

DRAFT

DECISION

On mechanism to encourage solar power development in Vietnam

Pursuant to the Law on Organization of the Government dated June 19, 2015;

Pursuant to the Electricity Law dated December 3, 2004; Law on amending and supplementing a number of articles of the Electricity Law dated November 20, 2012;

Pursuant to Investment Law dated November 26, 2014;

Pursuant to Construction Law dated June 18, 2014;

At the request of the Minister of Industry and Trade;

The Prime Minister issues a Decision on the mechanism to encourage solar power development in Vietnam.

Chapter I

GENERAL PROVISIONS

Article 1. Scope of application

This decision regulates mechanism to encourage solar power development in Vietnam.

Article 2. Subjects of application

Subjects of application of this Decision include organizations and individuals involved in developing solar power projects in Vietnam and other related organizations and individuals.

Article 3. Interpretation of terms

In this Decision the terms below are construed as follows:

1. Electricity Buyer means Electricity of Vietnam (EVN) or its authorized member unit or an organization, individual buying electricity from the Electricity

Seller or an organization taking over the rights and obligations of the above-mentioned organizations as prescribed by law

2. Electricity Seller means an organization, individual operating in the field of solar power generation or an organization, individual taking over the rights and obligations of the above organizations and individuals as prescribed by law.

3. Solar power means the production of power from photovoltaic panels under the principle of solar energy conversion into electricity.

4. Rooftop solar power system means a solar power model with photovoltaic panels installed on the roofs or attached to construction works and has a capacity of less than or equal to 1 MWp, directly or indirectly connected to the national power grid.

5. Grid-connected solar power project means a solar power project which is directly connected to the national power grid except those specified under Clause 4 of this Article.

6. Floating solar power project means a grid-connected solar power project with photovoltaic panels installed on floating structures on the water surface.

7. Ground-mounted solar power project means a grid-connected solar power project with photovoltaic panels installed on the ground or a solar power project with PV panels installed on the roofs or attached to construction works and has a capacity larger than 01MWp.

8. Solar power development zoning is stipulated in Appendix I of this Decision.

9. Commercial Operation Date (COD) of a grid-connected solar power projects means the date when a part or all of the solar power plant is ready to sell electricity to the Electricity Buyer and satisfies the following conditions:

- a) The initial test has been completed for a part of or the whole works;
- b) Has been granted the Electricity Operation License in the field of electricity generation by the authority;
- c) The Electricity Seller and the Buyer agrees on the meter readings to start the payment.

Chapter II

GRID-CONNECTED SOLAR POWER PROJECT CONSTRUCTION AND INVESTMENT

Article 4. Development of grid-connected solar power projects

1. The grid-connected solar power project development shall comply with the National Power Development Plan (NPDP).

2. Solar power projects which are not yet included in the NPDP must conduct the process of development, appraisal and submission for approval into the NPDP. The process of appraisal and approval on inclusion of solar power projects into NPDP shall comply with the existing legislations on planning.

3. Grid-connected solar power projects in the PDP at different levels which have been approved shall follow the provision on transitioning in Article 59 of the Law on Planning.

Article 5. Grid-connected solar power project investment and construction

1. The investment and construction of grid-connected solar power projects shall comply with the current legislations on investment, construction, fire control, environmental protection and other relevant regulations.

2. The main equipment of the grid-connected solar power projects must meet solar power technical standards; the electricity quality of the solar power projects must meet the technical requirements on voltage, frequency and others in accordance with current regulations.

3. Organizations and individuals investing in and constructing grid-connected solar power facilities are responsible for the safe installation of solar equipment in terms of structure, safety of works according to the current regulations.

Article 6. Connection of the grid-connected solar power project to the power system

1. The Electricity Seller shall be responsible for the investment, installation, operation and maintenance of the electricity metering device, the line and step-up transformer substation (if any) from the Electricity Seller's power plant to the connection point of the Electricity Buyer's grid; organize the testing, calibration, verification of electricity metering device in accordance with the legal regulations on measurement.

2. The connection point shall be agreed upon by the Electricity Seller and the Electricity Buyer on the principle of ensuring the power transmission of Seller's power plant, and complying with the approved plan. If the connection point is different from the location of the metering device, the Electricity Seller shall bear the electricity loss on the connection line and of the step-up transformer of the plant.

