



# SOLAR PV SNAPSHOT OF SINGAPORE 4Q 2022

## Installed capacity reached

**822 MWp (10.7% growth)  
in 4Q 2022**



## Top Contributors based on Installed Capacity



## Top Contributors based on Number of Solar Installations



## Planned Installations



Additional  
**~100.1 MWp**

of installed capacity expected by 2Q 2023.

## Energy Storage Systems



**202,919 kW**

of ESS capacity has been turned on as of 4Q 2022.



Smart Energy, Sustainable Future

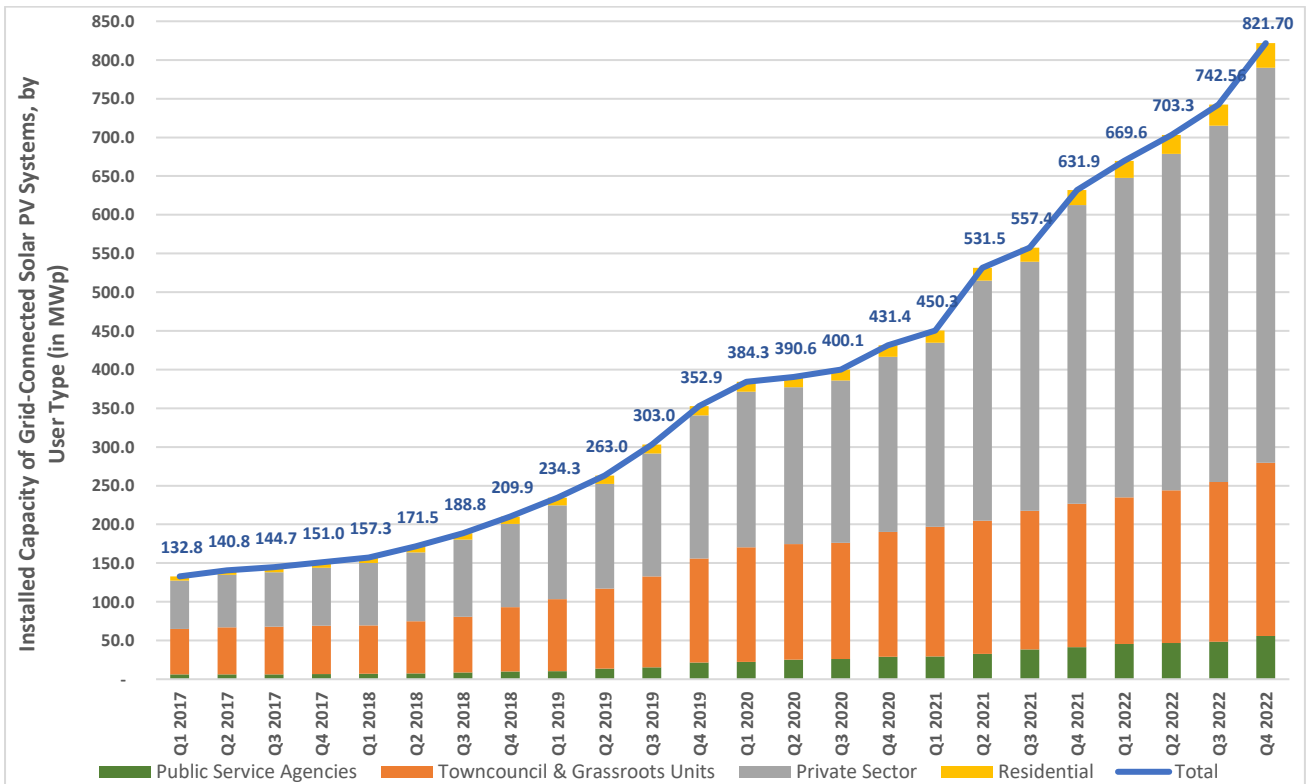
## SINGAPORE SOLAR PHOTOVOLTAIC REPORT 4Q 2022

1. This report provides an update on the key solar photovoltaic (PV) statistics (i.e., installed capacity and number of installations) in Singapore for 4Q 2022.
2. There were 6,629 grid-connected solar PV installations as at end 4Q 2022, with a combined installed capacity of 821.7 megawatt-peak (MWp) (see [Annex A](#) and [B](#)).

