

Legal Policies on Renewable Energy For Sustainable Economic Development in Vietnam

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Abstract

Using renewable energy is a new trend around the World recently. It is a good way to protect the environment and implement the sustainable economic development Goals. Following that trend, Vietnam's Government has enacted many legal policy and regulation to encourage everybody using of renewable energy. In this article, the author will analyze the international and domestic law and regulation on renewable energy in Vietnam. To do this research, the author uses many kinds of methodologies such as analysis Vietnam's legal policy and documents (law and regulations) related to energy activities, use the hypotheses developed in the study shows how to use law and regulation to govern energy activities in Vietnam, survey, etc.

Keywords: Renewable energy; law and regulation; sustainable economic development; Vietnam.

Introduction

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future [1]. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. The 7th Goal of the 17 Sustainable Development Goals is Ensure access to affordable, reliable, sustainable and modern energy for all.

Vietnam is in the process of industrialization and modernization. Therefore, ensuring the demand for energy for rapid and sustainable economic development, maintaining national defense, political security, social order, and safety, and constantly improving people's living particularly important role. Over the years, Vietnam has had many policies to invest in and support the energy industry in many aspects. The Politburo of Vietnam has issued Conclusion No. 26-KL/TW in on the Strategy and Planning for the Development of Vietnam's Electricity Industry; Resolution No. 18-NQ/TW in on the orientation of Vietnam's national energy development strategy to vision to 2050 [2-4]. Thanks to the Party's policy, correct leadership, and the influence of the Party. In response to the participation of the political system, the business community, and society as a whole, in recent years, our country's energy industry in general and the electricity industry, in particular, have made rapid and relatively similar developments. Ministries in all sub-sectors and fields closely followed the orientation and achieved many specific goals set out. In re-

sponse to the socio-economic development requirements of the period [5]. On the basis of this resolution, the National Assembly will study, amend and supplement the law to create favorable conditions for national energy development. Resolution 55 is highly appreciated by ministries, branches, localities, the business community, investors, domestic and international experts. The good implementation of this Resolution is expected to create breakthrough developments for Vietnam's energy industry in the next period.

Literature review

Renewable energy is encouraged to exploit and maximize its capacity and reach its limit in the next few decades. Countries around the world have been using renewable energy as significant solutions for meeting energy needs economically, ensuring energy security and sustainable development. The capacity and use of renewable energy on a global scale has increased at a faster rate than expected, especially in the electricity generation sector. The trend of renewable energy development in recent years has created turning points in the development of the global energy system. The rapid growth of renewable energy demonstrates the commitment of Governments around the world. More than 170 countries have set renewable energy targets, and nearly 150 countries have issued preferential policies for renewable energy development. The private sector also plays an important role in the development of renewable energy on a global scale. This signals a growing consensus that renewable energy technologies will be the engine for sustained growth and economic development.

The cost of electricity generation from renewable energy has

decreased significantly since 2010 with the decreasing trend of renewable energy equipment. Led by a trend of 81% decrease in the value of solar power equipment along with other cost reductions, the cost of residential electricity (LCOE) of solar power decreased by 73% between 2010-2017, to 10 USc/kWh. In some countries, solar power has been able to compete directly with traditional power sources without financial support. Off-shore wind power and concentrated solar power also saw a significant decrease during this period with LCOEs of 14 USc/kWh and 22 USc/kWh respectively. Bidding results for the two years 2016-2017 show a further reduction for these two types of renewable energy by 2020.

The main factors leading to the reduction in electricity costs of renewable energy include improved technology, competitive bidding, and accumulated experience at a large scale with international project developers. The results collected by IRENA for competitive bidding for renewable power project development through 2022 suggest that the reduction in LCOE will continue to be sustained. IRENA also predicts that by 2020, the cost of renewable electricity will be in the range of fossil fuel power sources. With an increasing amount of accumulated capacity in regions and countries, renewable electricity development costs will continue to maintain their current downward momentum. Building on this momentum, renewable energy is well-positioned to play a central role in the implementation of international agreements on climate change and sustainable development goals. IRENA estimates show that doubling the share of renewable energy to 36% by 2030 is technically and economically feasible.

