

The Truth about the Reduction of Greenhouse Gas Emissions Stated in the Kyoto Protocol -Environmental Problems Used as Political and Economic Strategies by European Countries-

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Abstract This paper discusses the process of the adoption of the Kyoto Protocol, including the U.N. Framework Convention on Climate Change and government policies of different countries reflected in the process, and examines whether or not the protocol has significance for the prevention of global warming. The results suggest that the process of setting an emission reduction target undergone by the Japanese government did not include thorough discussions and accurate estimates. On the other hand, E.U. member countries and the U.S.A. had discussed various measures with everything taken into account before they attended the Conference of Parties III (COP3). It should have been easy to predict that Japan would be disadvantaged by the enactment of the Kyoto Protocol even before the conference was held. While emission reduction targets for Japan and other developed countries were being set in the Kyoto Conference, all participating countries must have been solely determined to ensure that the protocol would work to their advantage, rather than actively trying to prevent global warming. Furthermore, when the protocol was adopted and emission reduction targets for Britain and Germany were set, these countries had surprisingly already accomplished their goals. This was presumably because industrialized E.U. countries held particularly dominant positions in the conference. On the other hand, Japan was solely determined to build a consensus among the participating countries and maintain its dignity as the host country of the Kyoto Conference. As a result, Japan had to agree to an emission reduction target that could not be easily accomplished.

Keywords Global Warming, Kyoto Protocol, Strategy, CO₂ emission, Greenhouse Gas

1. Introduction

Since the adoption of the Kyoto Protocol at a conference held in Kyoto, Japan, in 1997, following the conclusion of the U.N. Framework Convention on Climate Change in 1992, a variety of international conferences on the prevention of global warming have been organized. This reflects serious concern over the global environment and warming among many people around the world. Currently, such international conferences are organized on a regular basis by the contracting countries [1].

Among the achievements produced through a series of discussions on global warming, the Kyoto Protocol was particularly notable. The protocol is considered to be a compilation of the efforts of the international community to address global-scale environmental problems, and many people still remember its name. However, few people clearly

understand the details of the Kyoto Protocol, its interests, and its influences on Japan.

The Kyoto Protocol aims to prevent global warming, and obliges developed countries to reduce greenhouse gas emissions. It is based on the assumption that, if emission reduction targets for these countries are accomplished, the problem of global warming will be solved. However, some people have argued that global warming would not be prevented even if the goals stated in the protocol were reached, and others have stated that the reduction targets could not be accomplished in the first place. Some suspect that only Japan, as the host country of the conference, would be significantly disadvantaged by the Kyoto Protocol.

The present study examines questions related to the Kyoto Protocol and the status of greenhouse gas emission reduction in order to discuss whether or not the protocol has significance for the prevention of global warming, as well as the position of Japan in the protocol and in the international community. If the grounds and reasons for the above-mentioned assumption and position of Japan are explained and understood, the idea that the protocol has significance for the prevention of global warming may be

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questioned. Moreover, the study results may suggest that the protocol prevents Japan from enhancing its competitiveness in the international economy.

2. What is the Kyoto Protocol?

The Kyoto Protocol, adopted at the 3rd Conference of the Parties to the Framework Convention on Climate Change (COP3) held in Kyoto in December 1997, states the structural elements of approaches to be implemented by the international community to address the problem of climate change in the 21st century. The protocol, which includes descriptions of the Joint Implementation (JI), Clean Development Mechanism (CDM), and other measures to reduce greenhouse gas emissions, as well as emission reduction targets, entered into effect in February 2005. The protocol is centered on greenhouse gas emission reduction targets to be accomplished by developed countries between 2008 and 2012. The present study examines whether or not greenhouse gas emissions can be reduced by accomplishing those targets, and discusses its future effects on Japan and other countries, while taking into account their historical background.

