

## *Japan's Path to Kyoto: Paved with many Obstacles*

Journey Report of an Ecotax Missionary

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# **JAPAN'S PATH TO KYOTO: PAVED WITH MANY OBSTACLES**

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## A. ZWEI LÄNDER, DIE DEN SCHLÜSSEL HALTEN

Reisen bildet – in diesem Fall mein Bewusstsein darüber, wie sehr Japan und Deutschland in ihren jeweiligen Kontinenten darauf Einfluss haben, ob und wieweit die Kioto-Verpflichtungen künftig erfüllt werden. Deutschland hat dabei den großen Vorteil, Teil der europäischen Union zu sein, von der man vielleicht sagen kann, dass sie in keinem Politikbereich erfolgreicher wirkt, als in der Umweltpolitik. Europas Umweltpolitik ist nicht selten bei weitem fortschrittlicher als der Durchschnitt der nationalen Umweltpolitiken. Anderswo ist es oft umgekehrt.

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Japan sieht sich dagegen von Ländern umgeben, die Kioto gar nicht ratifiziert haben und deren Umweltstandards und ökologische Ambitionen in fast allen Fällen deutlich niedriger liegen. Zwei wichtige Vorteile hat Japan aber. Die konservativ-liberale Regierung muss mit weit weniger Gegenkampagnen von Seiten der Sozialdemokraten und Gewerkschaften zu ihren Ökosteuerplänen rechnen, als es Deutschlands rotgrüne Regierung von Wirtschaftsverbänden, Union und FDP erlebte. Zum anderen kann das Land das Zusammenspiel seiner umweltpolitischen Instrumente nach eigenem Ermessen optimieren. Es unterliegt keinen Unionsregeln.

Dass es diesen objektiven Spielraum aufgrund subjektiver Befindlichkeiten nicht ausschöpft, ist das Drama der japanischen Umweltpolitik, die noch vor wenigen Jahren zu den fortschrittlichsten aller Länder zählte. Heute läuft ausgerechnet Japan Gefahr, die in seiner alten Hauptstadt Kioto getroffenen Vereinbarungen krass zu verfehlen. Die subjektiven Befindlichkeiten, die einer konsequenteren Umweltpolitik im Weg stehen, lassen sich überwiegend dem auch bei uns bekannten und beliebten Phänomen der umweltpolitischen Phantomschmerzen zuordnen. Die Wirtschaft fürchtet Wettbewerbsnachteile, die in Wahrheit und per saldo nur eingebildet sind, populistische Politiker warnen vor sozialen Ungerechtigkeiten, die man bei vernünftiger Gestaltung einer Ökosteuer leicht kompensieren könnte.

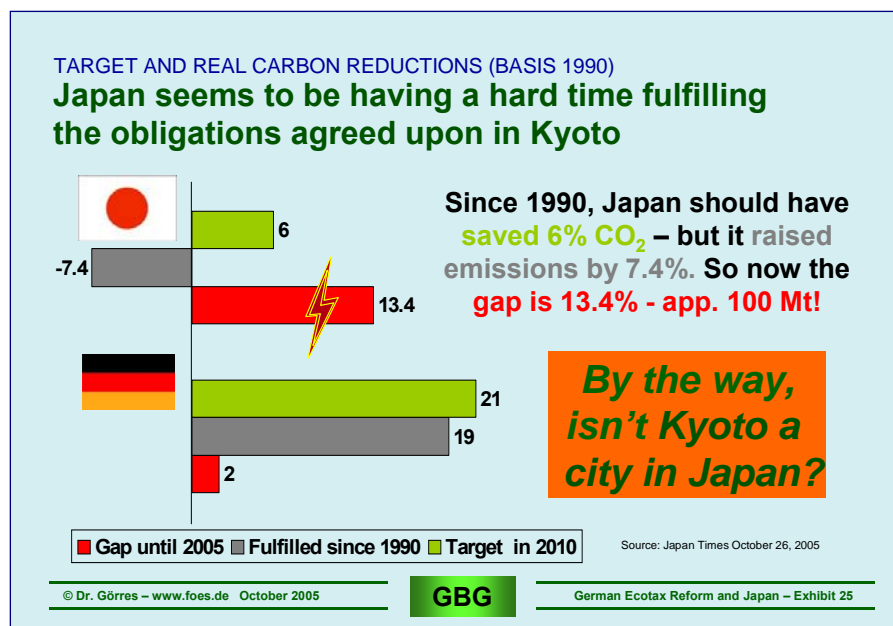
Auch Deutschlands Ökosteuerreform litt und leidet nicht daran, dass sie nicht objektiv erfolgreich war. Im Gegenteil – sie war in ihren ökologischen Zielen weit erfolgreicher, als die meisten erwartet hatten. Denn aufgrund des allgemeinen Anstiegs der Energiepreise wurden die Impulse der höheren Energiesteuersätze vervielfacht. Auch die von Gegnern prophezeiten verheerenden wirtschaftlichen Effekte sind nachweislich allesamt nicht eingetreten – auf den Weltmärkten konnte Deutschland seine Stärke sogar noch ausbauen. Von allen Steuern ist die Ökosteuer die unbürokratischste, und zum Abbau der Sozialkosten trug sie mit 17 Milliarden bei.

Wenn die Ökosteuer in Deutschland nicht als Erfolg gilt, so liegt das nicht an ihrer objektiven Performance, sondern nur an der subjektiven, leider oft negativen Wahrnehmung. Politisch erfolgreich sind Ökosteuern erst dann, wenn auch die kommunikativen Barrieren überwunden werden – nicht zuletzt die große Barriere der Phantomschmerzen. Man kann der japanischen Umweltministerin Yuriko Koike nur wünschen, dass sie bei der Lösung dieser Kommunikationsaufgabe eine glückliche Hand hat. Doch wenn dies jemand gelingen könnte, dann ihr und ihrem Premierminister Koizumi. Viel Glück dabei!

## B. SUMMARY – TWO COUNTRIES HOLDING THE KEY

**Do we want to drive energy prices or should we let energy prices drive our society?** By answering this question, Japan and Germany could play a decisive role, each in her respective continent. In many ways, both countries seem to hold the key to Kyoto in their hands, as Dr. Hermann Ott from Wuppertal Institute put it. But Japan is clearly more reluctant than Germany to make use of this key. Already far behind its own Kyoto commitments, the country is undergoing an inner struggle on whether or not it wants to follow the European example of taking Climate Change seriously, or to follow the Kyoto-sceptical course of most of its Pacific region neighbours, on both sides of the ocean.

