H-7 Legal Principles for Guiding the Medium and Long Term International Regime against Global Warming

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1. Introduction: The Background and purpose of this Research

After the Marrakesh Accords in the COP7 of UN Framework Convention on Climate Change (UNFCCC) in 2001, the international negotiation for preventing global warming shifted from the preparation for the 1st commitment period of the Kyoto protocol to the establishment of a new international long-/mid-term regime beyond 2012.

A lot of researchers and research groups, especially in Europe and the U.S., has begun to make various proposals for feasible regime options beyond 2012, in order to build a long-/mid-term regime in which some "meaningful" participation by developing countries would be achieved.

The Kyoto Protocol provides that the negotiation shall be started concerning the international commitment on the part of developed countries after the 1st commitment period at the end of 2005 at the latest. It is very important for Japan to make research on the design of a long-/mid-term international regime in order to take the leadership in this field. This research is one of such attempts

From both Japanese and global viewpoints, there has not yet been so much input from the jurisprudence into the research on an international regime of global warming. On the other hand, international society has agreed and developed international legal principles concerning environmental protection and sustainable development, which might be a useful basis for designing an effective and agreeable post-2012 climate regime,.

In such context, our research in legal policy aims to clarify what principles should be

respected, and what the contents, scope and limit of these principles are, which will produce a very important input in making an environmentally effective international regime.

2. The contents of this Research

(1) Research on the Contents and Scope of International Legal Principles Related to the Prevention of Global Warming

This research explores the contents and scope of international legal principles that relate to various aspects of global warming agreed on by nations. Here, international legal principles primarily mean principles set forth in Article 3 of the UNFCCC such as the principles of equity, of common but differentiated responsibilities (CBDR) and respective capabilities, of sustainable development, and precautionary principle. At the same time, the research deals with other principles/fundamentals of international law such as equality of nations and the right to development possibly considered the ones related to climate regimes.

Firstly, in light of characteristics of the global warming issue, our research clarifies what principles relate to what aspects of the issue. And it also reviews discussions of these principles made in the negotiation process of the adoption of the UNFCCC (especially Article 3) and the Kyoto Protocol. We then clarify what positions such principles were given in the Kyoto Protocol, how their functions were agreed on, and how they were coordinated when they were in conflict. In addition, we provide a larger analytical picture by discussing how these principles are treated in other international treaties. In doing the above research, we examine related extensive literature and primary materials on the matter.

Secondly, we analyze various proposals put forward regarding international regime and examine the positions given in these proposals to legal principles identified as the ones that will possibly help establish an effective international regime to prevent global warming.

Finally, based on these researches, we present some feasible options for a post-2012 international regime.

(2) Research on Law Principles Related to the Prevention of Global Warming in Major Countries

This research comprises two parts: (a) to clarify how each nation interprets and recognizes principles of international environmental law; and (b) to discuss if each nation has its own environmental law principles (in environmental legislation, including global warming legislation) that may contribute to designing long/mid-term international systems.

In the field of international law where interpretation rights are ultimately given to each nation, (a) will function as evidence defining contents of environmental principles, and help discuss the possibility of nations' agreement on proposed systems built upon such principles. In consideration of each nation's stance in the negotiation process of UNFCCC and the Kyoto Protocol, we will analyze how principles of international environmental law are interpreted and recognized in each country or region.

In regards to (b), we cannot say the polluter-pays principle, for example, is internationally accepted although it is sometimes used in international treaties. It is, however, found to be an established principle in the environmental legislation of Western countries and Japan. We will discuss if such principles will be useful in designing international systems and, if they are, to what extent they will be useful. If such principles exist, we will then find out their contents and reach, and consider how they can be used for designing international systems. Research target countries include the US, EU and other European countries, Japan, China and India.

We will discuss the positions given in these proposals to traditional principles of international environmental law and other domestic law principles that help establish international systems to prevent global warming. Finally, based on these discussions, we will make proposals for international systems.

- 3 The Reflection and Result of this Research
- (1) Research on the Contents and Scope of International Legal Principles Related to the Prevention of Global Warming

As the Kyoto Protocol suggests, any climate change regime is not composed of one simple institutional element of burden sharing among countries; rather, it is composed of many elements including burden sharing element, and other institutional elements supporting countries' implementation of their emission reduction commitment, such as market mechanisms (the Kyoto mechanisms), compliance procedure, financial mechanisms. The principles provided for in the Article 3 of the UNFCCC and related other principles function on and influence mainly burden sharing, but also other various elements. And any institutional element is not defined and framed by the function of the single principle.