### Installed Capacity

3. The total installed capacity of grid-connected solar PV systems was 821.7 MWp as at end 4Q 2022. This was a 10.7% (79.1 MWp) increase from the preceding quarter, attributed to 520 new installations in 4Q 2022. The quarter-on-quarter solar growth in Q4 2022 (10.7%) was higher as compared to Q3 2022 (5.6%).
4. The private sector contributed to majority of the solar PV capacity (62.1% or 510.4 MWp), followed by town councils & grassroots units (27.2% or 223.7 MWp). The remaining PV capacity contributions were from public service agencies (6.8% or 55.9 MWp) and residential sector (3.9% or 31.7 MWp) (see [Annex A](#)).
5. [Figure 1](#) provides a snapshot of the installed capacity of grid-connected solar PV installations from 2017 to 4Q 2022.

**Figure 1: Installed Capacity of Grid-Connected Solar PV Systems (in MWp), 1Q 2017 – 4Q 2022 (as at end of each quarter)**



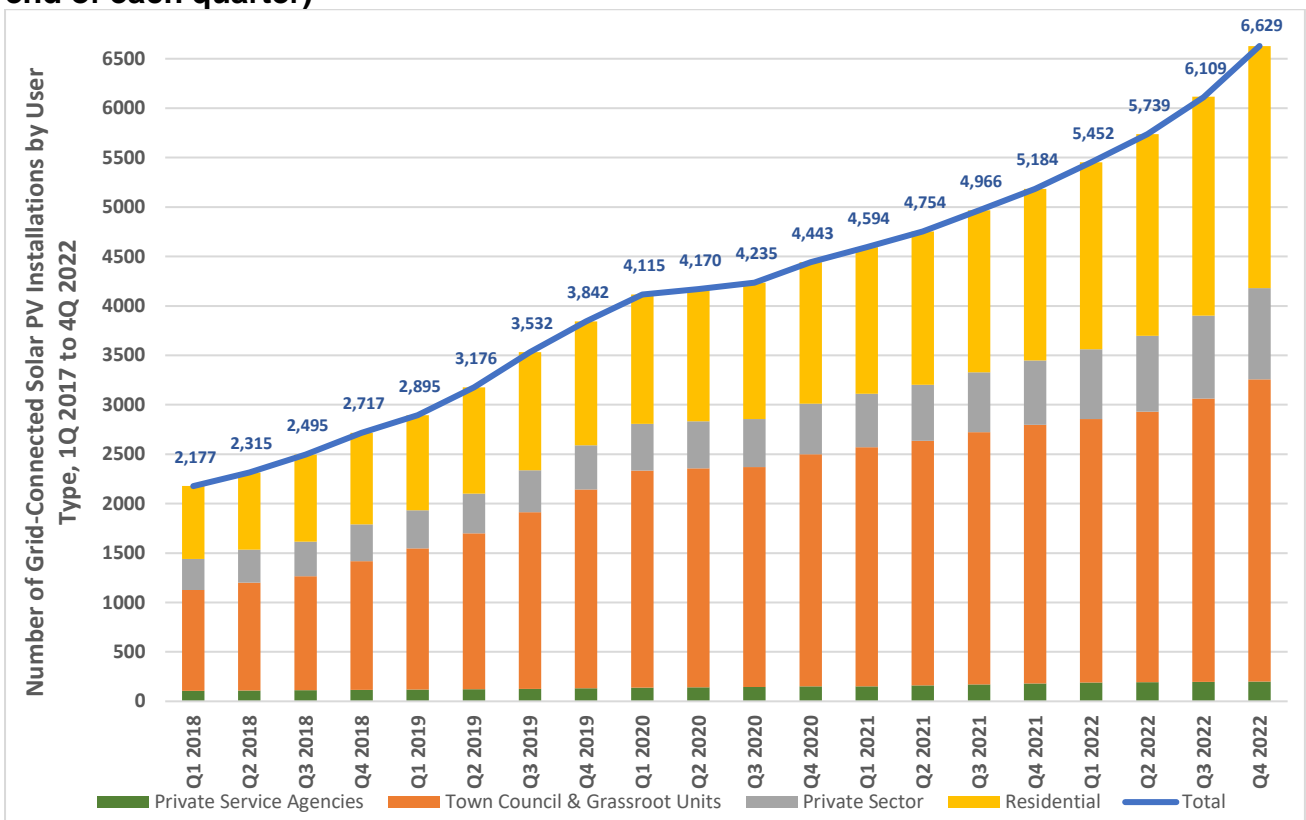
**Note:**

Historical values have been revised with the incorporation of latest information from SP on de-commissioned installations and reclassification of installations.

Number of Installations

- 6. There were 520 new grid-connected solar PVs installed in 4Q 2022, bringing the total number of installations in Singapore to 6,629.
- 7. Town councils & grassroots units accounted for majority (46.1% or 3,055 installations) of total installations, followed by the residential (37.0% or 2,450 installations) and private (13.9% or 923 installations) sectors. Public service agencies constituted the remaining (3.0% or 201 installations) of total installations (see Annex B).