Accelerating the implementation of energy turning points and developing renewable energy beyond electricity generation can have economic, social, and environmental benefits. Achieving the share of renewable energy by 2030 contributes to an increase in global economic output of 1.3 trillion USD compared to conventional projects. It also contributes to the creation of millions of jobs and significantly reduces the health hazards caused by air pollution. One of the biggest benefits is also creating opportunities for the 1 billion people who do not have access to electric power and the nearly 3 billion people who depend on traditional biomass for cooking. According to the report of IRENA 2018, to achieve the goal of reducing greenhouse gases under the plan to promote renewable energy, the world needs an investment of 16,000 billion USD by 2050. In which, renewable energy types, mainly onshore wind power 33%, solar power 43%. This is followed by an increased share of renewable electricity, increased investments in energy storage, power transmission, and distribution capacity, flexible power sources, and load regulation. The additional investments help the system to integrate 62% of the power load from wind and solar while ensuring an adequate, stable, and reliable power supply. In the period to 2050, solar power will increase from 233 GW to 7122 GW, wind power from 411 GW to 5445 GW, concentrated solar power from 5 GW to 633 GW, biomass power from 119 GW to 384 GW, geothermal power from 10GW to 227 GW, other forms of renewable energy (tidal, wave, etc.) from 0.3 GW to 881 GW. Thus, wind power and solar power will be the main forms of renewable energy

to meet electricity demand in the future. At this rate of growth, electricity from renewable energy will contribute to 85% of total electricity production by 2050 compared to 24% in 2015.

Methodology of research

In this paper, the authors use many kinds of researching methodologies to analyze international and national legal policy and documents (law and regulations) related to using clean energy for sustainable development. Besides, the authors based on the hypotheses developed in the study show how to use law and regulation to laws when implementing activities of using clean energy. To examine these relationships, the authors developed some hypotheses and tested these hypotheses using some empirical models. The developed models confirm the assumptions and demonstrate a legal mechanism for using clean energy. Moreover, statistics and surveys are also used to finish this research. The authors used the poll to survey the Vietnamese citizens, enterprises, and associations in Vietnam. The authors also sent the questionnaires to ask them some questions related to the law and using clean energy. The authors combined all of the methodologies above to do this research. However, because of time and financial limitations, the working paper cannot cover inclusive aspects of issues related to the topic. Thus, the authors look forward to taking the comments and opinions of readers and reviewers to do better in future.

Findings and discussion

International law and regulation

Sustainable development Goals of United Nation

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. The creativity, knowhow, technology and financial resources from all of society is necessary to achieve the SDGs in every context.

Climate change is a real and undeniable threat to our entire civilization. The effects are already visible and will be catastrophic unless we act now. Through education, innovation and adherence to our climate commitments, we can make the necessary changes to protect the planet. These changes also provide huge opportunities to modernize our infrastructure which will create new jobs and promote greater prosperity across the globe.

Renewable energy solutions are becoming cheaper, more reliable and more efficient every day. Our current reliance on fossil fuels is unsustainable and harmful to the planet, which is why we have to change the way we produce and consume energy. Implementing these new energy solutions as fast as possible is essential to counter climate change, one of the biggest threats to our own survival. To ensure access to sustainable energy, we all have to take action. Get inspired here:

- i. Universal access to modern energy. By 2030, ensure universal access to affordable, reliable and modern energy services. Increase global percentage of renewable energy. By

- 2030, increase substantially the share of renewable energy in the global energy mix.
- ii. Double the improvement in energy efficiency. By 2030, double the global rate of improvement in energy efficiency.
- iii. Promote access to research, technology and investments in clean energy. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
- iv. Expand and upgrade energy services for developing countries. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support.

Together we can ensure affordable and clean energy for all. Here you can see what you can do to contribute. Find organizations to support, information to share and some useful tips for your everyday life that can really make a difference.

