

A Carbon Tax or an Environmental Tax Reform: Difficult Decision for Japan

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Summary

For a world citizen familiar with efficient Japanese high-tech products, it may be a bit of a surprise that Japan emits yearly 8% more greenhouse gases than the base year of the Kyoto Protocol. In fact, the ability of its government to realize an effective climate policy is limited, unlike the innovative performance of its business.

The Ministry of Environment Japan has presented its own Carbon Tax proposals three times since 2004 in vain, because of lacking civic support, a resistant business lobby and the Finance Ministry's indifference. Proposed is a low-rate carbon tax earmarked for anti-global-warming measures. Actually, this proposal is the fruit of the internal discussions of several working groups in the Environment Ministry, which have studied theoretical and practical aspects broadly, including the research of foreign examples and several simulation studies, since the late '80s. Interestingly, any environmental tax reform (ETR) scenario which can result in a "positive double dividend" has *never* been tested in these experiments.

The Carbon Tax of Japan is now in a political stalemate. But, in view of our aging society, the shift of taxation from labor to environment is very important. The resistance of industrial lobbies, such as Keidanren, is the most crucial factor which has blocked the implementation of the carbon tax, but interestingly, the Japan Association of Business Executives basically approves the idea of ETR. Although some NGO members presented their proposals on ETR, most of the other groups are not much interested in economic solutions to environmental problems. According to the newest government's own opinion poll, the proponents for the carbon tax have increased to 40.1%, while 32.0% of the population is against. However, more than 70% of the proponents prefer the *total* revenue earmarking for anti-global-warming. These facts show the necessity of better public understanding on ecological tax reform.

Introduction

In spite of the glorious appearance as a leading country for sustainable technology, symbolized especially by the hybrid automobiles, Japan lacks political will and leadership to reduce the emission of greenhouse gases (GHGs). In 2005, Japan has emitted 7.8% more GHGs than 1990 level, although it has to cut the amount by 6% from 1990 level. While many European countries are on the track to meet the Kyoto-Target of 2008 to 2012, especially by adopting several market instruments such as the environmental tax reform, CO₂ emissions trading system or feed-in tariff system for renewable energies, Japan relies still now on the politically easy measures such as the industrial voluntary action or civic action, and sometimes some types of command and control. This paper discuss about the characteristics and history of the recent carbon tax proposals by the Ministry of Environment Japan (MoEJ) and try to make clear the problems of Japanese climate policy.

Japan's Review of the "Kyoto Achievement Plan"

On Aug. 10th 2007, the Joint Committee of Central Environmental Council and Industrial Structure Council has published the Intermediate Report for Review of the Kyoto Achievement Plan. According to this report, it is not possible to meet the target unless Japan adopts more effective political instruments. But, in the committee's proposal, instead of the effective market instruments such as carbon tax, the Appeal for the Civic Action ("Team Minus 6 Percent", "let's cut 1kg CO₂ per person per day") is one of *the core of Japan's GHG reduction policy*. It is actually the symbol of Japan's poor environmental policy¹. Other main measure is the wider and stronger "Voluntary Action" of industry *and service*, but there is no official penalty for nonperformance. And, for the *public* building, the support for greening or solar power is proposed. But under the Japan's support scheme based on very weak RPS system², Japan's renewable market has almost no prospect. On the other hand, government is willing to tighten the Energy Saving Law for building, which may be one of the effective command and control measure. Above all, the government wants to reduce GHG by higher use of nuclear power, on the very unrealistic utilization rate of 88%, but average utilization rate in last three years was only 70%. And after the severe earthquake attack on Nuclear Plant Kashiwazaki Kariwa, the contribution of atomic energy as a measure to reduce GHG

¹ The MoEJ pays 2.7 billion yen (ca. 17million Euro) annually to a single major advertisement company Hakuodo for total planning and management of this campaign.

² Japan's renewable portfolio standard (RPS) system is a variation of the quota & tradable green certificate (Quota/TGC) system, which is less successful than Feed-in tariff (Commission 2005). Japan's target is the renewable electricity share of only 1.6% until 2014.

became more and more uncertain. But, in today's political situation in Japan, it is very unlikely that an emissions trading scheme or carbon tax will be introduced. Ultimately, there may no option for politically impotent Japan other than to purchase reduction credits abroad by dipping into the debt-ridden public coffers.

What is wrong? Although strong protest of industrial lobby (especially the Keidanren) is very hard, but greater problem is that, people, both policy makers and ordinary people, don't understand the very basic law of environmental economics.