Article 7. Responsibility to purchase electricity from grid-connected solar power projects

1. The Electricity Buyer is responsible for purchasing all electricity produced by grid-connected solar power projects in relevance with the regulation on the national electricity system operation and electricity sector's technical

norms and regulations; prioritizes to exploit the entire capacity and generation of solar power projects.

2. The standardized Power Purchase Agreement (PPA) for grid-connected solar power projects is compulsory in the electricity purchase between the Electricity Seller and the Electricity Buyer which is EVN or its authorized member unit.

3. The term of a PPA for grid-connected solar power projects is 20 years from the COD. After 20 years, the extension of the contract or the new contract signing shall follow the current regulations.

Article 8. Electricity price of grid-connected solar power projects

1. Electricity tariff of grid-connected solar power projects at the electricity delivery point is defined in Appendix 2. This price does not include VAT, is adjusted according to fluctuations of the US dollar (equivalent to UScents/kWh), the applied exchange rate shall be the central exchange rate announced by SBV on the invoicing date of the Electricity Seller.

2. For Ninh Thuan province, the electricity price of grid-connected solar power projects that are included in the PDP at different levels and have the COD before January 01, 2021 with the total capacity of no more than 2,000 MW, is 2,086 VND/kWh (excluding VAT, equivalent to 9.35 US cents/kWh, at the central exchange rate announced by SBV on April 10, 2017, which is 22,316 VND/USD). The electricity price is adjusted in accordance with the fluctuation of the VND/USD exchange rate. The applied exchange rate shall be the central exchange rate announced by SBV on the invoicing date of the Electricity Seller. Grid-connected solar power projects that have the COD in the period from January 01, 2021 to December 31, 2021 shall apply the electricity tariff specified in Clause 1 of this Article.

3. The electricity price in Clause 1, Clause 2 of this Article is only applicable to projects with the solar cell efficiency greater than 16% or solar modules efficiency greater than 15%.

4. The electricity price in Clause 1 of this Article shall apply to a part or the entire grid-connected solar power plant with the COD in the period from July 1, 2019 to December 31, 2021 and shall apply for 20 years from the COD.

5. The cost of buying electricity from grid-connected solar power projects mentioned in Clauses 1 and 2 of this Article is calculated and fully included in the input parameters of EVN's annual electricity selling price plan.

Article 9. Investment capital, tax, and land

1. Financing: Organizations, individuals developing solar power projects are allowed to raise the legal funding from domestic and international organizations and individuals for the investment in solar power projects in accordance with the existing regulations.

2. Solar power projects are eligible for import tax preference for imported goods to be used to form fixed assets for the project, imported goods to be used as materials, inputs, semi-finished products for the project's production that are not yet produced domestically in accordance with the legal regulations on export, import tax.

3. Solar power investment projects are eligible for tax preference in accordance with the law on corporate income tax.

4. Solar power projects, line works and substation for the connection to the grid shall be exempted from or reduced land use fee, land lease fee, water surface lease fee accordance with the existing legislation.

Chapter III

INVESTMENT, CONSTRUCTION OF ROOFTOP SOLAR POWER SYSTEMS

Article 10. Rooftop solar power model

1. Electricity consumption model is the model in which the organization, individual invest, install the rooftop power system and use a part of the electricity generated from the rooftop solar power system and sell the surplus electricity to the national power grid.

2. Surplus electricity selling model is the model in which the organization, individual invest, install the rooftop power system and sell a part of the electricity generation to other individual, organization and sell the surplus electricity to the national power grid.

3. Entire electricity selling model is the model in which the organization, individual invest, install the rooftop power system and sell the entire electricity generated from the rooftop power system to the national power grid.

4. Direct electricity selling and purchasing model is the model in which the organization, individual invest, install the rooftop power system and sell the electricity generation to other individual, organization and do not directly use the national power grid.

Article 11. Investment and construction of the rooftop solar power works

1. A rooftop solar power system that is directly or indirectly connected to the national electricity grid is developed and invested upon the successful registration on connection with EVN or its authorized member unit.

2. EVN shall invest, install and maintain the electricity metering device for models using the national power grid.

3. Organizations, individuals investing and installing the rooftop solar power system must meet the requirements on electricity safety, construction works safety in accordance with the existing regulations.

