

The High Price Paid for Hatoyama Speech

At the UN Summit on Climate Change, Prime Minister Hatoyama came out with an initiative to reduce emissions by 25% from 1990 levels. With confident voices for Japan's world leadership on one end and vehement opposition from industry on the other, the tangled debate has a long way to go before it is unraveled. Nevertheless, the story of the three costly sacrifices that his speech made should be told.

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Returning to Top-Down Diplomacy

Prime Minister Yukio Hatoyama has won high international appraisal for his announcement of an initiative to reduce emissions by 25% from 1990 levels at the U.N. Summit on Climate Change held on September 22. The truth is that he focused on playing a card that would not inflict any real damage over the short term – global warming issues – setting out a novel initiative with the aim of maximizing the impact of the new prime minister's diplomatic debut, but at the expense of several crucial elements of climate change negotiations that he should not have undermined: For starters, he abandoned the bottom-up approach. Secondly, he has shown no insight on equity. Thirdly, he paid no attention to the simultaneous pursuit of environment and economic activity.

In the Kyoto Protocol negotiations, Japan accepted a 6% reduction target that would be extremely difficult to achieve considering its energy efficiency level which was already second to none in the world. EU, on the other hand, only assumed an easy -8% reduction target, regardless of an apparent downwards trend in greenhouse gas emissions resulting from rationalization measures after the German reunification and the liberalization of the UK market. The US agreed to a -7% target, which would have been a challenge, but with the Senate originally opposed to ratifying the Protocol prior to agreement, the Clinton Administration made no effort to ratify it and the succeeding Bush Administration withdrew from it.

In both the European style of, which employs adroit tactics, and the American style which is self-centered foreign policy, EU and US leaders come to the negotiation table with “handsome” figures which have been derived using

calculation methods designed to work in their favor (for example, in determining the base year), staging one performance after another to negotiate their national interests of minimizing their share of the burden. This top-down approach to negotiations is one of Japan's diplomatic weak points. This is why we were shifting to an approach that would determine national reduction targets based on scientifically-analyzed sector-specific reduction potentials and costs (sectoral approach), instead of repeating the imbecility of playing crude "number games" by manipulating numbers to make them look "attractive" and not by constructing them on reasonable grounds. This type of approach originates in objective data analysis and therefore intrinsically constitutes a "bottom-up approach."

Prime Minister Hatoyama's 25% reduction initiative is, in essence, a reshift of policy. The domestic business community and labor unions have expressed strong criticism and fears against the target's feasibility and the increased economic costs and increased employment insecurity that it would inflict. However, perhaps such criticism has already been taken into consideration by the producers of the Prime Minister's diplomatic show on climate change. Their idea of a "top-down approach", maybe, is to pledge a reduction target of -25% which hinges on an accord on ambitious targets among all major economies, so that Japan can sit back arms crossed and not be forced to accept any unreasonable demands, while the protracted multinational negotiations towards agreement on specific numerical targets are continued.

However, if Japan were to seriously pursue a "top-down approach," it should have followed the Japan-US and Japan-China summits with talks with the EU to emphasize that Japan's target is the most stringent in the world and thus press the EU for a compromise. If the Hatoyama Administration seeks to highlight its 25% reduction initiative, it may be in for a prolonged setback due to missing a series of diplomatic opportunities in September as it indulged in self-satisfaction after receiving applause at the U.N. summit.

What will happen to the bottom-up approach that Japan has put so much diplomatic effort in convincing other countries to adopt? Is it doomed to disappear from the negotiation table? Ironically, President Obama may in fact be the savior of our painstaking work. The US emissions reduction target is to be determined by a domestic bill, which means that the US may not agree to a legally-binding reduction target in the post-Kyoto framework, as was the case with the Kyoto Protocol. In order to avoid international criticism, the Obama Administration is likely to conclude a bilateral agreement with China, the other major emitter, on some form of

reduction commitments and financial and technological cooperation, later inviting other economies to take a similar approach – a close picture to entering into FTAs (free trade agreements) when WTO negotiations find no end.

