

Viet Nam Energy Partnership Group

FACTSHEET ON ROOFTOP SOLAR DEVELOPMENT

- December 2019 -

1. Background

On 05 July 2019, the Ministry of Industry and Trade (MOIT) issued [Decision 2023/QĐ-BCT](#) which launched the Rooftop Solar Promotion Program for the 2019-2025 period (RTS Programme) with the overall objective to promote the development of the market for rooftop solar technology. The program aims to install 100,000 Rooftop Solar (RTS) systems or the equivalent of 1,000 MWp by the end of the 2025. Furthermore, the support of the rooftop solar market is one of the key policy targets and part of the [VEPG Policy Recommendations](#) that were endorsed at the 2nd High-Level Meeting of the VEPG in November 2018. With the aim to monitor the impact of the RTS Programme and the overall development of the rooftop solar market, Viet Nam Electricity (EVN) is providing data on RTS development in the country on a monthly basis.

Based on these monthly data reports by EVN, the VEPG will regularly update this factsheet on RTS solar development. This first issue summarizes the EVN RTS data report from December 2019.

2. Summary of RTS Development by 31 December 2019

- Total installed RTS capacity: **378 MWp**
- Total number of RTS systems: **22,232**
- Average system capacity: **16.9 kWp**
- Total solar power supplied to the grid in December 2019: **21,528 MWh**
- Cumulated solar power supplied to the grid by 31.12.2019: **99,288 MWh**

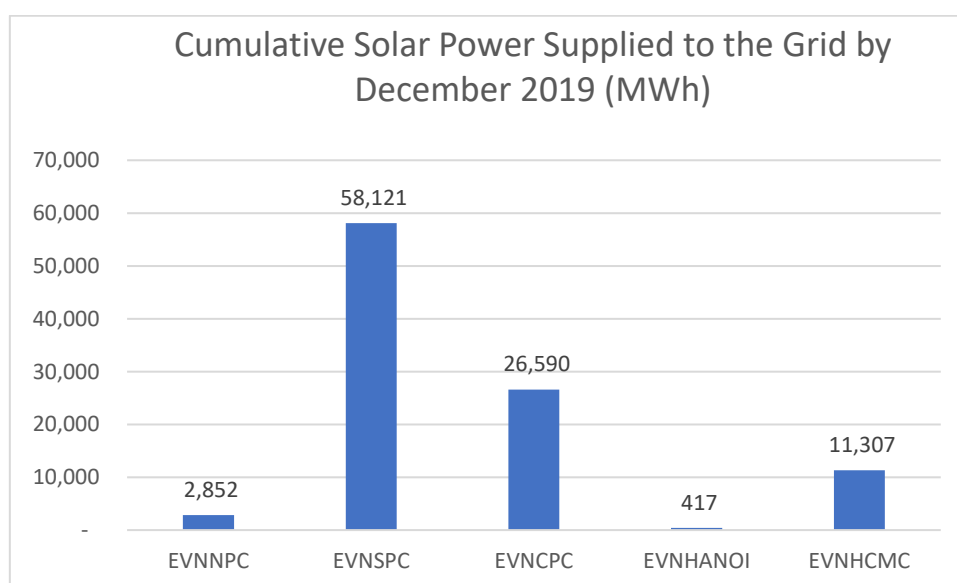


Figure 1. Cumulated solar power supplied to the grid by December 2019 (MWh) by Power Company

