A QUESTION OF COMMITMENT

Japan's Climate Change Policies Revisited

Cindy Termorshuizen

Tokyo Institute of Technology

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It is now over six months since the historic Kyoto Conference (COP3)

came to a close. Preparations for COP4, to be held in Argentina this

November, are well underway. Japan, which signed the Kyoto Protocol

on 28 April and has been pumping out climate change- and energy

policy-related reports and legislation ever since appears to be deeply

committed to the process.

However, there is increasing evidence that this commitment is not

much more than skin deep. In both the domestic and international

arena, a look at the fine print of key government documents reveals a

disturbing lack of commitment on the part of the Japanese government

(and particularly on the part of the Ministry of International Trade and

Industry -- MITI) to fulfilling its obligations under the Kyoto Protocol.

These obligations include, most importantly, a 6% reduction in

greenhouse gas emissions from 1990 levels by 2010, to be achieved

largely through domestic measures (Article 6.1 (d)). In the following

paper, I will outline key "problem" policies, both domestic and

international, discuss major criticisms of these policies, and point out

ways in which these policies might be made more "climate-friendly."

THE DOMESTIC ARENA

On the domestic level, four key changes have been made in energy

policy over the past half year with significant implications for,

particularly, carbon dioxide emissions. In May a revision of the Energy

Conservation Law passed the Diet and an updated "Long-Term Energy

Supply and Demand Forecast" was released by a subcommittee of the

Advisory Committee for Energy. In addition, as part of the slow, steady

move toward deregulation in electricity retailing, the Electricity Utility

Industry Council recommended that partial liberalization of electricity

sales be permitted. Finally, in June a government task force, set up in

January and consisting of key officials from most of Japan's ministries

and agencies, released guidelines specifically aimed at the fulfillment of

Japan's Kyoto Protocol obligations. The following section will elaborate

on these four areas of policy change.

The Energy Conservation Law

The amendment of the Energy Conservation Law is perhaps the

most positive of the four domestic policy changes considered here in

terms of its potential to actually reduce CO2 emissions. The law now

stipulates that energy conservation targets be based on a "top runner"

system, under which manufacturers must achieve efficiency levels

equivalent to the best available. This is a substantial improvement over

the past system, where only average efficiency levels were required.

The law also requires mid-size and large manufacturers to make

medium-term efficiency plans.

The strengths of this law, however, hide some serious weaknesses.

The top runner system, for instance, does not apply to all appliances and

machines, nor are the methods of calculation which underpin it clear.

The efficiency plans, though required, do not have to be made public.

Furthermore, the law does not stipulate any sanction should companies

fail to draw up these plans. Full information disclosure and strong

compliance incentives are indispensable if the law is to operate

effectively.

The Long-Term Energy Supply and Demand Forecast

The new "Long-Term Energy Supply and Demand Forecast," which

outlines the general direction to be taken by Japanese energy policy

until 2010, is considerably more problematic than the Conservation

Law. As in the 1994 forecast, the main goals of Japan's energy policy are

stated to be energy security, economic growth, and environmental

protection (though energy security is given much less emphasis than

previously). On the positive side, the forecast calls for a slow move away

from coal (from 16.4% of primary energy in 1996 to 14.9% in 2010) and

a significant expansion, at long last, of co-generation. It also sees

renewable energy, not including hydro and thermal, rise from 1.1% to

3.1% of primary energy. The good news stops there.

A closer look at the forecast reveals questionable assumptions

about growth and emissions, a stubborn and even foolish commitment

to nuclear power development, and only half-hearted action on

renewables. The total package bodes ill for achievement of Japan's 6%

reduction obligations and even worse for the achievement of the deeper

cuts necessary in the long term. The problem areas of the forecast are

briefly expanded on below.

The key assumption underlying the new forecast is a 2% economic

growth rate (actually, a 3% growth rate until 2000, and 2% thereafter).

Editorials in Japanese newspapers and reports by NGOs have been

critical of this assumption, pointing out that the country's economy is in

recession and unlikely to see sustained growth for some time. The

forecast's assumption that domestic energy policy measures need only

stabilize CO2 emissions (as opposed to reducing them by 6%) has also

been lambasted. Even some members of the Advisory Committee for

Energy, which drafted the forecast, have publicly voiced opposition to

this assumption.

The forecast's commitment to sharply expanding nuclear power

production (from 35% of electric power to 45% by 2010 --

approximately equivalent to 20 new reactors) has been greeted with

skepticism from industry, the press, and NGOs. Besides the obvious

safety and waste disposal concerns, criticism has focused on the

unfeasibility of such a major increase given strong local opposition to

reactor siting and on the huge amount of investment required, leaving

insufficient funding for efficiency improvements and for development

of other energy sources, particularly renewables.