Fiscal Instruments as means to reach the goal

We all know, in order to prevent the climate change, we mainly have to reduce the emission of greenhouse gases (GHGs) such as carbon dioxides by reducing the consumption of fossil energies. Many people think that the solutions to do it is for example to apply cleaner production process to the industry, to introduce more renewable resources for energy supply, to buy low emission vehicles, or to change our house and building more efficient by heat insulation or with more efficient appliances. Yes, daily action to save the consumption of energy by switching off the idle equipments or setting the temperature of the air conditioner higher (lower) in summer (winter) is also indispensable. But, is it really appropriate to treat these as *solutions*, or the "first means" to reach the goal? We cannot change the mind and lifestyle of people only by persuasion or sermon. Very small part of the population may be willing to do good for the earth *at their own expense*. And, a manager of a company can hardly persuade the stakeholder of "excessive" voluntary pollution abatement which makes no (or negative) profit or which does not appeal to the customers.

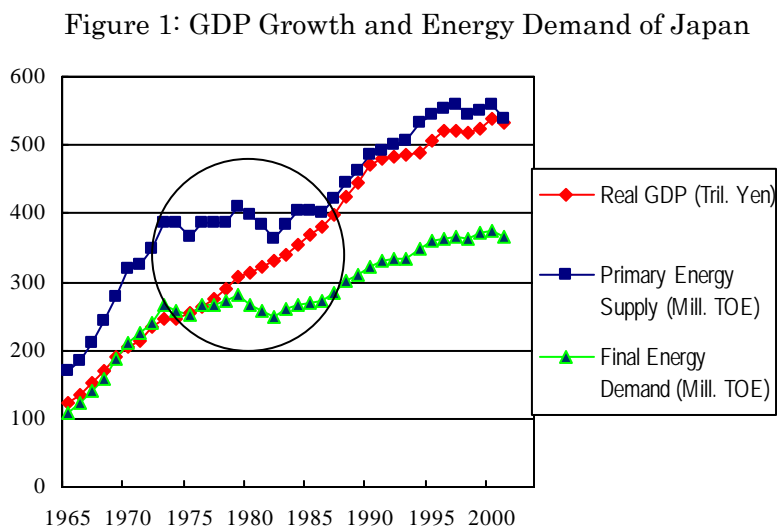
Apparently, we indeed need means to realize these solutions. We need effective instruments which can change the incentive structure of individuals and firms, that is, which can reward any environmentally positive initiatives of any member of our society. These means must be policy-instruments such as command and control (with penalty), subsidy, eco-tax or emissions trading etc. to promote the diffusion of existing technologies, rather than (often unprofitable) new technologies or moral suasions. In this paper, we focus on the fiscal instruments such as environmental taxation.

The Key is "Price"

As we know, in the market economy, the demand and supply of any good are adjusted by the price mechanism. According to the law of demand, one of the most basic theses of economics, consumers reduce the amount of goods of which price increased. Energy, which is strongly related to the several environmental damages such as the climate

change or air pollution, is no exception. Although energy demand is fairly inelastic, in other words, is not flexibly react to the price change at least *in the short run*, economy with high price consumes less energy. Here you can see an example.

Figure 1 shows the development of Japanese economy and energy demand. At the first glance it seems that the Real GDP and Energy Demand have grown in parallel. But the circle shows that after the 1st and 2nd oil crisis when the price of crude oil skyrocketed, the consumption of en-



Source: EDMC (2006)

ergy in Japan has stagnated although the economy has continuously grown. It makes us clear that development without energy consumption growth is possible, conditioned by the high price of energy.

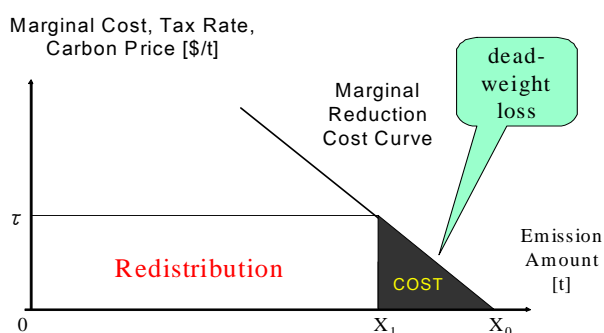
According to the book “Factor Four” published in 1995 by E. U. von Weizsäcker, Amory B. Lovins, L. Hunter Lovins, we can improve the resource efficiency of our society at least as high as four times. They have shown persuasive 50 examples of Factor 4 technologies *which already exist*. And they emphasized the importance of increasing resource/energy price to promote the *penetration* of these technologies. As we know, only a tiny part of these technologies which have existed ten years ago have penetrated into our market. Clearly there exists a barrier for it.

The price has to show the environmental reality, otherwise cheaper but environmentally harmful goods and production processes remain beneficial. Greater problem is the investment on energy-inefficient houses or infrastructures which cannot easily be scrapped in the future. Therefore, the ecologically true price signal should orientate the technical development, society’s structure and people’s behavior into the right direction. In addition, the price should increase strongly, steadily but slowly so that people can have stable vision of the future and time to adjust themselves. This can be realized by the environmental tax (or the “eco-tax”).