After a first failed attempt in 2004, Japan's newly reaffirmed MoE<sup>1</sup>, **Yuriko Koike**, is making a **new start with an ETR-proposal that is foreseen to start in 2007 (!)** and was announced October 26<sup>th</sup>. Only three days earlier, I had arrived on my ecotax promotion journey that lasted two weeks and led me to many important players in this arena. The favourable timing led to a heightened interest for Germany's ETR-experiences and was very helpful both for my purposes and for the success of the two conferences about Climate Change, that took place within the **Germany in Japan-Year**<sup>2</sup>.



Compared to Germany's ETR from 1999 to 2003, which increased energy taxation by nearly 20 billion Euro and almost one percent of GDP (0.85%), the Koike-Plan, with approx. 2.6 billion Euro volume, is less ambitious by a factor of six (0.15% of GDP). In contrast to Germany, there are **two circumstances that could facilitate its**

<sup>1</sup> MoE = Minister (or Ministry) of the Environment.

<sup>2</sup> The "Germany in Japan Year 2005" is aimed at strengthening the traditionally good relationship between the two countries. This year and next, Germany is staging a wide range of cultural, business and academic projects in Japan designed to provide the Japanese public with an insight into modern German life and the many facets of Germany. During Germany in Japan Year over 1,000 events are planned nationwide ([www.doitsu-nen.jp/DEU\\_DE.html](http://www.doitsu-nen.jp/DEU_DE.html)).

Among these events, there were many with environmental aspects. My trip had been planned to be centred around a two-day-event on *Climate Policy 2005 and beyond – Japanese-German Impulses*, with one day devoted to discussions with stakeholders, and another to a conference about ETR and ETS (ETR = Environmental Tax Reform, ETS = Emissions Trading System).

Further information about the two conferences:

<http://www.iges.or.jp/en/news/event/event9/event9.html>

**adoption: support by a very strong conservative prime minister, and much more time to elaborate and optimize** than Germany's red-green coalition had between its election victory of September 27th 1998 and the passing of the ETR-laws on 24th March of next year.

But even if the proposal survives the political, struggles and becomes law, it will, within its present scope, only serve to reduce Japan's Kyoto deficit of approx. 100 million tons carbon by 40 million tons – this would be twice as much as Germany (20 million tons) - if not less. Kyoto is Japan's former capital. If the new capital wants to honour the commitments made in the old one, Tokyo will not only have to come through with the ETR-proposal, but to take many additional steps. This will only be possible if the NGO scene gets stronger and more aggressive and Ms. Koike succeeds in forming a rainbow coalition that includes progressive forces from all parties, and many other groups in society. As was the case in Germany, **little or no support can be expected from the business community**, which is still far from having understood the obligations of the 21<sup>st</sup> century.

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In the joint interest of both countries (and the global aims of Kyoto), Japan and Germany should improve their cooperation and mutual exchange on Climate Change. As the two conferences and the many meetings I had before and after them have shown, such an exchange can be very fruitful.

That learning from each other is a two-way-street, I already found out on the first day, taking a taxi from Tokyo station to my hotel: My suitcase would almost not fit in, because each taxi has a big natural gas tank in its trunk. Why don't we import that useful piece of regulation from Japan to Germany? But both countries could profit in many other ways from mutual exchange. Germany could learn to devote a higher share of future Ecotaxes to green projects. Japan could profit from modifying its ETR proposal to include larger portions of double dividend (recycling via social contributions) and of debt reduction as well.

## C. SETTING AND FIRST RESULTS OF MY JOURNEY

### Many positive encounters

Thanks to a generous grant from the German Environment Ministry (henceforth: MoEG), I was not only nominated as a participant and speaker at two conferences (taking place within the *Germany in Japan-Year* on 31<sup>st</sup> of October and 1<sup>st</sup> November), but also invited to undertake a two-week-promotional journey to learn about the state of the Japanese debate on environmental tax reform (ETR) and contribute myself by informing my counterparts about facts and insights of the German ETR-experience.

In the course of two weeks, I had about 16 personal meetings where I met and conversed with approx. 50 individuals representing government, academic institutions, NGOs or business, not counting another total of approx. 300 persons that participated in some of the larger sessions or at the two conference days. Meetings mainly took place in Tokyo, but some also during



the few days I spent in Kyoto (see table in Annex 1). All in all, I encountered a very large and interesting group of people, certainly not representative for Japan, but a **good sample of most of the actors that have an interest in the Japanese ETR-debate**. I am aware, of course, that the average attitude of most of the people I met was perhaps slightly more in favour of green policies in general and ETR in particular than would be the case in a representative sample of the population or of all policymakers. But I also met sufficiently many individuals directly representing business or working in institutions that are close to business, like IEE or Climate Experts, that communicated more sceptical business views to me.

As usual, the conference also facilitated worthwhile exchange between German participants. One can meet the nicest compatriots while travelling.

### **Remarkable immediate results**

Helped along by the additional interest created by the proposition of a new ETR-draft in the very week of my arrival, I think the journey was a **great success**, and included:

- Many and fruitful encounters as detailed above and in the table in Annex 1.
- My active participation at both conference days.
- **A press interview with business journal Nihon Keizai Shimbun**, appearing “just in time” at the second conference day (see Annex 4).
- Being Guest of Honour and Speaker at a meeting with the **Central Environmental Council** at the Tokyo International Forum.

This **last event** was certainly **one of the highlights of the trip**. It served as the **first public hearing of the new law**, with detailed explanations from the Ministry, and an ensuing question and answer session. In the second part of this two-and-half-hour meeting, I had the opportunity to present German experiences in detail and even make some comments on the Japanese proposal. The audience of approx. 50 people was composed of **high-ranking representatives from business, trade bodies (Keidanren), unions, NGOs, academic institutions and the media**. The MoE was represented by several senior officials.

