key difference between the BOCM and the CDM is the coverage of technologies. The CDM does not accept some low-carbon technologies such as nuclear power, while no technology is *a priori* excluded under the BOCM. It intends to cover a wider range of sectors and activities from transport, waste management, to energy efficiency, renewable energy etc. Therefore, the BOCM is expected to facilitate technology transfer and dissemination of environmentally friendly infrastructures in various sectors, establishing the basis for sustainable growth in developing countries. Furthermore, bilateral cooperation under the BOCM is expected to potentially pave the way for more engagements by developing countries in global emission reduction efforts in the near future.

III. Conclusion

Emissions trading based on “cap and trade” could be a tool for cutting emissions if effectively operated in compatibility with international laws such as those discussed above. On the other hand, there would be no need for “cap and trade” as long as other schemes such as the Voluntary Action Plan are showing effects in emissions reduction. We should refrain from contending that “cap and trade” is more effective since it is obligatory while the Voluntary Action Plan is literally voluntary. In addition, methods such as the BOCM could also compliment emissions reduction efforts while assisting developing countries to establish a low carbon society. There is no “one-size-fits-all approach.” It is important that each country pursues its own policy that best contributes to emissions reduction in a legally compatible manner.

⁵⁰ Decision 1/CP.18, *Agreed outcome pursuant to the Bali Action Plan*, FCCC/CP/2012/8/Add.1, para. 41

⁵¹ Footnote 49 at p. 6