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C&I Rooftop Solar Investment Guidelines for Viet Nam

Legal Framework and Feasible Business Models for C&I Rooftop Solar

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Within the framework of

Viet Nam Energy Partnership Group

Regulatory Framework for C&I Rooftop Solar Power Projects in Viet Nam

The Regulation of the Vietnamese Power Sector

Electricity Law

Decision 13

Circular 21

Circular 18

Official Letter 3450

Official Letter 1532

Official Letter 7088

Overview of the Vietnamese Regulatory Environment

Regulation	Content
Electricity Law of Dec 3rd, 2004 amended on Nov. 20th, 2012.	This law governs the planning and investments of the power sector as well as the rights and obligations re electricity generation and consumption.
Decision No. 13/2020/QD-Ttg of April 6 th 2020 (Decision 13)	Decision No. 13 regulates the mechanisms for encouragement of the development of solar power projects in Vietnam
MoIT Circular No. 18/2020/TT-BCT dd. 17th of July 2020 (Circular No. 18)	This circular specifies the implementation framework for the development of Solar PV Projects including PPA templates for EVN
MoIT Circular No. 21/2020/TT-BCT dd. 9th of September 2020 (Circular No. 21)	Circular No. 21 specifies the application process and requirements for issuance of Electrity Generation Licences.
Official letter issued No. 1532/EVN-KD) dd. 27th of March 2019 (EVN letter No. 1532)	This letter specifies the requirements for Rooftop Solar PV Projects to be connected to the grid and selling power to EVN.
Official letter issued No. 3450/EVN-KD of 2nd of July 2019 (EVN Letter No. 3450)	This letter specifies certain requirements for Rooftop Solar Projects, including where the developer leases the rooftop of a building owner for installation of a rooftop solar power system for sale of electricity to EVN
Official letter issued No. 7088/BCT-DL dd. 22nd of September 2020 (MOIT Letter No. 7088)	This letter provides further guidance for Decision 13 and Circular No. 18, including comments on permissibility of more than one 1MW rooftop solar power system being installed on the same rooftop.

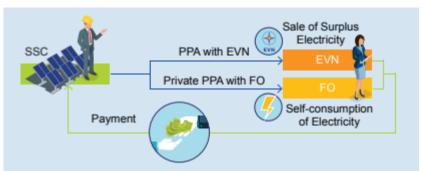
- Decision on the mechanism for encouragement of the development of solar power projects in Vietnam.
- Classification of rooftop solar power system (RTS system):
 - a solar power system with solar energy panels installed on the rooftop of a construction work.
 - capacity of an RTS system must be ≤ 1MW.
 - directly or indirectly connected to the power grid of the power purchaser (EVN).
 - voltage of an RTS system must be ≤ 35kV.
 - the solar cells must have an efficiency >16% and the module efficiency must be >15%.

- Decision 13: permitted business models for RTS Systems
 - Self-ownership model: self consumption and sale of excess to EVN



- Facility owner (FO) invests in and installs the RTS system on the rooftop of its building.
- FO self-consumes electricity for the building.
- FO enters into a PPA with EVN for sale of excess electricity.

- Decision 13: permitted business models for RTS Systems
 - Third party-ownership model: Private Power Purchase Agreement



- Solar Service Company (SSC) invests in and installs the RTS system on the FO's building (lease/license to occupy the rooftop required).
- SSC and FO enter into private PPA for sale of electricity to the FO for consumption of electricity by the building.
- SSC enters into a PPA with EVN for sale of excess electricity.

- Decision 13: permitted business models for RTS Systems
 - Third party-ownership model: RTS System Lease Agreement



- Not expressly provided for under Decision 13 but structure permitted under Vietnamese law and position of FO selling electricity to EVN permitted under Decision 13.
- SSC invests in and installs the RTS system on the FO's building.
- SSC leases the RTS system to the FO on an operational basis.
- FO consumes electricity and pays rent to the SSC for the RTS system.
- FO enters into a PPA with EVN for sale of excess electricity.

- Decision 13: permitted business models for RTS Systems
 - Third party-ownership model: Rooftop lease and 100% sale to EVN



- FO grants the SSC a lease/license to occupy the rooftop of its building.
- SSC invests in and installs the RTS system on the FO's building.
- SSC enters into a PPA with EVN for sale of 100% of the electricity produced.
- SSC pays the FO either a fixed rent or revenue share under the EVN PPA for the lease/license to occupy the rooftop.

- EVN PPA Feed-in-Tariff (FiT)
 - A FiT of VND1,948 (8.38 US cents)/kWh for sale of electricity to EVN from RTS systems that achieve COD and certificate of meter readings in period 1 July 2019 to 31 December 2020.
 - This FiT will apply for up to 20 years from the COD for such rooftop solar power projects.
 - The FiT will be adjusted annually based on VND/USD exchange rate published by the State Bank of Vietnam.
 - At this stage it is not clear if a new FiT for RTS systems will be issued or the current FiT will be extended after 31 December 2020.

Circular 18: Rooftop Solar Regulations

EVN PPA Template Form

- Template PPA for RTS systems issued under Circular 18 must be used with EVN and is not subject to negotiation.
- EVN PPA has a maximum term of 20 years.
- EVN has a standardised process for connecting PV-Systems to the grid, including new 2-way meters.
- The Seller has to send a monthly invoice to EVN for the power supplied to the grid.
- Based on this opportunity, SPVs are renting roof space from corporations and sell all power to EVN per Standard PPA.

Circular 18: Rooftop Solar Regulations

- **➤** Further provisions for RTS Systems
 - RTS system with capacity ≤ 1MW is exempt from an electricity operation license.
 - Sets out development requirements for RTS systems, including registering the proposed connection with EVN, entering into a grid connection agreement with EVN and so on.
 - Tight timeline for processes to be completed with EVN (in most cases less than 5 working days) so this should be properly planned and performed when installing the RTS system.

MOIT Letter No. 7088: Rooftop Solar Regulations

- More than one RTS System on the same rooftop/location
 - MOIT advises that more than one RTS system on the same rooftop/location with a combined capacity greater than 1MW is permitted provided these have separate meters and separate EVN PPAs.
 - With separate meters and separate PPAs and each RTS system having an individual capacity ≤ 1MW, each such RTS system will qualify under Decision 13 and other regulations as a rooftop solar power system.

Investment Law

- Foreign invested company and project IRC
 - In the case of an SSC being foreign invested it will require investment approval for the RTS system investment and operation ("**Project IRC**") under the Private PPA where the RTS system will be located outside the province of its establishment.
 - Also required to qualify for tax incentives applied to investment in production of renewable energy.
 - Adds time to the investment process as should be obtained before construction of the RTS system.

Contract Templates

Contract Templates for RTS Business Models Included with the Investment Guidelines

- Private power purchase agreement (Private PPA) between the SSC, as seller, and FO, as buyer.
- > RTS system lease agreement between the SSC, as lessor, and FO, as lessee.
- ➤ **Rooftop lease agreement** between FO, as lessor, and the SSC, as lessee (for installation of RTS system and 100% sale of electricity to EVN).
- O&M agreement between FO (or SSC) and O&M service provider.



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Thank you!

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