- 8. Figure 2 provides a snapshot of the number of grid-connected solar PV installations from 2017 to 4Q 2022.

**Figure 2: Number of Grid-Connected Solar PV Installations, 1Q 2017 – 4Q 2022 (as at end of each quarter)**



Note:  
 Historical values have been revised with the incorporation of latest information from SP on de-commissioned installations and reclassification of installations.

Planned Installations

- 9. As at end 4Q 2022, a combined installed capacity of 61.7 MWp (not yet installed) was slated for grid-connection by Q1 2023 and 100.1 MWp was planned for grid-connection by 2Q 2023.

**Date: 11 May 2023**

## ANNEX A

### INSTALLED CAPACITY OF GRID-CONNECTED SOLAR PV SYSTEMS, Q1 2017 – Q4 2022 (AS AT END OF EACH QUARTER)

	Unit: MWp																			
	2018				2019				2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total</b>	157.3	171.5	188.8	209.9	234.3	263.0	303.0	352.9	384.3	390.6	400.1	431.4	450.3	531.5	557.4	631.9	669.6	703.3	742.6	821.7
<b>Residential</b>	7.3	7.9	8.6	9.3	9.8	10.7	11.3	12.2	13.1	13.5	14.2	14.9	15.7	16.7	18.0	19.6	22.1	24.6	27.5	31.7
<b>Non-Residential</b>	150.0	163.7	180.2	200.7	224.5	252.3	291.7	340.7	371.3	377.1	386.0	416.4	434.6	514.8	539.4	612.4	647.5	678.7	715.1	790.0
Public Service Agencies	7.1	7.3	8.8	10.1	10.3	13.6	15.1	21.6	22.2	25.2	26.0	28.9	29.5	32.5	38.5	41.2	45.4	46.9	48.3	55.9
Town Councils & Grassroots Units	62.5	67.5	71.8	83.0	93.3	103.6	117.8	134.3	148.2	149.5	150.5	161.2	167.5	172.1	178.9	185.4	189.5	196.9	206.4	223.7
Private Sector	80.3	88.9	99.7	107.6	121.0	135.2	158.8	184.8	200.8	202.4	209.6	226.3	237.6	310.1	321.9	385.8	412.6	434.8	460.4	510.4

Source: SP PowerGrid Ltd (SPPG)