On the “Instrumental Illusion”

As we see, eco-tax has been not popular. It seems that most people in the world believe that eco-tax is a burden and it hinders the economic development. On the other hand, it seems most people believe that the emissions trading is a chance and it brings them profit. But, I believe, it is just an illusion, which I call “instrumental illusion”. *Under the assumption of the rationality and market efficiency*, the GHG reduction cost for the society (or “deadweight-loss”) is the same (Figure 2). It is determined not by the policy method but by the amount of reduction. In this meaning, tax and emissions trading are *equivalent*. Different is only the result of redistribution. By tax, tax revenue can, differently from the case of high crude oil price, be recycled into the economy in several ways. That is, the taxpayers receive the revenue back. By emissions trading, polluters

Figure 2: Reduction and Economic Cost



don't have to pay tax, but there will be financial give and take between them. In both policies, somebody wins, somebody loses, because the redistribution is a zero-sum game.

Then, are these two methods in practice equivalent? No, tax is in several respects far better. Firstly, the Emissions Trading is applica-

ble only for large polluters, because it requires the strict monitoring of emission. Secondly, by emissions trading, fair allocation is almost impossible and there will be many *innocent* losers. Thirdly, uncertain carbon price makes people myopic and discourages many reduction activities, while fixed tax rate would encourage them. In fact, Emissions Trading have dilemma, if many firms reduce their emission in order to make money by selling reduction credits, the carbon price will go down and they will be penalized by doing a good thing. Finally, by tax it is easier to take measures to reduce the number of losers, by reduction of other taxes, by lower tax rate or exemption for energy intensive businesses etc. Recently, some major economists argue that the international carbon tax is systematically better and easier to arrive at an agreement than global cap and trade as a Post-Kyoto Scheme (Nordhaus 2005, Stiglitz 2006, Mankiw 2007).

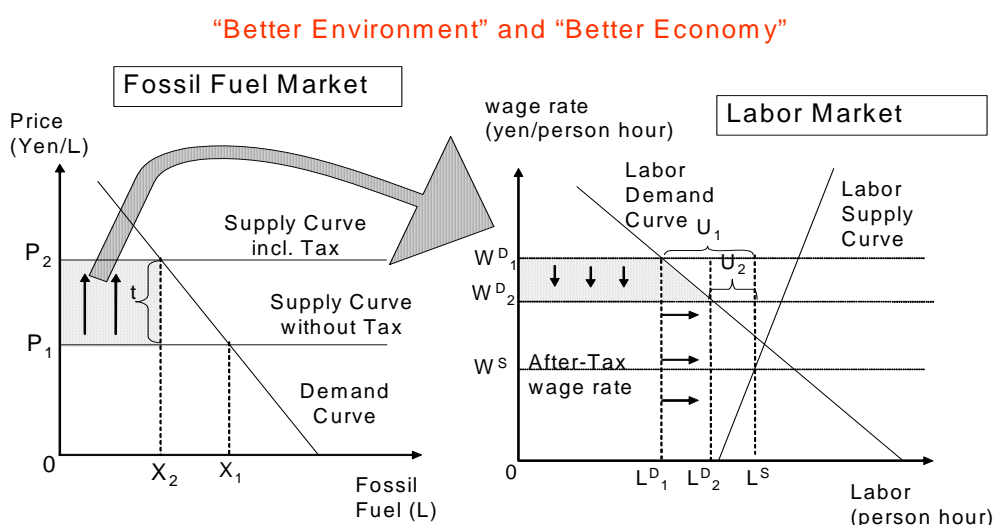
In short, the carbon tax is more effective and fair than Emissions Trading. On the other hand, one of the greatest disadvantages of the carbon tax is that it is not (yet) popular, again because of the instrumental illusion.

The Environmental Tax Reform with the “Double Dividend”

As mentioned, the energy price should increase strongly, steadily but slowly in the long run. Therefore the energy (or carbon) tax rate must be fairly high in the future. It will generate the tax revenue as much as value added tax or income tax. Although desire of an Environmental Ministry for its own financial resource is understandable, it is not a good idea to make it legally binding to use *whole carbon tax revenue* to subsidize the individual action for environmental protection. The revenue should flow into general budget to build the welfare system which will be necessary for Japan in the future, or to reduce other financial burdens of firms and households.

The Environmental Tax Reform introduced in some major European countries is a good alternative. In this concept, the higher carbon/energy tax leads to no increase in overall tax burden, because the tax revenue is used to reduce other tax (revenue neutrality). In other words, it is only a shift of tax base from *goods* (labor income or corporate profit etc.) to *bads* (damage to environment or use of precious resources).

