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A Discussion on the Role of International Regimes in Mitigating Global Warming and Climate Change

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## Abstract

Global warming and climate change represent more than just an environmental crisis; they are urgent issues exacerbated by the era of neoliberal globalization. This has become a global problem and is increasingly posing a significant threat to human security. Addressing this crisis necessitates the unity of developed and emerging countries to fortify international regimes aimed at controlling this environmental threat. A robust awareness among global communities is essential to exert pressure on both developed industrial and emerging countries. This pressure is necessary to reduce the consumption of fossil-based energies. At the same time, it is crucial to enhance the capacity of international regimes, making their roles more effective in managing the environmental crisis. Without collective action from the leaders of developed and emerging countries, along with heightened global awareness, the ongoing environmental crisis will inevitably lead to the destruction of our planet. The environmental crisis, driven by climate change, is a complex issue that demands comprehensive and coordinated international efforts. Developed countries, with their significant historical contributions to greenhouse gas emissions, have a responsibility to lead by example in reducing fossil fuel consumption and transitioning to sustainable energy sources. Emerging countries, which are rapidly industrializing and increasing their carbon footprints, must also commit to sustainable development practices. Global cooperation is vital in creating and enforcing international policies that address climate change. This includes agreements such as the Paris Agreement, which aims to limit global temperature increases and reduce greenhouse gas emissions. Strengthening these international regimes requires not only political commitment but also financial and technological support to help countries implement sustainable practices. Furthermore, raising awareness among global populations is critical. Public understanding and engagement can drive grassroots movements and put pressure on governments and corporations to adopt environmentally friendly policies. Education and advocacy play key roles in building this awareness and fostering a culture of sustainability. The environmental crisis posed by global warming and climate change is a pressing global threat that requires united action from both developed and emerging countries. Strong international regimes and heightened global awareness are crucial in mitigating this crisis. Only through collective effort and shared responsibility can we hope to protect our planet and ensure a sustainable future for all.

**Keywords:** Global Warming, Climate Change, International Cooperation

**JEL Codes:** Q54, Q58, O44

## 1. INTRODUCTION

Global warming is an issue of low political concern and has recently become an important issue (high politics). Global warming is regarded as one of the consequences of globalization. In the era of globalization, neoliberal principles encourage the emergence of market power where the greatest power in the economic field is held by the owners of capital and the benchmark for the advancement of a state seen from the progress of the industry of a country. To pursue economic growth, a state is required to increase production and consumption as well as race to improve its industry. This encourages the consumption of fossil-based energy which is very large and unmanageable. Development based on neoliberal principles causes the emergence of the phenomenon of over-exploitation of natural resources, leading to global warming or environmental crisis (Roussel & Audi, 2024). Environmental degradation has been a cross-border issue as its impact is felt by all human beings on Earth. Air pollution, global warming, climate change, animal extinction, water pollution, ozone depletion, and degradation have become global problems that must be resolved through global cooperation (Sulehri et al., 2024; Audi et al., 2024). Institutional perspectives that emphasize the need for global institutions and a strong norm are used to further examine these issues. Institutionalists believe that institutions need to internalize the principles of sustainable development, including in the decision-making process of the state bureaucracy, companies, and international organizations (Ali et al., 2023; Audi & Ali, 2023). The purpose of this approach is to ensure that global economic policies improve the environment and living standards. Therefore, the international regime needs to be strengthened to solve the environmental crisis. In this case, also required is an international public awareness of the need to protect nature. This article will conduct an evaluation of the international environmental regime in controlling environmental crises. The focus of the analysis will be directed to two forms of regional cooperation in dealing with the environmental crisis, namely ASEAN and the European Union.

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## 2. CONCEPTUAL DISCUSSION

Pieterse and Parekh (1995) admit that many views about globalization interpret it as the ultimate consequence of the globalization of modernity. Globalization is most often interpreted as the world becoming more uniform and standard through technology, commercial, and cultural synchronization from the West. This statement has two implications. First, they imply that globalization is seen as something that is born of modernity, a mode of social life, values, and organizations from the West because globalization certainly stands up to "color" the West with all the values and processes of development. As a result, globalization can be seen as a stage to enhance the cultural hegemony of certain central along the trajectory of modernity. For this reason, from the 70s onwards, globalization has been associated with standardization - the homogenisation process of economic institutions-political, symbolic practices, consumer habits, and lifestyles around the world. Modernity is 'inherently globalizing' and borrows a phrase from Giddens, "inherently westernizing". (Giddens, 1990).