The following is an outline of the Kyoto Protocol [2]: (1) A system of "emission quota trade" has been adopted. (2) The Joint Implementation (JI) system has been adopted. (3) The Clean Development Mechanism (CDM) has been adopted. (4) Greenhouse gases to be reduced include carbon dioxide (CO₂), methane (CH₄), nitrogen monoxide (= dinitrogen monoxide: N₂O), hydrofluorocarbon (HFC), perfluorocarbon (PFC), and sulfur hexafluoride (SF₆), and these are calculated using the Basket Approach [3]. (5) The reference year is 1990. (6) Regarding the accomplishment of targets, mean greenhouse gas emissions between 2008 and 2012 are calculated. (7) The calculation of the reduction of greenhouse gas emissions shall include the CO₂ absorptions and emissions attributed to forestation, reforestation, and deforestation since 1990. (8) E.U. countries have an advantage via the E.U. Bubble system [4]. (9) The collective target for the developed country group is 5%, and different targets may be set for each country.

The Kyoto Protocol includes the above-mentioned descriptions.

3. Background to the Enforcement of the Kyoto Protocol

3.1. Why was the Conference for Adoption of the Protocol Held in Japan?

Why was the conference for the adoption of the protocol held in Japan in the first place? This is closely related to an event at the Earth Summit held in Rio de Janeiro in 1992. The United Nations Conference on Environment and Development (UNCED), or the Earth Summit, held in June 1992, was participated in by 183 countries, areas, and

organizations globally, including the heads of 103 countries. It was the largest conference in the history of the United Nations, and the total number of participants was more than 40,000. One of the characteristics, or achievements, of the conference was that the heads of many countries gathered together to discuss global environmental problems. In other words, participation in the conference itself had great significance. Furthermore, as another achievement of the conference, the Framework Convention on Climate Change was also adopted.

However, former Japanese Prime Minister Kiichi Miyazawa could not participate in this historical conference because he had been scheduled for Diet deliberations on the controversial bill for the PKO Cooperation Law. The international community thus had the impression that Japan did not take environmental problems seriously [5]. At that time, the First Conference of Parties of the U.N. Framework Convention on Climate Change was being held, in which negotiations for a protocol and its adoption at the COP3 were in progress. The successful organization of the conference and adoption of the protocol in Japan would have left its name in the history of environmental conservation. With these factors taken into account, Japan may have bid to host the Conference of Parties III (COP3) of the U.N. Framework Convention on Climate Change to compensate for the failure at the Earth Summit in 1992, or to repair its damaged reputation. Furthermore, as the post of the chairperson of the COP3 had been allocated to the group of Asian countries [6], if Japan hosted and organized the conference as the chair, the country could demonstrate its environmental diplomatic efforts. Japan presumably applied to be the chair of the conference because it was determined to compensate for the failure at the Earth Summit.

However, Japan did not become the host of the conference based on a self-centered idea. In the first session of the Ad Hoc Group on the Berlin Mandate (AGBM1) held in August 1995, many countries expected Japan to organize the Conference of Parties, as suggested in their statements [7]. Their expectations were associated with the issue of "financial resources". Significant amounts of funds are required to promote environmental conservation including developments related to environmental protection. Methods for the collection of funds were also a subject discussed at the Earth Summit held in 1992. Therefore, former Prime Minister Miyazawa's absence from the Earth Summit must have disappointed those countries, which expected significant amounts of funds from Japan, the country having the world's largest trade surplus at that time. They expected the Prime Minister of Japan to announce a decision to provide funds during his speech at the conference. The fact that the Earth Summit office organized the "Eminent Persons' Meeting" in Tokyo to collect funds is also suggestive of this [8]. Considering that the meeting was held in Japan instead of the West, in which there are a large number of international organizations, it is natural to think that the other participating countries expected Japan - a country with the world's largest trade surplus at that time - to "provide

significant amounts of funds". If Japan responded to their expectations by successfully organizing the Conference of Parties in that situation, the country would have had no choice but to assume an important position in environmental diplomacy and provide funds. The actions of the major participating countries were based on this idea. On the other hand, Japan was eager to become the host of the COP3 since it was a good opportunity for the country to repair its damaged reputation.

Taking into account the background to the COP3 held in Japan, it is clear that the country was solely determined to lead the conference to success. As a result, Japan placed top priority on the success of the conference and agreed on an emission reduction target for the country that could not be accomplished.

