
No.: 2491/BCT-DL

On request and proposal for extending the
Feed-in tariffs mechanism for wind power
in Decision No. 39

Hanoi, April 9th 2020

Respectfully to: The Prime Minister

The Ministry of Industry and Trade (MOIT) would like to report to the Prime Minister on the implementation of Decision No. 37/2011/QĐ-TTg dated 29th June 2011 (Decision No. 37) by the Prime Minister regarding the mechanism for developing wind power projects in Viet Nam and Decision No. 39/2018/QĐ-TTg dated 10th September 2018 regarding the amendment and supplementation of a number of articles in Decision No. 37 (Decision No. 39) as follows:

1. The current development of wind power after the Prime Minister issued Decision No. 39

In the period 2011-2018, after the promulgation of Decision No. 37, only three power projects had been constructed and put into operation for electricity generation with the total installed capacity of 153.2 MW because the Feed-in tariffs (FiT) for wind power was not yet really attractive to investors.

To promote the wind power development, on September 10th 2018, the Prime Minister issued Decision 39 regarding the amendment and supplementation of a number of articles in Decision No. 37. Correspondingly, the FiT was increased with the following details:

- For mainland wind power: The FiT at the power delivery point is 1,927 VND/kWh or 8.5 Uscents/kWh (excluding the Value Added Tax (VAT)).

- For offshore wind power: The FiT at the power delivery point is 2,223 VND/kWh or 9.8 Uscents/kWh (excluding the Value Added Tax (VAT)).

The above FiT is applicable to wind power projects of which a part or the whole of power plants will have been put into commercial operation before November 1st 2021 for 20 years since their commercial operation dates.

Decision No. 39 has created a driving force to boost the wind power market in Viet Nam. Many wind power projects have been proposed to be included in the Power Development Plan (PDP) and are being constructed. The concrete situation of investments in developing wind power projects by March 2020 can be summed up as follows:

- 78 wind power projects have been added to the PDP with the total capacity of 4,800 MW.
- 11 projects have been put into operation for electricity generation with the total capacity of 337 MW.

- 31 projects have signed power purchase agreements with the total capacity of 1,662.25 MW and are expected to be put into operation in 2020 and 2021.

In addition, in the period from the end of 2018 up until now, the MOIT has received the requests for inclusion in the PDP from nearly 250 wind power projects with the total capacity of approx. 45,000 MW, including 03 offshore large-scale wind power projects with the total capacity of 4,900 MW.

The table summarizing capacities of wind power projects is provided in Appendix I.

2. Difficulties affecting the progress of implementing wind power projects

The Prime Minister's Decision No. 39 established an attractive mechanism for the wind power development. However, only 11 projects with the total capacity of 377 MW have been put into operation so far. Major difficulties affecting the progress of implementing wind power projects can be listed as follows:

- Application of the Planning Law: Right after Decision No. 39 took effect (on November 1st 2018), the investment registration and addition to the PDP of new wind power projects and transmission projects to receive and evacuate the wind power capacity have been stalled for more than one year due to unavailable guidelines on implementing the Planning Law (enacted on January 1st 2019). Currently, only 4,800 MW has been added to the PDP and 45,000 MW (250 projects) proposed by provinces remains not yet appraised and included in the PDP. To address problems in realizing the Planning Law, the Standing Committee of the National Assembly issued Resolution No. 751/2019/UBTVQH14 dated 16th September 2019 explaining a number of articles of the Planning Law (Resolution No. 751); the Government promulgated Resolution 110/NQ-CP dated 2nd December 2019 on the list of plans integrated in compliance with point c of clause 1 of Article 59 of the Planning Law, allowing the local revisions in the PDP (Resolution No. 110). Resolution No. 751 and Resolution No. 110 have handled hindrances to the amendment and supplementation of the PDP in the transitional period until the PDP 7 is approved to meet the requirement of supplying power for socio-economic development. In implementing these two Resolutions, the MOIT continues appraising the addition of qualified renewable energy power projects to the PDP to be submitted to the Prime Minister.