Another perspective that can be used to understand the complexity of this phenomenon is the view of Jonathan Friedman. Globalization is a recognition of what is understood as an increase in interconnecting the worldwide, stacking and movement of people, images, and commodities (Friedman, 1994; Ashiq et al., 2023). In more detail, he said that culture concerns the implications of global communication about the generation of cultural products ranging from standardization to postcolonial multiplicity. In economics, globalization refers to the internationalization of the economy and the spread of capitalist market relations. Many of the categories of globalization are the product of ideological discourses of 'modernity', but also recognizes that this discourse, through a direct connection to the modern era.

In his article, "Globalisation as Capitalism in the Age of Electronics", Watson (2002) stated that globalization is nothing but neoliberal capitalism in the era of technological progress. Watson included academics who believe that globalization itself is not new (Audi & Ali, 2023; Ali et al., 2022; Ali et al., 2021; Hirts and Thompson, 2009; Held et.al, 1999). Globalization is a form of capitalism that emerged in the era of development and advancements in technology, which is called by Watson as "The Electronic Age". This evidence is characterized by the acceleration of the exchange of information and culture and the high scale and complexity of the exchange itself. Facilitated by new technology, the speed is incredible, and the volume of exchange restrictions has raised the world's development. Such technology is impressive, from electronic mail to the satellite dish, although this technology can't be accepted by everyone, the technology is both direct and does not take responsibility for the new influences experienced by the world community.

It was explained earlier that globalization is understood as a phenomenon of the entry of the world into the modern era. Globalization encourages the countries in the world to compete and revolutionize their industry. This is because, in the process of economic globalization, there are a few of the many forces that have created a global market (Steiner and Steiner, 1994; Ali et al., 2021; Ali & Bibi, 2020; Audi et al., 2020; Audi & Ali, 2018). Over the past quarter-century, the world's gross national product has grown rapidly, especially in the developed countries in the world. Exports and imports expanded faster than previously described with the new demand for goods from industrialized countries. Due to a large demand for goods, industrial countries felt the need to revolutionize their industry cut production costs, and improve product quality. The era of economic globalization was accompanied by the rapid development of technology, very tight competition, and rapid changes in the business environment. Products of manufacturing in the country are now so out of the factory directly compete with foreign products, and the business world must also accept the fact that the rapid development of technology has resulted in rapid obsolescence of production facilities, the short shelf-life products, as well as with shrinking profit margins. In carrying out the process of industrial development, the situation is a reality that must be faced and should be the determining consideration in any policy to be issued, and is a new paradigm that must be faced by any country in implementing the industrialisation process of the country. Based on this conceptual world industrial development policy should be able to answer the challenges of globalisation of the world economy and able to anticipate the development of rapid environmental change (Levy 2012).

International competition is a new perspective for all countries so the focus of industrial development strategy for the future is to build the competitiveness of the industrial sector which is sustainable in the domestic and international markets. To build sustainable competitiveness, efforts to use the whole potential of the nation's available resources and the ability to exploit the opportunities that exist both outside and inside the country must be optimal. Therefore, the essence of sustainable competitiveness lies in how to mobilize and organize all potential productive resources, to meet the needs and market demand. The era of globalization and economic liberalization has brought renewal very fast and far-reaching impact on the economy, both domestically and internationally. The biggest impact is the increasing competition in the industrial sector. To build the industrial sector to grow in the arena of competition such as this and at the same time make it a driving force of the national economy in the future, the industry needs to have high competitiveness. Competitiveness is a strong structure, greatly increasing the added value and productivity throughout the chain value of production, and supporting all of the productive resources that are owned by the world. Increased industrial competitiveness in a sustainable form, forms the foundations for a strong economy in the form of macro-economic stability, the business climate, and a healthy investment (Levy 2012).