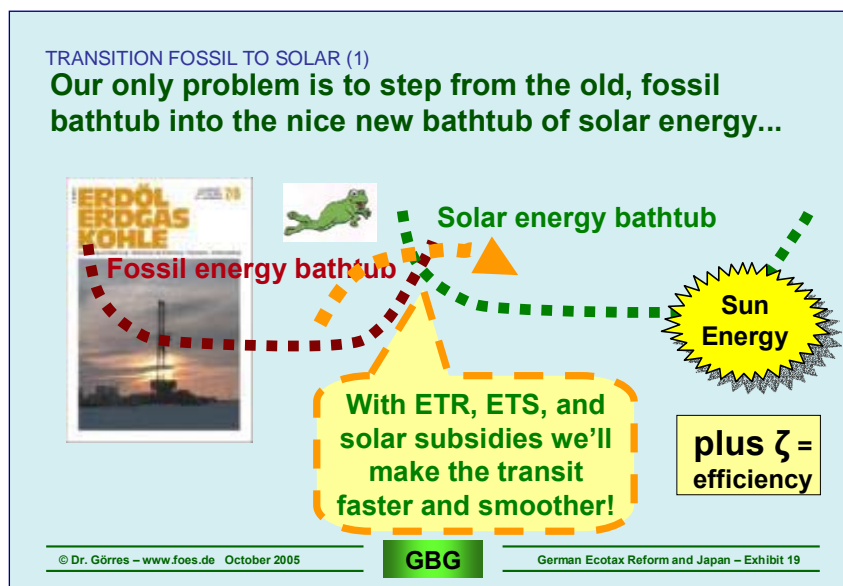
I owe thanks to many people, not only the many in Japan who welcomed me with warmth and support, but also those who contributed to the excellent preparation in Germany. In particular, it is my pleasure to mention the Wuppertal Institute’s team of Karin Holl and Elke Mohrbach, the international cooperation unit of Harald Neitzel from MoEG, his colleague on ETR, Kai Schlegelmilch, and last not least our small but excellent Green Budget Team in Munich (in particular our Bulgarian summer intern Elitza Todorowa who has been working for many months on preparation and follow-up for this project).

In Japan, the following individuals or institutions also should be mentioned for their great support and hospitality: Ms. Beatrice and Dr. Michael Portoff from BAYER, Japan, Mssrs Naomi INOUE, Kenji KAMIGAWARA, Yasushi NAGAMI, Yutaka NAKAO, and Yoshio TAMURA from the Japanese Ministry of the Environment, Yoshihiro FUJII from Nihon Keizai Shimbun, Mr. Jiro ADACHI and his entire from JACSES, Mr. Kimio HARADA and Prof. Yasushi ITO from Carbon Tax Research Group, Dr. Naoki MATSUO and Ms. Maki SATO for Climate Experts Ltd., Mr. Christoph OVERSOHL from the Embassy of the Federal Republic of Germany, Prof. Kazuhiro UETA and Prof. Matsushita KAZUO from Kyoto University, Prof. Soo-Cheol LEE from Nagoya Gakuin University, Dr. Seung-Joon PARK from Kyoto Sangyo University, Ms. Asaoko MIE and Mr. Kenro TAURA from KIKO-Network,



Mr. Kiichiro HAYASHI and his colleagues from Mitsubishi Research Institute, and Mr. Takahiko TAGAMI and his team from the Central Research Institute of Electric Power Industry. I apologize for many more whom we could not mention individually.

### Positive feedback on the optimistic message of the “Bathtub Theory”



The journey gave Green Budget and myself an excellent opportunity to prepare a comprehensive overview of the results of, but also the political lessons from, the German ETR of the years 1999-2003. This was very well received by all my counterparts and audiences, particularly since due to the publication of the new ETR-proposal we could include some actual comparisons between the two

countries and the different ETR-concepts.

For the first time, I presented our newly developed ‘**Bathtub Theory**’ of the necessary **transition from fossil to the solar energy**. In part, this is only a practical application from what is well known in economic theory in the context of ‘Hotelling’s Rule’ which describes the process where rising prices of exhausted resources can drive the **switch to new ‘backstop technologies’**. Our modest intellectual contribution lies in the combination of these ideas with the added insight that can be gained from the **concept of the ‘bathtub curve’ well known to engineers and consultants**. The bathtub character applies both for the price curve of crude oil as well as for most types of solar energy and already now implies dramatic complications for our energy policy. The fact that in the beginning, new energy technologies are drastically more expensive than they can be expected to become after some cost degression has occurred, constitutes an important impediment to the necessary transition and can supply an additional justification for both **green taxes** to make the old technology more expensive and **green subsidies** to speed up the adaptation of the new technologies.

## D. THE PLAYERS IN JAPAN – SOME OBSERVATIONS AND IMPRESSIONS

For someone who, like myself, has had the opportunity to follow and contribute to the ecotax debate over more than two decades, it is hard to hear any arguments one hasn’t heard many times before. In many ways, therefore, the situation I found and the arguments I heard reminded me strongly of the situation in Germany in the 1990s, in particular of the election campaigns in 1994 and 1998. Japan enjoys one important difference, however: **I did not encounter anything near the degree of hostility, aggressiveness, and hysterical exaggeration that could be, and unfortunately still can be, observed in Germany**. Perhaps this is the first important lesson to be drawn from the Japanese debates for my country: It is a pleasure to have a

civilized political debate without degrading and personal attacks, but in a very polite and friendly style. I will briefly represent the views and situation of the different groups as I could observe them below.

### **NGOs: Still small, dependent, and not always convinced of market instruments**

As a whole, environment-oriented NGOs in Japan are less strong, have less money and fewer members than their counterparts in Germany.

- The legal situation is still difficult: Registration has been facilitated, but **contributions are not tax-deductible**.
- The political and emotional **background is often pacifist and/or anti-nuclear** and not always open to market-based instruments.<sup>3</sup>
- There is **no organisation like Green Budget Germany** that focuses entirely on market based instruments.
- NGOs get much of their **funding from the MoE or government-related agencies** and therefore, do not always find it easy to retain political independence.
- It seems that many NGOs are **locally or regionally based** and have not yet built up enough links on the national or international policy level.

It certainly wouldn't hurt the further development of ETR in Japan, if NGOs could gain in campaign strength and act with a little bit more punch.

### **Academic and Research Institutions: Similar to Germany**

There is certainly much sympathy for ETR among universities. With research organisations, the attitude depends of course on the general position of the institution.