Figure 3: The Theory of “Double Dividend”



Source: Park (2004b)

One of the very important theoretical basis which supports this policy is the so called “double dividend hypothesis”. It says, higher eco-tax brings better environment (the first dividend) and lower conventional tax brings higher economic welfare by removing the tax distortion (the second dividend). Figure 3 shows how the carbon tax revenue can be spent to cut the labor tax (or social security contribution) so that the employment increases ($L^{D1} \Rightarrow L^{D2}$).

Until the beginning of 1990s, double dividend was taken for granted (technically, *Pigouvian Effect* [PE] and *Revenue Recycling Effect* [RE] are both positive; in detail, see Goodstein 2003). In the middle of 1990s, another effect is focused on by skeptical economist (Bovenberg, Parry or Goulder etc.). According to their theory, the inflation induced by higher energy price lowers the real wage, so that the labor supply reduces (so-called *Tax Interaction Effect* [IE], $IE < 0$) and economic welfare diminishes ($RE + IE < 0$). Although there is a consensus on *weak double dividend* among economists (to reduce other tax by the carbon tax revenue economically more efficient than to spend in another way; $RE > 0$), but *strong double dividend* (positive economic effect, $RE + IE > 0$) is controversial. Since late 1990s, some cases are discovered where the *strong double dividend* occurs even if IE is negative, especially the case of the labor market disequilibrium (involuntary unemployment). In 2003, Goodstein (2003) gave a strong counterargument against the “tax-interaction theory”. 2005, it is discovered by Kobayashi (2005) that *strong double dividend* is possible if the earning of households comes not only from the labor income.

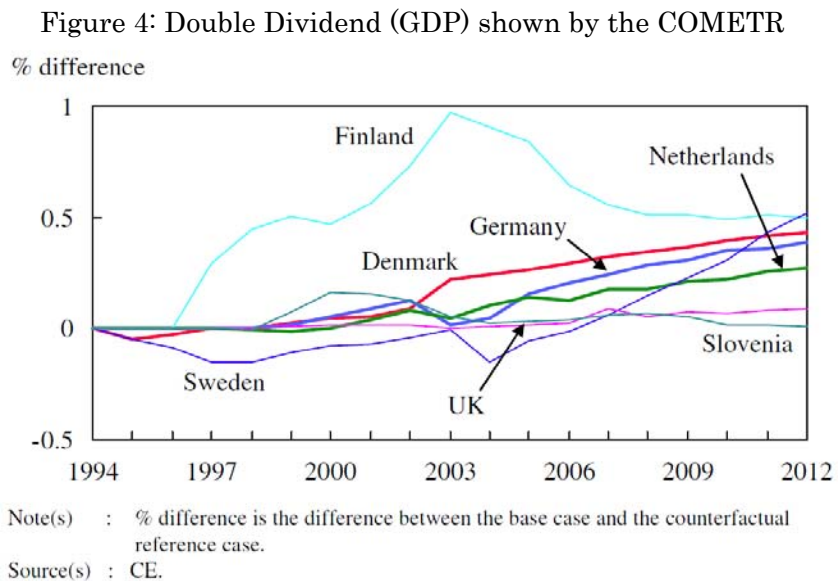
Note that, although environmental tax reform is believed to be harmful for international competitiveness of the domestic heavy industries, it is usual in precedent practices to give a special treatment for them, easing the potentially negative impact of the reform for them.

Table 1: European Examples of the Environmental Tax Reform

<i>Land (year)</i>	<i>Use of Revenue</i>	<i>Land (year)</i>	<i>Use of Revenue</i>
Finland (1990)	General Budget (reduce Income Tax)	Netherland (1990)	General Budget (partly subsidy)
Sweden (1991)	General Budget (reduce Income Tax etc.)	Germany (1999)	Reduce SSC (90%) (partly subsidy)
Norway (1991)	General Budget	Italy (1999)	Reduce SSC (60%) Compensation 30% subsidy 10%
Denmark (1992)	General Budget (reduce SSC etc.)	UK (2001)	Reduce SSC

In fact, in spite of controversial theoretical discussion, many European countries have already adopted the environmental tax reform pursuing the double dividend since early 1990's (Table 1). And several empirical or numerical study show results with strong double dividend. Ex-post studies of German and British Environmental Tax Reform have shown that the double dividend was realized (Bach et al. 2002, Ekins & Etheridge 2006). According to the estimation by German Institute for Economic Research (DIW), employment has increased as much as 250,000. The COMETR Study supported by the

EU has shown based on real historical data of seven European countries (including the special treatments for energy intensive industries) and on the E3ME model of Cambridge Econometrics that “double dividend theory can no longer be rejected in practice” (Andersen 2007). Besides, for Japanese economy, Park (2004a) shows the possibility of strong double dividend using the computable general equilibrium model.