The precautionary principle generally has three dimensions to be applied: first, when the potential risk (risk accompanied with scientific uncertainty) is the common issue for the international community; secondly, when the potential risk of transboundary damage is at issue; and thirdly, when a precautionary domestic action taken is affecting the (economic) interest of another country. In the context of a future climate regime, it mainly functions as factor in determining the medium-/long-term ultimate objective stipulated in the Article 2 of the

UNFCCC.

On the other hand, other principles such as the principles of equity and of common but differentiated responsibilities (CBDR) and respective capabilities mainly function as factor in determining institutional framework as well as burden sharing among countries.

The CBDR principle has broadly been accepted as the principle to require substantial equality among parties by making differentiation of their commitment while acknowledging common duty to protect the environment. However, it is not clear that equality of what this principle shall exactly require. Even if international law is in the process to transform to function to assure individual fundamental rights and freedom, at this point, there are no international criteria concerning absolute equality of individuals in the context of international sphere. The criteria for equal allocation of quantified emission limitation and reduction, such as per capita emission, has not been supported by the theory and practice of international law. It is needed to define the exact substance of equality that the CBDR shall require.

Aiming at bringing out the function of Polluters Pay Principle (PPP) in international law, we conducted review research articles and normative documents on PPP in both international law and domestic law, especially paying attention to what cost-sharing should be like. While the PPP has been well established at national level of many countries, it has not been accepted as customary law and it has limitedly been applied to multilateral environmental agreement. The PPP has not been provided for in the UNFCCC and its Kyoto Protocol. However, for internalizing an externality and in light of justice and fairness, the PPP is expected to play a role in providing a basis for burden sharing of cost of global warming, especially of adaptation cost. Further research should be done on this principle for this purpose.

Much literature has been published offering proposals on what should be done with a post -2012 regime. Many of legal principles have actually been reflected on major burden-sharing schemes proposals beyond 2012 such as Brazilian Proposal and Contraction & Convergence.

(2) Research on Law Principles Related to the Prevention of Global Warming in Major Countries

1) EU

1. The development of polluter pays principle in the EU

The research firstly examined the development process of polluter pays principle in the EU law. It revealed that polluter pays principle was introduced as a guiding principle in the EU first environmental action programme in 1973 and has been repeatedly mentioned as one of important principles to regulate environmental actions in the European commission, however, its meaning was yet clear. Directive2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage was adopted in 2004, in order to clarify the meaning of polluter pays principles, however, its implementation very much depends on member states.

2. Total volume control (acidification, CO2, air pollution) and polluter pays principle
The research secondly examined the relationship between polluter pays principle and
total volume control in the EU air pollution control laws, namely Large combustion plants
directive (88/609/EEC, 2001/80/EC), National emission ceilings directive (2001/81/EC),
Council Decision concerning burden sharing among the EU member states (2002/C75E/03), and
Emissions trading directive (2003/87/EC).

It revealed that the EU does not necessarily rely on the original definition of polluter pays principle to determine numerical targets. Looking into the way to determine the numerical targets for the examined two national total volume control regulations (2001/80/EC, 2002/C75E/03), they incorporate the idea underlining polluter pays principle, i.e. the polluting party pays for the damage done to the natural environment, and ability to pay principle. On the other hand, total volume controls for the installations in member states depend on member states' decisions, therefore are easy to be influenced by power games within member states. However, the objective to introduce regulations targeting large installations most contributing to emissions can be regarded as reflection of polluter pays principle.

The research also revealed that EU uses multi-level-regulations, i.e. setting national total volume control regulations and targeting the sectors discharging large emissions.

The EU multi-level-regulations-method recalls that national targets and sector targets are not contradictory but the latter could enhance compliance of the former. In other words, without having multi-level-regulations, it is difficult to control emissions discharged from various sources. This has the implications for the international climate negotiation facing various proposals based on national targets and sector-based targets.

2) France

- 1. Legal rules concerning fundamental environmental legal principles
- a. Code of Environment in France declares precautionary principle, preventive and correctional action principle, polluters pay principle and participation principle (Art.110-1) as well as a kind of environmental right (Art.110-2).
- b. Environmental Charter of France has been adopted on March 1st 2005, which declares 10 environmental principles Art.1 concerning environmental right, Art.2 on duties to participate in conservation and improvement of environment, Art.3 which prescribes all persons' duties to prevent to damage environment, Art.4 concerning recovery of environmental damage and Causal-Parties-Pay Principle, Art.5 prescribing precautionary principle, Art.6 concerning the necessity of integration of public policies to sustainable development, Art.7 concerning all persons' right to access to environmental information and to participate in environmental decisions, etc.
- 2. PPP and Causal-Parties-Pay Principle:
- a. PPP is prescribed in the Code of Environment and a lot of measures have been taken on the basis of this principle. Causal-Parties-Pay Principle aims to introduce new environmental

policies such as recovery of environmental damage.