- As was the case in Germany, many typical university professors, particularly environmental economists, are **in favour of ETR** and would even criticize the MoE-proposal as too compromising. Their impact on the political level seems rather low, however.
- There do not seem to be, as is the case in Germany, institutions like the DIW (German Economic Research Institute) that openly and strongly support ETR.
- However, there are notable initiatives, such as a model presented at the conference by Mr. Tsuneo **TAKEUCHI** from IGES, in which an improved version of the MoE-ETR was simulated, with very interesting results.

My general impression is that these groups will neither be a strong support nor exert a strong negative influence – but this is based on a very superficial observation of only two weeks.

### **Business: Chastity is fine in principle, but not right now, please**

The arguments I heard reminded me mostly of the young Augustine, who – after having accepted the virtue of chastity in principle – is said to have prayed: “*Dear lord, make me chaste, but not right now.*” The following attitudes seem to prevail:

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<sup>3</sup> One should not underestimate to what degree the ETR-debate in Germany has helped to open the Greens – many of them formerly rather anti-market and leftist minded – towards the teachings of Adam Smith.



- The Kyoto target of 6 percent less CO<sub>2</sub> is an **unjust burden on Japan**, the country has committed itself to much more than others did or than itself should have (some even say “*Japan has been defeated*”).
- Unlike Germany, **Japan is not surrounded by other friendly European states** that share the same eco-vision and similar obligations, but by countries that have all not signed the Kyoto agreement and are powerful competitors (in particular Australia, China, South Korea, Taiwan, and the USA).
- There are clear tendencies to soften the impact for Japan and reduce the necessary change at home. For all of them flowery slogans have been invented:
  - “**Step-by-step-approach**”, “**bottom up**” – meaning the government should not push business too hard, and also a preference for small, cautious steps, rather than the courageous ones that are actually necessary.
  - “**Technology rather than Target-setting**” – meaning basically the same as the above, plus an explicit refusal to accept hard objectives, combined with a hope for new eco-subsidies for real or alleged environment-related R&D activities.
  - “**International orientation via JI/CDM**” – meaning that it would be preferable if Japan can avoid making a contribution at home and leave others to do the job, with some help from Japan, of course. (This is by no means meant to criticize the progressive concepts of supranational efficiency gains through mechanisms like JI or CDM – but these mechanisms should be a supplement to, not a substitute for, activities on the national level).
  - **Nuclear energy as a simple way out of the fossil crisis** – this seems to be the view of many business people. Perhaps this is due, in part, to an underdeveloped debate of the **economic objections to nuclear energy** (it is simply not efficient, because it is more expensive than getting the same amount of energy from savings). I gained the impression – not checked in interviews – that the anti-nuclear movement in Japan is more based on pacifist or other political motives than on hard economic arguments.
  - As for instrument choice, someone said “**command and control is still our favourite**”. More creative people in business argue for using **ETS for the business sector, ETR for households**. That would protect business from any share in the tax burden of ETR.
- An interesting development is that the business community has begun to understand one little drawback of its otherwise unbroken **predilection for Voluntary Industry Agreements (VA)**. Since these will usually work only with larger firms and cannot be made mandatory for small businesses, let alone consumers, small companies and consumers inevitably become free riders, and can avoid any contribution to necessary eco-measures. This recognition makes some industry representatives argue for legal measures to create commitments for all participants, not only the well-behaved members of trade bodies.
- Business is also beginning to realize that some of the specific ingredients of the MoEJ plan, in particular the foreseen earmarking of about one half of the receipts for forestry purposes, could lead to the absurd consequence that Japan's industry, much more exposed to international competition than the relatively sheltered forest industry, **would indirectly subsidize forestry** through energy tax-financed forest cultivation.

- On a company level, many interesting initiatives as well as a certain change in attitude can be observed, not unlike Germany. Particularly at the Stakeholder Workshop (first conference day), companies like **BP, Hitachi, NEC, Nippon Steel, Toyota** and many others presented impressive voluntary action plans.

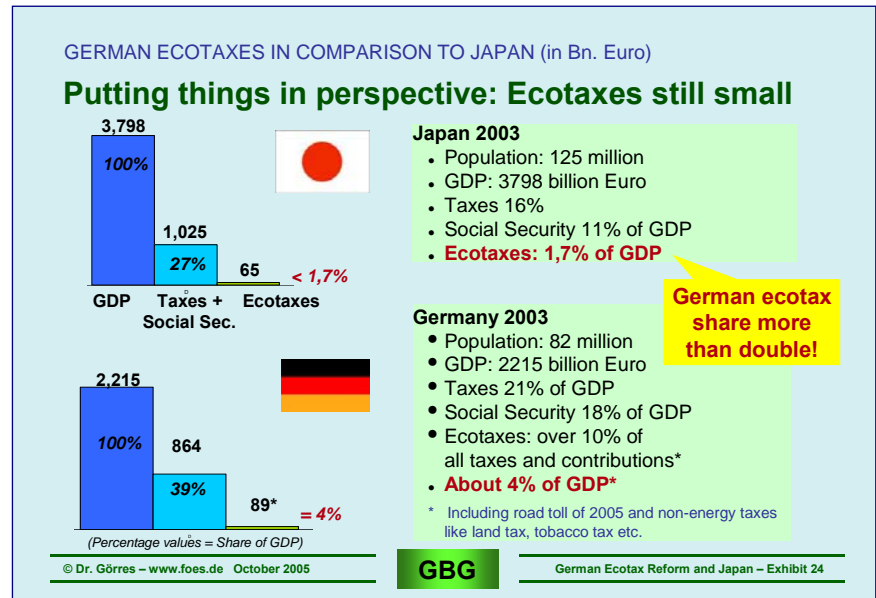
What remains is a **strikingly positive difference to the well-known German situation** (as mentioned above), namely an almost militant attitude against economic instruments, particularly from representatives of German trade bodies (industry federations, chambers of commerce, etc.). The business representatives I met in Japan communicated in a definitively more polite and reticent manner to make their doubts and fears known.

As a footnote to the business situation, two interesting points regarding Toyota should be mentioned. On the one hand, the press coverage of the Tokyo Motor Show pointed out how successfully the company has managed to establish itself as the **world's market leader in sustainable cars**, manifested by the enormous success of the Prius, and much to the shame of German industry who has missed a golden opportunity. "Toyota wants to be to the environment what Volvo was to car safety"<sup>4</sup>. During the same week, however, Toyota came under fire from the American NGO Bluewater Network, criticizing that while Toyota takes one step forward toward a clean future with the Prius "the company quietly takes three steps back into business as usual with gas guzzling hybrid vehicles that don't get better fuel mileage than their non-hybrid versions"<sup>5</sup>. Both events will certainly contribute to raising the business world's awareness of the chances and the risks the environment issue holds in store for them.

