

DAILY CONSUMPTION · SolisCloud · 20 – 22 October 2026

Ban Doo Chiangrai: when the site uses its electricity

20 kWp PV · Solis 20 kW three-phase hybrid inverter, no battery · zero export · small factory with a 57–62 kW machine · sunrise 06:17, sunset 17:53

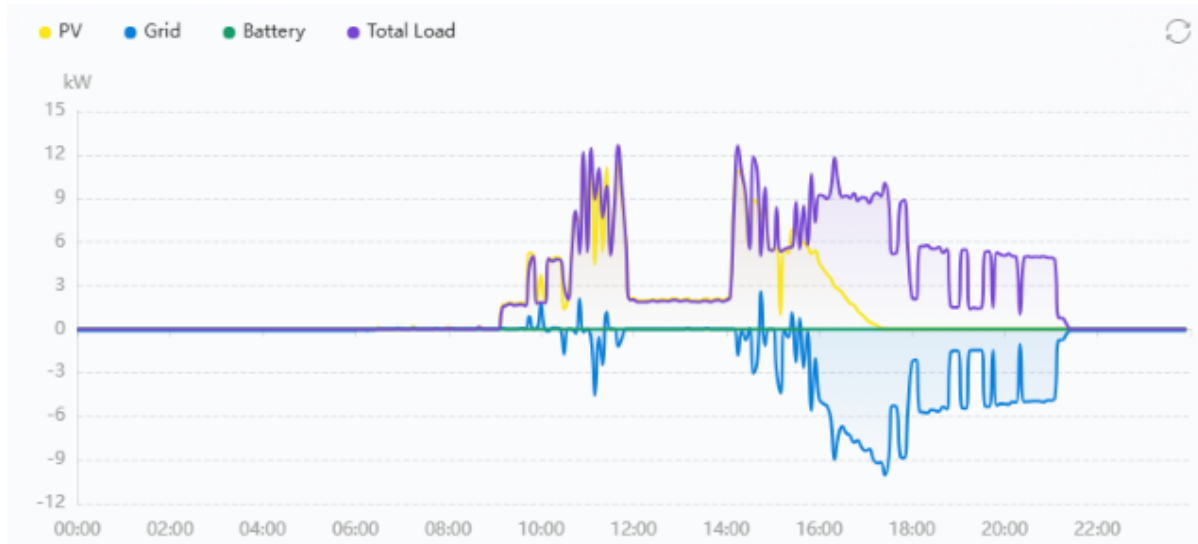
≈ 20 kWh used after sunset on 20 Oct, all bought from PEA	≈ 80 kWh used after 17:30 on 21 Oct (machine day)	8.8 kW being exported at 09:05 on 22 Oct with no load on site	07:30–16:30 suggested working hours to follow the sun
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Three days side by side

Day	Type	Solar produced	Site load	Bought from PEA	Exported	When the load runs
Tue 20 Oct	Normal day	≈ 32 kWh	≈ 68 kWh	≈ 36 kWh	1.5 kWh	09:30 – about 21:00; 5–7 kW after sunset
Wed 21 Oct	Machine day	47.3 kWh	281 kWh	230 kWh	5.2 kWh	Machine bursts of 50–60 kW from 09:00 to about 20:30
Thu 22 Oct (to 09:05)	Morning	6 kWh so far	0 kW shown	–	8.8 kW now	No load yet; the surplus is going to the grid

Solar produced = daily full-load hours × 20 kWp, which also matches the daily earning at 4.7 THB/kWh. 20 October load and purchases are read from the SolisCloud day view and are approximate. 21 October figures come from the inverter's 5-minute data.

Tuesday 20 October • a normal day



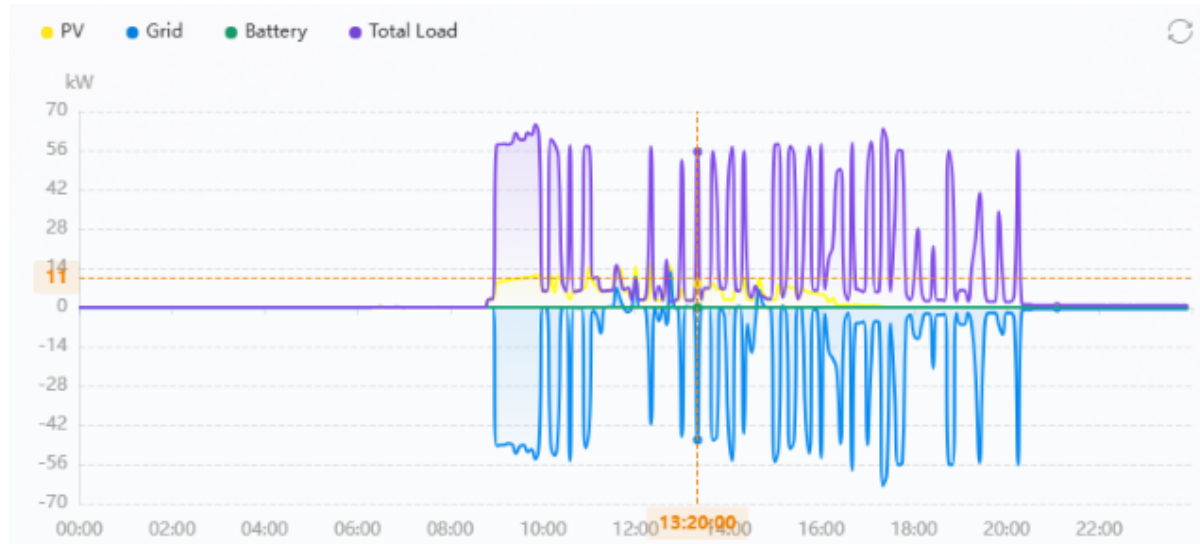
SolisCloud day view, 20 October. Purple = site load, yellow = solar, blue = grid (below zero = bought from PEA).

