

**Vietnam: Regulatory outlook and legal considerations for the development of rooftop solar power projects**

In addition to other renewable power sources, rooftop solar (RTS) power has increasingly become an important power supply source in Vietnam in recent years. However, the implementation of the PDP8 (defined below), demands some changes to policies and regulations on the development of RTS power. In this update, we provide an overview of the RTS power development in Vietnam from a regulatory and legal perspective, along with an analysis of key legal considerations for the development of new RTS power projects in Vietnam.

## **MARKET OUTLOOK AND POLICY ORIENTATION**

In recent years, RTS power has rapidly been developed and has attracted investments from both domestic and foreign investors due to the support and commitments of the government of Vietnam as provided in Decision No. 13/2020/QĐ-TTg issued by the Vietnam prime minister on 6 April 2020 ("**Decision No. 13**"). RTS power systems supported by Decision No. 13 are those systems installed on the roofs of construction works with a capacity of up to 1 megawatt and connected to the power grid with a voltage level of up to 35 kilovolt. With the government's encouragement, a significant number of RTS power systems have been developed for the power output being sold to Vietnam Electricity (EVN) at an incentive feed-in-tariff under a utility power purchase agreement (PPA) or to private/corporate power consumers at

an agreed-upon power tariff under an on-site corporate PPA.

Since 1 January 2021, while the option of selling power output of new RTS power systems to EVN has no longer been available, the demand for utilizing on-site power sources, including RTS power systems, has still increased, especially in industrial zones or large factories or buildings. Installing RTS power systems for selling power output to private/corporate power consumers, or on-site self-consumption, is relies on Decision No. 13 and EVN's relevant guidelines.

Under the national power development master plan for 2021 to 2030 with a vision to 2050 ("**PDP8**"), as approved by the prime minister under Decision No. 500/QĐ-TTg dated 15 May 2023, self-consumption power sources, including RTS power, are highly promoted nationwide as one of the prioritized policies and development orientation to ensure Vietnam's power supply security.

The PDP8 promotes and prioritizes an unlimited capacity for the development of on-site self-consumption RTS power (without selling or exporting power output onto the national grid) in the long run, with an estimation of 2,600 megawatts of RTS power to be developed for self-consumption purposes by 2030. The development of grid-connected RTS power for commercial sale, on the other hand, is not expressly encouraged or mentioned under the PDP8.

To further provide a regulatory framework and guidance for the development of on-site self-consumption RTS power as encouraged under the PDP8, as a next step, an implementation plan of the PDP8 ("**PDP8 Implementation Plan**") and a new legal mechanism for development of on-site self-consumption RTS power ("**New RTS Mechanism**") will be formulated by the Ministry of Industry and Trade (MOIT) and expectedly to be issued by the prime minister and the government within 2024.

According to the latest drafts of the PDP8 Implementation Plan ("**Draft PDP8 Implementation Plan**") and New RTS Mechanism ("**Draft New RTS Mechanism**"), the MOIT proposes each province select the specific RTS power systems to be developed. In particular, the development of grid-connected RTS power for on-site self-consumption in each province will be subject to the capacity limit allocated to each province to be approved under the PDP8 Implementation Plan, based on the total installed capacity of 2,600 megawatts nationwide, to ensure the safety of the national grid and the power system. On the other hand, the development of off-grid RTS power for on-site self-consumption will not be subject to similar limitation.



## KEY LEGAL CONSIDERATIONS FOR RTS POWER DEVELOPMENT

### Lack of a clear legal framework

For now, although EVN has postponed new grid connection agreements and the sale of power output for new grid-connected RTS power systems since 1 January 2021, theoretically, power developers can still sell the power output of their RTS power systems directly to private/corporate power consumers based on Decision No. 13 or utilize such power output for on-site self-consumption of the construction works where the RTS power systems are installed.

