



International renewable energy law and climate change mitigation: The legal basis

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Abstract

Renewable energy is a Critical solution on combating climate change, through reaching an accepting level of carbon emission. According to the reports of the Intergovernmental Panel on Climate Change, renewable energy is one of the solutions proposed to avoid the worst effects of climate change, as Renewable energy can provide broader benefits, if implemented appropriately, in social and economic development, providing a safe supply of energy, and reducing negative impacts on the environment and health.

The International Environmental law does not deal with renewable energy independently, it has still for a long time been within the jurisdiction of the state, but due to the rise of many factors such as climate change, the approach was changed, especially after increasing global demand, so the renewable energy sources today have an international dimension, but its regulations still need to create effective legal management systems.

Although there is no unified legal framework that regulates renewable energy, and binding normative regulations of renewable energy is scarce, however it has found provisions relevant regulation renewable energy across multiple level of international instrument.

(UNFCCC) doesn't create enforceable commitments to share of global use of renewable energy, on other hand, (Stockholm) and (Rio de Janeiro) Conferences do not provide Renewable energy explicitly, neither specified it, whereas (Johannesburg Plan), which is the most prominent example of soft international law, as it is a non-binding legal tool aimed at developing and regulating renewable energy, such as where alternative energy was mentioned in explicit texts in more than one place.

Keywords: Renewable energy, international agreements, energy sources, environmental pollution, climate change, greenhouse gases, emission.

Introduction

Renewable energy is an efficient tool for sustainable development, as the use of fossil fuels, the cost of its production, and the accompanying environmental pollution phenomenon, has made attention to finding a new environmentally clean source, and then searching for international legal frameworks that govern the use of this type of energy. Contributes to resolving disputes arising from investment.

Although Energy issues were subject to national law, this approach changed after the increasing of global demand, so this led to Creating a legal framework to regulate this type of energy is gradually, but in fact relevant, including the principle of permanent sovereignty over natural resources and energy security, which requires concerted international efforts.

Despite the absence of binding treaty obligations and Non-uniform legal framework, however, there are legal rules distributed among some international and regional agreements regulating the process of using renewable energy, but they were general, non-detailed and It lacks consistent formulation.

On the domestic level, some countries have enacted internal legislation to regulate investment issues. Therefore, the prevailing opinion goes towards creating an integrated legislative system that defines legal aspects in international law, Especially investment contracts since these contracts are of a special nature.

This article deals with the legal basis of the international renewable energy law and clarifying its concept in the light of jurisprudence and legislation. The problem is the lack of

clarity in the international renewable energy law as an emerging branch of international law, and this resulted from the weakness of its legal foundations, as well as the fragmentation of the legal provisions governing it between international, regional and bilateral agreements.

1.1. Research problem

The research deals with the legal basis of the international renewable energy law and clarifying its concept in the light of jurisprudence and legislation. The problem is the lack of clarity in the international law for renewable energy as an emerging branch of international law, and this resulted from the weakness of its legal foundations, as well as the fragmentation that means the fragmentation of the legal provisions governing it between international, regional and bilateral agreements.

1.2. Research Methodology

In this research, we will follow the analytical approach to clarify the legal rules related to the use of renewable energy in international law, and the interpretation of these rules and the statement of deficiency or contradiction between them, in order to find unified legal rules in this field

2. Legal framework of international renewable energy law

We will address the general framework of international renewable energy law, clarify the relation of International energy law and international environmental law, and answer questions such as how the of international renewable energy law was developed?

2.1. International energy law and international environmental law

Although international environmental law has existed since ancient times, it did not contain energy issues until late, this is due to the fact that regulatory issues for renewable energy fall within the internal jurisdiction of the State, but this traditional approach has changed for various reasons as, The increasing use of energy in world, as well as rapidly increasing energy use in emerging economies [1].

Especially developed countries since the end of World War II, has led to an increase on energy imports, especially oil products, and the development of free trade principles under the World Trade Organization agreement, and the establishment of regional and bilateral free trade agreements had a profound impact on International Energy Market.

At the regional level, the European Union has established an internal energy market and worked to coordinate energy laws among member States [2].

Although international environmental law we find its basics in the 1972 Stockholm Declaration, but the latter did not refer to the issue of energy. Some of the environmental damage, such as the Chernobyl accident and Three Mile Island, as well as other factors such as the decrease in the ozone layer and the phenomenon of desertification, these factors drew attention to the issue of energy and have now become an essential part of international environmental law [3].