	Unit: MWac																			
	2018				2019				2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total</b>	121.1	132.1	145.4	161.7	180.4	202.5	233.3	271.7	295.9	300.7	308.1	332.1	346.8	409.3	429.2	486.6	515.6	541.5	571.8	632.7
<b>Residential</b>	5.7	6.1	6.6	7.1	7.6	8.2	8.7	9.4	10.1	10.4	10.9	11.5	12.1	12.9	13.9	15.1	17.0	19.0	21.2	24.4
<b>Non-Residential</b>	115.5	126.0	138.8	154.5	172.9	194.3	224.6	262.4	285.9	290.4	297.2	320.6	334.7	396.4	415.3	471.5	498.6	522.6	550.6	608.3
Public Service Agencies	5.5	5.6	6.7	7.8	7.9	10.4	11.7	16.6	17.1	19.4	20.0	22.2	22.7	25.0	29.7	31.7	35.0	36.1	37.2	43.2
Town Councils & Grassroots Units	48.1	52.0	55.3	63.9	71.9	79.7	90.7	103.4	114.1	115.1	115.8	124.1	129.0	132.5	137.8	142.7	145.9	151.6	158.9	172.3
Private Sector	61.9	68.4	76.8	82.8	93.1	104.1	122.2	142.3	154.6	155.9	161.4	174.3	183.0	238.8	247.9	297.0	317.7	334.8	354.5	392.8

Source: SP PowerGrid Ltd (SPPG) & Energy Market Authority (EMA)

**Note:**

- a. Historical values have been revised with the incorporation of new information on de-commissioned installations and reclassification of installations.
- b. Figures may not add up to the total due to rounding.
- c. MWp refers to megawatt peak, which is a typical measure of the installed nameplate capacity of solar PV systems. MWp represents the amount of electric power than can be produced by a solar PV system at its peak.
- d. MWac refers to the Alternating Current (AC) capacity of the inverters used in solar PV installations.

ANNEX B

**NUMBER OF GRID-CONNECTED SOLAR PV INSTALLATIONS, Q1 2017 – Q4 2022 (AS AT END OF EACH QUARTER)**

Data As At 4Q 2022

	2018				2019				2020				2021				2022			
	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
<b>Total</b>	<b>2,177</b>	<b>2,315</b>	<b>2,495</b>	<b>2,717</b>	<b>2,895</b>	<b>3,176</b>	<b>3,532</b>	<b>3,842</b>	<b>4,115</b>	<b>4,170</b>	<b>4,235</b>	<b>4,443</b>	<b>4,594</b>	<b>4,754</b>	<b>4,966</b>	<b>5,184</b>	<b>5,452</b>	<b>5,739</b>	<b>6,109</b>	<b>6,629</b>
<b>Residential</b>	737	781	880	927	963	1076	1196	1253	1308	1336	1379	1432	1482	1551	1639	1737	1891	2043	2215	2450
<b>Non-Residential</b>	<b>1,440</b>	<b>1,534</b>	<b>1,615</b>	<b>1,790</b>	<b>1,932</b>	<b>2,100</b>	<b>2,336</b>	<b>2,589</b>	<b>2,807</b>	<b>2,834</b>	<b>2,856</b>	<b>3,011</b>	<b>3,112</b>	<b>3,203</b>	<b>3,327</b>	<b>3,447</b>	<b>3,561</b>	<b>3,696</b>	<b>3,894</b>	<b>4,179</b>
Public Service Agencies	105	108	111	115	118	122	126	133	137	142	145	151	152	161	172	181	189	193	196	201
Town Councils & Grassroots Units	1021	1091	1154	1304	1426	1577	1787	2010	2198	2215	2223	2349	2418	2473	2551	2615	2666	2738	2866	3055
Private Sector	314	335	350	371	386	401	423	446	472	477	488	511	542	569	604	651	706	765	839	923

Source: SP PowerGrid Ltd (SPPG)

Note:

a. Historical values have been revised with the incorporation of new information on de-commissioned installations and reclassification of installations.