The entry of the world into an era of globalization has also become an entry point for neo-liberal to instill their principles. Heightened industry competition made countries increasingly prioritize the development of their industry. The era of globalization is the era in which the progress of the industry is used as a benchmark to determine a country that has developed or managed (Simon, 2005). Neoliberalism is also known as a mind that understands the economy which refers to the philosophy of political economy's decade-late second century, neoliberalism is a redefinition and extension of classical liberalism that is influenced by the theory of neoclassical economics that reduces or rejects the inhibition by the

government in the domestic economy because it will lead to corrupt behavior. This insight focused on free markets and free trade that removes barriers to international trade and investment so that all countries can benefit and improve living standards through increased efficiency and modernization of trade and investment. Neoliberalism aims to increase market power and refers to freedom. As in the case of wages, the government's understanding of neoliberalism has no right to interfere in the determination of the worker's salary because it is a matter between the employer and the owner of capital. The main driver of market forces is the privatization of economic activities, especially in the industry's efforts owned and managed by the government.

Neoliberalism is a redefinition and extension of classical liberalism influenced by neoclassical economic theory that reduces or rejects an inhibiting factor by the government in the domestic economy because it will lead to the creation of Distortion and a High-Cost Economy which will then lead to corruptive behavior (Palley, 2004). This understanding focuses on free markets and free trade to knock down barriers to international trade and investment so that all countries can benefit from the rising living standards of people or people of a country and modernization through increased efficiency of trade and investment flows.

Saxon economic liberalism believes that economic growth is achieved as a normal result of "free competition". Aggressive competition is a result of the belief that the "free market" is a precise and efficient way to allocate natural resources are scarce people to meet human needs. Neoliberalism aims to restore confidence in the power market, with the justification that refers to freedom (Friedman, 2002). As in the case of workers' wages, the government's understanding of neoliberalism has no right to interfere in the determination of the worker's salary or issues of labor entirely this case is a matter between the employer owners of capital and workers. The main driver of the return of market forces is the privatization of economic activities, especially in the industrial businesses owned or managed by the government. But privatization is not the case in the major capitalist countries, it happens in the countries of South America and the poorer developing countries. This privatization has defeated a long process of nationalization as a key state-based welfare. Nationalization which inhibits the activity of entrepreneurs should be abolished. Revolution neoliberalism significant alternation of an inventory management-based economy to one based on demand (Friedman, 2002).

Based on the explanation of the principle of construction according to neo-liberalism, economic actors are required to compete with one another for control of the market. The market system tends to be only concerned with the pace of the economy, by which the effects on the environment less attention. Weak state control on economic activities is also one reason why countries such as China, and neo-liberals experiencing environmental problems such as high levels of pollution in the country (Gardner & Lewis, 2005). Neoliberal countries will prioritize industrialization to show economic and market power.

### 3. EMPIRICAL DISCUSSIONS

Bruff (2005) mention that the discourse of globalization is often propped up by economic interests. Even many global economists in detail say that globalization is an appropriate strategy for the benefit of multinational companies, such as lower taxes and loose regulation. Thus, the implications are very clear. The world has entered into a monolithic institutionalized neoliberal economic system into international agreements. The development of industry and globalization followed by the emergence of multi-national corporations operating in various countries to expand their markets. The development of MNCs is a phenomenon that is controversial given its presence has quite a significant influence on the economic development of a country and eliminates the sovereignty of the country, especially in developing countries that need foreign investment to sustain development so directly MNCs can influence the formation of a policy established by the government.

But in some cases, MNCs often act arbitrarily against the host country, it is because there is a difference between the government's goal with the company's goal. The reason a country is allowed entry of MNCs in addition to earning an income is that they will be used for the allocation of development, where multinational corporations can absorb a lot of labor, thereby reducing unemployment the most important is how the results of these investments will improve the welfare of the community. On the other hand, the company's goal is to obtain the maximum benefit with minimum capital so that companies pay less attention to the standards that should be applied to one of the waste industries. Most companies often ignore the regulations because they require more costs will reduce profits. This is evidenced by the UN Report which stated that "there was a growing gap between the efforts to reduce the impact of business and industry on nature and the worsening state of the planet" and that "this gap is because only a small number of companies in each industry are actively integrating social and environmental factors into business decisions" (Shah, 2002).

Large companies, especially those oriented to the natural resource sector contributed most to environmental degradation. In the production process, the company is highly dependent on the availability of natural resources. They continue to operate by exploiting the available raw materials, such as mining, timber, and oil. In conducting the exploitation of raw materials, there is no doubt the process is very damaging to the environment and it takes a long time to restore balance to the ecosystem, for example for the manufacture of paper, the timber needs to be in the cutting of forests, and the time required to wait for the tree to grow again is not fast. The economic advantage gained by a company is not comparable to the losses in the sector that were exploited in nature.

