

SINGAPORE SOLAR PHOTOVOLTAIC REPORT 2Q 2023

- 1. This report provides an update on the key solar photovoltaic (PV) statistics (i.e., installed capacity and number of installations) in Singapore for 2Q 2023.
- 2. There were 7,698 grid-connected solar PV installations as at end 2Q 2023, with a combined installed capacity of 1,005.7 megawatt-peak (MWp) (see <u>Annex A</u> and <u>B</u>).

Installed Capacity

- 3. The total installed capacity of grid-connected solar PV systems was 1,005.7 MWp as at end 2Q 2023. This was a 9.9% (90.2 MWp) increase from the preceding quarter, attributed to 555 new installations in 2Q 2023. The quarter-on-quarter solar growth in Q2 2023 (9.9%) was lower as compared to Q1 2023 (11.4%).
- 4. The private sector contributed to majority of the solar PV capacity (63.5% or 638.8 MWp), followed by town councils & public housing common services (25.9% or 260.4 MWp). The remaining PV capacity contributions were from public service agencies (6.6% or 66.0 MWp) and residential sector (4.0% or 40.4 MWp) (see <u>Annex A</u>).
- 5. <u>Figure 1</u> provides a snapshot of the installed capacity of grid-connected solar PV installations from 2018 to 2Q 2023.

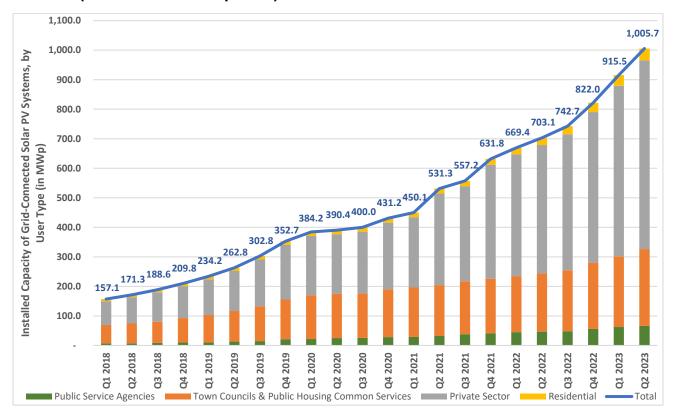


Figure 1: Installed Capacity of Grid-Connected Solar PV Systems (in MWp), 1Q 2018 – 2Q 2023 (as at end of each quarter)

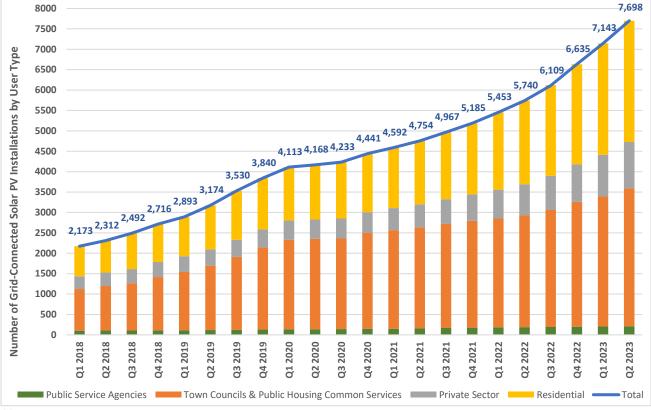
<u>Note</u>:

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

Number of Installations

- 6. There were 555 new grid-connected solar PVs installed in 2Q 2023, bringing the total number of installations in Singapore to 7,698.
- Town councils & public housing common services accounted for majority (43.9% or 3,377 installations) of total installations, followed by the residential (38.6% or 2,971 installations) and private (14.8% or 1,138 installations) sectors. Public service agencies constituted the remaining (2.8% or 212 installations) of total installations (see <u>Annex B</u>).
- 8. <u>Figure 2</u> provides a snapshot of the number of grid-connected solar PV installations from 2018 to 2Q 2023.

Figure 2: Number of Grid-Connected Solar PV Installations, 1Q 2018 – 2Q 2023 (as at end of each quarter)



Note:

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

Planned Installations

9. As at end 2Q 2023, it is estimated that a combined capacity of around 59.8 MWp is expected for grid-connection by Q3 2023, and a total of 116.7 MWp is expected for grid-connection by 4Q 2023.