Paris Convention 2015 on Climate change

At COP 21 in Paris, on 12 December 2015, Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future. The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change, and at making finance flows consistent with a low GHG emissions and climate-resilient pathway. To reach these ambitious goals, appropriate mobilization and provision of financial resources, a new technology framework and enhanced capacity-building is to be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for an enhanced transparency framework for action and support.

The Paris Agreement requires all Parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. There will also be a global stocktake every 5 years to assess the collective progress towards achieving the purpose of the agreement and to inform further individual actions by Parties.

The Paris Agreement opened for signature on 22 April 2016 – Earth Day – at UN Headquarters in New York. It entered into force on 4 November 2016, 30 days after the so-called “double threshold” (ratification by 55 countries that account for at least 55% of global emissions) had been met. Since then, more countries have ratified and continue to ratify the Agreement, reaching a total of 125 Parties in early 2017.

In order to make the Paris Agreement fully operational, a work programme was launched in Paris to develop modalities, procedures and guidelines on a broad array of issues. Since 2016, Parties work together in the subsidiary bodies (APA, SBSTA and SBI) and various constituted bodies. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) met for the first time in conjunction with COP 22 in Marrakesh (in November 2016) and adopted its first two decisions. The work programme is expected to be completed by 2018.

The Paris Agreement, adopted through Decision 1/CP.21, addresses crucial areas necessary to combat climate change. Some of the key aspects of the Agreement are set out below:

- i. Long-term temperature goal (Art. 2) – The Paris Agreement, in seeking to strengthen the global response to climate change, reaffirms the goal of limiting global temperature increase to well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees.
- ii. Global peaking and ‘climate neutrality’ (Art. 4) – To achieve this temperature goal, Parties aim to reach global peaking of greenhouse gas emissions (GHGs) as soon as possible, recognizing peaking will take longer for developing country Parties, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of GHGs in the second half of the century.
- iii. Voluntary cooperation/Market- and non-market-based approaches (Art. 6) – The Paris Agreement recognizes the possibility of voluntary cooperation among Parties to allow for higher ambition and sets out principles – including environmental integrity, transparency and robust accounting – for any cooperation that involves internationally transferal of mitigation outcomes. It establishes a mechanism to contribute to the mitigation of GHG emissions and support sustainable development, and defines a framework for non-market approaches to sustainable development.
- iv. Adaptation (Art. 7) – The Paris Agreement establishes a global goal on adaptation – of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change in the context of the temperature goal of the Agreement. It aims to significantly strengthen national adaptation efforts, including through support and international cooperation. It recognizes that adaptation is a global challenge faced by all. All Parties should engage in adaptation, including by formulating and implementing National Adaptation Plans, and should submit and periodically update an adaptation communication describing their priorities, needs, plans and actions. The adaptation efforts of developing countries should be recognized
- v. Loss and damage (Art. 8) – The Paris Agreement recognizes the importance of averting, minimizing and addressing loss

and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage. Parties are to enhance understanding, action and support, including through the Warsaw International Mechanism, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change.

- vi. Finance, technology and capacity-building support (Art. 9, 10 and 11) – The Paris Agreement reaffirms the obligations of developed countries to support the efforts of developing country Parties to build clean, climate-resilient futures, while for the first time encouraging voluntary contributions by other Parties. Provision of resources should also aim to achieve a balance between adaptation and mitigation. In addition to reporting on finance already provided, developed country Parties commit to submit indicative information on future support every two years, including projected levels of public finance. Climate change education, training as well as public awareness, participation and access to information (Art 12) is also to be enhanced under the Agreement.
- vii. Global Stocktake (Art. 14) – A “global stocktake”, to take place in 2023 and every 5 years thereafter, will assess collective progress toward achieving the purpose of the Agreement in a comprehensive and facilitative manner. It will be based on the best available science and its long-term global goal. Its outcome will inform Parties in updating and enhancing their actions and support and enhancing international cooperation on climate action.