One of the effects of neoliberal development and massive industrialization is the depletion of the ozone layer and global warming. Ozone is a gas that is naturally present in the atmosphere. The ozone layer began to be known by a scientist from Germany, Christian Friedrich Schönbein in 1839. Ozone is the result of a reaction between oxygen by ultraviolet rays from the sun. Ozone in the air serves to withstand ultraviolet radiation from the sun at a level that is safe for the health of us all. Ozone is also produced by humans for use as a water purification material, bleach, and one of the plastic-

forming elements. Each ozone molecule contains three atoms of oxygen with the chemical formula O<sub>3</sub>. Ozone is found primarily in the lining of the lower atmosphere. Approximately 10% of atmospheric ozone is found in the troposphere, a Tamosfir layer closest to Earth (from the surface of the Earth up to 10-16 Km). The ozone layer protects the earth from exposure to Ultra Violet B (UV-B) which is very dangerous for living things on Earth. UV-B has a wavelength of 280-315 nm, partially absorbed by the ozone layer, thus the amount of UV-B reaching the earth is very few (Muir, 2008). Exposure to UV-B in humans can lead to skin cancer, and cataracts and reduce the body's immune system. Exposure to UV-B can also damage plant life, single-celled organisms, and aquatic ecosystems. While UV-A (with a wavelength of 315-400 nm) is absorbed by the ozone layer. UV-A radiation from sunlight is very beneficial for the survival of living beings on the earth's surface. The ozone layer is important because it absorbs ultraviolet radiation (UV) from the sun to protect high up to the earth's surface. UV radiation in the form of the spectrum has a wavelength shorter than that of light. UV radiation with a wavelength between 280 to 315 nanometers that are recognized as UV-B and damaging almost all life. By absorbing the UV-B radiation before it gets to the Earth's surface, the ozone layer protects the Earth from harmful radiation effects on life. Depletion of the ozone layer will lead to more ultraviolet radiation entering the earth. Ultraviolet radiation can have effects on human health, destroy marine life, ecosystems, agriculture, and forests reduce yields. The main effect in humans is an increase in skin cancer because otherwise it can damage the eyes, including cataracts, and will also weaken the body's immune system.

Global warming, on the other hand, is an environmental issue that can cause global climate change. Global climate change occurs slowly over a long enough period, between 50-100 years. Although it occurs slowly, climate change has an enormous impact on living creatures. Impacts that occur include the melting of polar ice, shifting seasons, and rising sea levels. An impact on the continuity of living beings. Melting of polar ice, especially around Greenland can increase the volume of water in the sea which led to the addition of sea levels worldwide. In the 20<sup>th</sup> century, there was a sea level rise of 20-25 cm. If half of the Greenland and Antarctica ice melt, the sea level rise occurs on average as high as 6-7 meters. The increase in the water level could inundate many lands that are habitats for living creatures. Global climate change as the cause of the loss of biodiversity is still controversial for the time being.

Global warming impacts the more extreme changes in the weather and climate of the earth. The rainfall pattern change can be predicted without causing flooding in one place, but drought in others. Typhoons and tropical storms will be popping up with the trend of becoming more and more powerful. More often, farm fields, and plantations which usually results would be destroyed by flood or drought. Residents will suffer more suffering for the stock of foodstuffs and other necessities will be much reduced and the price will be bounced up. The government also requires large amounts of money to rebuild the affected areas and tackling disease is endemic. Africa, India, and other arid regions will suffer more severe droughts. Fresh water will be increasingly difficult to access and therefore, the land cannot be cultivated anymore, until the food supply is reduced drastically. Scientists estimate that African countries will decline by 50 percent in 2020, and the level of dryness in the world will increase by 66 percent (Threwartha and Horn, 1995).

Requests of a regime are closely related to its effectiveness, the more effective a regime dealing with a specific issue, the higher the demand for actors to such regimes. Economists define effectiveness as a comparison of the benefits of the results of what is given and the costs associated with the achievement obtained, such understanding is then used as an initial evaluation of public policies (Stoke, 2006). Their demand for an international environmental regime is motivated by three things: first, domestic environmental management is no longer effective in solving the problems, requiring effective cooperation among fellow nations. Second, the increasing scale of regional and local environmental problems, such as urban degradation, deforestation, desertification, sanitation, denudation, or water scarcity. Third, the complex relationship between the world economy and increasingly globalized environmental problems. Thus, the authors conclude that the environmental regime is a form of cooperation among the actors who put environmental issues as a specific issue area. The international environmental regime is formed based on the insistence of the issues that continue to increase so that the necessary role of the regime according to Martin List and Volher Ritterberger regime can manage conflict and issues of mutual interest. This regime includes legal regulations, norms, rules, and decision-making procedures either explicitly or implicitly within the scope of hope for all actors in a specific area of international relations (Hurrel and Kingbury, 2006).