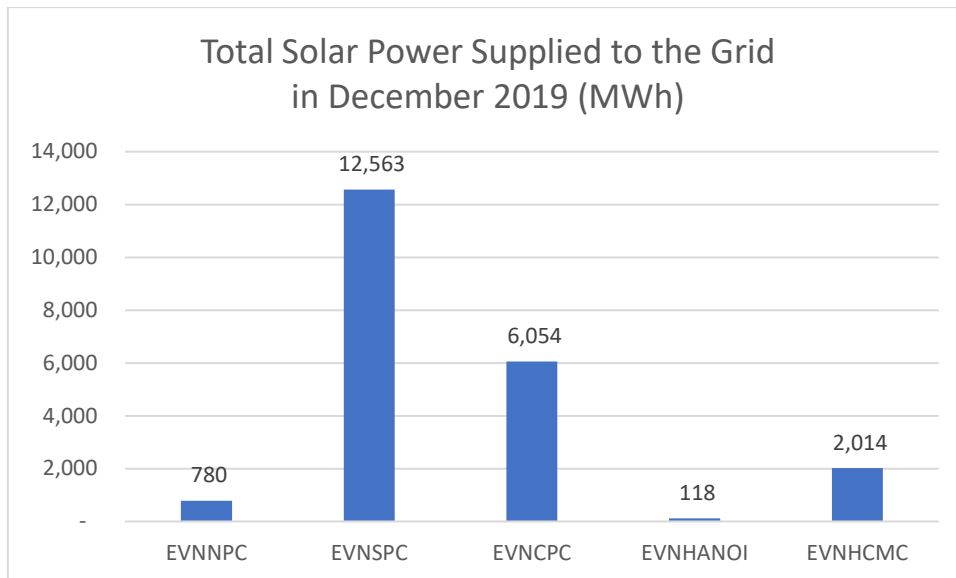


Figure 2. Total solar power supplied to the grid (MWh) in December 2019 by Power Company

3. Geographical breakdown:

Overall, a large number of RTS systems were installed in the South of Viet Nam under the management of the Southern Power Company (EVN SPC) and in Ho Chi Minh City (HCMC) which respectively accounted for 47% (10,599 systems) and 25% (5,636 Systems) of the total number RTS systems in the country¹.

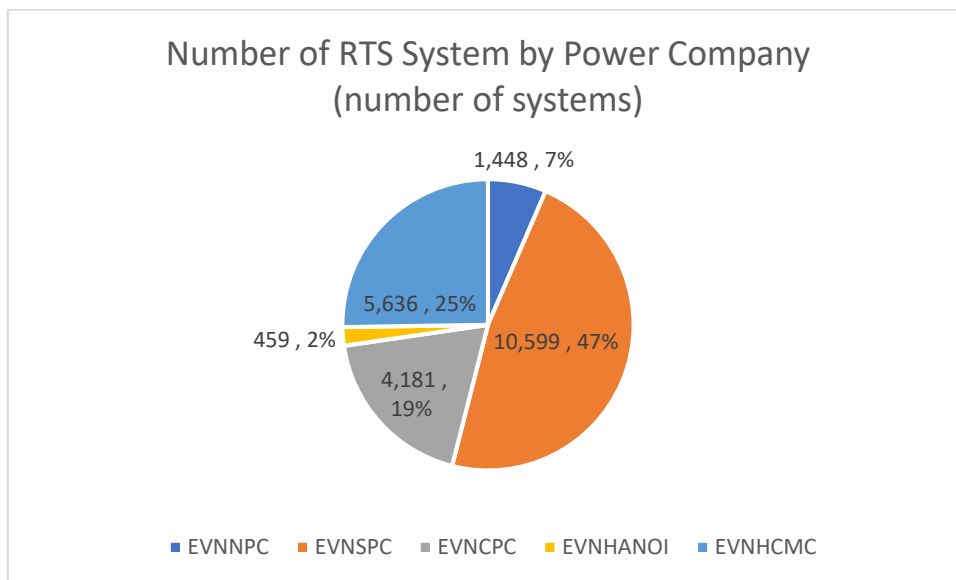


Figure 3. Number of RTS System by Power Company

¹ EVN CPC includes provinces in the Central Highlands. EVN SPC includes provinces in the Mekong Delta (incl. Ninh Thuan and Binh Thuan). A more detailed breakdown can be found here: http://vepg.vn/wp-content/uploads/2020/02/RTS_Monitoring-Report_EVN_2019_December_for-upload.xlsx.