In the area of renewables, the forecast is less ambitious than it

might initially appear. An international comparison will help to

illustrate this point. In Denmark, where the promotion of renewables

has been an energy policy priority, an estimated 12-14% of total gross

energy will come from renewables (in particular, biomass, wind, and

solar) by 2005. Japan, as mentioned above, plans to have only 3.1% of

its energy come from renewables by 2010. Though some might argue

that Japan's vastly higher total energy consumption makes this

comparison unjust, megawatt comparisons give similar results. For

instance, in the case of wind power, by 2010 Japan plans to have 150

MW installed. Denmark plans to have 10 times that (1500 MW) by the

year 2000.

In terms of solar power, problems lie less with the forecast itself

than with its implementation. Though the plan is to expand solar

capacity from 400 MW in 2000 to 4600 MW in 2010, actual installed

capacity was still foundering at only 90 MW in March of this year. This

is but one instance of a consistent problem in this country's energy

policy: a steady output of policy papers and legislation but a mere

trickle of measures to make their prescriptions work on the ground.

Deregulation of Electricity Retailing

While the general climate impact of the Long-Term Energy Supply

and Demand Forecast is relatively straightforward, the implications of

deregulation are difficult to judge, particularly as the process is only in

its infancy in Japan. In general, the effect of deregulation in electricity

retailing depends very much on the ultimate design of the new system.

For instance, if bids to supply energy are considered solely in terms of

price, there is likely to be a shift to the cheapest possible energy sources

(low-quality coal and oil or, more positively, combined cycle gas

turbines). Low-emission energy sources, like wind, which remain

relatively high cost (in Japan, anywhere from 12 to 23 yen per kWh)

compared to fossil fuel sources (10 yen per kWh), will lose out.

This is of particular concern in Japan, where retail liberalization is

presently aimed only at industrial and other large-scale customers.

While environmentally conscious households might choose higher cost,

renewable energy given the option, industrial customers are unlikely to

do so without regulation or strong incentives. The electricity industry is

presently discussing ways of evaluating bids so that not only price, but

also environmental criteria, would be taken into account. Moves toward

adopting such criteria need to be supported more vocally by the Diet

and environmental NGOs.

Guidelines for Meeting Kyoto Protocol Obligations

The final area of concern in domestic energy policy is the

guidelines for meeting Japan's Kyoto Protocol obligations, set out by a

special government task force. The guidelines call, as expected, for

major increases in nuclear power and also for the implementation of

other measures such as daylight saving, better home insulation, and

better public transportation. Though some of the task force's

recommendations are positive, their legal status and the effect they will

have on emissions is unclear. Individual ministries are expected to

transform the recommendations into concrete measures, but there is no

obligation for them to do so, nor any indication of how the success of

any implementation efforts will be measured. As in other areas of

energy policy, there is the distinct possibility that little of substance will

come out of the recommendations. Clarifying the legal status of the

guidelines and indicating who is responsible for their implementation

and evaluation would go far toward putting them into practice.

THE INTERNATIONAL ARENA

On the international level, Japanese approaches to sinks, joint

implementation (JI), and CFCs go one step further than domestic policies.

They not only betray a lack of commitment to the fulfillment of Japan's

own Protocol obligations, but also show a willingness to undermine

hard-won international agreement on such matters as the definition of

sinks and which gases to include in the Protocol. The following section

briefly discusses each of these policy problems.

Sinks

Sinks, defined as "direct human-induced land-use changes and

forestry activities, limited to afforestation, reforestation, and

deforestation since 1990" (Article 3.3) under the Protocol, can

technically only help achieve 0.3% of Japan's emission reduction

obligations. MITI, however, would like to see 3.7% of the 6% reduction

(equivalent to the CO2 absorbed by all of Japan's forests) achieved by

sinks. The Environment Agency disagrees with this 3.7% figure, pointing

out that under the expanded definition, a country like Canada could

cover 100% of its Protocol obligations by means of sinks. The Japan

Tropical Forest Action Network (JATAN), a well-known Japanese NGO, is

equally critical, bringing up the role of timber imports in maintaining

Japanese forest cover at its present high levels. JATAN accuses the

Japanese government of ignoring the fact that the annual amount of

timber imported to Japan "exceeds the rate of increase in domestic

forest cover." Given this fact, JATAN argues that CO2 emissions for

timber should be attributed to the importing country (as is now the case

with petroleum emissions). This suggestion is well worth considering, as

it would bring more fairness into the sinks debate.