The importance of the completion of this environment is due to the high uncertainty in which the definition and limitation issues, costs of alternative policy responses, and the identity of the actor with interests far from self-evident. There are three consequences of the environmental regime, among others, the first research collaboration occurs especially since the Stockholm Conference in 1972, which collects information and supports research on the nature and content of environmental problems. Second, a long negotiation to decide which aspects should be included in the settlement of the issue by considering the complexity of the science area and the link between environmental issues with economic processes. Third, alignment and flexibility in cooperation and joint management because of the seriousness of environmental issues (particularly climate change, ozone depletion, loss of biological diversity, and forest protection). Environmental regimes can be instrumental in helping to overcome the problem of insurance and the provision of incentives for losses. States prefer to work contrary to the interests of short-term, they will be more concerned with their reputation as a trustworthy partner and their long-term interests in the international system. A regime legal environment can stabilize expectations and institute a statement that the state is involved in its long-term partnership long term and in the negotiations on a growing issue, they are not only concerned with the deals one problem at a particular time.

In addition, the importance of international environmental regimes in solving environmental problems is the fact that environmental problems can't be completed if there are only a few parties that move. Environmental problems are complex issues, which in the settlement required the awareness of all actors in the world to begin to maintain and improve

the environment. The presence of the international regime is expected to become an international forum for all actors to join and discuss the appropriate measures to solve the problems of the environmental crisis. This is why international environmental regimes are considered important in discussing issues related to the environmental crisis.

Globalization has created conditions that are interconnected, and the problems that arise must be resolved jointly between countries. The environmental crisis as shown above is not possible to resolve individually. Instead, to be effective, it requires cooperation between countries in the region or global cooperation. In this context, the following description will take two cases of regional cooperation in overcoming the environment, ASEAN and the European Union.

International regimes, until now, are still believed to be a way out of global environmental problems. However, the international environmental regime is one of the international regimes that are difficult to identify because the regime is non-profit and depends on issues of particular areas. So, it is very difficult to solve the global problems in scope with a regional approach because nature cannot simply be changed without human intervention. The difference principle between advanced and developing countries is a source of potential confrontation for the global environment between North and South, which turns it into an international political issue that is fundamental. Three important aspects of the problem: (1) a striking asymmetry between North and South in the availability of resources global, such as ozone depletion and global climate change; (2) the global environment must accommodate the needs of future development in the South; and (3) failure to support the economy in a more sustainable form in the South, which is less influential to the first acts of environmental measures undertaken in Holland (Hurrell and Kingbury, 2006). Not only that, some of the factors that hinder the effectiveness of the regimes of the global environment, include a high level of scientific uncertainty and economics, as it is difficult to implement a negotiation, because the cost of environmental degradation is sudden and cannot go down at any time, it is still unclear definition of sustainable development, and conflict on various issues relating to sovereignty. With the swift currents of globalization, mobility, as well as human needs are even higher. To meet these needs, exploitative acts of nature were inevitable.

International environmental regimes are regimes that are different from other international regimes but are generally based on interests and strengths. Environmental regimes are not regimes that are based on the interests of the regime because it is non-profit and is based on consciousness or awareness (Alkoby, 2001). Because environmental regimes are based on the aspect of consciousness then there are various difficulties and obstacles in the implementation of the framework and rules agreed in various aspects. People realize the importance of the environment, but on the other hand, they also realize the welfare of people in need of development. So there is a dilemma in its implementation. Moreover, the state will be more concerned to meet the needs of the people that the state is not said to fail in carrying out its functions. The absence of a binding legal document brings difficulties for a regime to measure the compliance of each member (Nwokike, 2022).