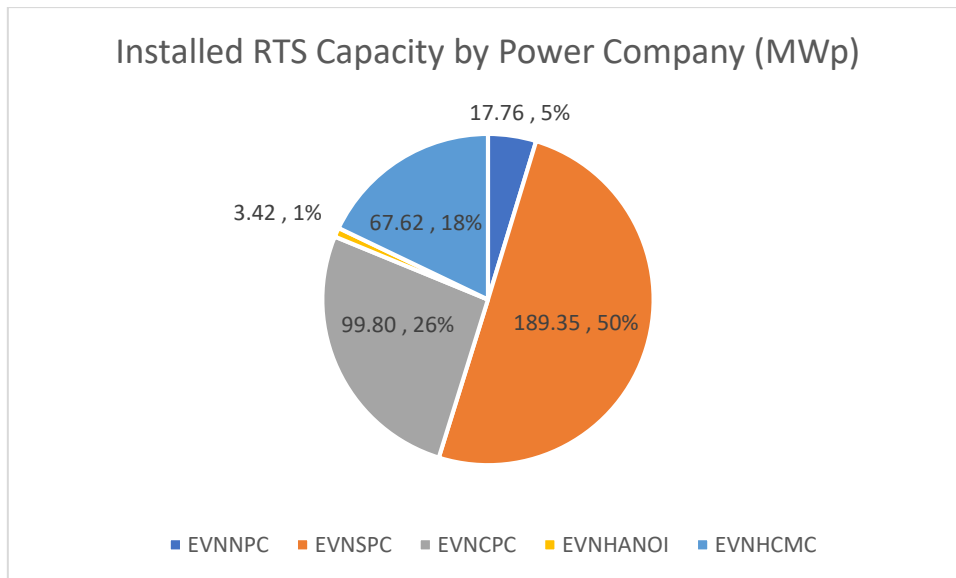


Figure 4. Installed RTS Capacity by Power Company (MWp)

EVN SPC also accounts for the largest installed capacity in the country with ~ 189 MWp installed. ENV CPC has the second largest installed capacity while having less systems than HCMC PC.

The average systems size in Central Power Companies (EVN CPC) is largest with the average of 23.9 kWp/ System while the number is 17.9 kWp/system for EVN SPC (Table 1).

Table 1. Average System Size by Power Companies

Average system capacity (kWp)	16.9
NPC Average system capacity	12.3
SPC Average System Capacity	17.9
CPC Average System Capacity	23.9
Hanoi PC Average System Capacity	7.4
HCMC PC Average System Capacity	12.0

4. Customer group breakdown:

Most RTS systems installed by end of 2019 are residential (household) systems. The highest installed capacity is in the industry sector due to the larger system size (average system size on industry roofs is app. 150kWp, with around 1/4 of systems larger than 100kWp). The average size of commercial systems is app. 30kWp (with only 5% larger than 100kWp). The average size of RTS systems on public buildings is 45kWp and the average size of household systems is 6.5kWp.