0kWh Daily Charge	0kWh Daily Discharge	150.4THB Daily Earning
1.6h Daily Full Load Hours		

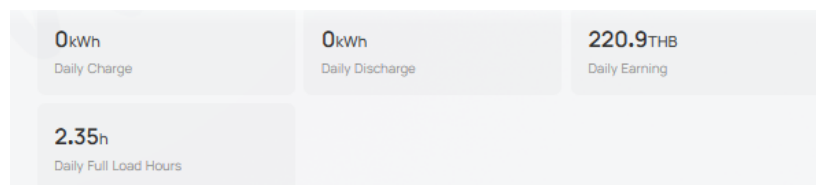
Daily totals: 1.6 full-load hours ($\approx$ 32 kWh), 150.4 THB earned.

- **Morning wasted.** The sun is up from 06:17, but the load only starts around 09:30, so about two hours of solar are not used.
- **Lunch dip.** Between about 12:30 and 14:30 the load drops to 2–3 kW and the inverter is held back with it.
- **Evening on the grid.** From 17:30 until about 21:00 the site keeps drawing 5–7 kW after sunset. That is roughly 20 kWh, all bought from PEA – more than half of the day's purchases.

Wednesday 21 October · a machine day



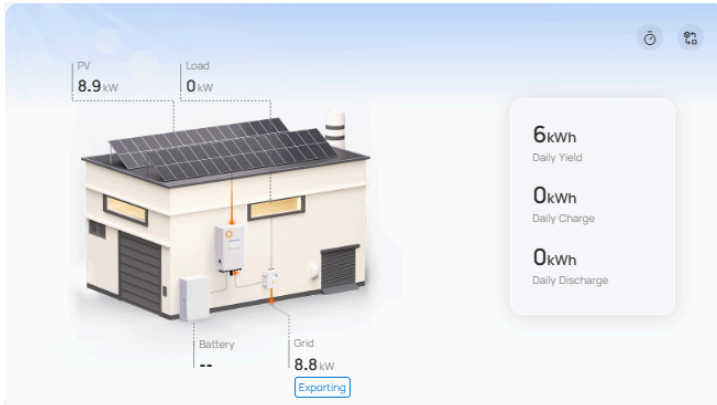
SolisCloud day view, 21 October. The 57–62 kW machine runs in bursts all day and into the evening.



Daily totals: 2.35 full-load hours (≈ 47 kWh), 220.9 THB earned.

- **Solar at full output while the machine runs** – about 10–13 kW – but the machine draws four to five times that, so most of each burst comes from PEA.
- **Late running.** The machine keeps cycling until about 20:30. About 80 of the day's 281 kWh (29%) were used after 17:30, when there is no sun at all.
- **Limit slow to release.** On this day the export limit took 45–55 minutes to release after the machine started, so solar was held back during part of the run.

Thursday 22 October · 09:05, morning



- **Producing with no load.** The panels are making 8.9 kW, the load shows 0 kW, and 8.8 kW is going to the grid ("Exporting").
- **Different from the rest of October,** when the export limit kept the inverter idle until the shop opened. Either the export limit has been switched off, or the meter/CT reading has dropped out (a load of exactly 0 kW is unusual for this site).
- **Exported energy is not paid for.** Please check Allow Export = Disable and the meter connection.

What these days show

The site uses most of its electricity when the sun is low or gone. The panels produce best between about 08:00 and 16:00. The site starts around 09:30, slows at lunch, and keeps working until about 21:00 – so the morning sun is wasted and the evening is bought from PEA.

Suggestion	Possible gain / month	Possible saving / month
Move office and working hours to follow the sun, for example 07:30–16:30 instead of about 09:30–21:00	up to ~500 kWh	up to ≈ 2,400 THB
Run the machine between 09:00 and 15:00 where the work allows, and avoid runs after 17:30		adds to the gain above
Stagger lunch breaks so some load keeps running between 12:30 and 14:30	uses solar that is now curtailed	
Check the export setting and meter link after this morning's export		stops unpaid export

Estimates at 4.7 THB/kWh. The gain from shifting hours assumes the ~20 kWh used after sunset on a normal day moves into sun hours on about 26 working days a month; it overlaps with the other daytime-load suggestions in the production timeline report. Sources: SolisCloud plant overview and day views, 20–22 October 2026, and inverter 5-minute data for 21 October. Analysis by Solar ESS Co. Ltd.