From a historical point of view, international environmental law is all concerned with preserving plants and animals, and then it was developed to deal with pollution of rivers and seas, transport across borders and emissions in the gaseous atmosphere, and these issues are related to the energy sector, and thus international law regulates the right of the state to use and exploit its national resources. While international environmental agreements affect the type of energy policy adopted by countries [4].

Although the principles of international environmental law are not clear and do not apply directly to all kinds of energy, it indirectly affects the policy drawn up for energy use. And by a practice States and the doctrines of jurists for more than several decades, specific principles have crystallized in customary international law, such as the rule of non-harm to others and compensation for damages resulting from pollution [5].

In 1981, energy was defined directly for the first time through the policy of non-governmental organizations adopted by The United Nations, and this policy formed the bases for the establishment of a committee for the development and exploitation of new sustainable sources of energy, followed by the formation of the Global Committee for Environment and Evolution, which clarified in its reports the need for new sources of energy in light of the new needs [6].

With short words international environmental law did not define the issue of energy in the beginning independently except after the impact of multiple factors such as the phenomenon of desertification and the decline of the ozone layer, and in general it can be said by the phenomenon of climate change [7], as this last phenomenon necessitated attention to regulatory issues of energy in general and renewable energy in particular.

2.2. International Renewable Energy Law: Historical Evolution

The issue related to sovereignty over natural resources is not an absolute issue, but it subject in some cases to international environmental obligations that directly affect the development of energy. States also restrict their will to international obligations, taking into account the issues that fall within the internal jurisdiction of the state without affecting its sovereignty, some necessary matters remain within the internal jurisdiction of the state. Nevertheless international issues related to renewable energy rise based on international planning, countries remain under international law to implement those obligations [8].

This means that international law in the context of energy has evolved with the influence of internal activities, directly or indirectly. For example, countries have voluntarily joined many bilateral environmental agreements, including the international regulation of activities related to fossil fuels and nuclear energy, and this represents significant progress for the responsible management of natural resources [9].

International cooperation in the field of energy is more complex, however In recent years, international efforts have increased in this field, moreover many obstacles have begun to disappear. Before finding international legislation [10].

It has been argued that states' domestic jurisdiction has been eroded by international cooperation on energy issues relevant cooperation and assistance [11].

The stages of development of the soft international law [12] for renewable energy can be divided into four stages.

a. General Principles (1972-1991)

Over several decades, a set of principles have been formed from the States practice, such as the rule of (no harm). These principles have crystallized in customary international law. The legal status of most of the principles related to energy activities has remained disputed, including precaution and the polluter pays.

In 1981, for the first time, it was unanimously agreed on its economic and social policy, by the United Nations This policy formed the seed for the establishment of a committee for the development and utilization of renewable energy sources.

b. Sustainable Development (1992-2001)

Neither the Stockholm Declaration nor the Rio Declaration explicitly referred to energy, nor did they define sustainable development, while Agenda 21 included the non-binding energy policy requirement for governments [13] to promote renewable energy research and technology transfer, including control over mixed energy supply.

In 1994, government agencies issued non-binding decisions regarding recommendations at the international level to change energy production patterns through sustainable energy [14].

c. Energy for Sustainable Development (2002-2010)

In 2002 the concept of energy was linked for the first time to energy security, climate change and sustainable development by intergovernmental policy and by the political agenda for renewable energy, more than 118 countries went to implement local renewable energy laws and policies at different levels.

Among the non-binding international instruments that emerged from this movement was the Johannesburg Plan by

a number of countries and included a set of clear goals, namely.

1. Developing and disseminating technologies and alternative energy within the stated goal of greater energy sharing.
2. Increasing the global participation of renewable energy sources, including the increasing the contribution to the total energy ^[15].

The Johannesburg plan emphasized the issue of renewable energy, as the term renewable energy was mentioned twelve, and although it is a non-binding instrument, it is still an important element of soft international law. It supported the development of renewable energy, technology transfer, and communications, despite its lack of some specific goals and binding principles ^[16].

It is also one of the broadest instruments of international soft law in terms of its support for renewable energy development, operation, technology transfer and trade, as well as in terms of expanding interest from domestic energy policy to the international level ^[17].