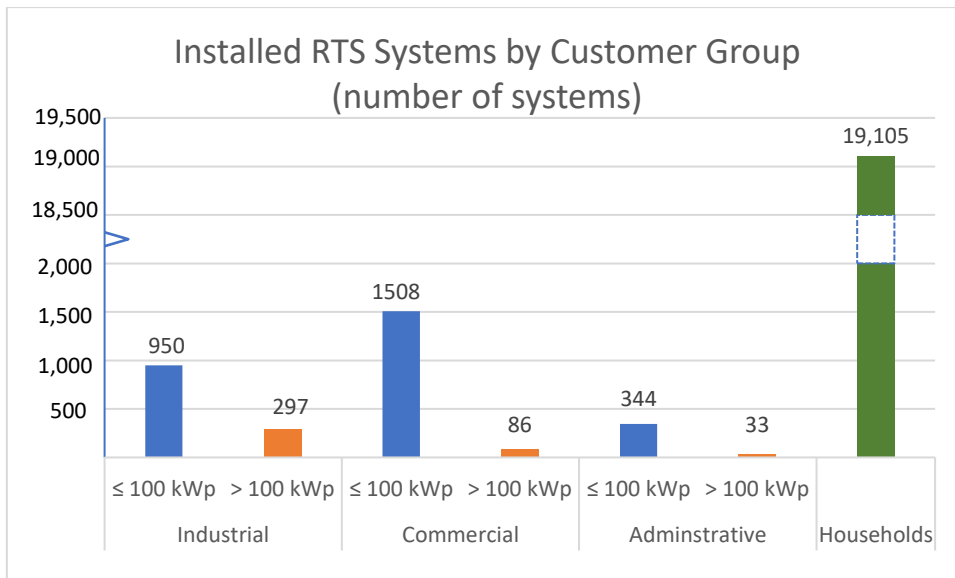


Figure 5. Number of RTS Systems by Customer Group

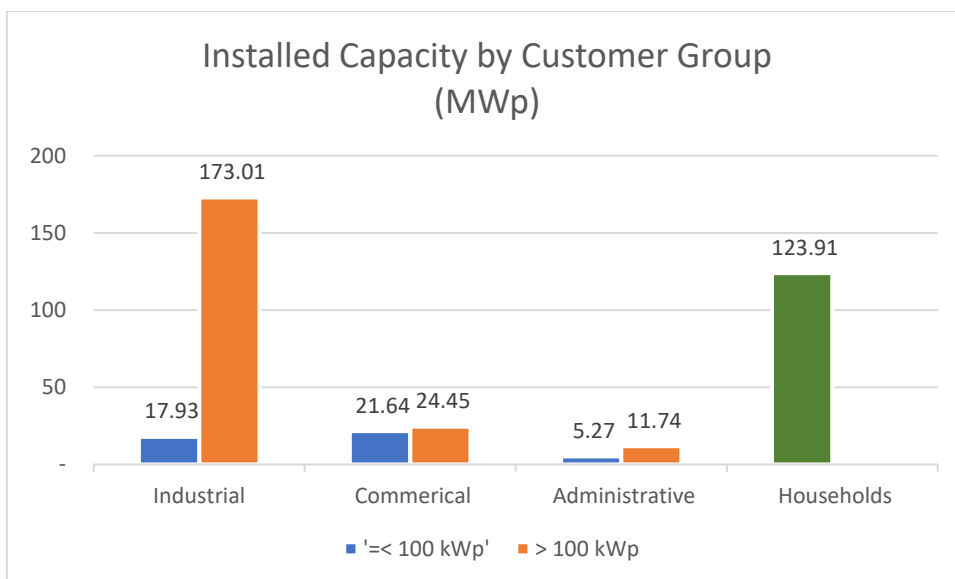


Figure 6. Installed RTS Capacity by Customer Group

Provinces with highest installed capacity by customer group

Table 2. Five Provinces with the Highest Total Installed Capacity by **Household Customers**

	Province	Installed Capacity (MWp)
1	Đồng Nai	6.57
2	Bình Dương	6.25
3	Ninh Thuận	5.67
4	Đắk Lắk	5.35
5	HCMC	5.13

Table 3. Five Provinces with the Highest Total Installed Capacity by **Industrial Customers**

	Province	Installed Capacity (MWp)
1	Ninh Thuận	33.02
2	Khánh Hòa	20.94
3	Đắk Lắk	17.86
4	Đồng Nai	16.75
5	Long An	10.06

Table 4. Five Provinces with the Highest Total Installed Capacity by **Commercial Customers**

	Province	Installed Capacity (MWp)
1	Đắk Lắk	4.71
2	Bình Dương	2.82
3	Bình Thuận	2.23
4	Bình Phước	2.09
5	Hưng Yên	1.99

Information regarding current legal framework: The first Feed-in-Tariff (FIT) mechanism for rooftop solar systems (based on PM Decision 11/2017/QĐ-TTg) expired on 31.06.2019. Until the new FIT is legally published (current draft in final government approval process), EVN continues commissioning rooftop solar systems, installing bi-directional meters and recording solar energy supplied to the grid by systems operators and informed that payments will be resumed after formal publication of the FIT legislation.

Disclaimer: The VEPG does not take any responsibility for the accuracy of the displayed data. Please refer to the original EVN data report for more information. Please download here: http://vepg.vn/wp-content/uploads/2020/02/RTS_Monitoring-Report_EVN_2019_December_for-upload.xlsx.