### Government and Politics: The LDP can do it, if anybody

As already mentioned, one fundamental difference to the German ETR is the present strength of the LDP government.

- **Ms. Koike has survived quite a number of cabinet reshuffles.** In the last one, which took place in the first week of November while I happened to be there, only a few days after the presentation of the ETR-proposal, she was only one of three ministers that made it from the old into the new cabinet. All three 'survivors' are seen as potential successors to the PM. She played an important role in the recent successful re-election of Prime Minister Koizumi's government. All this gives her a **strong position**.

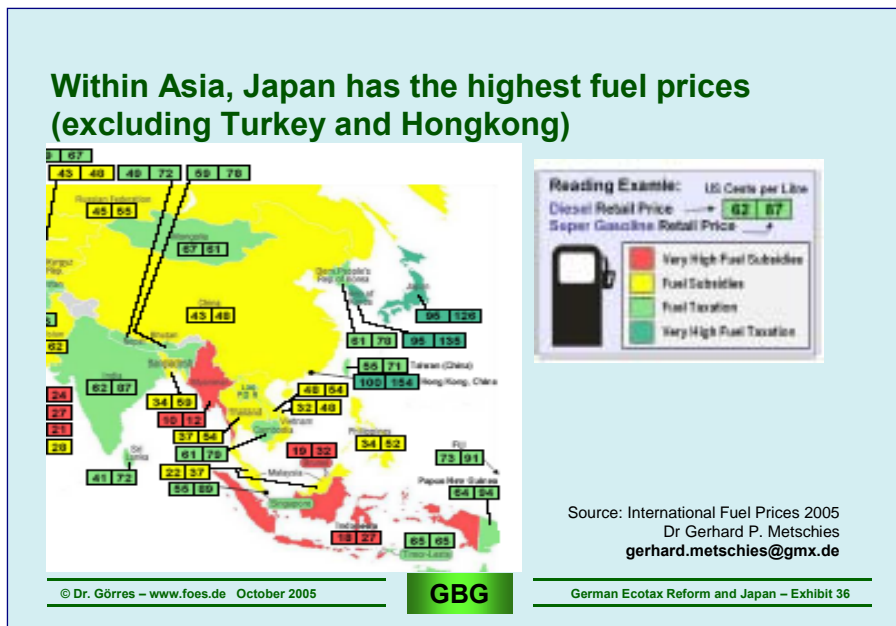


<sup>4</sup> John Brook: "At car show all the talk is about fuel alternatives", Toyota Commitment to the Environment; New York Times, 5<sup>th</sup> November 2005. [www.toyota.com](http://www.toyota.com)

<sup>5</sup> [http://www.consumeraffairs.com/news04/2005/toyota\\_bluewater.html](http://www.consumeraffairs.com/news04/2005/toyota_bluewater.html)

- The next step in the decision process seems to be a **meeting of the LDP's powerful tax committee in December 2005**. In the end, a lot will depend on the power play between METI, MoE and MoF.
- The political tradition in Japan entails a **very strong relationship between METI and the business world**. This seems to go so far that the METI more or less monopolizes communication between government and business and does not approve of other government agencies directly relating with business. Along the same lines are problems that can arise when the MoE proposes a tax but the receipts thereof – and therewith the possibility to distribute benefits – stays with the METI.
- As far as I could gather from the **meeting with the Central Environment Council, labour unions** seem to have studied the European ETR experiences extensively and to **like the double dividend concept**. They would therefore not seem opposed to Ecotaxes as long as they involve at least a relevant portion of double dividend philosophy – i.e., using part of the revenue to reduce labour cost and/or help finance social security. Thus, they would probably prefer a partial return to last year's ETR-proposal which foresaw exactly this approach.
- Not being part of a larger political alliance, **Japan has more liberties** in defining its own optimal mix of economic measures, whereas Germany as EU-member has to respect the European directive for minimum energy prices and the EU emissions trading system.

**Japan's government has the political strength to push the ETR-proposal through parliament.** So the internal debate within LDP and the government will be decisive. For some observers, only half of the LDP representatives are pro-ETR. Koizumi and Koike will have to do a lot of convincing.



On both conference days it became also very clear that in Japan as well in Germany **municipalities or regional bodies, including NGOs with a corresponding focus, are becoming ever more important actors** on the eco-scene.

### E. PRELIMINARY EVALUATION OF JAPAN'S ETR-DRAFT

All in all, it seems **rather probable** that some ETR legislation will result from the Koike initiative, though it is difficult to foresee what exactly. As we know from political processes in

Germany, nothing tends to emerge from such processes looking the same at the end as it did at the start. It is important to understand the specific situation in Japan at the outset:



- Japan has a much lower GDP-quota of taxes (17 percent) and social security (10 percent). Its road taxes are less than Germany's, but one of the highest in Asia, certainly facilitated by the fact that we are dealing with an island. On top of road taxes, the country charges high traffic tolls for using its motorways. With 156 percent of GDP, its **public debt is more than two times higher than Germany's** (65 percent).
- Japan is used to a traditional system of 'special accounts' where different taxes and levies flow into different funds, administered by different ministries or agencies. This 'fiscal compartmentalisation' is perhaps not the latest cry of financial management and has come under criticism of the highest authority: PM Koizumi wants to abolish it. The Koike Plan, however, seems to follow the special accounts tradition. Transport Minister Kitagawa is strongly defending the accounts.<sup>6</sup>

### Short description of MoEJ's ETR Concept

The Koike plan (for details see Annex 2) can be characterized by the following elements:

- Tax of 2400 Yen (app. 18-19 Euro) per ton of carbon, **applied on all fossil energies** in principle, but preliminary **exception of transport sector** due to present high crude oil prices.
- Exemptions are granted for coal, coke and other substances for manufacturing steel, reduced rates of 50 to 60 percent for energy-intensive industries (partly contingent on reduction efforts) and for households heating with kerosene. Small and medium-size companies seem to be completely excluded.
- Of the total expected revenue volume of 370 bn yen (approx. € 2.6 bn), 190 bn yen are devoted to "measures to manage and maintain forestry. The rest will be for spreading energy saving houses & buildings, low emitting cars, renewable energy like biomass, wind power, solar power, etc, which is promoted mainly by abating other taxes."