The Johannesburg Plan Energy Working Group has published a report entitled *An Energy Framework for Action*. The report identifies energy efficiency and renewable energy as two of five major challenges for sustainable energy development in the coming years, and the framework recommends specific energy efficiency actions, including “energy efficiency standards, device and product labeling, and demand-side management ^[18].”

3. Sustainable energy for all:

The United Nations General Assembly declared 2012 the International Year of Sustainable Energy for All, and that the decades between 2014-2024 will be the years of sustainable energy for all, and for this purposes the Secretary of the United Nations UNSG has appointed a high-level team. The Sustainable Energy for All initiative includes three objectives:

1. Global transfer of energy
2. Doubling energy development rates
3. Doubling the participation of renewable energy ^[19].

Whereas, sustainable energy for all is a global initiative called for by the General Secretariat of the United Nations and the World Bank, and it has drawn attention to three main issues for the energy sector until 2030: ensuring access to the electricity sector, doubling the development of industrial energy, and promoting the participation of renewable energy ^[20].

In 2012, the Rio +20 Conference, which was built on the basis of the Rio Declaration, recognized the crucial role that energy affects economic development and drew the fact that renewable energy is an essential part in addressing the sustainability of energy systems and in the broad context of sustainable development and climate change ^[21].

In December 2013, 160 countries ratified the Abu Dhabi Declaration of the Renewable Energy Conference, which called for doubling the participation of renewable energy by 2030, led by the International Renewable Energy Agency, it constitutes an important step towards cooperation and enhancing the demand for renewable energy ^[22].

2.3. Internationalization of Energy Law

Traditionally, the legal regulation of energy issues has been seen as a matter of domestic rather than international law, This was particularly true of renewable energy and energy efficiency so this is done For several reasons for instance, there has been a huge jump in energy consumption in developed countries since the end of World War II, growing of energy use rapidly in emerging economies and is expected to rise exponentially as more developing countries experience significant economic growth. and, there is increasing recognition of environmental issues associated with energy use and production, particularly climate change and acid rain. For these reasons, energy concerns play an increasingly important role in the development of international environmental law ^[23].

Some jurisprudence refers to the factor of changing the markets, which in turn led to an increase in the agreements that regulate this field, as in the European Union, for example, in addition to another factor, which is the internationalization of the principles of energy law that were previously confirmed in the local markets ^[24].

Some jurists discussed the issue of internationalization of energy law, In 1996, Adrian bradbrook defined energy law as a set of rights and obligations related to the harnessing and exploitation of all energy sources between individuals, between individuals and the government, and between governments and States ^[25].

This definition looks at the law in terms of its function, and it discusses the organization of the energy law regardless of energy sources so its came with deferent ways so it was observed Absent in electric energy and clear in other energy sources such as oil, gas and coal, but it seems weaker in renewable energy sources ^[26].

Ernst Nordtveit has defined energy law as a relatively new legal system that is defined through a functional approach, such as rules and regulations related to energy activity or energy services throughout the life of energy activity, from the division of energy resources, production, transportation, distribution and international energy marketing ^[27].

Legal scholars recognized of the international dimension of energy law, this recognition led to a development of international energy law as an independent academic discipline, although some branches of international energy law such as oil or gas law are advanced fields in practice, but the study and understanding of international energy law is still in progress ^[28].

However there are many examples of internationalization of energy law. One example is the increasing global application of principles of law related to the privatization of electricity and gas companies. The restructuring of the EU's internal electricity and gas markets has been largely supported by EU regulations, in view of the emergence of cross-border trade. However, the spread of the principles to other countries, such as those in South America, occurred through a different process, in particular through the linkage of World Bank and international financing ^[29].

In the last few decades, energy trade has crossed national borders with privatization and the emergence of a reorganization of competitive markets. Energy trade has become international, which necessitated its regulation through international law, such as the Energy Charter Agreement ^[30].

3. Legal Basis for International renewable energy Law

Renewable energy has always been the subject of many international conferences and agreements, but these agreements did not establish unified rules regulating this type of energy, so we can find many rules in the international agreements concerned with the study of the subject.

Therefore, we will discuss the legal foundations at the international level in the following topics:

3.1. International conferences and Declarations

Although renewable energy seen on the agenda of many international conferences related to the environment, many issues such as the relationship between renewable energy and the principle of sustainable development or legal binding rules for countries, have not been fully explored on these occasions^[31].

The Conference of Governments on the Environment, which was held in Stockholm in 1972, is the beginning of the interest of world governments in environmental issues.