- Impacts of the COVID-19 pandemic: the COVID-19 pandemic is now affecting the turbine supply progress, extending the construction and installation and slowing the operation progress of wind power projects. The production and supply of main equipment and accessories for wind power projects are short and stagnated. Moreover, the import and export of goods as well as immigration of technical workers and foreign experts are interrupted. Such facts all leave adverse impacts on enterprises.

- The construction time of wind power projects: Wind power projects in the development plan in Southwestern provinces are mostly inshore with the total capacity of approx. 1,600 MW. However, inshore wind power projects use technologies and technical solutions which are different

from onshore turbines (with higher capacity level, construction under the water surface, season-and-tide-based construction and others), so the preparation for project construction requires longer time (2 years for an onshore project and 3-3.5 years for an inshore project). In addition, regulations on identifying sea bodies and licensing the use of these bodies are quite complicated. Regulations on identifying the area of sea bodies to calculate the cost of using these bodies are not yet developed at present. As a result, the time and costs for inshore projects are increased.

- Offshore wind power development: Viet Nam is of great potential for offshore wind power with the total technical potential of approx. 475 GW (Report of the World Bank in September 2019). The MOIT has also received documents from 03 provinces (Binh Thuan, Ba Ria – Vung Tau and Ben Tre), requesting the inclusion of 03 offshore wind power projects with the total capacity of 4,900 MW in the PDP. Numerous provinces allow investors to survey and research offshore wind power projects with the total registered capacity of approx. 18,000 MW. Nevertheless, apart from the FiT mechanism stipulated in Decision No. 39, there is a marked lack of mechanisms and policies on offshore wind power development at present. Developing offshore wind power is a solution in alignment with Resolution No. 55-NQ/TW dated 11th February 2020 by the Politburo on the orientation of Viet Nam's National Energy Development Strategy to 2030 and outlook to 2045. The MOIT is actively and proactively collaborating with line ministries to study the proposal on specific goals and solutions for offshore wind power development in Viet Nam to add efficient and sustainable power sources for socio-economic development.

According to the MOIT's evaluations, there are just 18 months to go from now to the end of October 2021 (when Decision No. 39 allows wind power projects already put into operation to be applied with the FiT mechanism). This means that investors will not have enough time to prepare for and develop wind power projects (addition to the PDP, site clearance, project development and approval, technical design, equipment order/purchase, environmental impact assessment, connection agreement, power purchase agreement and other agreements), especially the offshore ones and ones which have not been approved to be included in the PDP yet.

3. The necessity of continuous development of wind power projects in line with the FiT mechanism

3.1. Quick addition of power sources in the period to 2025 for the power system

Updates on the power source progress in accordance with the revised PDP 7 show that the majority of thermal power sources will be 1-2 years behind schedule, especially thermal power sources in the South expected to be put into operation in the period 2018-2021 such as Long Phu I, Song Hau I, Song Hau II, Long Phu III, O Mon III and IV and power plants using gases from Ca Voi Xanh mine are probably behind schedule in relation to the plan. According to calculations of the supply-demand balance, it is very likely that the Southern power system will fall short of electricity in the period 2021-2025; and calculating for the addition of new power sources to ensure the electricity supply nationwide is thus necessary.

As stated in the overall review report on the revised PDP 7 developed by the Institute of Energy in February 2020, to ensure the supply-demand balance, one of the crucial solutions in the coming period is to develop power from renewable energy, especially wind. Capacities of the renewable energy which need to be mobilized to 2025 are specified as follows (Table of power source structure calculations is provided in Appendix II):

- Baseline option: in the period to 2025, the total capacity of power expected to be developed from renewable energy is approx. 21,700 MW, including approx. 14,450 MW from solar power and approx. 6,030 MW from wind power.

- Intense option: in the period to 2025, the total capacity of power expected to be developed from renewable energy is approx. 32,200 MW, including approx. 20,350 MW from solar power and approx. 11,630 MW from wind power.

The later is selected to be the controlling option to develop backup power sources in case of soared load, disadvantageous climate or other power sources being behind schedule.

