# Interim Compilation of Preceding Discussions on the Promotion of Greening the Whole Tax System

September 4, 2012

#### Committee for the Promotion of Greening the Whole Tax System

# Introduction

In considering what tax system should be, it is important not only to satisfy the principles of taxation such as fairness, but also to obtain understandings and consents from taxpayers. The nature of these understandings and consents of the people for the tax system has come to change with the times.

In modern times, the people deeply recognize the importance to protect the global environment, and pass it on to next generations. Given this perspective, it can be said that imposing a tax burden on goods and acts which adversely affect the environment, is one of the roles of the tax system that is able to obtain the public understandings and consents.

In order to realize a sustainable society, it is essential to reform drastically the economic and social system and lifestyle of the people, such as securing human activity which does not exceed the "carrying capacity" of the globe, effective use of non-renewable resources, sustainable use of renewable resources which can be substitute for exhaustible resources, and so on.

On the other hand, "market failure" caused by externalities, public goods, uncertainty and the rest deeply impact these environmental problems. Therefore, it is a major challenge to correct the market failure through public policy.

In light of these perspectives, it is conceivable that the weight of environmental-friendliness in the tax system will relatively increase in the medium and long term. In particular, the role of taxation in accordance with the environmental-impact will increase in the field of item-specific indirect tax, especially volume tax.

In this way, thinking of the future of the greening of the whole tax system is also important from the point of view to deepen public understanding of its significance and need. So far, the medium or long-term direction and concrete promotion measures for the greening of the whole tax system have been discussed in cooperation with many researchers. This report is intended to organize the following interim compilation for the discussed contents.

# Greening of the Whole Tax System

According to the 4th Environmental Master Plan (endorsed by Cabinet on 27 April 2012), in order to continue to build a sustainable society in the future, it is essential to promote greener economy and society, that is, environmentally-friendly behavior by

businesses and individuals permeate the whole economy and society. In achieving sustainable development, "Green Economy" has been recognized as an important tool in the United Nations Conference on Sustainable Development (Rio+20).

Towards the creation of a sustainable society, it is necessary to take advantage of the economic approach to achieve the policy objectives through a grant by inducing action along the economic rationality of each entity as a part of the policy mix. Taxation is positioned as an economic approach along with subsidies, emissions trading, feed-in tariffs and the like.

In "the Greening of the Whole Tax System", a tax is to be designed in accordance with the environmental impact to make economic incentives work towards the suppression of the environmental load from the perspective of building a sustainable society. The direction of this greening is in consistence with the idea like the "polluter pays" principle that the economic burden should be incurred on those who caused pollution depending on the amount of environmental loads, under their own responsibility as well as the intergeneration equity in the sense of that halt of long-term environmental impact for future generations. Moreover, it is also conceivable to call for a tax burden to cover the financial needs required for administrative services that promote environmental preservation, in light of the relations between its benefits and payments.

Additionally, in the greening of the whole tax system, we should take notice that the reform is done in the tax system having the function of fundraising considering the financial condition of Japan. More specifically, when promoting the greening of the tax system, it is also a meaningful perspective to ensure revenue neutrality at least, and to contribute to the general fiscal demand for public policy including environmental policy.

# 2. Current State of the Environmentally Related Taxation in Japan

In Japan, in addition to the environment-related tax system which so far has the corresponding effect on the CO2 emissions reduction, the introduction of the tax for climate change mitigation for energy-oriented CO2 emissions reduction and the other measures such as the greening of the vehicle taxation have been taking. At the local level, we have also seen the introduction of industrial waste taxes, the spread of forest environment taxes and et al. Therefore, it can be evaluated that a certain progress has been made in the greening of the whole tax system in Japan.

However, based on the following points from the international comparative views, it is considered that there is some room for further examination.

- The burden level of environment-related taxation in Japan cannot be said necessarily high.
- Tax rates on carbon and waste remain low.
- Taxes on Freon and the other contaminant pollutants have been introduced internationally.
- There is a discussion of various theories, such as the movement of environmental

tax reform in the EU, the double dividend and et al.

In promoting the greening of the whole tax system in Japan, it is important for us to continue the evaluation and analysis steadily for the environmental effects of the environmentally-related taxation including comparing with the other countries.

# Future Direction of the Greening of the Whole Tax System

#### (Basic Ideas)

It is important to consider greening of the whole tax system in the broader perspective. Because towards the creation of a sustainable society, it is essential not only to promote low-carbonation but also to instill environmentally friendly initiatives into the whole economy and society throughout the mid-to long term in a wide range of the environmental fields such as the construction of a sound material cycle society and a society in harmony with the nature.

Therefore, it is necessary to promote greening of the whole tax system in a wide range of the fields based comprehensively on characteristics and situations of each environmental field, effectiveness of utilizing tax system as a policy tool, financial, economic and social conditions in Japan, the progress of environmental tax reform and the evaluation on its environmental aspects in the other countries, and the like. In particular, it is effective to promote greening of the tax system including the establishment of a new tax in the field where long-term behavioral change in all levels of civil society are required such as for the reduction in GHG emissions and the amount of waste, or where high policy effects are expected by complementing each other among various policy measures.