3.2. Determination of Emission Reduction Targets

The emission reduction target for Japan was set at 6% in the Kyoto Protocol [9]. The U.S.A. and the E.U., other major participating regions, were required to reduce greenhouse gas emissions by 7 and 8%, respectively. What were the grounds for these figures? The present study examines the background, the process by which the targets were agreed on, and the intentions of the participating countries.

Originally, the E.U. suggested that it would reduce gas emissions by 15% [10]. However, even some E.U. countries questioned whether this target could be accomplished. In fact, Thibault, the Aide to the Minister of Environment, stated that the business community was vigorously opposed to the 15% reduction, and that it would be unfair if only E.U. countries were obliged to reduce gas emissions by 15% [11]. Britain suggested that it would accept a 10% reduction, rather than 15%, in exchange for the E.U. Bubble [12]. These facts suggest that, as a clever strategy, the E.U. first proposed a higher reduction target, compared with those proposed by Japan and the U.S., and then made some requests in exchange for lowering the target.

Eventually, Japan, the U.S.A., and the E.U. agreed on 6, 7, and 8% reduction targets, respectively, as they had to lead the Kyoto Conference to success. However, since the U.S.A. had emphasized the importance of efforts by developing countries, it made the following suggestion: In the initial stages of negotiations with developing countries, developed countries would provisionally propose reduction targets of 5, 6, and 6% for Japan, the U.S.A., and E.U., respectively, instead of the above-mentioned targets, to encourage developing countries to become involved in environmental conservation voluntarily

The participating countries employed various tactics to gain an advantage.

3.3. The 6% Greenhouse Gas Emission Reduction Target for Japan

Emission reduction targets for Japan, the U.S.A., and the E.U. are stated in the preceding sections. In this section, the 6% greenhouse gas emission reduction target for Japan is

discussed in detail.

Prior to the Kyoto Conference, the former Japanese Ministry of International Trade and Industry stated that Japan could not reduce greenhouse gas emissions by more than 0% [13]. This was because the energy efficiency achieved by Japanese industry was the world's best; therefore, it was difficult for Japan to increase its reduction of CO₂ emissions - one of the greenhouse gases for which emissions were to be reduced (Figure 1) [14].

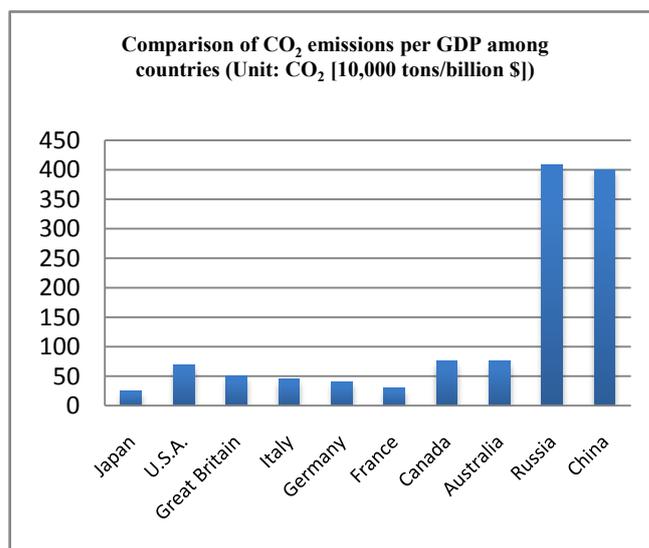


Figure 1. Comparison of CO₂ emissions per GDP [15]

However, as the Japanese Environment Agency and the Ministry of Foreign Affairs had been aware of the views of the other countries, namely, that "Unless the emission reduction rate agreed on at the Kyoto Conference was at least 5% higher than that of the year 1990, the conference should be regarded as a failure", they considered that high emission reduction targets should be set [16]. Furthermore, Japan must have been afraid that, if it proposed a 0% increase in the emission reduction rate relative to the year 1990, it would be blamed for its irresponsibility as the chair country, and its status in environmental diplomacy would be damaged. This is assumed to be a cause of Japan's agreement to an increase in the emission reduction rate that could not easily be accomplished.