However the conference recognized in Item 1 the sovereign rights of states to exploit their resources in accordance with their own environmental policies, it asked states when exploiting their resources to ensure that non-renewable resources were not depleted, so the Stockholm Declaration was the first attempt to restrict the right of states to^[32] exploit their natural resources, especially those that are non-renewable.

The importance of the Stockholm Conference is highlighted in that it identified a common relationship between the depletion of resources for the purpose of development and environmental protection, a relationship that was later adopted in the international environmental protection strategy that crystallized for the first time the concept of sustainable development^[33].

However, the obvious change was after the first global environmental summit, the Earth Summit, was held in Rio de Janeiro in 1992, which is distinguished in that it laid the cornerstone for a new global vision of the environment, transforming the global agenda into sustainable development by raising global opinion on the mutual relationship between the environmental, social, cultural, economic and political dimensions of development. It also paved the way for the concept of sustainable development. At that summit, the parties committed itself to the concept of sustainable development and actually drafted an international environmental law in this regard^[34].

In fact, few of the principles related to the renewable energy sector were formed in the Rio Declaration, including principle (2), which combined the right state to sovereignty over natural resources and prohibited transboundary damage^[35]. And the Principle (17) related to environmental impact assessment and Principle (10) related to access to justice and information in environmental issues^[36].

Issues such as increasing the development, deployment and utilization of renewable energy are among the main challenges for developed and developing countries, as well as the impossibility of a consensus on the need to adopt measurable targets for renewable energy^[37].

Some believe that the lack of binding and non-binding international legal instruments results from two reasons. The first is the insistence on sustaining benefits from the exploitation of traditional energy sources, The second

reason is the technical defects and limitations that impede reliance on renewable energy^[38].

3.2. Relevant international agreements

In fact, many international agreements dealt with the legal aspects of renewable energy and the problem of climate change, we will discuss the most important of these agreements as the following:

3.2.1. United Nations Convention on Climate Change

in the preamble the convention held (*all countries, especially developing countries, need to have access to the resources necessary to achieve sustainable social and economic development, and for developing countries to make progress towards this purpose, it is necessary to increase their energy consumption, taking into account the possibilities for achieving greater energy efficiency and control greenhouse gas emissions in general, including through the use of new technologies under conditions that make such use economically and socially beneficial*)^[39].

This text seems to involve the use of new technology to achieve more energy efficiency and control greenhouse gas emissions. Here, the text includes a reference to renewable energy technology that would mitigate the harmful effects and related emissions.

However, the text did not explicitly refer to renewable energy. Perhaps through a broad interpretation of the text, we can derive a reference to the necessity of using alternative energy, which is within the phrase new technology.

Actually this approach called (the theory of implied power) which means complementary method to the texts through which the interpretation of texts related to jurisdiction is expanded to include cases and facts not included in the legal text^[40].

In fact, the United Nations agreement is relevant to the development of renewable energy to the extent that it requires the contracting parties to control the sources of greenhouse gases (GHG) and support the mitigation of climate change by adopting programs to achieve these ends in its economic and environmental programmes^[41].

The climate change law has an indirect link with renewable energy sources, and the mitigation of anthropogenic emissions is an important subject of this law^[42].

3.2.2. Paris agreement

This Agreement, aims to consolidate the global response to the threat posed by climate change by keeping the rise in the average global temperature within 2°C above pre-industrial levels and limiting the rise in temperature to 1.5°C. above the pre-industrial level, as well as enhancing the ability to adapt to the harmful effects of climate change, strengthening the ability to withstand climate change, and consolidating low-emission development^[43].

However Some believe that although these agreement intended to encourage others, there is a realization that it is difficult for the parties to fulfill^[44].

On the other hand the Paris Agreement contains several well-known legally binding obligations for parties. Most of these obligations are procedural in nature and require parties to submit specific information at certain points in time in regular intervals and to report or account in accordance with agreed rules. These obligations include for all parties to:

- prepare, communicate and maintain successive nationally determined contributions (NDCs)
- biennially provide information on national inventories and information necessary to track progress made in implementing and achieving an NDC and
- Participate in the facilitative multilateral consideration of progress under the Agreement's enhanced transparency framework.

For developed country Parties, it also includes the submission of specific information on support, according to Articles 9(5) and 9(7). All of these obligations require a specific action and can, thus, be considered to establish obligations of result that are also judicially reviewable.