However, following the issuance of the PDP8 and, as the New RTS Mechanism governing the RTS power development for on-site self-consumption is in the process of being finalized and officially issued, the practical application of the previously issued Decision No. 13 and guidelines of EVN at this time is questionable and uncertain. The Draft New RTS Mechanism provides detailed guidance on the policies, incentives, licensing requirements and procedures for the development of RTS power with two scenarios of grid-connected RTS power (connecting to or linking with the national grid) and off-grid RTS power for on-site self-consumption, without selling power output to any other parties. If the Draft New RTS Mechanism remains unchanged and, once issued, replaces Decision No. 13, it could be possible that the option for developing RTS power for commercial sale to EVN or other private/corporate power consumers will no longer be available or may be challenged for new projects.

On the other hand, it may be possible that the development of RTS power for commercial sale will be subject to a separate set of regulations or mechanisms to be drafted in the upcoming period. However, by now, there are no initiatives for elaborating new regulations on the development of RTS for commercial sale or drafts for this purpose.

As a matter of practice, during the past few years, RTS power developers have explored mechanisms for effectively developing their RTS power systems and, accordingly, have considered some varying business models, such as the following:

- Corporate PPA — A direct power sale and purchase model under which the power developer installs, operates and sells all or part of the power output of its RTS power system, which is installed on the rooftop of the building works of the private/corporate power consumer or other parties, at an agreed-upon power tariff under the on-site corporate PPA entered between the RTS power developer and the private/corporate power consumer.
- Equipment lease — An equipment lease model under which the power developer, being the equipment owner and lessor, installs, operates and leases the RTS power system to the roof owner, being the power consumer, under an equipment lease agreement (ELA) between the RTS power developer and the power consumer. Under an ELA, the power developer leases and hands over the installed RTS power system to the roof owner during a specified term, and the roof owner must pay rental and services fees for such lease,

installation and operation as agreed under the ELA.

- Sale contract — A deferred payment equipment sale contract model under which the power developer, being the equipment owner and seller, installs and sells the RTS power system to the roof owner as the power consumer for operation under a sale contract ("**Sale Contract**"). Under the Sale Contract, the power developer sells and hands over the installed RTS power system to the roof owner, and the roof owner must make deferred payment for such sale during a specified term. The power developer may or may not retain ownership until the roof owner completes the agreed-upon payment under the Sale Contract.
- Service contract — A service contract model under which the roof owner engages another party to act as the power developer to install and operate the RTS power system at an agreed-upon service price under a service contract ("**Service Contract**"), and the roof owner consumes all or part of or sells all or part of the power output of the RTS power system to other private/corporate power consumers in the surrounding area at an agreed-upon power tariff under an on-site corporate PPA between the roof owner and the other private/corporate power consumers. Under the Service Contract, the power developer is only the contractor that is engaged by the roof owner to install and operate the RTS power system for the roof owner, and the roof owner holds ownership

over the RTS power system and bears all the capital expenditure.

Each of the business models above, while being considered, has its own pros and cons. However, the option of a Corporate PPA is more common as a matter of practice, given the clearer effective legal framework for this structure.

### **Foreign ownership caps**

There is no express limitation on foreign ownership regarding the development of RTS power systems in Vietnam. However, as power generation activities are unbound under Vietnam's WTO commitments, the licenses for implementing this activity, including RTS power development by a foreign investor, are still subject to certain discretion of the licensing authorities of each province on a case-by-case basis. However, as a matter of practice, it is common that 100% foreign ownership in developing RTS power is allowed in most cases.

### **Tax incentives**

The development of RTS power systems (as power generation from renewable energy sources) may be eligible for tax incentives such as exemption or reduction of corporate income tax and equipment import tax, which is subject to a number of conditions from tax law and investment law perspectives, and verified and determined by the authorities on a case-by-case basis.

### **Grid connection**

Due to the intermittency of solar power sources and the increased costs of investing in private grids,

certain power developers may wish to connect their RTS power systems to the national grid, even for on-site self-consumption only.

However, the practice of EVN and its power companies (PCs) in relation to the approval of grid connection of RTS power systems has been inconsistent between different provinces. Given the absence of official regulations or guidance on this matter, whether EVN and its PCs approve the grid connection and enter into a grid connection agreement with the power developers for new RTS power systems would be subject to their assessment and discretion on a case-by-case basis. This is, however, a common market issue rather than a specific project issue.