COMPARING JAPANESE CONCEPT FOR 2007 WITH GERMAN ETR 1999 -2003  
**The MoEJ-proposal is courageous, though less ambitious than Germany's ETR**

<b>Tax base</b>	Almost all energies 	+ Coal  - Transport fuels	Both provide for large exemptions
<b>Rise</b>	Most 5 times	All only 1 time	
<b>Rate</b>	2 €/litre for heavy oil, 66 €/litre for petrol	19 Euro per ton CO <sub>2</sub> across the board	Traffic problems not only CO <sub>2</sub> !
<b>Total volume</b>	€ 19 bn	€ 2.6 bn (370 bn Y)	D = .85% of GDP J = .15% of GDP
<b>Revenue use</b>	90% to reduce labour cost	50% for forests 50% for REN and energy savings	Forest maintenance = less CO <sub>2</sub> ?
<b>CO<sub>2</sub>-reduction</b>	20-24 mn tons (2,4-2,9% of D)	43 mn tons (3,5% of J)	Japan estimate a little too optimistic?

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<sup>6</sup> Japanese Times of November 4, 2005: Keep road taxes for road projects, Kitagawa says. German readers will know this position, for instance from ADAC-presidents.

In a preliminary evaluation, one could define the following strengths and weaknesses of the plan.

- The strong input orientation comes close to the **economist's ideal of using a unified, 'beginning-of-pipe' CO2-based tax rate** for all energies and all consumers (with some exemptions). The rate chosen is close to the current price level on the EU emission rights market.
- On the down side, the use of a unified rate leads to **very different price increases for different energy types** (a problem which the German ETR avoided by designing tax increases with regard to existing market prices). The **exclusion of the transport sector** means leaving out the very sector that is most responsible for Japan's present great gap in meeting of the Kyoto targets.

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### Some first comments and suggestions for possible improvements

During the Central Environmental Council session, there were many voices asking for modifications and changes in the plan, given that it is not scheduled to start before 2007. Thus in all due respect, we may be permitted to give some suggestions as to the lines that could be followed.

1. There is no need to copy the German model, but even with less pressure to reduce taxes, Japan should **include some portion of double dividend**. People receive something in return for the higher taxes they pay. But if it is done, it should be done in a more transparent way than was the case in Germany.
2. Given Japan's low levies quota and high public debt, **devoting a portion of the receipts to fiscal sustainability** (i.e., debt reduction) does not seem unreasonable.
3. In Germany, the proverbial woman and man on the street were unable to understand that a green tax was not used to finance green projects. Therefore, **part of the revenue should by all means go into green projects**. But there is no need for 100 percent to go to such projects.
4. To avoid an indirect and probably **unnecessary subsidy flow from industry to forestry**, and to correct the hitherto strongly negative Kyoto contribution of the transport sector, **transport fuels should not be excluded**. Part of the revenue could be used to **offset competitive disadvantages for export industries**.

In conclusion, one should perhaps change the winning formula for spending the receipts in both countries:

- In Germany, about 10 percent of future green taxes should be

What would we recommend to Koike-San if asked?


Congratulations to your proposal – it's courageous and progressive. But:

1 Since Japan is an island, why not include the transport sector?

2 With Japan's high national debt and low tax quota,

- why not 1/3 for debt reduction
- 1/3 for recycling/ social security
- and only 1/3 for green projects?

3 And use all your charm and intelligence to win over the tough guys from METI!





**reserved for green projects** (but not more!). Given the present fiscal pressures, one should also consider a **lower share of double dividend** (i.e. social security reductions) and a higher share remaining with the MoF to reduce debts.

- For Japan, I would suggest the following formula as a rule of thumb:
  - One third – if not more! – for **debt reduction**
  - One third for **social security/ double dividend**
  - And one third, perhaps even less, **for green projects**.

This way, one could argue that a green tax helps to produce **sustainability along three axes**: Long-term fiscal solidity, contribution to the long-term problem of an ageing population, and active support for renewables, saving energy, etc.

From the very mixed experiences we had in Germany – where ETR was economically and environmentally successful, but much less so in political terms – one can perhaps conclude that **a mix of debt reduction, recycling to citizens and reinforcing new energies and efficiency would be easier to sell politically** than any one of these elements on its own. Using the popular support for green taxes to get more approval for some increase in the total levy rate could turn out to be an interesting element in a long-term strategy to reduce Japan's public debt. After all, green taxes are the first tax in history people are actually asking for, instead of revolting against.

## **F. IDEAS AND RECOMMENDATIONS**

The many positive observations and impressions I could gather before, during, and after my journey encourage me to put forward the following recommendations. The overall purpose should be to offer all conceivable support to Japan in its attempt to get back on the Kyoto track, but also to profit from positive and useful experiences in Japan.

### **1. Annual series of conferences, taking turns between Japan and Germany**

- To continue the excellent experiences from the *Germany in Japan-Year*, events should be organised on a regular basis in the future.
- Separate forums could be organised, each about a day long, for different topics and groups, i.e. technology exchange, debate of economic instruments, NGO exchange and so on, to bring together similar stakeholder from both countries.
- First soundings of this idea led to very positive reactions.
- First event to be held 2006 in Germany, then 2007 in Japan, and so on. (Starting in Japan is equally conceivable, considering the present debate of the Koike-Plan.) I am sure both the Wuppertal Institute and GBG would be more than happy to help with the organisation.

### **2. Give environment even more weight in German foreign policy and diplomatic service**

- Experience from many discussions in foreign countries (not only in Japan) shows positive image of German environment policy, often strikingly better than at home.



- German foreign policy and diplomatic service have already begun to see our Eco-Policy as an important 'export article' – but this could and should be strengthened and extended.<sup>7</sup>
- Environment should be given a similar role and importance as culture or the economy. This seems a logical extension of the fact that Germany's environmental targets can only be reached through global cooperation. More practically, it helps to avoid competitive problems if other countries move forward as fast as we do.

### 3. Import best practices from Japan: LNG-driven taxis as a case in point

- Germany should, perhaps more than other countries, be very careful to avoid an attitude of knowing better than others what needs to be done.
- One very good example we could copy from Japan would be to demand taxis to be run only with eco-friendly fuel solutions.
- Couldn't that be a nice little item on Mr. Gabriel's (new MoEG) political agenda?