In addition to these obligations, the Agreement contains norms that appear to be less explored for their legal relevance. While these norms do not establish obligations of result for parties, they are not without normative bearing. Rather, they are elements of a standard of due diligence expressed in the Paris Agreement and contain a 'strong expectation' of how parties should conduct themselves. This, in turn, can have legal significance for the determination of standards of care in other international legal contexts [45].

3.2.3. Kyoto Protocol

The Kyoto Protocol is an international agreement that contains International obligations to mitigate climate change. It also includes some provisions related to renewable energy and sources of greenhouse gas emissions [46].

The protocol in Appendix (1) required countries to reduce carbon emissions to low and specific levels, and to encourage the use of efficient energy. Carbon and renewable energy technology [47].

It should be noted that the implementation of this program opened the door for endless investment opportunities, the creation of new markets, and the encouragement of investment in the global renewable energy sector [48].

The growth of the global investment market in the renewable energy sector depends on adopting legal protection mechanisms at the national level, which entails finding measures to regulate access to multiple benefits such as tax exemption, guarantees, and financial support [49].

The protocol aims to reduce the total percentage of greenhouse gas emissions to 5% for the period between 2008 and 2012, in addition the protocol includes the Clean Development Mechanism (CDM). From a technical point of view, The Clean Development Mechanism pursues the dual purpose of helping developing countries achieve sustainable development and contributing to the ultimate goal of the agreement, while helping developed countries carry out their obligations under Article 3. Finally, the Protocol does not adopt renewable energy technology as a mandatory method for reducing greenhouse gas emissions [50].

Some believe that the Kyoto Protocol is fundamentally inappropriate to change the rate of greenhouse gas emissions in the energy sector. and thus insufficient to reduce global greenhouse gas emissions to sustainable levels, which was confirmed by the fourth report of the Intergovernmental Panel on Climate Change (IPCC), published in 2007, where it concluded that the evidence for (man-made global warming) is clear, and, countries that

make up nearly the majority of the world's carbon emitters are not parties covered by the Kyoto Protocol [51].

Contrary to the advanced opinion, some believe that the Protocol does not exclude dealing with investments in renewable energy, but rather encourages them through flexibility mechanisms designed to complement the efforts made by the countries included in Annex I of the Protocol in achieving their national goals to reduce emissions, especially the Clean Development Mechanism, and the reality Supports the advanced point of view, as approximately 70% of the total amount of CDM projects from the beginning of the approval period until the end of 2012 is related to renewable energies [52].

Although the Kyoto Protocol does not deal directly with clean energy, it does include policy options for sustainable development through research, development, and increasing the use of sustainable energy sources [53].

Conducting research on new and renewable forms of energy and carbon dioxide sequestration technologies Encouraging, developing and increasing their use of advanced and innovative environmentally sound carbon and technologies [54].

It obligated The Parties to ensure that the total dioxide equivalent does not exceed

Anthropogenic carbon source of greenhouse gas emissions in order to reduce their emissions The total number of such gases was at least five percent below 1990 levels in the commitment period extending from 2008 to 2012 [55].

Kyoto also includes the creation of compensation. It offers many advantages where it allows this Cost reduction opportunities are less outside of cap countries As options to reduce cost. And, compensation can promote technology transfer to developing countries [56].

The second mechanism for compliance is joint implementation that allows developed countries Signatories must implement projects in their countries or in other countries listed in Annex I That remove greenhouse gases or create additional carbon sinks [57].

However, Some believe that there are two obstacles in the way of finding an effective system to control climate change. The first is the adherence to the need for a change in the traditional concept of state sovereignty, which still exists, which means that states are free to reject or accept the obligations of international treaties.

The second is represented in the deep difference of opinion between the countries regarding the standards required and the manner in which responsibility is distributed [58].

4. Role of international organizations

International organizations play an important role in regulating renewable energy activities and then mitigating climate change. We will discuss the role of IRENA and EU in the following paragraphs:

4.1. International Renewable Energy Agency

The Statute of the International Renewable Energy Agency stipulates in the preamble the following: *(The Parties to this Statute, Desiring to support the widespread and increasing introduction of renewable energy and its use in order to achieve sustainable development, and inspired by its strong belief in the tremendous opportunities offered by renewable energy to address and gradually mitigate the problems posed by energy security and volatile prices.....*

Believing in the essential role that renewable energy can play in reducing the concentration of greenhouse gas emissions in the atmosphere, which contributes to stabilizing the climate system and enables the achievement of a sustainable, safe and light transition to a low-carbon economy...