### **Key licenses and approvals**

#### **Master power development plan approval**

The current law is silent on whether a master power development plan approval is required for the development of an RTS power system. As a matter of practice, a case-by-case approval may be required to develop the RTS power system if the installed capacity of the RTS power project is higher than 1 megawatt.

However, for the time being, under the Draft PDP8 Implementation Plan and the Draft New RTS Mechanism, the master power development plan appears only to set out the maximum capacity of the grid-connected RTS power of each province, and each province must decide and approve the specific projects within such an allocated range. There is no specific requirement for off-grid RTS power to be subject to a similar limitation. Therefore, the likelihood that the authorities will

require a master power development plan approval for RTS power development is low.

#### **Investment approval**

Theoretically, the RTS power system developer may need to obtain a separate Investment Policy Decision (IPD) (likely from the provincial-level People's Committees) for each system depending on the location and whether it is subject to IPD requirement under Articles 30, 31 and 32 of Investment Law 2020.

However, given as RTS power systems would be installed on the roof of the owners' factories (which are within the location of another approved investment project), and if there is no need for a conversation on land use purpose or land lease directly from the state authorities, it is unlikely that an IPD is required for the development of RTS power systems.

An Investment Registration Certificate (IRC) application is required if the relevant RTS power system developer is a foreign investor or a foreign-invested enterprise (FIE) being deemed a foreign investor under Vietnamese law. If applicable, the power developer may be required to apply for a separate RTS power project IRC for each RTS power system. However, in practice, several licensing authorities in different provinces currently have different views in terms of expressly denying the issuance of IRCs for RTS power projects for several reasons, including the lack of centralized detailed legal guidelines and the pending Draft PDP8 Implementation Plan and the Draft New RTS Mechanism.

## **Firefighting and prevention**

Whether the approval for the firefighting and prevention system would be required will need to be determined on a case-by-case basis depending on whether the roof owner's factories are subject to the approval for the firefighting and prevention system.

If an RTS power system is installed on the roof of a construction work subject to firefighting and prevention design approval by law, the power developer will be required to obtain a separate firefighting and prevention design approval for such an RTS power system.

## **Construction permit**

By law, an RTS power system can be subject to the construction permit exemption for renovation works in the following circumstances:

- It does not affect the building's function (công năng sử dụng).
- It does not affect the building's force-bearing structure and safety.
- It is constructed in compliance with the construction planning of the existing building on which the RTS power system is installed.
- It is constructed in compliance with the firefighting and environmental protection

requirements of the existing building on which the RTS power system is installed.

Otherwise, if not subject to any of the cases above, the power developer needs to apply for a construction permit to install the RTS power system.

## **Environmental-related licensing requirements**

Not all RTS power systems need to comply with licensing requirements in terms of environmental compliance.

Based on certain technical thresholds of the RTS power project (i.e., project's scale and capacity, level of emission, and risks of adverse environmental impact), the power developers can be required to apply for (1) an environmental impact assessment report, or (2) the environment license under the Law on Environmental Protection.

## **Power operation license**

By law, the power operation license is exempted for an RTS power system with capacity equal to and less than 1 megawatt (AC capacity) and 1.25 megawatt peak (DC capacity).

## **Contracts execution**

The contracts required to be engaged for RTS power development and supply depend on the business structure and commercial intentions of

involved parties, based on the legal framework from time to time.

In recent years, the Corporate PPA model seems more common and favored by the power developers in investing in RTS power for commercial and industrial purposes.

However, subject to the regulatory developments on RTS power in the near future, especially with the shift from the Vietnamese government's encouragement of RTS power development from commercial sale to self-consumption under the PDP8, and if the Corporate PPA model, therefore, faces further challenges, the power developers may need to consider an alternative model to ensure it complies with the new regulations and their business demand.

If you would like to discuss further details on the RTS power project development, please feel free to contact us at [thanhhai.nguyen@bakermckenzie.com](mailto:thanhhai.nguyen@bakermckenzie.com) or [thiyenly.le@bakermckenzie.com](mailto:thiyenly.le@bakermckenzie.com).

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