International environmental regimes in the process of implementation are often faced with issues such as conflict of interest and the difficulty of reaching an agreement by consensus. This is evidenced by the lack of effective multiple agreements such as the Kyoto Protocol because of the unwillingness of some countries, especially industrialized countries to engage in environmental regimes due to the conflict of interest between the carbon emission reduction agreement and also, the economic development of the industrial sector. The author argues that the international environmental regime is very influential in social-political life in the present and the future but the need of their awareness of all the actors in the success of the international environmental regime (Young, 2011; Weiss, 1998).

The failure of a state and international environmental regime in dealing with the environmental crisis can be analyzed through the lens of game theory in particular prisoner's dilemma. A prisoner's dilemma is a paradox in the analysis of decisions in which the two actors who act in their own best interests pursue an action that does not produce ideal results. Typical dilemmas of prisoners have been arranged so that both parties choose to protect themselves at the expense of other participants. As a result of adhering to purely logical thought processes to help themselves, both actors find themselves in a situation worse than if they had cooperated in the decision-making process (Caleiro, 2019; BenDor & Scheffran, 2018). State, an actor who is pretty much blamed for environmental problems, the situation 'prisoner's dilemma' often be a barrier for them to cooperate to maintain the integrity of the environment together. Situations where their interests, in this case, the state, become a barrier to the necessary collaboration for mutual benefit, namely the preservation of the environment. Both developing countries and industrialized countries are often confronted with the situation, so the assumptions regarding the maintenance of the environment sometimes clash with the interests held by each country to fulfill the development needs of the country can't be denied.

#### 4. CONCLUSIONS AND IMPLICATIONS

Globalization is often associated with the phenomenon of the industrial revolution. Advances in technology and shifting global issues make nations simultaneously undertake an industrial revolution to strengthen the economic foundation of the country. The entry of the world into an era of globalization has also become an entry point for the neo-liberals to instill their principles. Heightened industry competition made countries increasingly prioritize the development of their industry. The era of globalization is the era in which the progress of the industry is used as a benchmark to determine how a country has developed or managed. The principle of construction according to neo-liberalism, is where economic actors are required to compete with one another for control of the market. This then encourages countries to always attach great importance to development and ignore other things.

Globalization becomes a starting point for the commencement of construction-development undertaken by various countries to promote the country. But along the way, globalization and development turned out to cause a few things than the cause of environmental damage and exacerbate global warming. Many things cause global warming and

environmental crises. Both individuals, community groups, and even countries are actors that affect global warming. One of them is the cause of global warming industry sector. The industry sector is one of the biggest contributors to smoke the plant, CO<sub>2</sub>, and the use of electrical appliances that produce emissions. In the process, the term industrial countries, i.e. countries with industrialized put the industry as the main force of the country's economy.

However, global warming is a global issue that requires cooperation in the solution. Global warming problems would not be complete if only some countries were moving, the correct solution is to realize that the entire country and the international community are needed to begin caring about the environment. Awareness of the need for cooperation then makes people of the world try to create a regime to solve global environmental problems. This then encourages cooperation among countries of the world both on a regional level such as ASEAN and the EU to begin to be concerned with issues other than security and economics that are environmental problems. Combating environmental problems does not stop at regional cooperation. The international community realized that to address environmental concerns, cannot just stop at the regional level alone, but must be at the international level. This then encourages the emergence of international environmental regimes as a forum for the entire international community in dealing with international problems. International environmental regimes are a regime that is different from other international regimes that are generally based on interests and strengths. Environmental regimes are not regimes that are based on the interests of the regime because it is a non-profit and based on consciousness or awareness.

Worsening of global warming that happens is to encourage various groups to start thinking about the right way to tackle global warming. Indeed, it is undeniable that environmental regimes have not been able to bring significant changes in responding to environmental problems. Various alternative roads can reach the international regimes. Two of them are creating a more binding agreement, and creating mechanisms to be an incentive in the form of economic benefits to the country were well behaved. These two mechanisms move on the principle of reward and punishment: when obedient it will be rewarded, and when not obedient then it will have bad consequences. Solutions that can be taken are to raise a joint commitment of all stakeholders that tech businesses are not environmentally friendly (involving the government and corporations) to shift the orientation of the business (product development and sales) to the orientation of environmentally friendly technologies. When such a commitment has been made possible, environmentally friendly technology which had been acting as a competitor, can become a source of new revenue. By doing so, the business environment-friendly energy will be an incentive for the parties concerned. If this happens, the willingness to develop renewable technologies both in business and in technology will be greater.

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