

Post-Kyoto Protocol Approach

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The Kyoto Protocol covers the period until 2012. Therefore, formulating a Post-Kyoto Protocol Framework (PKPF) is a big issue as of now. There are five important points in considering PKPF.

The first point is to establish a global numerical target for reduction of "greenhouse gases not controlled by the Montreal Protocol" (hereafter referred to as CO₂). Prime Minister Abe Shinzo proposed to reduce global emissions by half by 2050. The economic summit meeting in Heiligendamm last June agreed to study seriously similar ideas, including the Abe proposal. Since PKPF will not cover the period up to 2050, we will need a target year closer to now. Of course, this global target should be established taking into consideration the CO₂ absorption capacity of the globe scientifically. The global target has to be identical to accumulated CO₂ emission rights of member countries of PKPF.

The second point is to secure the participation of all major CO₂-emitting countries in a binding framework in terms of CO₂ emissions. The share of countries whose CO₂ emissions are controlled numerically by the Kyoto Protocol is only 30%. This share will go down to 20% in 2030. China and India, the second and fifth largest CO₂-emitting countries, are not bound by the Kyoto Protocol numerically. The United States, the largest CO₂ emitter, used to be bound by the Kyoto Protocol that obliged the country to reduce CO₂ emissions on the five-year average between 2008 and 2012 to 93% of its emission level in 1990, but got out of it later and has no obligation to abide by it. Those free countries' share in CO₂ emissions is 70% as of now and will increase to 80% in 2030. Obliging the rest of countries does not make any sense. In PKPF, all major CO₂-emitting countries should manage their economies, without emitting more CO₂ than their emission rights distributed by

PKPF and transferred by other countries based on "Cap & Trade," mentioned later.

The third point is the way for PKPF to distribute emission rights to member countries. There are many ways of distributing emission rights, including selling them to member countries or allocating them free of charge based on the size of GDP or population of each country and so forth. The most equitable way to distribute should be found.

The fourth point is to enable our economies to enjoy relatively high growth rates even under the constraint of global CO₂ reduction. For this purpose admitting transfer of CO₂ emission rights seems to be worth considering. If the transfer is not admitted, a country that is not given enough CO₂ emission rights to grow its economy cannot achieve high growth, while other countries which happen to be given excessive emission rights cannot make use of them.

As a matter of fact, the Kyoto Protocol admits three types of transferring CO₂ emission rights, namely the CDM (Clean Development Mechanism), JI (Joint Implementation) and Cap & Trade. The CDM is for a company in a developed country to acquire additional CO₂ emission rights in exchange for the reduction of CO₂ emissions that the company achieves in a developing country. The JI is similar to the CDM but everything happens within developed countries. In the cases of the CDM and JI, however, the process of verification conducted by the United Nations as to how much reduction will take place is said to be very cumbersome. Cap & Trade is a mechanism for a company in one developed country to purchase additional CO₂ emission rights from another developed country whose emission rights happen to be plenty. Regarding Cap & Trade, there is no need for the verification process for the amount of reduction because this is just transferring

one's emission rights to another. Thus, if Cap & Trade, which is limited just between numerically controlled developed countries, is expanded to every country in PKPF, each country can maximize economic growth potential under the constraint of reduction of CO₂ emissions and also can eliminate the cumbersome verification process. In addition, what should be noticed here is the fact that the cost of transfer (the price of emission rights) is relatively cheap though it will change reflecting supply and demand. It is approximately \$15 to \$20 per ton of CO₂ as compared to \$500 per ton of oil.

The fifth point is to introduce a most efficient and effective implementation method of the Cap & Trade system. As of now the European Union is implementing Cap & Trade. But since the EU system is to measure emission volume at the stage of emission, measurements are conducted only for big companies and are much more costly than the "upstream measurement system" (UMS) proposed by a former MITI official, Yasumoto Akinobu. The UMS measures the volume of oil and gas at the stage of production, export and import, and is much easier and comprehensive than to measure at the stage of emission.

I wish these five points can serve as food for thoughts for PKPF. **JS**

COMING UP

We will look into Japan's sagging birthrate in the next issue. There are many things to be considered in addressing this problem. We will try to approach some of them, including the current environment surrounding Japanese women, policy issues, psychological analysis, the work/life balance and corporate challenges. As a special article, problems associated with the safety of consumer products are to be taken up.