

## **The Bilateral Offset Credit Mechanism**

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### **Abstract**

Although the Bilateral Offset Credit Mechanism is an excellent idea because it ensures that real emission reductions continue to be realized even in the absence of an international agreement under the UN, its downside is that it is limited to assisting only a single project rather than a policy program covering a bunch of “projects.”

For involving major emitting developing countries in the next framework for mitigation, the idea of expanding the BCM to NAMA assistance is surely worth being explored further in the situation where a legally binding agreement cannot be expected in Durban.

### **Key Words**

Bilateral Offset Credit Mechanism

NAMA

bottom up approach

next framework, post Kyoto

### **1. The background that formulated this idea of the BCM**

The bilateral offset mechanism (BCM) is gradually catching the eyes of policymakers, market players, and researchers worldwide.

There are two different approaches towards a future international framework for tackling climate change. One is the Kyoto Protocol-type, which is also called a top-down approach, and the other is the Copenhagen Accord or Cancun COP decision-type, which represents a bottom-up approach.

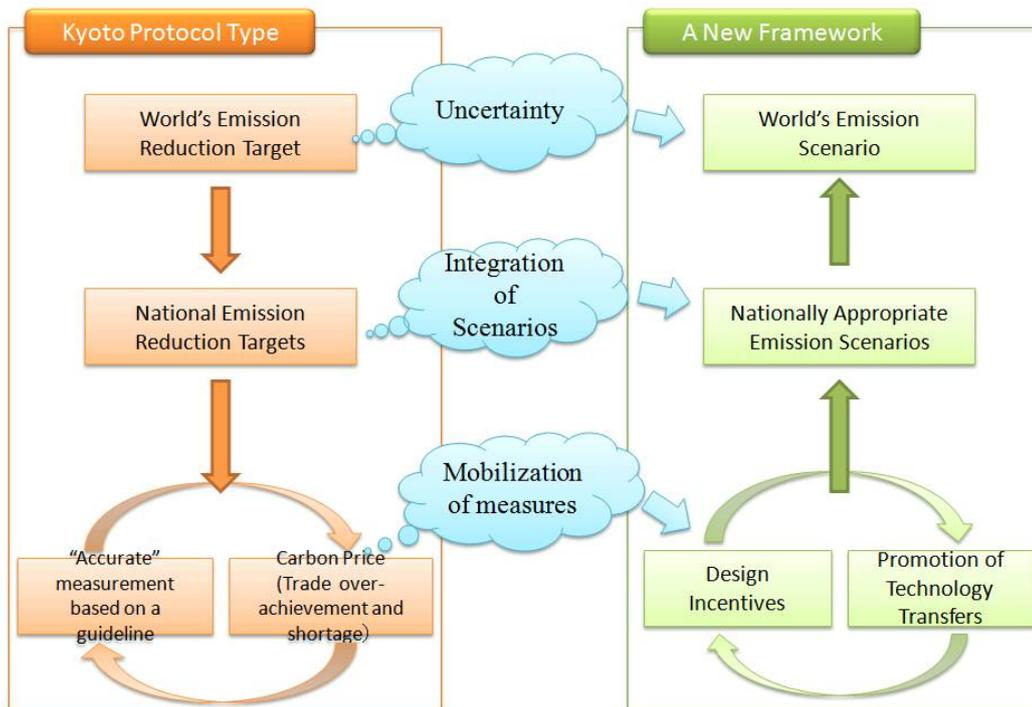


Fig. 1 Two Policy Frameworks

Under the Kyoto-type top-down approach, a worldwide emission reduction target required to meet some “scientific” goal like the “2-degree goal” is determined, break down the total amount of reduction into national targets, and try to achieve the target under a worldwide emission trading system which is expected to realize so-called carbon pricing. Comparatively, the Cancun COP decision supports the political will of each nation to make as much effort as economically and technologically possible to deal with climate change. From this approach, well-designed incentives for both developed and developing countries can be made up in the field of technology and financial resources transfer and a variety of mitigation actions would be able to be facilitated. This is the thrust of a bottom-up approach. It does not entail a compulsory or legally-binding target as those under the Kyoto Protocol but governments should be politically accountable to achieve the target. Laying importance on requiring frameworks to be legally-binding, the new framework could be designed so that every participating nation is legally committed to taking appropriate domestic policies and measures for mitigation. We are now faced with the choice of either one of these policy frameworks or a combination of the two.