Article 12. Electricity price and standardized PPA

1. The Electricity Buyer is responsible for purchasing all the electricity generated by the rooftop solar power system sold to the grid in accordance with the regulation on the national electricity system operation, technical norms and regulations of the electricity sector.

2. For the Electricity consumption model, Suplus electricity selling model, and Entire electricity selling model, EVN or its authorized member unit will make payment for the electricity generated by the rooftop solar power system injected to the national grid at price specified at Electricity tariff for rooftop solar power systems under Appendix 2. This price does not include VAT, is adjusted according to fluctuations of the US dollar (UScents/kWh), the USD/VND exchange rate announced by the State Bank of Vietnam on the last day of the previous year to calculate the payment for next year. Relevant parties are responsible for the compliance with existing regulations on taxation and fees.

3. If the Electricity Buyer is not EVN or its authorized member unit, the electricity price and the PPA shall comply with the existing legislation.

4. The electricity price specified in Clause 2 of this Article shall be applicable to rooftop solar power systems with the COD in the period of July 01, 2019 to December 31, 2012 and shall apply for 20 years from the COD. The cost of buying electricity from rooftop solar power projects is calculated and fully included in the input parameters of EVN's annual electricity price plan. Invoice is developed on the basis of separate electricity delivery and received amount.

7. The standardized PPA is mandatory in the power purchase between the Seller and the Buyer who is EVN or its authorized member unit. The PPA term of rooftop solar power projects is maximum 20 years from the COD. Upon the expiry date of the PPA, the two parties may extend the PPA term or sign a new PPA in accordance with the current legislation.

Chapter IV

IMPLEMENTATION

Article 13. Responsibilities of regulatory bodies

1. Ministry of Industry and Trade

a) Organize, provide instructions and coordinate with People's Committees of provinces and cities under the central Government to supervise the implementation of this Decision.

b) Promulgate the standardized PPA for solar power projects.

c) Promulgate regulations on metering, recording of electricity output and payment for solar power models which have the participation of Electricity Distributor and Retailer which is not under EVN.

d) Promulgate technical regulations and standards on solar power equipment, regulations and norms on grid connection, metering procedures and regulations, regulations on equipment testing, acceptance and trial operation of the solar power works.

dd) Promulgate technical regulations and norms on electricity storage; recovery and treatment of waste panels and materials from rooftop solar power projects upon their expired date.

e) Lead, cooperate with relevant ministries, agencies and localities to organize pilot bidding to select solar power projects in 2020. Report to the PM on issues out of the authority.

g) Study, improve the bidding procedure for solar power projects and implementation roadmap to be reported to the PM for approval and implementation nationwide.

2. People's Committees of provinces and cities under the Central government

a) Cooperate with and assist investors in terms of compensation, site clearance, infrastructure, human resources for investment and execution of solar power projects in their provinces.

b) Monitor, supervise and inspect the execution of solar power projects in their provinces as per assigned authority.

c) Perform the tasks of state management on activities involved solar power in the provinces in accordance with existing regulations.

d) Report to the Ministry of Industry and Trade and the Government the registration and development status of solar power projects in the province.

3. Ninh Thuan People's Committee shall cooperate with EVN to monitor, supervise grid-connected solar power projects with the COD that is eligible for preferential electricity price stipulated in Clause 2, Article 8 of this Decision and in relevance with Resolution 115/NQ-CP dated August 31, 2018 of the Government on implementing several preferential mechanisms, policies to support Ninh Thuan province in socioeconomic development, production and people's life stabilization in the period 2018-2023.

Article 14. EVN

1. EVN is responsible for calculating the full cost of purchasing electricity from solar power projects and including such cost in the input parameters of the annual electricity price plan of EVN and submit to competent authorities for approval.

2. Study and invest in electricity storage solutions for the system to ensure the electricity system stability with the integration of renewable energy.

3. Develop the management information system on nationwide grid-connected and rooftop solar power development

4. Conduct periodic report annually to the Ministry of Industry and Trade on the current status of solar power connection, total installed capacity and power output purchased from grid-connected and rooftop solar power projects.

Article 15. Effectiveness

1. This decision takes effect from July 1, 2019 and replaces PM's Decision 11/2017/QD-TTg dated April 11, 2017 on mechanism to encourage solar power projects in Vietnam and PM's Decision 02/2019/QD-TTg dated January 08, 2019 amending, supplementing several articles of Decision 11/2017/QD-TTg dated April 11, 2017 on mechanism to encourage solar power projects in Vietnam.