The Carbon Tax Proposals of Japan’s Environmental Ministry

Environmental Ministry of Japan (MoEJ) has made it’s concrete proposal three times (in vain) since 2004 (Table 2); “A Concrete Proposal for the Environmental Tax” of Nov. 5th 2004, “A Concrete Proposal for the Environmental Tax” of Oct. 25th 2005, and “Greening the Budget for Anti Global Warming” of Nov. 22nd 2006.

As you see, these proposals are the combination of very low carbon tax rate (with almost no incentive to reduce the use of fossil energy) and subsidies on climate protection (such as renewable energy or isolation of building) and on measures for forestry³. The MoEJ claims that, in comparison to the high carbon tax which is enough to induce all economic actors to cut the CO₂ significantly, its plan will achieve equivalent reduction with lower economic costs. But we should doubt it, because the government cannot allocate the financial resource as efficient as the market (Figure 5 and 6).

³ Japan will be certified up to 3.9% reduction if it properly manages (or spends money to) their forest (carbon sink activity).

Table 3: Japan's Carbon Tax Proposal

	Proposal 2004	Proposal 2005	Proposal 2006 with LDP's environmental committee.
Tax Rate	2400 Yen/t-C (c. a. 20\$/t-C) (654 Yen/t-CO ₂ , 5.45\$/t-CO ₂)	2400 Yen/t-C (654 Yen/t-CO ₂)	2400 Yen/t-C (654 Yen/t-CO ₂)
Revenue (Industry: Service: Household)	490 Bill. Yen 150: 200: 140	370 Bill. Yen 160: 110: 100	360 Bill. Yen
Use of Revenue	Subsidy for Climate Protection and Forestry (340) Reduction of Social Security Contribution (150)	General Budget But: Subsidy for Climate Protection and Forestry	General Budget But: Subsidy for Climate Protection and Forestry
Special Treatment	Steel; Agriculture, Forestry, Fishery (Exemption); Heavy Industry; Diesel; Small Firms and Household (Reduction etc.)	Steel (Exemption); Large emitter which performed reduction activity (50% Reduction) Kerosen (50% Reduction) Motor Fuel (put-off)	Steel; Fishery (Exemption); Large emitter which performed reduction activity (80% Reduction) Kerosen (50% Reduction) Motor Fuel (put-off)

Figure 5: Market can AUTOMATICALLY achieve the efficient reduction

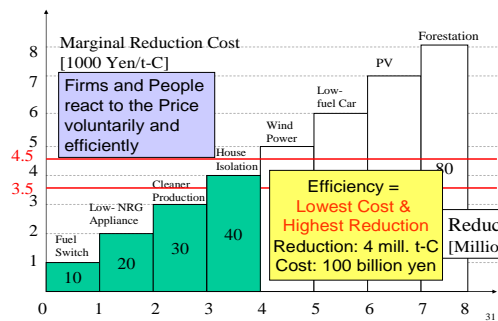
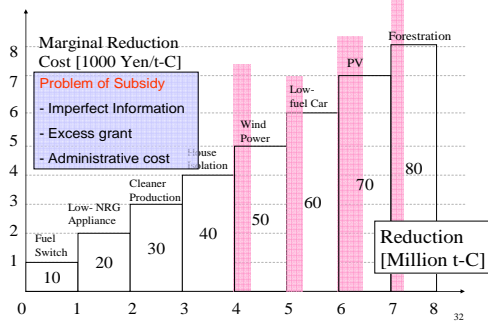


Figure 6: Government cannot be as efficient as the market.

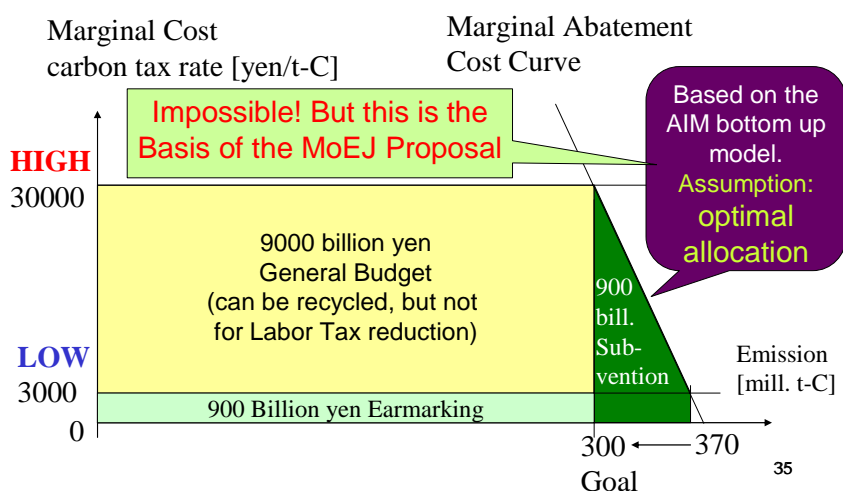


In the market, firms and people react to the price voluntarily and efficiently, achieving highest reduction by lowest cost. However, as the government cannot have the perfect information of where and how much is the potential reduction possibility, it can excessively subsidize *remarkable* but *expensive* reduction plans (such as the “Team Minus 6 %” by Hakuhodo, see footnote 1). In addition, merely to give grant to a firm requires fairly high administrative costs. Therefore, to give subsidies in this way is perhaps worse than to buy foreign reduction credits of which reduction is verified. Besides, this proposal is just a tax hike unlike the environmental tax reform, and we should contemplate whether we permanently earmark the revenue even if the carbon tax rate shall be higher and higher, bringing more and more revenue.