- b. We wonder if policy makers of environmental policies in France try to make up their countermeasures against global warming on the basis of these fundamental legal environmental principles, PPP or Causal-Parties-Pay Principle in particular, but from our point of view we might find out their application in their National Plan to climate change and total regulations to some environmental pollution substances.
- 3. Total emission regulation:
- a. We will report here three systems of total regulation we studied in this research. The 1st is the air pollutant emission reduction national program to perform a regulation of volume about SO2, nitrogen oxide, a volatile organic compound, and ammonia. It is a plan for observing the maximum limit of the pollutant release which the directive (la directive 2001/81/CE) adopted on October 23, 2001 defines, and a new policy has presented per difficult portion of standard achievement by the existing regulation.
- b. The 2nd is a quota trading system of greenhouse gas. The prescriptions on it are placed in the code of environmental law, translating the directive on October 13, 2003 (2003/87/CE) into French law. The national plan on quota to emit greenhouse gas (PNAQ) defines the highest limit of the emissions rights which the country assigns, the criteria of assignment of quota, and the list of institutions that receives assignment.
- c. And the 3rd is a certificate of economizing energy system. The program act fixing the orientations on the energy policy (NOR:ECOX 0400059L) provides it. A quota trading system being a system to control the emission from a industrial sector, a certificate system is a system to control the emission from a people's livelihood sector. In this system, the entrepreneur who supplies the energy exceeding a fixed quantity to final consumers has an obligation of economizing energy and is asked for presentation of the certificates of economizing energy to prove the fulfillment.

In order to apply the measures for regulation in these systems, a certain amount of scale is needed. Probably, it is appropriate to regard as the result of having taken into consideration the effectiveness of a regulatory measure and the possibility of application. And it is in agreement with Polluters Pay Principle and a pays principle according to ability as a result.

3) United Kingdom

In this paper, among several environmental principles that are recognized in UK, both political and legal aspects of precautionary principle and polluter pays principle have been mainly explored. Also, by taking Landfill Allowance Trading Scheme (LATS) as an example, principles and methods of allocation have been examined.

Policy documents published by the UK government explicitly confirms the importance of both precautionary principle and polluter pays principle. However, on the other hand, both principles lack their legal basis in UK environmental legislation. Their existence and importance in UK environmental law have been confirmed through the court judgment. Even then, those principles have not been given independent legal weight, but only in conjunction with other

principles or values.

In UK, it is obvious that precautionary principle and polluter pays principle are given significant value in the UK policy making and legislation, but at the same time, the principle of proportionality, equity/fairness, certainty, and - especially after the Thatcher administration - economical efficiency are principles or elements required to be taken into consideration.

4) United States

Traditionally, American (federal) jurisprudence is not familiar with a deductive (or systematical) approach of thinking, starting from "(legal) principle". It is unusual that a "principle" is dealt with in an academic discourse or enshrined in legislation explicitly. However, with regard to the polluter-pays principle for example, there seems to be lots of environmental statutes that materialize the principle -- then it might be possible to say that these statutes are based on that principle.

Some statutes of CERCLA, the Superfund law, include the idea of the polluter-pays principle. In CERCLA, the party that is responsible to clean up past pollution is construed by courts to include wide range of entities, which goes beyond the commonly held image of "polluter". And CERCLA liability is applied to acts committed before its effective date, even though such acts were legal when they were committed.

CAA provides an emission trading system along with a total emission control, and CAA's system adopts the two-phased approach. We can point out in this approach an example of practical institutional design which reflects the effectiveness of emission reduction and the feasibility (or ability) of regulatee to comply.

5) Japan

Debate concerning cost allocation and responsibility under Japanese environmental law suggests the following two points:

First, PPP is the most desirable approach from the perspectives of both the effectiveness of environmental protection and the efficiency of policy, and is a convincing option in terms of fairness. However, because there are many different concepts of fairness, it is necessary to take into consideration such aspects as the ability to pay (a point particularly discussed as an issue of equity). Speaking globally with regard to the citizens of developing countries, this consideration raises a particular concern about how to approach the right to develop.