4.800 MW of wind power in the PDP is currently being implemented in different steps. Given the intense option on wind power development, the period 2020 – 2025 needs to have an appropriate mechanism to mobilize maximally the capacity of projects which have already been in the PDP and add approx. 5,000 MW – 7,000 MW of wind power to provide electricity for the system.

3.2. Replacing a part of power sources using fossil fuels and honoring the commitment to environmental protection

In the period 2020 – 2025, with the development scale of 11,630 MW, the additional wind power output will be around 3,400 GWh/year – 7,400 GWh/year to replace the volume of coal-fired thermal power and reduce the volume of costly oil-fired thermal power, thereby contributing to the mitigation of CO₂ emission (approx. 5 million tons/year)

Promoting the renewable energy power is one of the solutions which are responsive to the National Green Growth Strategy to ensure Viet Nam's target of reducing greenhouse gases in the period to 2030 in the 21st UN's Framework Convention Conference on Climate Change (COP 21).

3.3. Solutions for wind power mobilization

To mobilize and develop wind power sources and compensate for the shortage of electricity in the period 2020 – 2025, some following solutions need to be timely taken into consideration:

- To continue to create the incentive mechanism for the FiT, ensuring adequate time for the development of projects which have already been included in the PDP (approx. 4,800 MW) and additional mobilization of necessary capacity in the period 2020 – 2025.

- To boost the investment in the transmission grid system to ensure the maximal evacuation of capacities from renewable energy projects and the stable operation of the system.

- To promote solutions for the system energy storage such as supplementing system storage sources right from the period 2022-2023 in the South and timely putting into operation the pumped-storage hydroelectricity on schedule.

4. Viewpoints of provinces with potential for wind power development

The MOIT has received reports of people's committees of 9 provinces requesting the MOIT to report to the Prime Minister on extending the application time of the FiT mechanism in Decision No. 39 for projects which have been put into commercial operation to 2020 – 2023 (1 – 2 more years) owing to difficulties in applying the Planning Law, impediments in investing in the constructions of offshore wind power projects and impacts of the COVID-19 pandemic. These provinces are of great potential for wind power development and concentrate in the Southwestern region and Central Highlands. The development of wind power in such regions not only contributes to ensuring the national energy security but also promotes the local socio-economic development.

5. Recommendations of the MOIT

To address difficulties in the investment in and development of wind power to contribute to ensuring the power supply in the period to 2025, the MOIT would like to propose and recommend the Prime Minister:

- To extend the application time of the FiT mechanism for wind power projects in Decision No. 39 to the end of December 31st 2023.

- To assign the MOIT to calculate and propose the new FiT for wind power applicable to wind power projects having operation dates in the period from November 1st 2021 to December 31st 2023 and report to the Prime Minister for consideration and approval.

- To apply the competitive bidding and auction mechanism for wind power projects after 2023.

The MOIT would like to hereby respectfully report to the Prime Minister the above contents./.

Recipients:

- As above;
- Office of the Government;
- Minister (for report);
- Archive: Document Servicing Department, ERAV

FOR MINISTER

DEPUTY MINISTER

(signed and sealed)

Hoang Quoc Vuong

APPENDIX I

SUMMARY OF CAPACITIES OF WIND POWER PROJECTS

(In attachment to Official Letter No. 2491/BCT-DT dated 9th April 2020 by the MOIT)

	List of provinces	Wind power							
		Under operation		Under construction		Already included in the PDP		Already proposed for inclusion in the PDP	
		Number of projects	Capacity (MW)	Number of projects	Capacity (MW)	Number of projects	Capacity (MW)	Number of projects	Capacity
1	Ba Ria – Vung Tau							2	603
2	Bac Lieu	2	99.2	4	292	6	401	19	4,807
3	Ben Tre			6	179.7	6	179.7	23	12,063
4	Binh Dinh							3	225
5	Binh Thuan	3	60	14	826	21	890	1	3,400
6	Ca Mau			5	550	5	550	16	4,249
7	Dak Lak	1	28.8	1	110	2	138.8	23	2,683
8	Dak Nong							6	460
9	Gia Lai							62	8,719
10	Ha Tinh							1	120
11	Hau Giang							1	100
12	Kon Tum							2	153
13	Lam Dong			3	148	3	148	1	69
14	Ninh Thuan	3	129	5	477.07	8	714	5	462
15	Phu Yen			2	350	2	350	1	106