Decision 1/CP.21 also sets out a number of measures to enhance action prior to 2020, including strengthening the technical examination process, enhancement of provision of urgent finance, technology and support and measures to strengthen high-level engagement. For 2018 a facilitative dialogue is envisaged to take stock of collective progress towards the long-term emission reduction goal of Art 4. The decision also welcomes the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities. These stakeholders are invited to scale up their efforts and showcase them via the Non-State Actor Zone for Climate Action platform (<http://climateaction.unfccc.int>). Parties also recognized the need to strengthen the knowledge, technologies, practices and efforts of local communities and indigenous peoples, as well as the important role of providing incentives through tools such as domestic policies and carbon pricing.

Sources of renewable energy in Vietnam

Regarding solar energy, in the context of the world’s progress in solar energy absorption technology, Vietnam’s solar energy sector is considered to have many positive impacts. Solar energy is considered to have strong development potential in the future due to the favorable geographical position of Vietnam, located within the limit between the equator and the Tropic of Cancer, in the inner tropical region where the sun shines year-round. However, the exploitation and use of this energy source have been improved with many applications of advanced equipment

technology, especially for power generation, hot water heating, and drying, etc. The use of this energy source compared to other energy sources is gradually developing and there is competition in the market. On the other hand, mechanisms and policies to encourage the use of solar energy and citizens’ awareness have also been gradually improved. In the future, when the exploitation of other energy sources has reached the limit, Vietnam’s solar energy source is great potential.

Biomass energy along with solar energy is a potential clean energy source of Vietnam. The source of biomass energy is waste from agricultural products or livestock waste, urban organic waste, and other organic wastes. According to preliminary calculations, Vietnam’s solid biomass energy source is about 170 million tons and has an electrical output of 2000 MW. This is a great and potential energy source of Vietnam.

Wind energy is also a potential source of Vietnam due to its location in the tropical monsoon region, with a coastline of more than 3000km. Vietnam’s wind power potential ranges from 1785MW to 8700MW. Wind power of Vietnam is not only in coastal areas but also in mountainous areas, especially in valleys along rivers and streams. Vietnam has started implementing a number of projects to exploit wind power sources in Ca Mau and Ninh Thuan.

In addition, Vietnam also has potential for marine energy such as tides, ocean currents, and burning ice on the seabed. This is an energy source that can meet the needs of economic development in the long-term energy extraction strategy.

Domestic law and regulation on renewable energy in Vietnam

Constitution

Constitution is the highest legal document in Vietnam. It regulates the main principle of legal policies of Vietnam. Constitution 2013 is the newest Vietnam’s Constitution. It has an article related to the issue of environmental ocean protection. That article is article 63. Following the regulations of article 63, the State has policies on environmental protection; manage and use effectively and sustainably natural resources; nature conservation, biodiversity; proactively prevent and combat natural disasters and respond to climate change. The State encourages all activities of environmental protection, development and use of new and renewable energy. Organizations and individuals that pollute the environment, deplete natural resources and degrade biodiversity must be strictly handled and have the responsibility to remedy and compensate for damage. These regulations are the background of the legal system environmental ocean protection in Vietnam.

The 2020 Law on Environmental Protection

Law on environmental protection activities; rights, obligations and responsibilities of agencies, organizations, communities, households and individuals in environmental protection activities. Seaport environmental protection activities are regulated from the planning, investment preparation, construction and exploitation stages. In which, Article 25 stipulates on subjects that

must carry out strategic environmental assessment; Article 30 stipulates on subjects subject to environmental impact assessment; Article 39 stipulates who must have an environmental permit.

The Law also stipulates that in the course of operation, production, business and service establishments must meet environmental protection requirements such as: Collection and treatment of wastewater; collect, classify, store, treat and dispose of solid waste; reduce, collect and treat dust and gas emissions; ensure resources and equipment to prevent and respond to environmental incidents; carry out environmental monitoring; report on environmental protection activities.