In addition to the insufficient coverage of the Kyoto Protocol as claimed by the Japanese government, it should be pointed out that the Protocol has a structural problem owing to a very severe compliance system under which legally-binding targets make it very difficult for ordinary countries to ratify it or participate in it in the first place – one which entails even more challenges in raising the ambitiousness of the current target. There must be a good possibility that a bottom-up

approach, instead of a top-down approach, would bring better results in terms of environmental integrity.

The Kyoto Protocol is a multilateral framework under the Convention and was agreed upon in the United Nations process. That is why there are a number of researchers and delegations who still think in the UN context about the next framework or feel emotional sentiment towards the Kyoto Protocol. Although the concept of bilateral cooperation has been embedded in the Convention itself from the start (Article 11 of the UNFCCC stipulates that its financial mechanism, including technology transfer, will include “bilateral” channels), this atmosphere has been working against various diplomatic efforts which aim at bilateral or regional arrangements for solving climate change.

But some drastic changes are occurring in the negotiations. The idea of bilateral cooperation has been reaffirmed in the Cancun COP decision, which refers to the importance of bilateral actions in several parts (Finance, Technology, REDD and Capacity Building). In addition, that decision goes as far as to say that institutional arrangements even outside of the Convention shall be taken into consideration. Not only in the field of climate change, but also in the bio-diversity field, the Nagoya Protocol adopted at the COP10 meeting for the CBD refers to bilateral channels for finance.

The reason for that tendency is that developing countries have now become aware that environmental negotiations could be used as a tool for legitimizing their demand for economic assistance from developed countries. They began to insist that economic assistance should no longer be limited to those under multilateral arrangements. The idea of the BCM was created against this background in order to involve developing countries more positively in global mitigation.

Article 4 of the Nagoya Protocol is showing a hint for a possible future international arrangement for climate change; that is, “regime mixture.” This Nagoya spirit will surely present a new view to those who still believe that the UN framework shall be the single institutional arrangement for climate change.

## 2. Principles for the BCM to abide by and work

The basic concept of the BCM is as follows:

The objective of the BCM is to utilize the potential of developed countries’ advanced low-carbon technologies and products to the maximum extent in order to realize and accelerate global mitigation. The five principles for this objective are below;

- ◆ To contribute to global GHG emission reductions (no gap for global mitigation action)
- ◆ To be a Mechanism to promote real emission reductions (not compulsory, nor punitive)
- ◆ To promote technology innovation (focus on the effectiveness of technologies)

- ◆ To be effective as a long-term approach (long-term effectiveness)
- ◆ To be compatible with economic development, and to be sustainable (compatibility with economic development)

The first principle is that the BCM should contribute to global GHG emission reductions. The BCM is aimed at filling the possible gap of mitigation action which would be unavoidable in the case of diplomatic quagmire on a future framework. What matters is the gap of actions for mitigation, not the gap of legally-binding agreements for mitigation targets.

The second is that the BCM should promote real emission reductions. Under a top-down cap & trade system-type of international framework that does not analyze the technological mitigation potential of each country, it would be inevitable that some countries with better diplomatic skills will acquire hot air which will in turn dampen the carbon market. Real emission reductions might not occur under this kind of system.

In the same vein, the BCM should promote technology innovation, and for that to happen it inherently needs a long-term arrangement in nature. Then the fifth principle of being compatible with sustainable development will be satisfied almost automatically.