16	Quang Binh							1	252
17	Quang Tri	2	60	13	488	15	608	52	2,766
18	Soc Trang			10	352.4	10	500	19	1,749
19	Tien Giang							2	686
20	Tra Vinh			5	270	5	318	14	2,086
	Total	11	377	68	4,428.6	83	4,827	254	45,757

Unofficial GIZ Translation - For Reference Only

APPENDIX II

CALCULATIONS POWER SOURCE CAPACITY STRUCTURE IN THE PERIOD 2021 – 2030

(In attachment to Official Letter No. 2491/BCT-DT dated 9th April 2020 by the MOIT)

Table 1: The structure of power source capacity in the period 2021 – 2030 (Baseline option)

Item/year	Installed capacity (MW)			Capacity structure (%)		
	2020	2025	2030	2020	2025	2030
Total power demand across the country	42080	63471	90651			
Total installed power capacity	59090	104824	145568			
<i>Total installed capacity (excluding wind, solar, power storage)</i>	<i>51410</i>	<i>81944</i>	<i>110028</i>			
<i>Percentage of backup power (excluding wind, solar, power storage)</i>	<i>22.2%</i>	<i>29.1%</i>	<i>21.4%</i>			
Of which:						
Coal-fired power	19637	38842	48932	33.2%	37.1%	33.6%
Gas-fired power which is domestic and imported from Malaysia	7133	10514	10774	12.1%	10.0%	7.4%
New LNG-fired power	0	1500	12750	0.0%	1.4%	8.8%
Current thermal power using LNG	0	1883	4213	0.0%	1.8%	2.9%
Oil-fired power	1610	575	108	2.7%	0.5%	0.1%
Imported power	920	3370	5796	1.6%	3.2%	4.0%
Major hydropower over 30 MW	17766	19116	19211	30.1%	18.2%	13.2%
Minor hydropower	3800	4900	6000	6.4%	4.7%	4.1%
Wind power (*)	1010	6030	10090	1.7%	5.8%	6.9%
Solar power (*)	6670	14450	20050	11.3%	13.8%	13.8%
Biomass power and other renewable energies	544	1244	2244	0.9%	1.2%	1.5%
Power storage (pumped-storage hydroelectricity and energy-storage batteries)	0	2400	5400	0.0%	2.3%	3.7%

Table 2: Structure of power source capacity in the period 2021 – 2030 (intense option)

Item/year	Installed capacity (MW)	Capacity structure (%)
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	2020	2025	2030	2020	2025	2030
Total power demand across the country	44224	68367	100215			
Total installed power capacity	60090	116699	169498			
<i>Total installed capacity (excluding wind, solar, power storage)</i>	<i>51410</i>	<i>82319</i>	<i>120458</i>			
<i>Percentage of backup power (excluding wind, solar, power storage)</i>	<i>16.2%</i>	<i>20.4%</i>	<i>20.2%</i>			
Of which:						
Coal-fired power	19637	38842	52962	32.7%	33.3%	31.2%
Gas-fired power which is domestic and imported from Malaysia	7133	10139	10024	11.9%	8.7%	5.9%
New LNG-fired power	0	1500	18000	0.0%	1.3%	10.6%
Current thermal power using LNG	0	2258	5063	0.0%	1.9%	3.0%
Oil-fired power	1610	950	108	2.7%	0.8%	0.1%
Imported power	920	3370	5796	1.5%	2.9%	3.4%
Major hydropower over 30 MW	17766	19116	19211	29.6%	16.4%	11.3%
Minor hydropower	3800	4900	6000	6.3%	4.2%	3.5%
Wind power (*)	1010	11630	18390	1.7%	10.0%	10.8%
Solar power (*)	7670	20350	25250	12.8%	17.4%	14.9%
Biomass power and other renewable energies	544	1244	2544	0.9%	1.1%	1.5%
Power storage (pumped-storage hydroelectricity and energy-storage batteries)	0	2400	5400	0.0%	2.1%	3.2%