National Survey Report of PV Power Applications in Sweden 2024 2024 瑞典光伏国家市场报告

IEA PVPS has published the National Survey Report of PV Power Applications in Sweden 2024.

国际能源署 IEA PVPS 发布了《2024 瑞典光伏国家市场报告》。

According to the report, 41,395 new PV systems were connected to the Swedish electricity grid in 2024, adding a total installed capacity of 847.5 MW. This represents a 47% decrease compared to the record-setting 1,586.0 MW installed in 2023. Nevertheless, 2024 still marks the second-highest year for installed capacity to date, exceeding 2022 by 6% (796.7 MW).

报告显示, 2024 年瑞典电网新增接入 41395 套光伏系统, 新增装机容量 847.5 MW。较 2023 年创纪录的 1586 MW 下降 47%, 但仍是历年装机容量第二高的年份, 较 2022 年 (796.7 MW) 增长 6%。

Key highlights from the report:

1. The residential market saw a sharp decline during the year. A total of 36,517 new systems under 20 kW were installed in 2024 – 62% fewer than in 2023 – contributing 389.3 MW of capacity compared to 1,053.6 MW in 2023. The mid-sized segment (20 kW–1 000 kW) installed 329.0 MW (–21% compared to 2023), while large-scale systems above 1 MW added 129.2 MW, an 11% increase compared to 2023.

住宅市场显著萎缩。2024 年新增 20 kW 以下系统 36517 套,较 2023 年减少 62%;新增容量 389.3 MW,远低于 2023 年的 1053.6 MW。中型系统(20 kW-1 000 kW)装机 329 MW(较 2023 年下降 21%),而兆瓦级大型系统新增 129.2MW,同比增长 11%。

2. The total grid-connected PV capacity at the end of 2024 was 4,808.4 MW, of which 368.1 MW was centralised PV and 4,440.3 MW distributed PV. Adding an estimated 22.3 MW of off-grid systems, Sweden reached a total of 4,830.7 MW of installed PV capacity by the end of 2024. PV electricity generation, including self-consumed PV electricity, was estimated at 4,087 GWh, representing 2.4% of total electricity consumption.

截至 2024 年底,瑞典并网光伏总装机达 4808.4 MW,其中集中式光伏 368.1 MW,分布式光伏 4440.3 MW。计入约 22.3 MW 离网系统, 2024 年底瑞典光伏总装机容量达 4830.7 MW。全年光伏发电量(含自消纳部分)估算为 4087 GWh,占全国总用电量的 2.4%。

- 3. At the end of 2024, 293,019 grid-connected PV systems were in operation in Sweden. The average PV system size was approximately 16.4 kW, illustrating that the market continues to be dominated by small, distributed installations.
- 至 2024 年末,瑞典在运并网光伏系统达 293019 套。平均系统规模约 16.4 kW,表明小型分布式装置仍主导市场。
- 4、System prices decreased in 2024. According to the report, turnkey system prices averaged 14.7 SEK/W for small residential systems (5–10 kW), 12.1 SEK/W for small commercial systems (10–100 kW), 9.4 SEK/W for large commercial systems (100–250 kW), and 7.0 SEK/W for small ground-mounted centralised systems (1–20 MW). 2024 年系统价格呈下降趋势。报告显示: 小型户用系统(5-10 kW)均价 14.7 SEK/W;小型商用系统(10–100 kW)12.1 SEK/W;大型商用系统(100-250 kW)9.4 SEK/W;小型地面集中式系统(1-20 MW)7 SEK/W。
- 5. Sweden does not have an official target for PV installations. The tax reduction for green technology, introduced in 2021, provides a 20% deduction for PV installations. In 2024, 48,115 buyers received this deduction, corresponding to 812.7 million SEK. The Swedish government plans to reduce the deduction from 20% to 15% effective July 1, 2025.

瑞典官方未设定光伏装机目标。自 2021 年实施的绿色技术税收减免政策为光伏安装提供 20%的抵扣额, 2024 年共有 48115 名用户享受该政策, 抵扣总额达 8.127 亿 SEK (约合人民币 5.5 亿元)。瑞典政府计划自 2025 年 7 月 1 日起将抵扣比例从 20%下调至 15%。