Desiring to broaden the scope of the positive impact inherent in renewable energy technologies represented in stimulating sustainable economic growth and job creation [59].

It is noted through the texts of the preamble above the link between the use of renewable energy and other terms such as sustainable development and reduction of greenhouse gas emissions, stabilization of the climate system and stimulation of economic growth as well as the facilitation of cooperation between member states and other organizations that encourage the use of renewable energy, which is what they seek to achieve agency.

Article 3 of the Basic Law stipulates that renewable energy is defined as (the term "renewable energy" is referred to in this Basic Law to all forms of energy generated from renewable resources in a sustainable manner [60].

The same article contain renewable energy sources, as it mentioned:

1. Bioenergy
2. Geothermal energy
3. Hydroelectric power
4. Ocean energy, which includes tidal energy, waves, ocean thermal energy, and others.
5. Solar energy, and
6. Wind Energy [61].

Some believe that the International Renewable Energy Agency did not provide a complete list of renewable energy sources, and therefore it is necessary to point out a typical list of the most typical energy sources. In the other hand some jurists believe that renewable energy includes a group of different energy resources and technologies, including water energy, solar energy, wind energy and biomass. Geothermal energy and solar energy are a general term that includes the direct production of electricity from photovoltaic cells. but renewable energy sources were classified for the first time in General Assembly Resolution No. 33/148 at the United Nations Conference on Renewable Energy Resources in 1978, and the conference identified them as including solar, thermal, terrestrial, wind energy, tidal energy, wave energy, and thermal hydrogenation [62].

While a report on renewable energy sources and climate mitigation in 2011 identified energy sources as (*including bioenergy that is formed from biomass raw materials such as forests, agricultural residues, animal waste, direct solar energy, geothermal energy from the ground, and hydroelectric energy, i.e. the energy of moving water from High to low places, marine energy and wind energy* [63].

4.2. European Union

The Renewable Energy Directive promotes the use of renewable sources for electricity generation and sets a target of 20% of total energy consumption to be generated from renewable sources across the European Union by 2020. The Directive also includes an additional target of 10% of energy from renewable sources versus transport energy consumption for every member state [64].

To achieve these overarching goals, the Renewable Energy Directive sets a mandatory national target for each member state, which states the total share of total energy consumption. The mandatory national targets have provided certainty to investors and are intended to encourage technological development. Member states have to follow a path, but according to their own National Action Plans.

The Renewable Energy Directive contains a series of interim targets for all member states to ensure steady progress towards the ultimate goals [65].

However, there are no financial penalties for failure to meet these interim targets, but the commission reserves the right to issue infringement actions if member states do not take "appropriate measures" to try to achieve their targets [66].

Previously, small producers of renewable electricity argued that a lack of transparency and restrictions on access to electricity grids prevented them from competing in the market. The new directive now requires member states to ensure that transmission and distribution system providers give priority access to the grid for all electricity produced from renewable sources [67].

Conclusion

Despite the existence of a number of rules regulating the use of renewable energy at the international level, this sector is still in the stage of growth and its legal regulation is insufficient and needs more efforts and has not reached of full implementation in the absence of the framework agreement and the lack of consensus on some issues related to this field, such as distribution, use and utilization.

The continued weakness of legal regulation and the apparent lack of normative rules of international renewable energy law due to a many factors, the most prominent of which is the principle of permanent sovereignty of the state over its natural resources. And the technical defects that accompany the use of renewable energy, so this law is still a large part of this branch of international law is classified as soft international law.

The delegation included some agreements, such as the United Nations Convention on Climate Change, included provisions related to the development of international renewable energy law, but this depends on the extent of the commitment of the state's parties to the treaty to control the sources of human emissions and other measures related to mitigating climate change.

It is also noted the absence of legal regulation at the regional level for aspects related to energy in general, especially in light of the problem of climate change.

Many international conferences, such as the Rio and Stockholm Declarations, did not explicitly refer to the issue of energy, while some international agreements related to reducing emissions and climate change did not deal directly with renewable energy, instead they included sustainable development policies by encouraging the search for sustainable energy sources.

It is noted also that the weakness of regulation of some issues related to renewable energy varies, but it is well-established in developed countries or those in the process of growth.

There are essential need to reach a framework treaty which regulating all legal aspects of renewable energy.

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