Second, one of the special characteristics of environment-related cost allocation in Japan has been the incorporation of the concept that the causal party pays even in cases where a response is needed to restore the environment after pollution has occurred. This approach has since gained momentum in the rest of the world, as evidenced by its recognition by OECD and the Rio Declaration, where it has been pointed out that it is highly necessary from the perspective of ensuring the effectiveness of environmental protection measures.

6) India

1. In India following points have been clarified not in the statutes but by the development of environmental public interest litigation.

Some of the salient principles of "Sustainable Development", as culled out from Brundtland Report and other international documents, are Inter-Generational Equity, Use and Conservation of Natural Resources, Environmental Protection, the Precautionary Principle, Polluter Pays Principle, Obligation to Assist and Cooperate, Eradication of Poverty and Financial Assistance to the developing countries. We are, however, of the view that "Precautionary Principle" and "Polluter Pays Principle" are essential features of "Sustainable Development". The "Precautionary Principle"--in the context of the domestic law--means:

- (1) Environmental measures--by the State Government and the statutory authorities--must anticipate, prevent and attack the causes of environmental degradation.
- (2) Where there are threats of serious and irreversible damages, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- (3) The 'onus of proof' is on the actor or developer/industrialist to show that his action is environmentally benign.

It appears that the Court has maintained the consistency in the application of polluter pays principle in subsequent cases. It may be submitted, however, that the explanation regarding nature, scope and definition of "Polluter Pays Principle" in more lucid manner by the Court is need of the hour, as there is no direct statutory provision regarding application of this principle in India.

2. Post-UNCED, moreover, the Indian government maintains the position that Indian emissions will have to grow as the country seeks to expand its economic growth. It is a general perception among the central government officials who are involved in the policy-making process regarding CC that the FCCC takes satisfactorily care of this position and that this leaves the responsibility for GHG-abatement with developed countries. Hence, the position within the bureaucracy is that the current main concern of developing countries must be to take stock of the national impacts of CC, and, further, to stake out the possibilities for adapting to such impacts. The central government officials interviewed all found it important to stress that India is a developing country with many other important priorities. Employment, the eradication of poverty and economic growth were stressed as being more significant domestic issues.

7) China

Causal-Parties-Pay Principle is generally accepted in China. In regard to its content and theoretical ground there are some differences in detail, but it is agreed that the one who polluted environment should shoulder some responsibility for the result of his / her behavior, at least should pay some cost. Emission charge system which is a typical application of Causal-Parties-Pay Principle in China was established in early times, and recently the extent that

emission charge is imposed became more comprehensive than before by amendment. In this way the emission charge system of China was made more fit to Causal-Parties-Pay Principle.

In the system about distribution of emission right among companies or prefectures, the factors such as the past emission, the ability of each company or prefecture etc. are considered, but it is necessary condition to achieve the aim. So if we take the basic stand that is based on Causal-Parties-Pay Principle, makes it necessary condition to achieve aim and considers the other factors, the standpoint that requires developing countries reducing emission of green house gas will not be opposed by China Government.

- 8) Post-2012 proposals based on various principles
- (1) Mitigation—3 system proposals
- 1) Proposal 1: Design from causal party-pays-principle, ability to pay principle and CBDR (Figure 1)
- i) First, countries with certain percentage (e.g. 70%) from the top in worldwide cumulative greenhouse gasses emission (mainly carbon dioxide) in the past (after 1990) shall be determined (EU is considered as an entity.). This section uses the causal party-pays- principle.
- ii) Among these, the countries with national income and other indices (purchasing power parity is a possible criterion) at certain levels should reduce by a uniform rate of X% from the greenhouse gas emission amount in 1990 (or from the year in which the above indices reached certain levels for developing countries) ("X" here is the value to aim for halving the greenhouse gasses emission in 1990 for 70% of the world while considering iii)). It is based on CBDR (causal parties pay principle (= i) + ability to pay principle).
- iii) Countries that do not apply in ii) shall be applied with a target of intensity (not legally binding or somewhat legally binding. Whether it will be possible to participate in emission trading will depend on which is chosen). This is based on ability to pay principle.
- iv) Among the remaining countries comprising the remaining 30%, countries with national income and other indices at certain levels should be obligated with reduction in emission from the viewpoint of ability to pay principle. Countries to accept obligations with hopes to participate in emission trading shall also be acclaimed. These are handled in a similar fashion to ii).
- v) Measures for the remaining countries should be left to aids by advanced countries, revised CDM, etc. (based on CBDR [causal party-pays-principle (= i) + ability to pay principle]). It is also possible to apply support for developing countries in iii).

These 2 tracks are based on the concept that countries with high emission (at present or in the past) should reduce more (or first) as indicated by the above causal party-pays-principle with some corrections by CBDR.