Date: 20 Oct 2023

ANNEX A

INSTALLED CAPACITY OF GRID-CONNECTED SOLAR PV SYSTEMS, Q1 2018 - Q2 2023 (AS AT END OF EACH QUARTER)

																					Ur	nit: MWp
		2018 2019						2020					202	1			202	2023				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Total	157.1	171.3	188.6	209.8	234.2	262.8	302.8	352.7	384.2	390.4	400.0	431.2	450.1	531.3	557.2	631.8	669.4	703.1	742.7	822.0	915.5	1,005.7
Residential	7.3	7.9	8.6	9.4	10.0	10.8	11.5	12.3	13.3	13.6	14.3	15.1	15.9	16.9	18.0	19.5	22.1	24.6	27.5	31.7	36.4	40.4
Non-Residential	149.8	163.4	179.9	200.4	224.2	252.0	291.3	340.4	370.9	376.7	385.6	416.1	434.3	514.4	539.2	612.2	647.3	678.5	715.2	790.3	879.1	965.3
Public Service Agencies	7.0	7.0	8.5	9.8	10.0	13.3	14.9	21.3	21.9	24.9	25.5	28.4	29.0	32.0	38.2	40.9	45.1	46.6	48.0	55.9	62.6	66.0
Town Councils & Public Housing Common	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	206.9	224.4	239.5	260.4
Private Sector	80.3	88.9	99.7	107.6	120.9	135.1	158.7	184.7	200.7	202.3	209.7	226.5	237.8	310.3	322.1	385.9	412.8	435.0	460.3	510.0	576.9	638.8

Source: SP PowerGrid Ltd (SPPG)

																					Uni	it: MWac	
	2018					20	19			2020 2021 2022							2		2023				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Total	121.0	131.9	145.2	161.6	180.3	202.4	233.2	271.6	295.8	300.6	308.0	332.0	346.6	409.1	429.1	486.4	515.5	541.4	571.9	632.9	704.9	774.4	
Residential	5.7	6.1	6.6	7.3	7.7	8.3	8.8	9.5	10.2	10.5	11.0	11.6	12.2	13.0	13.9	15.1	17.0	18.9	21.1	24.4	28.0	31.1	
Non-Residential	115.3	125.8	138.5	154.3	172.6	194.0	224.3	262.1	285.6	290.1	296.9	320.4	334.4	396.1	415.2	471.4	498.5	522.5	550.7	608.6	676.9	743.2	
Public Service Agencies	5.4	5.4	6.5	7.6	7.7	10.2	11.4	16.4	16.9	19.2	19.6	21.8	22.3	24.7	29.4	31.5	34.7	35.9	37.0	43.0	48.2	50.9	
Town Councils & Public Housing Common	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	159.3	172.8	184.4	200.5	
Private Sector	61.9	68.4	76.8	82.8	93.1	104.1	122.2	142.2	154.6	155.8	161.5	174.4	183.1	238.9	248.0	297.2	317.8	334.9	354.5	392.7	444.2	491.9	

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.

NUMBER OF GRID-CONNECTED SOLAR PV INSTALLATIONS, Q1 2018 - Q2 2023 (AS AT END OF EACH QUARTER)

		20 1	18			201	9			202	20			202	21			202	22		2023	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	2018	2018	2018	2018	2019	2019	2019	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022	2022	2023	2023
Total	2,173	2,312	2,492	2,716	2,893	3,174	3,530	3,840	4,113	4,168	4,233	4,441	4,592	4,754	4,967	5,185	5,453	5,740	6,109	6,635	7,143	7,698
Residential	736	781	880	929	965	1078	1198	1255	1310	1338	1381	1434	1484	1555	1643	1741	1895	2047	2219	2455	2730	2971
Non-Residential	1,437	1,531	1,612	1,787	1,928	2,096	2,332	2,585	2,803	2,830	2,852	3,007	3,108	3,199	3,324	3,444	3,558	3,693	3,894	4,180	4,413	4,727
Public Service Agencies	102	105	108	112	115	119	123	130	134	139	141	147	148	157	169	178	186	190	193	199	203	212
Town Councils & Public Housing Common Services	1021	1091	1154	1304	1428	1577	1787	2010	2198	2215	2223	2349	2418	2473	2551	2615	2666	2738	2869	3060	3187	3377
Private Sector	314	335	350	371	385	400	422	445	471	476	488	511	542	569	604	651	706	765	838	921	1023	1138

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.

ANNEX B