2. Ministers, Heads of ministerial-level agencies, Heads of Government agencies and Chairman of People's Committees; Heads of agencies, units and organizations related to the development of solar power projects in Vietnam are responsible for implementing this Decision./.

Recipients:

- Party Central Committee Secretariat;
- Prime Minister and Deputy Prime Ministers;
- Ministries, ministerial-level agencies and Government agencies;
- People's Councils, People's Committees of provinces and cities under central Government;
- Central Office and Party Committees;
- Office of the General Secretary;
- Office of the President;
- EM Council and Committees of the National Assembly;
- NA's Office;
- Supreme People's Court;
- Supreme People's Procuratorate;
- SAV;
- National Financial Supervisory Committee;
- Social Policy Bank;
- Vietnam Development Bank;
- Vietnam Fatherland Front's Central Committee;
- Central agency of unions;
- Government Office: Head and Vice Head of the Office, Assistant to the Prime Minister, Departments, Agencies Official Gazette;
- Filing

PRIME MINISTER

Nguyen Xuan Phuc

ANNEX 1
SOLAR RADIATION ZONE

*(Promulgated together with the Prime Minister's Decision No.. /QĐ-TTg dated
.....2019 on support mechanisms encouraging solar power project development
in Vietnam)*

No	Province	No	Province
	Zone 1 (28 provinces)		Zone 3 (23 provinces)
1.	Hà Giang	35.	Kon Tum
2.	Bắc Kạn	36.	Cà Mau
3.	Cao Bằng	37.	Hậu Giang
4.	Tuyên Quang	38.	Bình Định
5.	Thái Nguyên	39.	Bạc Liêu
6.	Lào Cai	40.	Kiên Giang
7.	Yên Bái	41.	Sóc Trăng
8.	Lạng Sơn	42.	Cần Thơ
9.	Quảng Ninh	43.	Vĩnh Long
10.	Phú Thọ	44.	Trà Vinh
11.	Vĩnh Phúc	45.	Lâm Đồng
12.	Bắc Giang	46.	Bến Tre
13.	Hải Dương	47.	Tiền Giang
14.	Hòa Bình	48.	An Giang
15.	Hà Nội	49.	Đắk Nông
16.	Hà Nam	50.	TP. Hồ Chí Minh
17.	Bắc Ninh	51.	Đồng Nai
18.	Hưng Yên	52.	Đồng Tháp
19.	Hải Phòng	53.	Bà Rịa – Vũng Tàu
20.	Ninh Bình	54.	Long An
21.	Thái Bình	55.	Bình Dương
22.	Hà Tĩnh	56.	Bình Phước
23.	Nam Định	57.	Tây Ninh
24.	Quảng Bình		Zone 4 (6 provinces)
25.	Thanh Hóa	58.	Phú Yên
26.	Lai Châu	59.	Gia Lai
27.	Nghệ An	60.	Đắk Lắk
28.	Sơn La	61.	Khánh Hòa
	Zone 2 (6 provinces)	62.	Ninh Thuận
29.	Quảng Trị	63.	Bình Thuận
30.	Điện Biên		
31.	Thừa Thiên Huế		
32.	Quảng Nam		
33.	Đà Nẵng		
34.	Quảng Ngãi		

ANNEX 2
SOLAR POWER TARIFF

(Promulgated together with the Prime Minister's Decision No. . /QD-TTg dated ... 2019 on support mechanisms for encouraging solar power projects development in Vietnam)

No.	Solar power technology	Tariff for Zone I		Tariff for Zone II		Tariff for Zone III		Tariff for Zone IV	
		VND/kWh	US cent/kWh	VND/kWh	US cent/kWh	VND/kWh	US cent/kWh	VND/kWh	US cent/kWh
1	Floating solar power project	2,281	9.98	1,963	8.59	1,758	7.69	1,655	7.24
2	Ground mounted solar power project	2,102	9,20	1,809	7.91	1,620	7.09	1,525	6.67
3	Rooftop solar power project (power selling household and power consumption household model)	2,486	10.87	2,139	9.36	1,916	8.38	1,803	7.89

(Note: The exchange rate refers to central exchange rate of USD/VND announced by SBV on December 12th, 2018)