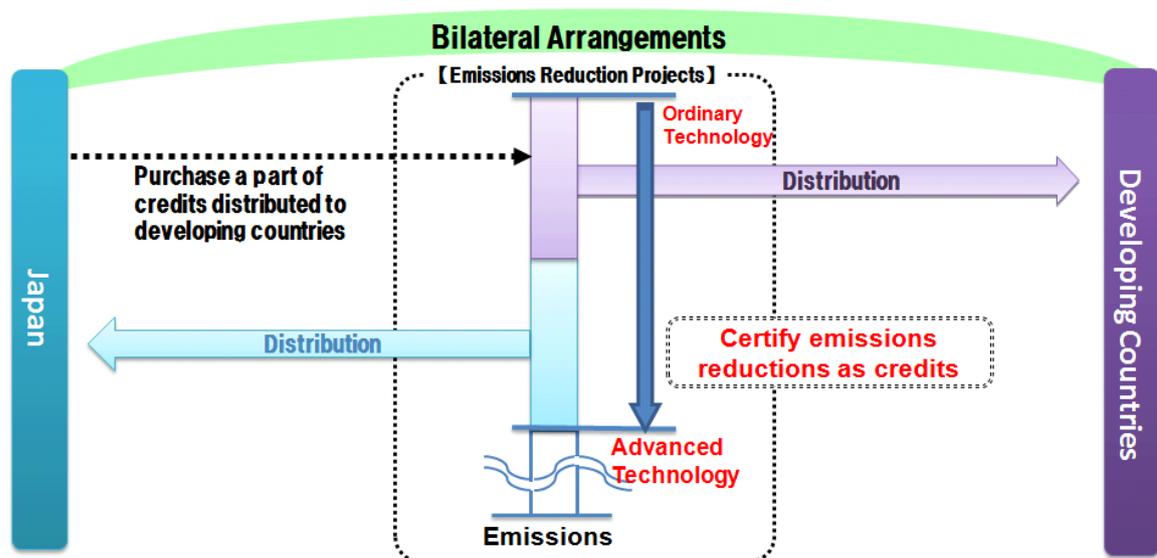


Fig. 2 Image of BCM

To start a BCM scheme, developed country and developing country governments first make an administrative agreement which identifies the concerned sector, players, projects, technology, how to share the credits and so on, and decides on the rules of MRV. Under this BCM agreement, “credits” for the technology and/or products transfer will be issued to the firms and to the concerned developing government. Such crucial elements related to the BCM design as tradability and compatibility with CER should be considered further.

However, one of the institutional merits of the BCM, compared to the CDM, is that this would

enable wider applicability of low-carbon technologies, for example, CCS and highly efficient coal-fired power plants as mentioned later, depending on the bilateral arrangement. The other practical merit is less bureaucratic process is required for the issuance of credits.

This mechanism is not allowed under the Kyoto Protocol, but the Cancun COP decision has opened a way for each country to design its own mechanism, as it's mentioned before. Under the BCM, new options for carbon mechanisms can be pursued and developed creatively and imaginatively. It is possible to design a BCM scheme either in a compatible and complementary way with the current CDM, or in a totally new fashion.

The most promising sector for the BCM would be an energy-intensive or energy-sensitive one. Coal-fired power generation projects would have the biggest impact on emission reductions in a single sector. In addition to that, the projects for improving the energy efficiency of iron and steel plants or those for spreading home appliances with higher energy efficiency in developing countries would also offer good prospects for mitigation.

Figure 3 and Figure 4 elaborate the project of highly efficient coal-fired power plants.