The carbon tax proposal of Japan has a long history. It was discussed since early 1990's in consecutive working groups of MoEJ. They have narrowed the policy options to

mainly two different concepts: high tax rate (about 30000 yen/t-C), or low tax rate (about 3000 yen/t-C) combined with subsidies (originally about 1 trillion yen) (Figure 7). Some of the members have performed several simulation studies (especially with famous AIM end-use model), showing the advantage of the low-rate option with subsidy under the assumption that *the carbon tax revenue will be granted efficiently* (Central Environment Council 2003). But it is a sweet illusion as explained above. Although they have reviewed precedent European cases, they have never seriously calculated the possibility of “double dividend” scenario. As a result, very few policy makers and almost no people know what an environmental tax reform is like. I suspect it is because the Environmental Ministry cannot have a special budget at its own disposal if the double dividend theory is proved. If this suspect is true, this proposal is not “fiscally pure”.

Figure 7: High Ecotax vs. Low Ecotax with Subvention;
Idea of MoEJ based on „AIM model“



In addition, they preferred lower tax because it may ease the resistance against carbon tax. That is partly true (as we see later), but in the real political process, the low tax rate and additional special treatments couldn't ease the resistance of the industry so far. They set their heart not only against environmental tax but also emissions trading (in some ways, can it be said that Japan's industrial lobbies do not embrace the instrumental illusion?). Anyway, lack of understanding on effective policy measures among policy makers and general public hindered the breakthrough of market instruments, even though it is clear that Japan cannot meet its Kyoto-target without them.

Revenue sources in the Aged Society Japan

Japan is the top aged society in the world in 2007. According to the UN's *World Popu-*

lation Aging 2007, the percentage of population aged 60 or over is 27.9% (rank 1), followed by Italy (26.4%, rank 2) or Germany (25.3%, rank 3). The USA is far below (17.2%, rank 43). For the sake of well-being of the elderly, Japan has to prepare a variety of hard and soft social infrastructures, such as sound pension scheme, nursing-care system or user-friendly public transportation system. The government of Japan cannot avoid to raise the revenue per tax, although it is needless to say there is a huge amount of wasted public resources to be saved. The level of general budget's dependence on public bonds was 44.6% in 2004, which is declined to still high level of 30.6% in 2007. The accumulated amount of public bonds (central and regional) is 148% of the GDP, which is markedly higher than Italy.

In this context we have to contemplate on the structure of the public revenue. Developed countries such as Japan or Germany today rely heavily on “goods”-taxation, that is, on tax on labor, capital or consumption goods (Table 4). Especially, the tax on labor has negative incentive both for firms to employ less labor and for workers to work less, which is counterproductive for constructing a sound welfare society. In the future, the public finance of our society should rely on “environmental” tax bases (or “bads”), in other words, should shift the tax burden from goods to bads, in order to bring out the creative human power and to ease the environmental problem at the same time. This is what the idea of the environmental tax reform aims in the long run.

Germany has finally begun to change the trend with the Ecological Tax Reform in 1999, increasing the share of environmental taxation by 2005.

Table 4: Revenue share of Tax/SSC on each production factors in Japan and Germany

	Japan (1970)	Japan (2000)	Germany (1998)	Germany (2005)
Factor Neutral	16.4%	19.1%	16.4%	16.6%
Environment	7.8%	6.2%	7.0%	8.5%
Capital	39.1%	27.1%	11.3%	11.1%
Labor	33.9%	47.6%	65.3%	63.8%

Source: Park (2003) and newest calculation by B. Meyer (BMU). Factor neutral: tax on ordinary products; Environment: tax on energy or environmentally harmful products; Capital: tax on corporate profit and individual income from capital; Labor: labor income tax and social security contributions

Power Balance of the Environmental Tax Reform

1) Ministries

In the political decision making system, the role of ministerial bureaucrats are crucial. About 85% of the recently enacted bills are cabinet laws most of which are practically designed by government officials in different ministries⁴. Policies are discussed in sev-

⁴ Source: a record of submitted and enacted bills by Cabinet Legislation Bureau (<http://www.clb.go.jp/contents/all.html>).