### 4. Mutual Support of NGOs in Germany and in Japan

- As is already being done, German NGOs should devote resources to supporting their Japanese counterparts. They enjoy a high reputation not only for their competence, but also for their past successes.
- This should of course be a two-way street.
- Some of my counterparts suggested building up an organisation comparable to Green Budget Germany that is devoted fully to economic instruments.

### 5. Extending the positive example of this promotion journey to other countries

- Both the MoEG and GBG were surprised by the extremely positive resonance our initiative received – partly due, of course, to a special coincidence of favourable circumstances.
- But we are convinced that similar journey could and should be organized to other countries crucial within the Kyoto process or within EU environmental policy.
- An immediate proposal is to combine a similar promotion journey in Canada with the forthcoming "Seventh Global Conference on Environmental Taxation", to be held from 22th to 24th October 2006 in Ottawa.
- Other countries worth a similar journey could be emerging markets like China, India, Mexico, but also EU-members, both old and new. And of course, the United States.

### 6. Involving more Japanese participants in future World Ecotax Conferences

- In the past six "Global Conferences on Environmental Taxation", there were not many participants from Japan. GBG will help to invite many of our Japanese encounters to the next two conferences, namely Ottawa 2006 and Munich 2007.
- <http://www.environmental-tax-conference.uottawa.ca/>

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<sup>7</sup> To prevent misunderstandings: GBG has many positive experiences of support from German diplomats. On my Japan trip, Christoph Oversohl provided us with important briefings and logistical support. In our conference on air transport taxation in London (November 2005), the embassy even organized a reception in our favour.

- We also proposed a Japanese application for one of the subsequent consequences, perhaps already in 2008. Kyoto seems to be a most fitting venue for such a topic and conference.

## G. ANNEXES

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### Annex 1. Overview of my encounters in Japan

<b>Government/ Politics</b>	<ul style="list-style-type: none"> <li>- <b>MoEJ:</b> Ms. Yuriko KOIKE, Minister; Kenji KAMIGAWARA, Policy Coordinator; Yukato NAKAO, Dep. Dir. Env. + Econ. Div.; Hiroshi KAMAGATA, Dir. Env. + Econ. Div.; Yoshio TAMURA, Dir. Gen. Env. Pol. Bureau (in chronological order)</li> <li>- <b>Japanese Diet:</b> Meeting prepared by JACSES, with approx. 25 representatives and their collaborators</li> <li>- <b>German Embassy:</b> Stefan GALLON (Gesandter, Leiter Wirtschaft), Peter GOERSS, Christoph OVERSOHL (Umwelt)</li> <li>- <b>METI:</b> Yasushi NAGAMI, Dep. Director</li> </ul> <p>Many more contacts during the two conference days, including many people from municipalities, see list of participants.</p>
<b>Business World</b>	<ul style="list-style-type: none"> <li>- <b>The Climate Experts</b> (independent consulting firm): Naoki MATSUO, Senior Research Fellow and Executive Director; Maki SATO, R and Miki YANAGI, researchers</li> <li>- <b>Nippon Steel:</b> Hirobonu NOSE, Environmental Relations</li> <li>- <b>NEC:</b> Dr. Ryosuke UGO, Chief Mgr. Env. Mgmt. Division</li> <li>- <b>Toyota Motor Corporation,:</b> Masayuki SASANOUCI, Project Gen. Mgr. Env. Affairs Division</li> </ul> <p><b>Many more companies</b> were represented during the conference event, among others Aquabit, Tokyo Electric Power Company (see list of participants)</p> <p>Companies represented at Meeting with MRI (see below): Mitsubishi Electric Corporation, NYK Logistics &amp; MegacARRIER, Asahi Glass Co., Mitsubishi Rayon Co.</p>
<b>Media</b>	<ul style="list-style-type: none"> <li>- <b>Nippon Business Daily:</b> Yoshiro FUJI, Senior Staff Writer in Nihon Keizai Shimbun (Nikkei) newspaper</li> </ul>
<b>Academic and Research institutions</b>	<ul style="list-style-type: none"> <li>- <b>Reitaku University:</b> Prof. Terue OHASHI</li> <li>- <b>IGES</b> (Institute for Global Environmental Studies): Prof. Akio MORISHIMA, Chair; Shinichi HOKA, Program Manager CDM; Tsuneo TAKEUCHI, Researcher; Rie WATANABE, Climate Researcher</li> <li>- <b>IEE</b> Institute of Energy Economics, Climate Change Policy Group: Takahiko TAGAMI, Junko OGAWA, Masazumi HIRONO, Miki YAGAGI</li> <li>- <b>Mitsubishi Research Institute:</b> Dr. Kiichiro HAYASHI, Project Manager Env.+ Resources Research Group</li> </ul>
<b>.. in Kyoto</b>	<ul style="list-style-type: none"> <li>- <b>Meijo University:</b> Prof. Soochool LEE</li> <li>- <b>Kobe University:</b> Daisuke NUMATA</li> <li>- <b>Kyoto University:</b> Prof. Kazuhiro UETA and Prof. Kazuo MATSUSHITA, Environmental Economists; Yasuko MATSUMOTO (was in Tokyo);</li> <li>- <b>Kyoto Sangyo University:</b> Dr. Seung-Yoon PARK</li> </ul>

NGOs	<ul style="list-style-type: none"> <li>- <b>JACSES:</b> Jiro ADACHI and his team</li> <li>- <b>KIKO Network:</b> Naoyuki HATA</li> <li>- <b>Carbon Tax Research Group:</b> Prof. Yasushi ITO, Dr. Kimio HARADA</li> <li>- <b>FoE Japan:</b> Ryoko Seguchi, Tokiharu OKAZAKI</li> <li>- <b>WWF Japan:</b> Yurika AYUKAWA, Climate Change Policy Senior Officer</li> </ul>
.. in Kyoto	- <b>KIKO Network:</b> Mie ASAOKA, President, Kenro TAURA, Executive Director