2) Proposal 2: Design from the formal equality of each person—Contraction &Convergence proposal (Figure 2)

This is a concept to set up the emission amount target per capita based on the formal

equality of each person. It is a concept that pursues one state of the equity principle. One problem for this design is that it makes light of the fact that increase in population itself is an environmental load and a cause for greenhouse gas emission.

3) Proposal 3: Design with consideration of fairness for international competition (Figure 3)

The concept to establish the intensity target per GDP is one method with consideration of fairness for international competition. This aims to equalize the greenhouse gas emission amount per certain volume of economic activity (though a little inaccurate). However, the problem for this proposal is how we should think of the fact that the reduction of total emission amount cannot be achieved when GDP increases. It is possible to address this problem by setting up the intensity target so that the total amount stays within certain range by considering the growth in production using a model. The idea of the fairness for international competition should be applied not only to advanced countries but also to developing countries if the levels of trade and investment are high. In this case, aiming for one intensity target among the obligated countries is a possibility.

For developing countries among the countries with major emission levels, it may also be possible to allow certain transitional period or allocate a little larger emission amount. This will give consideration to CBDR while using fairness for international competition as the basis.

This proposal is considered to have the following advantages:

- This concept is important when considering the possibility for obtaining agreement by the countries that will actually be obligated.
- It is highly likely that leakage of greenhouse gas emission can be solved.
- The reduction target is clear for the industries and there will be incentive for reduction.
- Energy saving is promoted from economic viewpoint aside from the environmental viewpoint and it is a theme highly emphasized by not only advanced countries but also developing countries, especially high emission developing countries. This proposal keeps this point firmly in mind.

(2) Proposals on adaptation (Figure 4)

For adaptation, it is recommended we directly adopt the causal party-pays-principle. In this case, it is difficult to avoid proving the causation between the contribution by cumulative emission of greenhouse gases and the damage caused, and this is the greatest problem to be solved. Though there is an opinion that it is possible to acknowledge this and apply responsibilities by countries, only a few international law scholars support this. It seems practically extremely difficult to apply the causal party-pays-principle on adaptation unless this problem is cleared.

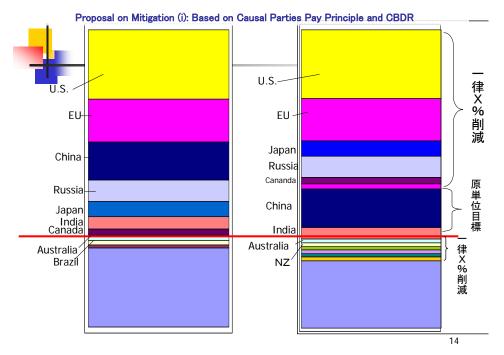


Figure 1

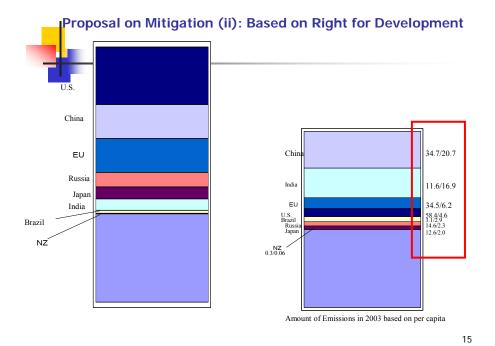


Figure 2

Proposal on Mitigation (iii): Based on Fairness for international competition CO2/GDP 4.5 China 4 India 3.5 NZ 3 U.S. 2.5 EU 2 1.5 1 Sweder 0.5 \mathbf{x}_{0} 2002 2050 16 Figure 3

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2. Proposal on post-2012 framework based on legal principles --Adaptation--

- Adaptation Cost: Causal Parties Pay Principle
 - Apply Causal Parties Pay Principle to Cost for remedy and Cost for the damage

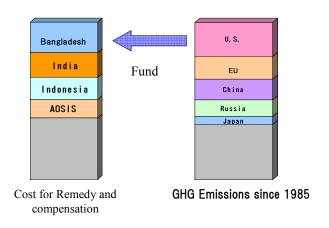


Figure 4

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Major Publications

- Otsuka, T, Chu-Chokiteki na Chikyuondanka Boushi no Kokusaiseido Sekkei -- Nihon no Kankyoho ni okeru Kihongensoku karano Pasupekutibu (Designing a Future International System to Prevent and Adapt to Global Warming: The Perspective of the Principles of Japanese Environmental Law), Kikan Kankyo Kenkyu (Environmental Research Quarterly) 138, 128-133 (2005)
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