eral committees, councils or working groups inside of the competent ministry, and members of them are usually selected not by parliament members but by ministerial officials. This selection process factually determines the direction of the discussion. Because of the well-known vertically divided administrative functions (“tatewari”), it is fairly hard to harmonize the interests of ministries. For highly multifaceted political issue such as the environmental tax reform, it requires inter-ministerial cooperation between competent ministries such as MoF (Ministry of Finance), METI (Ministry of Economy, Trade and Industry; competent for energy policy), MLIT (Ministry of Land, Infrastructure and Transportation; competent for spending of gasoline tax revenue), MAFF (Ministry of Agriculture, Forestry and Fisheries of Japan) or MoEJ (Ministry of Environment). But it is very hard to harmonize their interests. As mentioned, the carbon tax proposal was made by MoEJ. While MoEJ and MAFF made coalition for the carbon tax proposal of MoEJ, the METI is strongly against eco-tax reflecting the interest of its patron (“industry”), and the MoF seems not very active for the implementation of the carbon tax recently. Although the Government Tax Commission (in the Cabinet Office, virtually managed by the MoF) has been fairly pro-eco-tax under the former chairperson Hiromitsu Ishi (a fiscal scientist known by his book on eco-tax), today the commission can only mention the necessity of the further discussion on carbon tax.

Table 5: Budget of Ministries related to the Environmental Tax Reform* (F. Y. 2007)

Ministry	from General Budget tril. yen (bill. EURO)	Special Budget under Control one-tenth billion yen; Name of the Account)
MAFF	2.42 (6.4)	44130; items... 32943 (food stabilization) + 1252 (agricultural mutual aid) + 128 (forestry insurance) + 4591 (national forest) + 179 (fishery ship reinsurance) + 5037 (national land improvement)
METI	1.03 (38.5)	27992; items... 22404 (energy) + 2267 (power resources) + 2131 (trade reinsurance) + 1190 (patent)
MLIT	6.16 (15.1)	56627; items... 430 (urban fund) + 9452 (flood control) + 36178 (road) + 3223 (harbor) + 5660 (airport) + 819 (automobile liability insurance) + 539 (automobile inspection) + 326 (special government property)
MoEJ	0.22 (1.4)	337; items... 337 (energy)

*Except for the Ministry of Finance. Some amount of the resource from general budget and special budget can be overlapped. 1 EURO=ca. 160 yen.

Source: Ministry of Finance, author’s own calculation.

Table 5 shows the relative financial power of ministries and why MoEJ longed the support of the MAFF which is interested in the carbon sink policy. In fact, the revenue of the above-mentioned carbon tax proposal (360 or 490 billion yen, ca. 2.2 billion Euro) is very small compared to the Special Account for the Road Improvement (3.6 trillion yen). In Japan, the revenue from tax on automobile fuel (gasoline etc.) is bound to this account and can never be spent on other public purpose than to pave the road (some-

times futilely) in spite of the deficit of the general budget. The MoEJ shall demand only about one tenth of this special budget to do what they allege to be effective for the climate protection even if the carbon tax is impossible⁵.

2) Political Parties

In the post-WWII Japanese political system, the LDPJ (Liberal Democratic Party Japan) has always been dominant (except for very short period in the 1990s), and have made symbiotic relationship between the bureaucracy and business (the so called iron triangle). LDPJ has even its own Tax Committee which is as powerful as Government Tax Committee. However, LDPJ is not monolithic but has some “Habatsu” (factions) and many “Zoku-Giins”, that is, diet members who act in the interest of certain government ministries and industries they regulate and benefit from their efforts. Therefore there is pros and cons of the carbon tax in the LDPJ reflecting the interest of ministries (MoEJ-MAFF axis or METI-MLIT ally) or business concerned, so that it can not (yet) express the common position.

Opposition parties express favorable opinion to the market-based environmental policy measures. Especially the Democratic Party, which has won the position of the top party in the House of Councilors at the election of July 2007, expresses support for the idea of Emissions Trading, and began to discuss about an automobile carbon tax in exchange for the earmarked automobile fuel taxes in the DP Tax Committee. But the Democrats and other opposition parties alike do not have their concrete proposal, and in today’s situation it is not likely that the eventual victory of them in the next election of the lower house leads to the implementation of the Carbon Tax, not to mention the Environmental Tax Reform.

Table 6: The Position of Parties and Their Seats in two Parliaments

	Environmental Position	Seats in the House of Representatives	Seats in the House of Councilors
LDPJ	ambiguous	305*	84
Komeito	ambiguous	31*	20
Democratic Party (DP)	for ETS and Carbon Tax	113	112*
Communist Party	for Carbon Tax	9	7
SDPJ	for Carbon Tax	7	5
People’s New Party	ambiguous	6	4
independent	NA	9	10

*The ruling party in the respective House.

Source: Surveys by several civic groups such as JACSES, ECOLO-Japan or the Promise-of-KYOTO.