## Annex 2. ETR-Scheme of Ministry of Environment Japan

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<b>Objects of taxation</b>	All types of fossil fuels.
<b>Stage at which tax is imposed</b>	<p>(1) Households &amp; offices kerosene, gasoline, LPG (Stage of shipment from refineries)</p> <p>(2) Factories coal, heavy oil, light oil, natural gas, jet fuel (Paid by tax return by large emitting companies)</p> <p>(3) Electric producing companies, city gas producing companies material for producing electricity and city gas (Paid by tax return)</p>
<b>Tax rate</b>	<p>2,400 yen/carbon ton</p> <p>* Tax on the material for producing electricity is supposed to be 0.25 yen/kWh)</p> <p>* gasoline 1.5 yen/L, etc. )</p> <p>* Tax burden on an average household: 2,100 yen a year (180 yen a month )</p> <p>&gt;&gt;&gt; <b>Tax on gasoline, light oil, and jet fuel would be taxed at current levels for the time being considering the rise of oil prices these days</b></p>
<b>Tax revenue</b>	370 billion yen (≈ 2,6 billion Euro)
<b>Relief measures</b>	<p>Ensuring international competitiveness and the incentive to reduce emissions</p> <ul style="list-style-type: none"> <li>• Coal for manufacturing steel, coke and other substances are exempt from the taxation.</li> <li>• Reduced tax rate on the large emitting businesses by 50% on condition that they make efforts to reduce CO<sub>2</sub> emissions, and by 60% for the businesses that are categorized as high energy-consuming manufacturers.</li> <li>• Reduced tax rate on kerosene by 50% considering its high demand in the cold latitudes.</li> </ul>
<b>How revenue is to be spent</b>	<p>For measures against global warming in businesses and households</p> <p>Around 190 billion yen is supposed to be expended for the measures to manage and maintain forestry. The other part will be for spreading energy saving houses &amp; buildings, low emitting cars, renewable energy like biomass, wind power, solar power, etc, which is promoted mainly by abating other taxes.</p>
<b>Implementation time</b>	January 2007
<b>Effects</b>	<p>Volume of CO<sub>2</sub> reduction 43 million tons</p> <p>(Around 3.5% reduction compared to base year)</p>

## Annex 3. The rate of energy related taxes in Japan

Energy Source	Unit	Retail price without tax	Existing tax	Environment tax
Coal	t	4850	943	1580
Heating oil (Kerosine)	kilo litre	66790	5660	820
C heavy oil	kilo litre	between 24040 & 30340	between 3523 & 3838	1800
Natural gas	t	28690	2514	1760
LPG (for vehicle)	t	98101	16329	1960
Town gas *	m <sup>3</sup>	117	0	1,38
Electricity *	kWh	21 (Tokyo)	0.4 **	0,25

gasoline	kilo litre	74990	62560	1520
light oil (Diesel?)	kilo litre	71690	38005	1720
Jet fuel	kilo litre	32564	31943	1610

\* Environment tax is not to be imposed on the Town gas and Electricity themselves, but it is to be imposed on the fossil fuel to produce Town gas and Electricity.

\*\* The existing Electricity tax rate is now \0.4 per 1kWh, and will be lowered to be \0.377.

## Annex 4. Article from The Japanese Times ETR-Plan (October 26, 2005) and Press Interview in Nihon Keizai Shimbun (November 5, 2005)



2 THE JAPAN TIMES • WEDNESDAY, OCTOBER 26, 2005

# New carbon tax plan limits levy

## Ministry excludes several fuels due to high price of oil

By ERIKO ARITA  
Staff writer

The Environment Ministry on Tuesday released a revised version of its carbon tax plan, aimed at discouraging fossil fuel use so Japan can fulfill its Kyoto Protocol obligation to cut global greenhouse gas emissions.

The ministry had submitted an environment tax proposal last year to the Tax Commission but discussion was postponed mainly due to strong opposition from the business community.

What differentiates the new proposal from the previous one is the levy would not be imposed on gasoline, light oil and jet fuel for the time being, given the current high price of crude oil, according to the ministry.

Processors and importers of liquefied petroleum gas and kerosene would have to pay ¥2,400 per ton of carbon mixed in the fuel, the same as the previous proposal. Industries that use coal, natural gas and heavy oil also would pay the same tax rate.

One example of the proposed carbon levy is ¥1.58 per kilogram of coal, the ministry officials said.

They said they expect that the additional costs to industry would be passed on to the public through price increases on goods and services.

Under the new plan, a household would pay an average of ¥2,100 a year for electricity, gas, kerosene and other fuels. In the other plan, the burden was estimated at ¥3,000.

The ministry expects it would reap annual revenue of ¥370 billion from the tax, compared with ¥490 billion estimated in the previous plan.

Last year, the ministry said part of the revenue would be used to reduce companies' costs, such as social security fees.

But this year, the ministry said the revenue would be used solely for measures to reduce global warming, including the management of forests, which absorb carbon dioxide, and the promotion of

energy-saving appliances and renewable energy resources.

Because there has been strong opposition from industries that say the tax would undermine their activities and harm the global competitiveness of Japanese firms, the ministry has proposed the levy be halved for businesses that succeed in curbing greenhouse gas emissions, although it has not specified any amounts.

Environment Minister Yuri Koike said the plan minimizes the burden on the economy and individual households, taking into consideration the rise in the price of crude oil, while emphasizing the necessity of the levy.

"The ministry is promoting education (on how to reduce global warming) through such measures as the "Cool Biz" and "Warm Biz" campaigns. But we definitely need the environment tax so that all people will be involved (in reducing greenhouse emissions)," Koike told a news conference Tuesday.

As the government discuss-

es new uses of tax revenue in the special account budgets, the ministry said in the plan it would ask the government to allow some of the revenue to be used for programs to stop global warming.

The carbon tax is aimed at curbing carbon dioxide emissions, the main cause of global warming.

Japan hopes the tax along with other measures will help it achieve its Kyoto Protocol target of curbing greenhouse gas emissions by 6 percent from 1990 levels by 2012.

But the country has already fallen behind. Its emissions in fiscal 2004 were 7.4 percent higher than the 1990 levels, according to a report the ministry released Friday.

The revised tax proposal will be submitted to the tax panels of the government and the ruling Liberal Democratic Party, the ministry said.

It hopes to introduce the tax in January 2007, although there is much uncertainty whether the plan will be accepted by the other ministries and industry.



**果くつきり**  
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## Annex 5. Links to further documents

- Presentation used by Dr. Görres in Japan:  
<http://www.eco-tax.info/D200510-06%20GermanETRforJapan.ppt>
- Program and Participants of the Conference Events (plus further information)  
<http://www.iges.or.jp/en/news/event/event9/event9.html>