In addition, when promoting the greening of the whole tax system, the important perspectives are to be fair from the viewpoints of environmental loads or tax burdens, as well as to be able to obtain the maximum environmental benefits while minimizing the burden.

Furthermore, when reforming the related taxation, it is necessary to contribute to the mitigation of the environmental impacts as well as to take into account of being the fair burden in terms of environmental loads.

(Directions of the Deliberation on Concrete Measures)

Based on the results of the discussions about the concrete measures of the greening proposed mainly in this committee, we will proceed with further deliberation along with the direction as following:

As for energy tax reform towards carbon tax, GHG reduction and internalization of the social cost of carbon are to be promoted by setting the tax rate according to the amount of carbon emissions. In this regard, it is important to properly evaluate the effect of CO2 reduction particularly by the Carbon Tax (Tax for Climate Change Mitigation) introduced in the form of the additional tax rate corresponding to the amount of CO2 emissions for all fossil fuels in order to reduce energy-related CO2

emissions as well as to maximize its effect. Also, it is necessary to consider the further actions in the field of energy taxation by looking ahead to climate change mitigation including a forest sink measure as well as energy policy in the medium-to long-term, in addition to taking into consideration of the greening measures that have been applied.

- As to greening of the vehicle taxation, the tax-break for eco-friendly cars in the Automobile Acquisition Tax and Automobile Weight Tax and special measures of greening the Automobile Tax have already been applied. Therefore, it is important to properly analyze and evaluate the environmental effect of those measures at the very beginning. On this basis, when conducting a review of the vehicle taxation, it is necessary to make comprehensive and systematical consideration in the whole environmentally-related tax system, in order to produce the inhibitory effect on the environmental impact of automobile traffic, as well as to ensure the stable funding for the compensation of the pollution-related health damage in accordance with the polluter-pays principle, by verifying the environmental effects by the related taxation including in other countries from the view point of the promotion for climate change mitigation and anti-pollution measures. In case the increase in environmental impacts is expected by a radical revision of the vehicle taxation, it is necessary to reduce the impact on the environment and to ensure a stable source of revenue, by, for instance, tax increase on energy.
- In regards to chlorofluorocabon tax, it is conceivable to tax in accordance with the contained amount of alternative CFC for the purpose of suppressing its use as its strong greenhouse effect. If such a tax is positioned as an important option from the viewpoint of strengthening climate change mitigation, its practical mechanism should be considered in light of its role in relation to the existing regulatory measures, expected policy effects, fairness from the viewpoint of environmental impacts, enforceability of tax collection as a new tax, and so on.
- As regarding waste tax, it is conceivable to study on its enhancement and nationwide expansion on the basis of the evaluation of the environmental effects caused by current industrial waste tax, the need for the further emissions control in waste policy and reduction in the amount of final disposal, the role of the taxation in accordance with these purposes and the like (for non-industrial waste, relationship with initiatives already taken such as charging for trash or plastic bags).
- As concerns forest environment tax, it is conceivable to strengthen and nationalize forest environment tax in order to cover the financial needs for the conservation of forest environment such as forest sink measure and biodiversity conservation. Therefore, it is necessary to properly evaluate the environmental effects of the current foreign environmental taxes, as well as to further study on the appropriate tax burden and method for the revenue distributions depending on the fact that all the citizens enjoy benefits of environmental conservation forest.
- In addition to the above, since the utilization of tax system is expected in the wide range of fields like the building low-carbon towns, conservation of biological diversity, promoting the use of renewable energy and coping with resource constraints, for the creation of a sustainable society, it is conceivable that we continue the broad study.

# 4. Considerations in Promoting the Greening of the Whole Tax System

#### (Effects of Taxation)

As the environmental effects caused by greening the whole tax system, there are price effect, budget effect, announcement effect (pre-announcement effect and signaling effect) and the like. Therefore, we should serve to the proper understanding of the effects and the maximization of those effects while referring to the cases in other countries.

In addition to the environment effects caused by greening the whole tax system, it is also needed to properly evaluate its induction effects on job creation, technology and innovation, and its negative impacts on specific industries and international competitiveness.

In case to consider such impacts, it is conceivable to respond appropriately in the various systems relating to the taxation with attention to a possibility to weaken the environmental effect of the taxation.

#### (Mechanism of Taxation)

In greening of the whole tax system, we should consider the appropriate mechanism such as taxation in the upstream or downstream stage based on the terms of the efficiency of tax collection including by taking the advantage of the existing tax system, its policy objectives and expected efforts.

For tax measures carried out separately at the local level, from the legal viewpoint, in case the taxation is expected to spread nationwide, it is conceivable to respond with a view to enshrine into law. In addition, if the tax revenue is to be distributed nationwide, there will be a possible use of local transfer tax. It is necessary to consider these measures in light of a proactive commitment at the local level.

#### (Uses of Tax Revenue)

In order to gain understanding of the public on the burden of environmentally-related taxation, it is important to fulfill the accountability that the tax revenue has been used effectively. Especially when the revenue is devoted to an environmental measure, its static and dynamite efficiency (cost-effective) should be high so as to be essential to the creation of a sustainable society.