Japan was significantly influenced by the intentions of the U.S.A. for another reason. Although the U.S.A. originally proposed a 0% increase in the emission reduction rate over the base year, it eventually agreed on a 7% increase in the reduction rate. The U.S.A., which had stated that it would ratify the protocol only if developing countries agreed to it, proposed emission reduction targets higher than those agreed on as a final decision to encourage developing countries to participate in negotiations for the protocol. The U.S.A. also wanted Japan to agree to those high targets to persuade the developing countries to participate in the negotiations. However, in addition to this purpose, the U.S.A. presumably attempted to avoid adverse effects on its economy caused by setting a high emission reduction target only for the country.

The U.S.A. persuaded Japan to set a similarly high target to prevent the Japanese economy from gaining an advantage over the American one. Japan agreed on the 6% emission reduction target at this point to cooperate with the U.S.A. However, the U.S.A. eventually refused to ratify the protocol to avoid its obligation to reduce greenhouse gas emissions by 7%. Japan agreed on the emission reduction target because the country was persuaded by the U.S.A. and informed of the targets for the other countries as a final decision, and was betrayed.

In my opinion, Japan attempted to present a satisfactory emission reduction target for the country to lead the Kyoto Conference to success, but was put in a disadvantaged position. The Japanese government may have felt pressured to organize the important international conference appropriately and to demonstrate its capability. However, since CO₂ emissions are directly related to economic activities in Japan, the government should have been more careful and prepared in organizing the conference.

4. Accomplishment of Targets stated in the Kyoto Protocol

4.1. Difficulty for Japan to Accomplish Targets Stated in the Kyoto Protocol

The Kyoto Protocol states that greenhouse gas emission reduction targets shall be calculated based on the levels in 1990. Greenhouse gas emissions when converted into the amounts of CO₂ emitted in 1990 were 1,272 million tons in Japan, 6,229 million tons in the U.S.A., 771.4 million tons in Britain, and 1,227.9 million tons in Germany. Greenhouse gas emissions when converted into the amounts of CO₂ emitted in 2000 were 1,347.6 million tons in Japan, 7,125.9 million tons in the U.S.A., 674 million tons in Britain, and 1,019.8 million tons in Germany. The emission reduction rates in 2000 (following the Kyoto Conference) for Japan and the U.S. were 6 and 14% higher, respectively, than in the year 1990. On the other hand, at the time of the Kyoto Conference, the emission reduction rates for Britain and Germany were 13 and 17%, respectively. In other words, at the time of the conclusion of the convention, the two countries had already accomplished their greenhouse gas emission reduction targets (refer to Table 1) [17].

The fact that Britain and Germany, political and economic powers in Europe, had already accomplished their reduction targets even before the conclusion of the convention suggests that they were not determined to reduce greenhouse gas emissions. The Kyoto Protocol did not aim to reduce greenhouse gas emissions in a real sense. Moreover, the CO₂ emissions per capita in Britain and Germany were greater than those in Japan (refer to Figure 2) [18].

As the CO₂ emissions per capita were larger, Britain and Germany still had room for emission reduction, and it was easier for them to accomplish their targets. On the other hand, the greenhouse gas emissions in Japan had increased by 6%, according to a survey conducted in 1997, the year in which the Kyoto Conference was held, so the country was obliged to reduce gas emissions by approximately 12%, instead of 6% as stated in the protocol. Similarly, the U.S.A. was actually required to reduce gas emissions by approximately 21%. Japan could not accomplish its target as expected. Since automobile and other industries in Japan had already improved their energy conservation significantly, newly developed energy conservation technologies could not have increased the emission reduction rate. The greenhouse gas emission reduction target for Japan could thus not have been accomplished. The slogan of the prevention of global warming and its positive image tricked Japan into ratifying this absurd convention.

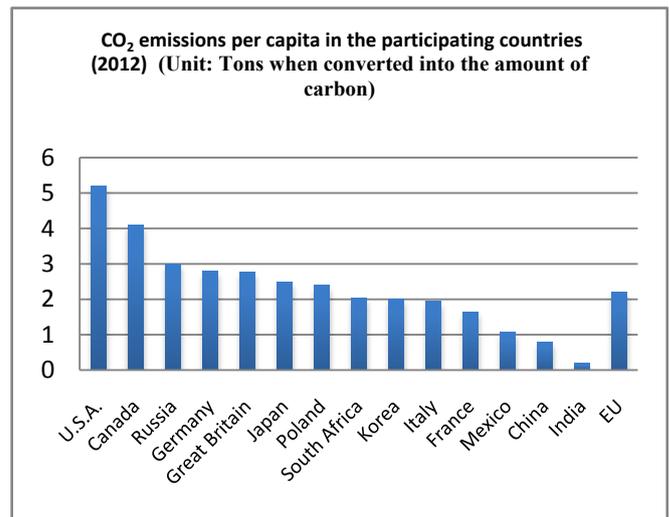


Figure 2. CO₂ emissions per capita in the participating countries (2012)