Bilateral agreements will involve identifying sector-specific cooperation projects, the reduction potentials of which will be analyzed and aggregated. Experienced with the bottom-up approach, which is employed in its industry-led Voluntary Action Plan, Japan possesses the most insight in this field. President Obama will visit China in mid-November, when he is expected to present an important proposal towards the COP (Conference of the Parties to the United Nations Framework Convention on Climate Change) 15 meeting in December. The second Japan-US summit to be held around then is the biggest chance for Japan to “bridge” (Prime Minister Hatoyama) the two countries. Japan will need to gain hold of the deepest information on the US-China negotiations. Hatoyama diplomacy will be put to the test.

The Vagueness of his “Equitableness” Criterion

In order to enter into to full-fledged diplomatic negotiations, Prime Minister Hatoyama must clarify his standards for “equitableness” in a “equitable and effective international framework” (Prime Minister Hatoyama). If he is not ready to elaborate on the equitableness of his 25% reduction initiative and the mid-term targets of his counterparty compared, then he will not be able to press for a compromise and the Japanese public will have no means to judge whether the numerical target set forward towards the end of highly tense negotiations are acceptable or not. The executive members of the Democratic Party of Japan (DPJ) have emphasized since elections that they will see to it that Japan is not the lone loser.

Under the Aso regime, the Mid-term Target Committee and diplomatic policy, which advocated a sectoral approach, adopted “marginal reduction costs” (costs required to reduce an additional ton of CO₂. i.e. national energy or CO₂ efficiency) as criteria to determine equitableness. The figure below shows that according to analysis reports submitted by various research institutions to the Mid-term Target Committee, the marginal costs required by the reduction target of -15% from 2005 levels set forth by Prime Minister Aso was 150 USD/t-CO₂, whereas the marginal costs incurred by the recently announced initiative to reduce emissions by 25% compared to 1990 levels are drastically leaped to 621 – 1071 USD/t-CO₂. In comparison, marginal costs in other countries are only a couple of tens of dollars,

literally a digit less than that of Japan's. This apparently means that the equitableness of national burdens cannot be measured by simply comparing superficial mid-term reduction targets (shown in the most left column). The largeness of Japan's marginal costs imply that industrial cost reduction efforts and the "mottainai" culture in Japanese households have so successfully served to improve energy efficiency that all (low-cost) energy reduction opportunities have been exhausted, and only expensive methods remain.

Mid-term targets and their economic impacts: Japan finds itself in a class of its own

	GDP decline (as of 2020)	Marginal reduction costs (dollars/t-CO2)	Impact on household budget
EU (- 20% from 1990 levels)	-0.35%	54USD/t-CO2	- NA
Canada (- 20% from 2006 levels)	-0.4%	65USD/t-CO2	-4% electricity bill rise -2% gas bill rise
Australia (- 5 - 15% from 2000 levels; -25% with international agreement)	-1.1%	25USD/t-CO2	-0.2% disposal income additional 14,000 JPY annual decrease under new target electricity bill: 17,500 JPY annual increase gas bill: 7,000 JPY annual increase
US (- 17% from 2005 levels)	-0.13%~-0.57%	16~30USD/t-CO2	*household income: 8300 JPY ~ 10,400 JPY annual decrease
Japan (-25% from 1990 levels = -30% from 2005 levels)	-3.2% (Japan Center for Economic Research) ~-6.0% (National Institute for Environmental Studies)	621~1071USD/t-CO2	-360,000 JPY / year (incl. 140,000 JPY on energy bill)

(*1) US figured based on Environmental Protection Agency (EPA) data

(*2) Marginal reduction costs for Canada and Australia represent emissions allowance price envisaged in respective country

(*3) Exchange rate as of March 2009

American and European experts and researchers of global warming measures share the view that national global warming measures under the post-Kyoto framework would have to be limited to those that can be implemented within the marginal costs of 50-60 USD/t-CO2 in order to minimize negative economic impact; and hence, the profound astonishment of the international community at Prime Minister Hatoyama's proposal of reductions by 25%. All countries of the world know very well that Japan tops the world in energy efficiency, and therefore understand the political importance of the initiative but doubt its feasibility. Moreover, they are concerned that Japan will continue to bring up marginal cost-based criteria and demand more ambitious reduction targets of them. The EU cleverly contained Japanese demands by commenting that Japan's target had finally reached its standards. The US, which has yet to commit to a mid-term target, confined its