Joint Implementation

Joint implementation, which refers to investing in emission-

cutting projects in other countries and using the reduced emissions to

meet the Protocol obligations of the investing country, is another device

which Japan is utilizing to sidestep domestic emission reductions. MITI

intends to achieve 1.8% of its 6% reduction obligation through a

combination of JI and emissions trading. To realize this, the ministry

recently earmarked 2.2 billion yen to survey JI opportunities in Russia.

Japanese corporations have already shown an extraordinary interest in

JI, especially in Russia, and to a lesser extent in China. While both of

these countries desperately need to increase the efficiency of their

power generating sectors and could certainly use Japanese assistance,

dependence on Japan for plant upgrades may very well inhibit both

countries from developing domestic environmental technology to do this

work on their own. It would also provide Japan a way out of making

domestic cuts. To keep JI fair and beneficial in the long run, developing

countries and economies in transition need to acquire not only

environmental technologies, but also the know-how to produce them.

And to keep industrialized countries honest, a cap on JI's contribution to

total emission reduction obligations needs to be put in place.

CFCs

The final area of concern regarding Japan's international climate

change negotiations is its position on CFCs. At a preparatory meeting for

COP4 held in Bonn in early June, a member of the Japanese negotiating

team announced that Japan intends to push for the inclusion of CFCs in

the list of gases covered under the Kyoto Protocol. CFCs, as most readers

will know, deplete the ozone layer and their production is already

regulated under the Montreal Protocol. Though CFCs also contribute to

global warming, delegates at COP3 agreed to leave them under the

Montreal Protocol. The Japanese government, however, argues that as

the latter Protocol only regulates production and not disposal of CFCs,

CFC destruction should fall under the Kyoto Protocol. For good reason,

the Climate Action Network (CAN), an international NGO network,

vehemently disagreed with this proposal in its newsletter ECO. It noted

that incentives to destroy CFCs can and should fall under the Montreal

Protocol; placing them under the Kyoto Protocol would simply add one

more loophole to an already very flawed emissions reduction

framework. Japanese NGOs and Diet members need to do their utmost to

ensure that CFCs stay out of the Kyoto Protocol.

THE DECISION-MAKING PROCESS

The above sections have outlined some key problem areas in

Japan's energy and climate policies and argued that the prospects for

achieving the country's emission reduction obligations are limited.

Underlying this dizzying array of flawed policies is an even more flawed

decision-making process (which, unfortunately, is not limited to energy

and environment issues). In general, the environmental policymaking

process in Japan has little toleration for dissent from status quo opinion,

allows only limited participation by environmental experts and NGOs,

and includes almost no oversight by the Diet. These general points

certainly hold true in the case of climate change.

Ministry advisory councils dealing with climate change were

handpicked by the relevant ministry and usually included no climate or

environmental scientists. At best, only one token NGO member (never

one from an energy-related or environmental NGO) per council was

appointed. No system was in place to accept or discuss documents or

opinion papers submitted by NGOs not represented in the councils. The

Diet, constitutionally Japan's highest legislative body, had virtually no

input into the policies discussed above. To my knowledge, its only active

involvement was in the Energy Conservation Law, which had to be

deliberated upon and passed by the Lower and Upper Houses. Though

thorough scrutiny by the Diet of energy and climate policies would not

guarantee more environmentally sound decision-making, it would open

space for greater citizen participation (through lobbying, for instance)

and allow decision makers unaffiliated with the ministries to question

ministry assumptions and priorities.

A questioning of present priorities and assumptions is desperately

needed. According to the Intergovernmental Panel on Climate Change

(IPCC), a 50% reduction in global CO2 emissions is necessary to slow

climate change to a level to which natural ecosystems can adapt. If one

accepts the argument that developing countries have the right to

increase emissions past their present levels for reasons of equity, then

industrialized countries like Japan will have to cut emissions by 80 or

even 90%. Piecemeal policies like those described in this paper will not

bring emissions anywhere close to these figures. A more holistic,

visionary energy policy that grapples with not only supply and demand

but also with social needs and environmental limitations is necessary.

CONCLUSION

Japanese energy and climate change policy are underpinned by a

"hold the course" attitude. On the domestic level, changes in everything

from energy conservation legislation to the long-term energy supply

and demand forecast are minor adjustments to an environmentally

unsustainable energy policy. On the international level, Japanese policy

towards sinks, joint implementation and CFCs shows a similar tendency

to avoid energy sector reform at all costs.

It is only a more open and critical decision-making process that

will open Japan's energy policy to fundamental reform. At best, without

fundamental reform, the introduction of sound climate change policies

will be delayed. At worst, such policies may not be put in place until it

is far too late.

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