Table 1. Actual greenhouse gas emission reduction targets

Country	Greenhouse gas emissions (CO ₂ base [million tons])		Reduction rate			Implementation status	
	1990	2000	At the time of the conference	Ratification	Actual reduction targets	Protocol	Obligation to reduce greenhouse gas emissions
Japan	1272	1347.6	6%	-6%	-12%	Agreed to ratify	Yes
U.S.A.	6229	7125.9	14%	-7%	-21%	Refused to ratify	No
Germany	1227.9	1019.8	-17%	-8%	9%	Agreed to ratify	No
Britain	771.4	674	-13%	-8%	5%	Agreed to ratify	No
Canada	596	720.9	21%	-6%	-27%	Refused to ratify	No

4.2. Why could Britain and Germany only Reduce CO₂ Emissions Nominally?

Prior to the 1980s, management and production systems in Britain were inefficient because there were a large number of government-owned companies in this country. However, many of these state-owned companies were privatized in the 1980s to achieve marked improvements in the management and production systems. Furthermore, Britain became the second largest oil producer in Western Europe in the 1980s owing to the successful development of oilfields in the North Sea [19]. During the 1990s, inefficient coal-fired thermal power stations were gradually turned into gas-fired power plants using efficient petroleum. This was the reason why Britain was able to reduce CO₂ emissions to a level lower than that in 1990.

East and West Germany were not reunified until 1990. At this time, the social system of East Germany and its technologies were significantly behind those of West Germany. The country was thus able to reduce CO₂ emissions by simply replacing old equipment in industrial, transportation, and private sectors without difficulty. The energy efficiency in Germany was the lowest in 1990. When East Germany was reunified with West Germany, and its efficient technologies were introduced, East Germany was able to reduce CO₂ emissions markedly because the country had unnecessarily emitted large amounts of greenhouse gas prior to reunification.

On the other hand, in the 1980s, energy efficiency in Japanese manufacturing was the highest in the world, and Japan had already established an environmentally friendly society through energy conservation and other efforts. As Japan had already reduced greenhouse gas emissions to a large extent by 1990, the country did not benefit from the Kyoto Protocol. It could thus have been predicted that Japan would be disadvantaged by the protocol.

4.3. The E.U. Bubble

In the Kyoto Protocol, one greenhouse gas emission reduction target has principally been set for each individual country, including Japan, the U.S.A., and Russia. However, a single greenhouse gas emission reduction target has been set for European countries, such as Britain and Germany, as the target to be accomplished by the whole E.U. The protocol requires Japan, the U.S.A., and the E.U. to reduce greenhouse gas emissions by 6, 7, and 8%, respectively. The target for European countries thus appears to be high. However, under the E.U. Bubble system, it is actually not: The target for the E.U. may be accomplished when some E.U. countries markedly reduce greenhouse gas emissions even if other countries fail to do so [20]. Britain and Germany had already accomplished their targets even prior to the conclusion of the convention, as explained in the preceding sections. When the system of the E.U. Bubble was adopted, Britain and Germany had already reduced greenhouse gas

emissions to the level required to accomplish the target for the E.U. This clearly suggests that Britain, Germany, and the other European countries were reluctant to reduce greenhouse gas emissions.

The E.U. Bubble can be regarded as a trade of emission quotas that does not involve money, and Japan was opposed to it [2]. Why was Japan - a country in favor of another more common trade of emission quotas involving money - opposed to the E.U. Bubble. It presumably considered that the trade of emission quotas that does not involve money among a large number of E.U. countries would restrict the number of emission quotas traded on the market, which would subsequently increase their prices. The above-mentioned action of the Japanese government reflects the essence of the Kyoto Protocol: the protocol allows the countries to trade their quotas of gas emissions. If a country has difficulty reducing greenhouse gas emissions, it may purchase the right to emit greenhouse gas from another country that is expected to emit an amount of greenhouse gas far below the quota and is in need of foreign currency. This is far from the real purpose of the Kyoto Protocol, namely, "reduction of the effects of greenhouse gases".