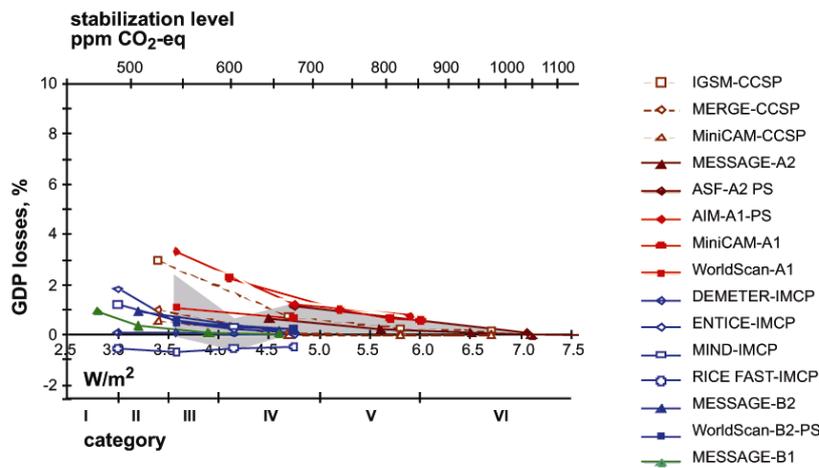
statement to expressing how impressed Obama was by the bold proposal, which can be taken both as a complement and as irony. Developing countries praised only Prime Minister Hatoyama's attitude, saying that the target itself was insufficient; they remain unchanged about not wanting to take any chances with binding reduction targets. In the end, all countries save Japan have maintained their stance that they will not make reference to anything that may put them at a disadvantage.

With little time left before Copenhagen, what are Prime Minister Hatoyama's diplomatic plans? If he continues to be ambiguous about what he means by "equitable," he will not be taken seriously by his counterparts. He has left us in the dark about his vision for "bridging" differences between nations with conflicting interests during the next two months – what will he demand of developed countries on what grounds and how will he involve developing countries? If he intends to abandon marginal reduction costs as criteria for equitableness, he must clarify his ideas about the new criteria, which will hold the key to gaining world leadership for Japan, convincing other countries to follow Japan in adopting similar targets, but never serve as grounds for reduction allocation and cost sharing that would put Japan at a disadvantage. Otherwise, his return to a top-down approach will be pointless. If negotiations end with Japan left holding the bag, then it will be the Kyoto Protocol all over again, and Japan will be named the awkward negotiator for good.

Ignoring Environmental and Economic Balance

In the figure below, the horizontal axis represents the CO₂ equivalent of GHG stabilization concentration, and the vertical axis, GDP loss. All the models provided show that the farther left we move on the graph, the larger the GDP loss. This implies that the lower the stabilization concentration level, or the more stringent the reduction target, the higher the economic costs incurred; and thus, economic growth is hindered. In implementing global warming measures, both developed and developing economies are faced with the dilemma of achieving the economic growth required for higher living standards, while somehow reducing the consumption of fossil fuels, which are essential for our livelihood. Had Prime Minister Hatoyama appealed that this was the very reason that "political initiative" was the only solution, he might have sounded more logical.

Hindered economic growth is inevitable to achieve stringent target



(Note) Line graph represents economic models for 2030

(Source) IPCC Fourth Assessment Report

However, by claiming that no such dilemma exists, not only is he abandoning accountability, he is also deceiving the Japanese public, abusing our trust in the administration. He states that his initiative to reduce emissions by 25% from 1990 levels reflects “what science says is needed” according to the Inter-governmental Panel on Climate Change (IPCC). However, the IPCC is an analytical body and does not call for anything. If the prime minister insists on basing his policy on analyses conducted by the IPCC, he will not be justified for closing his eyes to the “adverse economic effects of reduction targets” also analyzed and released by the IPCC.