The 2015 Law on natural resources and environment of sea and islands

In this Law, the content of controlling the environmental pollution of sea and islands stipulates the following contents: Principles and contents of environmental pollution control of sea and islands; responsibility for investigation and assessment of the sea and island environment; control marine environmental pollution from activities at sea, from land and control transboundary marine environmental pollution; tools and measures to control marine and island environmental pollution, assessment of results of sea and island environmental pollution control activities; report on the current state of the sea and island environment.

The other regulations

National environmental protection policies and objectives, and the slow issuance of strategic environmental assessments have caused difficulties in the implementation of energy sector projects. After 5-7 years since 2007 as Resolution No. 24-NQ/TW of the 11th Party Central Committee on proactively responding to climate change, strengthening natural resource management and environmental protection; Decision No. 1293/QD-TTG dated 25/9/05/9/2012 of the Government on the National Strategy on Green Growth 2011-2020 and Vision to 2050; Decision No. 1216/QD-TTG dated September 5, 2012, of the Government on the National Strategy for Environmental Protection to 2020 with a Vision to 2030; Resolution 11/NQ-CP dated February 18, 2013, of the Government on the Government's action plan to implement Resolution No. 62/2013/QH13 dated November 27, 2013, of the National Assembly on strengthening the management planning, investment, construction, operation and exploitation of hydroelectric projects; Decree 18/2015/ND-CP stipulating environmental protection planning, strategic environmental assessment, environmental impact assessment, and environmental protection plan. National standards and regulations on safety and protection the environmental and social impact assessment is still lacking, slow to be supplemented according to international regulations and standards. The control and management of energy exploitation technology equipment are not regular. Many old power plants have outdated equipment and lack equipment for treating smoke and wastewater according to advanced standards. Mechanisms and policies for the treatment of ash and slag discharged from coal-fired power plants are slow to be promulgated. Ensuring a good combination of energy exploitation and use with good environmental management has not been paid

enough attention in some places. There have been some unfortunate incidents about the environment that cause concern when building new projects. New plants, especially coal-fired power plants, such as air pollution, deterioration of seawater and river water quality, changes in ecosystems, etc. The strong development of hydropower projects from 2006 to 2012 changed the flow mechanism of many natural rivers, reduced biodiversity, took away a large area of forest and agricultural land.

In 2015, the Prime Minister issued Decision No. 2068/QD-TTG approving Vietnam's renewable energy development strategy to 2030 with a vision to 2050. The renewable energy development strategy has encouraged the mobilization of all social resources and people for the development of renewable energy to enhance access to modern, sustainable, reliable energy sources at reasonable prices for all people; to step up the development and use of renewable energy sources, increase domestic energy supply, gradually increase the proportion of renewable energy sources in national energy production and consumption to reduce dependence on renewable energy sources, fossil energy, contributing to ensuring energy security, mitigating climate change, environmental protection, and sustainable socio-economic development.

To attract businesses to invest in the renewable energy sector, Decision No. 2068/QD-TTG stipulates EVN's responsibilities in purchasing electricity and prioritizing capacity mobilization from renewable energy sources. Power producers from renewable energy sources are given priority to exploit the full capacity and develop electricity by the operating mode of the plant. This decision is aimed at protecting the interests of investors, ensuring that they will be able to mobilize maximum capacity and sell all electricity produced from renewable energy sources.