4.4. Why was the Reference Year of 1990 Selected?

The Kyoto Protocol was adopted in 1997. Therefore, 1997 or 1998 should have been selected as the reference year. Alternatively, the year 2000, a few years later, could have been chosen. However, as you may know, the year 1990, seven years prior to the adoption of the protocol, was chosen as the reference year. This decision was significantly influenced by the interests of the participating countries.

It was relatively easy for Britain, Germany, and other developed E.U. countries to accomplish the targets calculated based on the greenhouse gas emissions in 1990, as explained in the preceding sections. Many people had already recognized this fact at the time of the conference in 1997. Similarly, it was also very easy for Russia, another major power that has not been mentioned in the preceding sections, to accomplish the target calculated based on the greenhouse gas emissions in 1990. With the collapse of the Soviet Union and its communist regime in 1989, state-owned companies and factories across the country were closed, and there was a significant decrease in energy consumption, by approximately 40% according to a report, in accordance with the collapsed economy [21].

In the Kyoto Protocol, the emission reduction rate to be accomplished by Russia was set to be 0% based on the reference year of 1990. As of 1997, many countries must have already recognized a significant decrease in the amount of greenhouse gas emitted by Russia. Russia's reaction would thus have been completely different if its emission reduction target had been decided based on the level in 1997. The COP3 Kyoto Conference was significantly influenced by the intentions of the participating countries, including the E.U. and Russia.

5. Discussion

The above-mentioned facts and the discussion on them suggest that the Kyoto Protocol does not solely focus on environmental problems, and it is closely related to diplomatic and economic issues. For the participating countries, the subject of the environment, which creates a positive image, was a means of holding a dominant position diplomatically and economically. However, if the greenhouse gas reduction rate to be accomplished is large, the country will be required to refrain from economic activities or its economic burden will increase, including investment in business. The Kyoto Protocol is regarded as an international agreement on the allocation of quotas of greenhouse gas emission reduction, and all participating countries were determined to reduce their quota as much as possible. Why was the COP3 held in Kyoto in the first place? Japan, whose political power is particularly weak among the developed countries, applied to host the conference, presumably because it considered it to be a valuable opportunity to improve its political initiatives and status in international politics. Although Japan was able to host the conference, it was very easy for Britain and Germany to accomplish their targets, and the protocol was not ratified by the U.S.A. Considering these facts, the conference in Japan may have been planned by other developed countries with the purpose of preventing the country from having an advantage.

Regarding emission reduction targets, it is clear that Japan had no choice but to agree on the 6% emission reduction target under pressure from other developed countries, including E.U. countries and the U.S.A., since Japan was already aware that it would not be able to reduce greenhouse gas emissions by more than 0%, even prior to the Kyoto Conference. If Japan had resisted pressure from E.U. countries and only reduced greenhouse gas emissions by a smaller percentage, it would have failed to accomplish its goal of enhancing its political power among other countries through environmental diplomacy, and demonstrated that it was reluctant to promote “environmental conservation” - a subject associated with a positive image. Japan, a country that relies on the U.S.A. both economically and politically, was unable to ignore the emission reduction target for the U.S.A., which had already been decided, and insist on a smaller target for itself. These facts suggest that the Kyoto Protocol is actually closely associated with political and economic issues, although it is officially an agreement on “environmental” problems. In fact, the protocol does not aim to promote CO₂ reduction. It only helps the participating countries secure their national interests and gain an advantage over other countries, using the rhetoric of “CO₂ reduction”. As an indication of this, the Kyoto Protocol was not ratified by the U.S.A. Now that Japan has agreed on the 6% emission reduction, it has no choice but to accomplish this target by reducing its industrial and other activities. This means a decline in domestic industry. In contrast, the U.S.A. is not obliged to accomplish the target as it did not ratify the

protocol, and E.U. countries have no difficulty achieving their goals owing to the E.U. Bubble system. On the other hand, Japan has none of these advantages. It is clear that only Japan is significantly disadvantaged by the protocol.

