For the In-Depth-Review of Japan's 3rd National Communication under the UNFCCC

Analysis of Economic Instruments (tax and fiscal policy) in Japan's Climate Change Policy

HATA, Naoyuki (Carbon Tax Research Group)

- 1. Economic instruments (tax and fiscal policy) as climate change policies in Japan
- The Priority of economic instruments is lower than other policies and measures
 Japan's 3rd National Communication only mentions that economic instruments, such as tax
 and levies, should be afforded continued comprehensive examination in a various occasions.
 That means these instruments is only under the consideration and there is no plan to
 introduce these measures shortly. This situation has not changed for decades.
- There are subsidies for energy conservation, but no tax or levy related to climate change policies Currently there are subsidies for wind or solar power facilities, tax credits to promote investments for energy conservation of the plants' facilities, and a tax credits or grant-in-aid to switch to fuel-efficient vehicles. But there are no tax, levy or emissions trading system as climate change policies in Japan.
- 2. Current situation of taxation and fiscal expenditure related to climate change policies

• Taxation: Tax in Japan for fossil fuel, electricity, and vehicles is less heavy than in EU countries and little effective to cut CO₂ emissions.

Like other developed countries, Japan has the tax on fossil fuel, electricity, and vehicles, and virtually functions as carbon-energy tax. However, those taxations don't respond to the burden on the environment, e.g. the amount of CO_2 emissions, because this has established not for the environmental objective. Especially Japan does not tax on coal, which emits CO_2 a lot, and this fact leads to increase coal consumption in power plants (the number of coal-fired power generations in Japan has increased sharply since 1990). Besides, tax rate of fuel for industry, transportation and vehicles are not heavy comparing for EU countries, and this is not enough to reduce CO_2 emissions.

• Fiscal expenditure: Large amounts are spent for road, oil stock and nuclear power plants.

There are the earmarked funds for road and the special account for energy in Japan. Tax for gasoline and vehicle possession are earmarked for road and $5 \sim 6$ trillion yen (US\$ $30 \sim 40$ billion) per year are automatically spent for road construction. This is interpreted that government prioritizes the policy for the vehicle transportation, which emits CO₂ much more than trains. It would be one of the causes of CO₂ increase in transportation sector.

There are two special accounts for energy in Japan. One is from the tax on petroleum (about 500 billion yen (US\$ 4 billion)) and another is from the tax on electricity (about 600 billion yen (US\$ 5 billion)). The former is spent for oil stock and oil development, and the later is for regional or technical development to build nuclear power plants. Compared to those, budgets for renewable energy and energy conservation are smaller and it should be increased.

3. Latest movement in the government

• Reform of special accounts for energy: The government's plan to introduce coal tax is a step forward, but still not enough because of the lower rate than petroleum

The government plans to reform two special accounts for energy from 2003. The plan is to introduce coal tax, which is now tax- free, and to cut the tax on electricity. Introducing coal tax is a progress but its tax rate per carbon is still low, only 1/3 of the petroleum tax rate. The tax use is little changed but the government is about to strengthen the support for nuclear power, which has serious environmental damages.

• Reform of the earmarked funds for road: The object of financing is slightly wider but still a large amount of it will be continually used for road.

In March 2003, the provisional rate of tax used for road, like a gasoline tax, will expire and the government needs to amend the law concerning about this. Environmental NGOs take it as a chance to change this system in climate-friendly manner and demand to maintain this tax rate and to switch the tax use from the earmarked funds for road, which increase CO_2 emissions, to the general revenue source. The government plans to keep its rate, but still keep heavy use for road with only slight widening the object, like for subway maintenance. This would promote continuous CO2 emissions from vehicles.

• Carbon Tax: Still under consideration in the government, but 2005 will be too late

The advisory council of the Ministry of Environment is now considering about the carbon tax and aiming to introduce it after 2005. It is very slow pace and the ministry should aim earlier realization and show a concrete proposal as soon as possible.

- 4. Our suggestion for policy reform
- · The policy should be changed toward early introduction of carbon tax

The CO₂ emission of Japan is still increasing nevertheless it faces the economical depression. To change this trend, it is necessary to strengthen policies and measures for climate change and early introduction of carbon tax is necessary. Carbon Tax Research Group has already proposed a carbon tax system as a basis for broad discussion. However, the government has already decided to continue existing policies and measures till 2005 based on the Guideline of the Measures to Prevent Global Warming and the Ministry of Environment aims to introduce only after 2005. The Guideline itself should be reconsidered or abolished, and change it to the policy to introduce the carbon tax as soon as possible.

• The fundamental reform to tighten tax on energy generated from fossil fuel and to change the special accounts to the general revenue source is necessary

Concerning climate change problem, existing tax on energy generated from fossil fuel should be tighter and at least the coal tax rate should be raised as at the same level as tax on petroleum. The special account systems should be reformed fundamentally to switch to the general revenue source not to limit its use for the oil development and to spend more for renewable energy and energy conservation.

• The earmarked funds for road should be abolished and tax to bear social cost should be introduced This large amount earmarked funds used for road is never seen in other countries and it should be abolished soon. However, the current tax rate on fuel or vehicles should be kept in order not to accelerate CO2 emissions. At that time, tax to bear social cost, which aiming to burden various social cost caused by fuel or vehicles, should be introduced instead and its rate should be same as the existing tax system.