In addition, the electricity price support mechanism is also implemented in the direction that electricity produced from small hydropower sources, wind energy, and solid waste biomass energy is purchased at a higher price than the purchase price of electricity from power sources conventional energy (large hydroelectricity, fossil fuels, etc.). Small hydropower projects and grid-connected biomass power projects enjoy preferential electricity prices. Wind power, solar power, and electricity from grid-connected solid waste are entitled to electricity price incentives according to the feed-in tariff price mechanism (The FIT price for onshore and offshore wind power is equivalent to 8.5 cents/kWh and 9.8 Ascent/kWh; FIT price for solid waste electricity is equivalent to 10.05 Uscents/kWh). This FIT price is applied to the project for 20 years. The selling price is fixed in USD, payment is in VND at the time of payment. The purchase price of electricity from renewable energy projects is higher than the average retail price of electricity in Vietnam. The Ministry of Industry and Trade of Vietnam has also coordinated with the ASEAN Council to issue the "Technical Handbook on connecting wind power to the Vietnamese grid". The development of renewable energy has many shortcomings, the power transmission system is still not synchronized and meets the requirements. In the year 2017-2018, with incentives for the development of solar energy (Decision No. 11/2017/QD-TTG of the Prime Minister) and wind power (Decision No. 37/2011/QD-TTG and Deci-

sion No. 39/2018/QĐ-TTĐ of the Prime Minister), wind power and solar power have made great progress. By 2019, more than 100 solar power projects and 11 wind power projects have been put into operation with a total capacity of 44,479.5 MW from solar power and 377 MW from wind power, respectively. In addition, about 378 MW of rooftop solar power has been installed, of which the Hochiminh City area accounts for 18%, the southern region (excluding HCMC) accounts for 50% and the central region accounted for 26%. In 2019, the electricity output from rooftop solar power is expected to reach about 99 million kWh 2019. However, because the grid infrastructure has not been developed in sync with the development of renewable energy sources, mainly solar power, while the private mechanism has not been opened to invest in the power transmission system. Thus, there have been several projects with reduced capacity. According to the report of EVN, this group has ensured the transmission capacity to mobilize the full power generation capacity of 81/100 renewable energy projects with a total capacity of about 4,400 MW (ie, ensuring the mobilization of 86% of the capacity of power sources of wind and sun have come into operation). Only 19 factories in the two provinces of Ninh Thuan and Binh Thuan with a total capacity of 670 MW had to partially limit the generating capacity at some point in time due to partial overload of the 110kV power grid because these 19 projects are all over the world connected on a single-circuit 110kV transmission line. Research by the German Development Cooperation Organization GIZ shows that in Ninh Thuan, about 10 solar and wind power projects have had their capacity cut by 38%-65% while in Binh Thuan, from mid-2019 to date, renewable energy projects have experienced an average reduction of 30% in generating capacity. It is worth noting that projects that have been in operation since 2 years ago are also affected by the sharing of generating capacity with new projects put into operation.

There is a paradox currently occurring, the number and capacity of wind and solar power projects proposed to supplement the planning are very large, many times higher than the planned structure, but the amount Actual output power is still very low. The main reason is that the investor's capacity is not guaranteed, the state of offering for sale and project transfer leads to the slow implementation of the project while many capable investors cannot deploy the project because it has not been added to the project. This causes a great waste of national resources. The hot development of renewable energy, especially solar energy, is creating great challenges in power system operation while there is a lack of mechanisms and policies to encourage the private sector to invest in national electricity transmission systems.

In general, mechanisms and policies to develop renewable energy, especially wind and solar power, have not kept pace with the market, creating many policy risks for investors. Typically, Decision No. 13/2020/QĐ-TTĐ was issued in 2020, nearly a year after Decision No. 11/2017/QĐ-TTĐ expired on June 30, 2019.

While the validity of Decision 11 is valid for more than two years, Decision 13 is only valid until the end of 2020. Besides, the Decision's guidance on these documents is not yet available. Regarding wind power, Decision No. 39/2018/QĐ-TTĐ issued in 2018 is valid until 2021. The effectiveness of the FIT mechanism for wind power is relatively short compared to the construction characteristics of wind power. In addition, the bidding mechanism is expected to be put into effect from November 2021 but has not been clearly developed, it is necessary to consider extending the time to suit the actual situation.

Conclusion

From the analysis above, we can see that renewable energy plays an important role in the process of sustainable economic development. The challenges of protecting the ecological environment and international commitments to respond to climate change also create great pressure when implementing the legal policies to ensure energy security associated with sustainable development.

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