# (Policy Mix)

Since greening of the whole tax system is only one approach on environmental policy, it is important to form the optimal policy mix with other methods. When doing so, it is necessary to adequately demonstrate policy effects in the overall system, for example, by achieving the necessary adjustments and harmonizing with Feed-In Tariff and domestic emissions trading scheme based on some advanced cases of climate change mitigation in other countries,.

Furthermore, since there are complementary relationships not only among economic

approaches but also with the regulatory approach, environmental education and R&D policy, it is also important to have a viewpoint to configure the appropriate policy packages in relation to these measures at the right time.

# Committee for the Promotion of Greening the Whole Tax System

#### 1. Purpose

In order to realize a sustainable society including low-carbon society, it is necessary to mobilize all measures. In this sense, taxation is an effective policy tool.

Looking at the current tax system of Japan, various tax measures incorporating environment point of view, such as the tax for climate change mitigation which comes into force from October 2012 as well as the special taxation measures in accordance with the greening of the vehicle tax, renewable energy, energy saving housing, pollution and waste management, have been introduced.

On the other hand, since it is stated in the 4th Environmental Basic Master (endorsed by Cabinet on 26 April 2012), that the greening of the taxation should be promoted by comprehensive investing and systematical analyzing the environmental effects due to environment-related taxes such as of energy and vehicles including the situation in other countries, further consideration from taxation towards the construction of a sustainable society is being required.

Therefore, from the point of view of promoting the creation of a sustainable society hereafter, in order to study systematically and comprehensively the desirable way of taxation from the environmental perspective, Committee for the Promotion of Greening the Whole Tax System consisting of experts is to be held.

# 2. Considerations

- [1] Significance of greening the whole tax system
- [2] Appearance of the tax system from the environmental aspect to be realized in the medium to long term
- [3] Evaluation of the current tax system in Japan from the environmental aspect
- [4] Promotion of greening the whole tax system in the future
- [5] Considerations in promotion of greening the whole tax system

#### 3. Committee Members

UETA, Kazuhiro	Professor, Graduate School of Economics and Faculty of
	Economics, Kyoto University
OTSUKA, Tadashi	Professor, School of Law, Waseda University
KURIYAMA, Koichi	Professor, Division of Natural Resource Economics,
	School of Agriculture, Kyoto University)
JINNO, Naohiko *	Professor Emeritus, University of Tokyo
NAKAZATO, Minoru	Professor, Graduate Schools for Law and Politics,
	University of Tokyo
MOROTOMI, Toru	Professor, Graduate School of Economics and Faculty of
	Economics, Kyoto University
YOKOYAMA, Akira	Professor, Faculty of Policy Studies, Chuo University

# YOSHIMURA, Masao (Associate Professor, Graduate School of International Corporate Strategy, Hitotsubashi University)

\* = Chairman

# **Course of Meetings**

- For the first time, on May 15, 2012
  - Agenda (1) Operation of the Committee
    - (2) Report on the current states of greening the whole tax systems at home and abroad
    - (3) Free discussion on the matters to be discussed in the Committee
- For the second time, on Jun3 1, 2012
  - Agenda (1) Interviews with researchers in various fields
    - [1] Shigeki NAKAHARA, Professor, Graduate School of Law, Tohoku University
    - [2] Toshihide ARIMURA, Professor, Faculty of Political Science and Economics, Waseda University
    - [3] Shigeki MORINOBU, Professor, Graduate School of Law, Chuo University
    - (2) Considerations
      - [1] Significance of greening the whole tax system
      - [2] Form of tax system to be realized from the environmental association in the middle to long terms.
- For the third time, on Jun. 19, 2012
  - Agenda (1) Interviews with researchers in various fields, etc.
    - [1] Hiroki KUDO, Senior Research Fellow, the Institute of Energy Economics, Japan
    - [2] Keiji KAJIYAMA, Senior Researcher, Fujitsu Research Institute
    - [3] Yoshitsugu HAYASHI, Professor, Graduate School of Environmental Studies, Nagoya University
    - [4] Koichi KURIYAMA, Professor, Division of Natural Resources, Faculty of Agriculture, Kyoto University
    - (2) Considerations
      - [1] Evaluation of the current tax system from environmental aspect
- For the fourth time, on July 3, 2012
  - Agenda (1) Interviews with researchers in various fields
    - [1] Yasuhiro DAISHO, Professor, School of Creative Science and Engineering Faculty of Science and Engineering, Waseda University
    - [2] Toshiaki SASAO, Associate Professor, Faculty of Humanities & Social Sciences, Iwate University
    - [3] Shunsuke MANAGI, Associate Professor, Graduate School of Environmental Studies, Tohoku University
    - (2) Considerations
      - [1] Promotion of greening the whole tax system in the future
      - [2] Considerations in promotion of greening the whole tax system
- For the fifth time, on July 17, 2012
  Agenda (1) Discussions based on interviews, etc. so far

For the sixth time, on August 28, 2012
 Agenda (1) Organizing discussions so far
 (2) How to proceed with considerations in the future