The present study has discussed the approaches taken by the countries that participated in the Kyoto Conference to accomplish their emission reduction targets from the viewpoints of their historical background, processes, and systems of emission reduction quotas. The results suggest that, although developed European countries have been appealing to other countries that greenhouse gas emissions must be reduced, they themselves are not committed to or seriously concerned about this. They may reduce greenhouse gas emissions to some extent. However, as shown in the above-mentioned examples of Britain and Germany, it is almost certain that they were not determined to reduce greenhouse gas emissions more than other countries when they ratified the Kyoto Protocol.

Now that the reduction targets have been set and some countries including the U.S.A. have refused to ratify the protocol, Japan is virtually the only developed country required to reduce greenhouse gas emissions. Britain and Germany were already emitting greenhouse gases below their targets at the time of the convention. Moreover, via the E.U. Bubble system, E.U. countries have an advantage because they are only required to accomplish one collective target in collaboration with each other. The U.S.A., which did not ratify the Kyoto Protocol, is not obliged to reduce greenhouse gas emissions. Furthermore, Canada even stated that it would not comply with the Kyoto Protocol because it would be difficult for the country to reduce emissions. As such, Japan is the only country obliged to accomplish its emission reduction target on its own. This is completely unfair. In addition, as Japan had been promoting energy conservation even before 1990, it is required to reduce greenhouse gas emissions to even lower levels. A country has to reduce greenhouse gas emissions in exchange for decreases in domestic industry and the quality of people's lives, or economic contraction. Unlike E.U. countries, Japan has to reduce greenhouse gas emissions completely on its own. Moreover, for Japanese domestic industry that had been promoting energy conservation even prior to the convention, it is very difficult to reduce energy consumption further without affecting the domestic economy. The Kyoto Protocol can thus be regarded as a treaty that puts only Japan in an economically disadvantaged position. Many of the participating countries are only required to reduce greenhouse gas emissions by zero or almost zero percent because their historical background and current situation were taken into account in the conference. Considering this, even the reason for the adoption of the Kyoto Protocol and its significance are questionable. Furthermore, if some European countries, such as Britain and Germany, have already reduced greenhouse gas emissions in large quantities and accomplished their targets, other E.U. countries will be exempt from the obligation to reduce gas emissions. With these facts taken into consideration, it is necessary to review

the meaning of the Kyoto Protocol. In recent years, an increasing number of European countries have joined the E.U., which aims to remove economic barriers among European countries and enhance the economic power of each member country, as well as the significance of their existence through their development as an economic community. This suggests that the E.U. Bubble, which was adopted to promote collaboration in relation to gas emission reduction among E.U. countries, aims to help developing countries with their economic growth despite CO₂ and other greenhouse gas emission control, and maintain the economic power of the E.U.

6. Conclusions

The study suggests that Japan attempted to take the political initiative and lead other countries towards environmental conservation by organizing an international conference in which protocols were scheduled to be adopted. However, the above-mentioned adoption of the protocol at the conference organized by Japan to enhance its political power left the country no choice but to agree to an emission reduction target that could not be accomplished, as well as to take the initiative in the implementation of a convention that would leave Japan in a significantly disadvantaged position. Japan attracted attention from across the world and played a leading role in the reduction of greenhouse gas emissions through its efforts in “environmental conservation” - a subject that creates a positive image. However, this was in exchange for an emission reduction target that was the most challenging, as well as concern over the adverse effects on the Japanese economy if the target were accomplished.

The paper has also discussed the fulfillment of the goals stated in the Kyoto Protocol. It was very difficult for Japan to accomplish its target specified in the protocol by the deadline. Although the E.U. agreed on an 8% gas emission reduction rate in the Kyoto Conference, it was easy for E.U. countries to reduce greenhouse gas emissions, taking into account their historical background and economic situation. Furthermore, Britain, Germany, and other developed countries were very careful to avoid adverse effects on their economy. On the basis of these facts, it was concluded that developed E.U. countries were reluctant to reduce greenhouse gas emissions.

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