⁵ The newest Environmental Minister, Ichiro Kamoshita, has demanded a part of the Special Budget for Road Construction (Mainichi Shinbun 2007/9/27).

3) Business

The most influential Japanese business organization is the Nippon Keidanren which consists of 1,662 members such as 1,343 companies, 130 industrial associations, and 47 regional economic organizations (as of June 22, 2007). Although members are not only the energy intensive businesses (such as cement, steel, paper or chemical), Keidanren (over-)represent the interest of the industries supplying and demanding great amount of energy when it comes to the issue eco-tax. This federation is dead set against any “dirigiste approach” such as environmental tax or emissions trading (in a sence, they don’t embrace the instrumental illusion). The history of Keidanren’s protest against eco-tax dates back more than ten years. In Nov. 1996, Keidanren and the Federation of German Industry (BDI) announced the Joint statement on Global Warming Prevention which criticize the carbon tax and, as a familiar story, advocated for voluntary actions. As mentioned above, the voluntary actions of Keidanren has become one of the pillars of Japan’s *official* non-market-based policy to achieve the Kyoto target, while in Germany the EU-ETS has been established as the main environmental policy instrument for the industrial sector.

The Japan Chamber of Commerce and Industry (ICCJ) has taken also similar position. 60 groups including ICCJ, Keidanren and National Federation of Small Business Associations held the “Indignation Meeting against New Tax arrogating the Eco-Tax” on Dec. 9th 2004, in which also about 100 parliament members took part. In short, low-rate carbon tax with special treatment for industry couldn’t ease their protest.

Rather exceptional is the position of the Keizai Doyukai (Japan Association of Corporate Executives) which consists of 1400 corporate executives who take part in this group as an individual. Although the political power is not as strong as Keidanren, its opinion is not negligible because many members are representatives of famous major companies. It has expressed a favorable opinion on a revenue neutral carbon tax in the position paper in Jan. 2006 under the former chairman Kakutaro Kitashiro. In fact, he was skeptical about the earmarked carbon tax a la MoEJ. The present chairman Masamitsu Sakurai has also advocated personally in favor of the carbon tax (*Voice* 2007).

4) Civil Society

Although most people in Japan tend to believe that moralistic individual effort (such as the Civic Action “Team Minus 6%”) will “save the earth”, some civic groups realized the necessity of effective (market-based) regulatory system. Above all, the Carbon Tax Study Group (consists of members from NGOs such as the JACSES, Kiko-Network, Study Group for the Sustainable Society, Green Forward and WWF Japan) has played

the leading role in preparing for the arena of discussion between policy makers, citizens and business leaders. It has been studied the theory and practice of the Environmental Tax Reform and been making its own proposal similar to the European practice (high-tax-rate and revenue neutrality) since 2001. Some other climate protection groups are also interested in the market based policies. While WWF Japan has made its proposal for the Domestic Emissions Trading in March 2007, Kiko-Network, ECOLO-Japan or the Promise-of-KYOTO have conducted several electoral surveys on the candidates or political parties and gave information to the voters on who and what party are for the implementation of the effective regulatory instruments such as the carbon tax. However, their activity is known to few people. Other environmental NGOs seem not interested in economic solution to the environmental problem, and the implementation of environmental-economic instruments has never been the focal issue of the newest election of the Upper House in July 2007.

On the other hand, public support for the Carbon Tax is strengthened (may be because of the increasing temperature and recent weather anomalies). According to the newest public-opinion pole by the Cabinet Office in August 2007, the proponents (40.1%) finally⁶ exceeded the opponents (32.0%), and yet strong majority (70.9%) of the proponents would like the whole amount of the revenue to be spent on the anti-global-warming measures (Cabinet Office of Japan 2007). The concept “revenue neutrality” or “the double dividend” is (naturally) outside the scope of the survey. For your information, only 24.8% of the respondents were for while 32.4% were against in the same survey in 2005.

Conclusion

The implementation of an environmental tax reform faces very high hurdle to jump in Japan. People believe that non-economic approach such as moralistic civic action, industrial voluntary action or subsidy managed by the Ministry of Environment is effective method available without burden. It is not surprising because the economic theory behind the environmental-economic measures is fairly hard to convey and to be understood. But as the weather shows anomaly seemingly caused by anthropogenic global warming, it will be inevitable to implement some truly effective regulative or economic instruments. What we need now is, rather than just to give people a sermon to save the climate, to give better understanding of the policy measures, first of all the tax shift

⁶ Although there have been majority support for the carbon tax according to the questionnaires conducted by the MoEJ, they have been somewhat biased in terms of sampling of respondents.

approach which is proved to be effective and beneficial for the economy. Although industry's protest is very strong, majority of Japanese people (including businessmen) want to contribute to climate protection, and want to know how to do it. The result of recent public pole indicating 40% of support for carbon tax is a good sign.

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