Prime Minister Hatoyama lays an emphasis on how Japan brilliantly overcame the oil shock – how Japan turned adversity into advantage and focused all its efforts into developing energy efficiency technologies and products, thus putting itself on a new track to growth. His contention that we can surely find our way on a similar path this time as well would seem plausible, but it should not be forgotten that Japan’s recovery from the oil shock owed mainly to fiscal-monetary policy, a macroeconomic solution. Individual industries and companies overcoming economic constraints and securing aggregate demand to support an entire economy are fundamentally not two sides of the same coin.

That being said, we return to the issue of technological development. The economic models from a handful of research institutions that have been employed in the Mid-Term Target Committee have already incorporated the robustness of the Japanese economy. The problem is that even with our sturdy economic model, analyses show that a 25% reduction target will inevitably be a tremendous blow to

the economy.

CO2 intensity improvement required for both economic growth and compliance with mid-term target

	Mid-term target under Aso regime	Mid-term target under Hatoyama regime	Past trends		
	-15% from 2005 levels	-25% from 1990 levels (-30% from 2005 levels)	1970-80	1980-90	1990-2000
Annual improvement rate	2.6%	4.2%	2.5%	1.7%	0.4%
Improvement rate for entire period (2005-2020 unless otherwise indicated)	33%	47%	23%	16%	4%

The mid-term target on the left side of the chart above proposed by former Prime Minister Aso hinged on fully harnessing Japan's strength in technological development. Under a mid-term target to reduce emissions by 15% from 2005 levels, the annual energy-derived CO2 intensity per GDP (an indicator representing how much economic value can be generated without emitting CO2) must be improved by 2.6% in order to achieve both environmental and economic goals. This figure is comparable to the intensity improvements (technological improvements, equipment installments) achieved by Japanese industry in the 1970s in the midst of the oil shock.

However, the intensity improvement rate remained stagnant during the 1980's and 1990's, when the low-hanging fruit had all been picked, with energy efficiency technologies having reached saturation and investment opportunities for energy efficiency having decreased. Given the circumstances that is now a hard challenge to achieve even a 2.6% improvement rate, if reductions by 25% from 1990 levels becomes a formal target, it will be substantially impossible in technological terms for Japan to achieve the required intensity improvement by 4.2% annually in order to pursue economic growth as well. Concerns from the business community regarding a 25% reduction target have not aroused from a lack of confidence in their technological development potential but are grounded on the judgment that it cannot be achieved through technological development alone but only by dampening economic activity

Needing to Come to Face with Public Burden

The new regime's 25% reduction initiative has neither been considered through a formal process in the government nor has it been exposed to public debate. Hence, its quantitative impact on public debate has not yet been brought to light. Climate change policy is linked with all dimensions of the work and daily lives of consumers and voters. The government should appropriately disclose information and fulfill its accountability.

When the government decided to ratify the Kyoto Protocol, it failed to deliberate on significant issues, including how much public burden would be incurred by ratifying the Protocol, if energy prices would rise, or if taxes would be used to purchase credits from overseas. Any politician would surely want to avoid explaining to the public, "No public burden, no compliance," and instead preach that it is indeed possible to implement effective climate change measures that do not entail national burden at all."

However, even the LDP regime led by Prime Minister Aso, with elections just around the corner, announced directly to the Japanese public the need for a contribution of 76,000 Yen (about US\$844) per household per year. Now that the governing party has changed, if a new mid-term reduction target of -25% should be formally adopted, new analytical results ought to be exhibited along with a description of the analytical process, set against the burden share of 360,000 Yen (about US\$4,000) per household determined in the Mid-Target Committee under the former regime.

In reality, as many public polls have indicated, although many people are highly interested in environmental issues, there are not as many who are ready to sacrifice large sums to alter their lifestyles. "360,000 Yen per household" was not derived to construct a negative campaign against climate change policy, but with the aim of illustrating for people who are not willing to voluntarily change their current lifestyles for the sake of coping with climate change, the scale of economic burden to be experience in a forced lifestyle change.

The costs incurred with climate change policy invariably causes energy prices rises. Energy being a common necessity, only regressive effects on income distribution and regional disparities can be expected. The new Hatoyama regime is required to analyze the public burden related to its 25% reduction initiative in an open process and seek wide and informed public consensus of its essentiality and rationality in diplomatic terms.

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