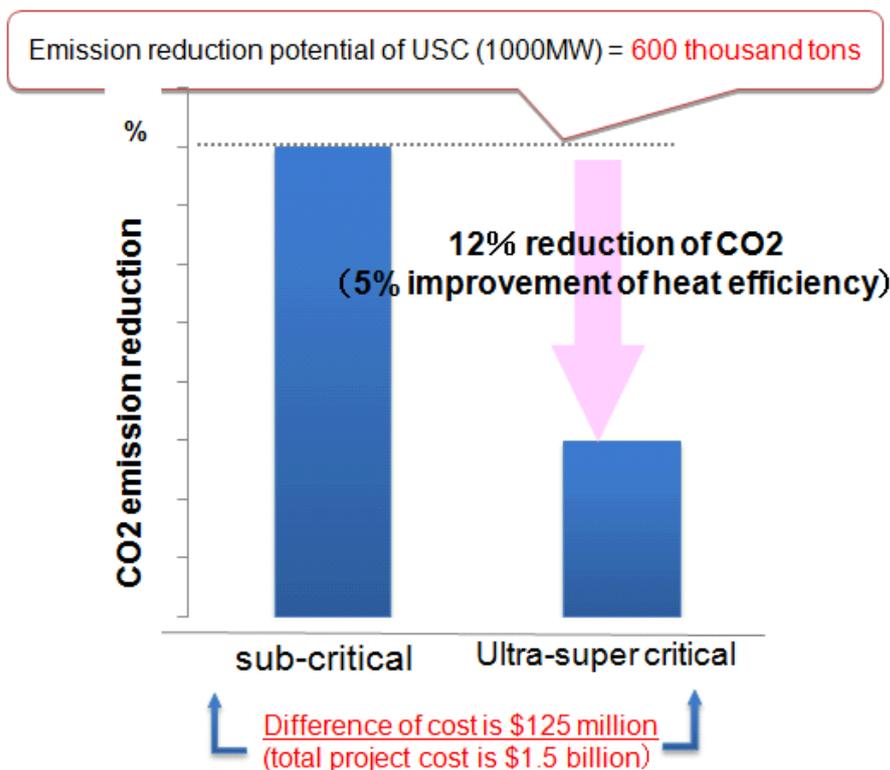


Fig. 3 reduction volume of Japan's ultra super-critical coal fired power plant

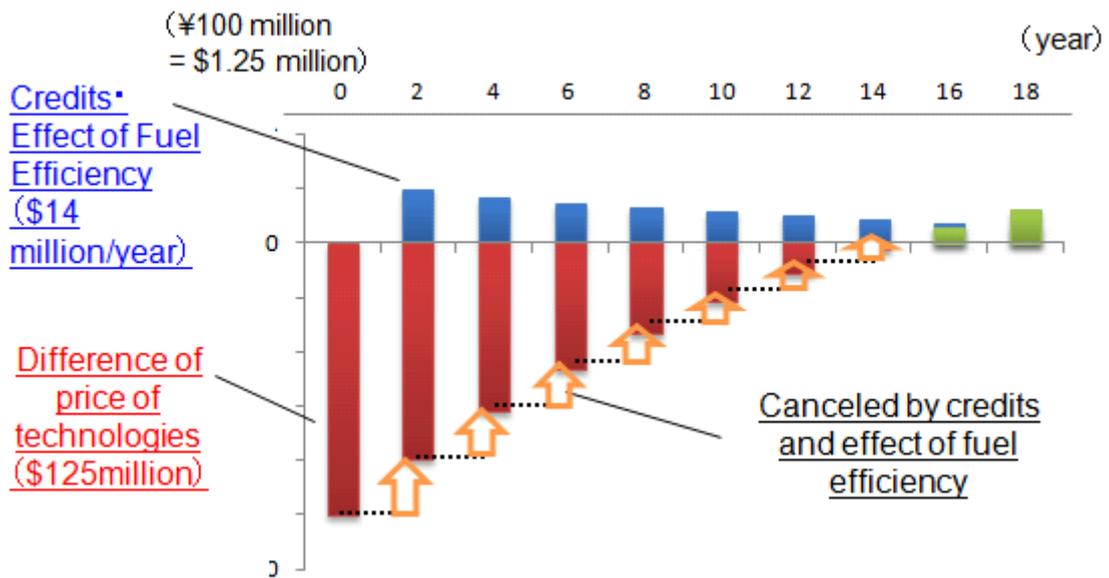


Fig. 4 balance of Japan's ultra super-critical coal fired power plant

Japan's ultra super-critical coal-fired power plant is much more efficient compared to China's sub-critical coal-fired power plant. However, the difference in the initial cost is about \$125 million. On the other hand, by introducing ultra super-critical technology, the total value of \$14million per year based on fuel efficiency improvements would be saved worth \$8.75 million per year accompanied by bilateral credits worth \$5 million per year if half of 600 thousand tons of CO<sub>2</sub> reduced annually are cashed.

The Government of Japan has been approaching many developing countries, especially in Southeast Asia and has begun consultation with them about the BCM. The discussion includes the elements of bilateral agreement, such as measurement of emissions, verification and distribution of credits. With India and Vietnam, the GOJ has already reached agreement on the establishment of the BCM.

### 3. Linking with NAMA

It would be worthwhile considering the idea that the BCM is to cover not only a bunch of single projects but also Nationally Appropriate Mitigation Action (NAMA) as a whole, in relevant policy sectors. Although the BCM is an excellent idea because it ensures that real emission reductions continue to be realized for a prolonged period of time even in the absence of an international agreement under the UN, its downside is that it is limited to assisting only a single project rather than a policy program covering a bunch of "projects." Therefore, developed countries' assistance to developing countries should be expanded beyond the BCM to cover a broad package of mitigation actions by developing countries known as NAMA. Although a political sense of

obligation towards the domestic implementation of NAMA prevails among some Asian and South American nations with proactive attitudes towards coping with climate change issues, these nations often face a shortage of funds and technology. Some developing countries have strong interest in creating NAMA-based credits or to implement NAMA with the profits earned from selling credits generated under the BCM. However, given the diversity of mitigation actions considered to be included in NAMA, whether to award credits for NAMA as a whole or not requires further discussion. Therefore, direct assistance like ODA and other types of public finance should be mobilized.

Direct support is beneficial in three dimensions:

Firstly, it can allocate funds to climate change measures which require a long-term perspective, such as technology development and capacity-building, instead of being caught up in immediate reductions.

Secondly, it can avoid the possible negative effects associated with support for quantifiable emission reductions, which tends to be preferentially extended to emerging countries with high emission levels, but delayed for developing countries undergoing slower economic development.

Thirdly, a wider range of mitigation actions which could not be formulated into specific projects for various reasons can be materialized, too.

It is essential to involve major emitting developing countries in the next framework for mitigation. The idea of the BCM and NAMA assistance is surely worth being explored further in the situation where a legally binding agreement cannot be expected in Durban.

## **References**