

Fleet Performance Review

15 DeyeCloud plants not covered by earlier reports · 1 – 24 October 2026

15 plants
 Reviewed in this report

12 online
 Reporting normally today

3 offline
 Comms / commissioning

9.4 MWh
 Produced 1–24 Oct (13 plants)

2 urgent
 Investigate now

4 settings
 Fixable remotely

4.0 MWh
 Bought from the grid

389 kWh
 Exported unpaid

Summary

Most systems are producing well, but **six plants lose solar every day because of inverter settings** – batteries charged from the grid (Home B, Villa C), battery floors or charge limits set too conservatively (Villa A, the Chiang Mai residence, the Songkhla building) and one site exporting over 40% of its output for free (the office). These can be fixed remotely in DeyeCloud at no cost. **The Trang apartment building** changed behaviour today: the battery was charged from the grid overnight and the hybrid's own panels produced only 7 kWh instead of ≈55 – it needs checking first. Three plants are not reporting: the retreat centre (since 16:09 today), Home E (since May 2025) and the warehouse (never connected). The poultry farm and the Songkhla building are good candidates for battery or system-upgrade proposals.

Priority actions

#	Plant	Action	At stake	Priority
1	The Trang apartment building	Find why the battery grid-charged and the hybrid PV dropped on 24 Oct; restore normal mode	≈50 kWh/day	Urgent
2	Home B	Disable grid charging; battery floor 20%; discharge all evening	≈8–10 kWh/day	Urgent
3	Villa A	Battery floor 50% → 20%; raise charge current; check zero export	up to 16–35 kWh/day	Fix settings
4	Villa C	Remove grid charging in the 16:00–19:00 TOU slot	≈4–10 kWh/day	Fix settings
5	The office	Enable zero export (or confirm export permit); offer battery	≈11 kWh/day exported	Fix settings
6	The Chiang Mai residence	Raise charge current; fix TOU slot that idles the battery 22:00–24:00	≈2–5 kWh/day	Fix settings
7	The Songkhla building	Let battery discharge from noon; propose 15–20 kWp upgrade	≈2 kWh/day + upgrade	Opportunity
8	Home D	Set plant time zone to UTC+07:00; log the 20 Oct fix	schedule accuracy	Watch
9	The retreat centre · Home E · the warehouse	Restore Wi-Fi / logger, reconnect, or remove empty plants	monitoring	Check comms

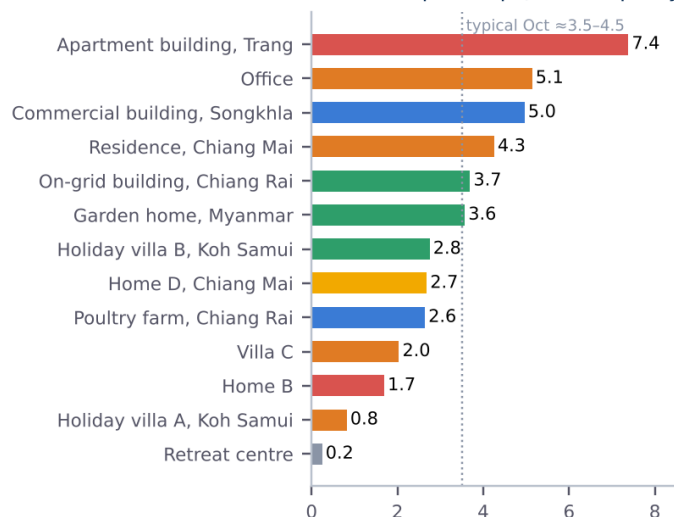
“At stake” figures are estimates from October data. Three other plants are covered in separate monthly reports.



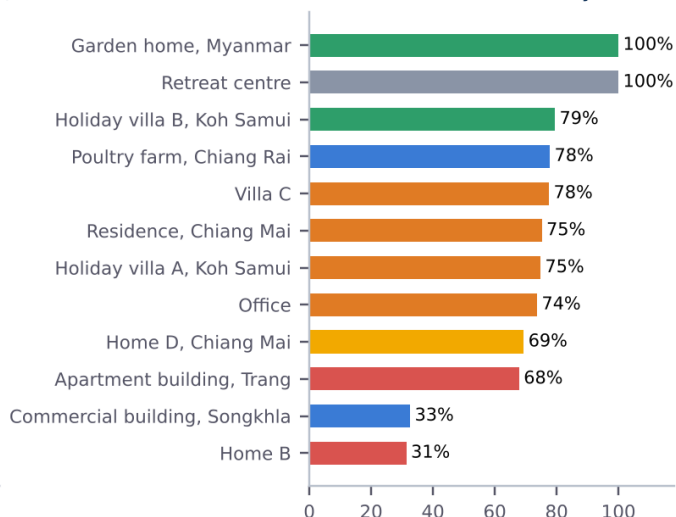
1. Fleet overview

Plant	kWp	Battery	Prod. kWh/d	Yield*	Use kWh/d	Grid buy kWh/d	Solar share	Status
On-grid building, Chiang Rai	5	–	18.5	3.69	–	–	–	Healthy
Retreat centre (8 kWp)	8	314 Ah (≈16 kWh)	2.0	0.25	1.1	0.0	100%	Check comms
Holiday villa A, Koh Samui	20	40.9 kWh	16.4	0.82	21.2	5.4	75%	Fix settings
Poultry farm, Chiang Rai	20	–	52.9	2.64	65.3	14.5	78%	Opportunity
Holiday villa B, Koh Samui	20	45 kWh	55.1	2.75	69.3	14.2	79%	Healthy
Residence, Chiang Mai	6.4	not recorded	27.2	4.26	34.3	8.5	75%	Fix settings
Home D, Chiang Mai	10	not recorded	26.8	2.68	36.4	11.2	69%	Watch
Villa C (5 kWp)	5	not recorded	10.2	2.04	12.6	2.8	78%	Fix settings
Garden home, Myanmar	10	not recorded	35.7	3.57	34.2	0.0	100%	Healthy
Apartment building, Trang	12	80 kWh (1,500 Ah)	88.6	7.38	120.1	38.6	68%	Urgent
Office (5 kWp)	5	none active	25.7	5.14	19.5	5.1	74%	Fix settings
Home B (5 kWp)	5	not recorded	8.5	1.69	24.4	16.8	31%	Urgent
Commercial building, Songkhla	5	10.4 kWh	24.8	4.96	73.4	49.5	33%	Opportunity
Home E (5.5 kWp)	5.5	–	–	–	–	–	–	Check comms
Warehouse (5 kWp)	5	–	–	–	–	–	–	Check comms

Production per kWp (kWh/kWp/day)



Share of use covered by solar



*Yield = kWh per kWp per day. Averages over the days with data (1–24 Oct; the retreat centre from 8 Oct). Bar colours follow the status. Yields above ≈5 kWh/kWp (the Trang apartment, the office, the Songkhla building) mean the capacity registered in DeyeCloud is lower than the real array, or extra AC-coupled PV is counted; low yields at the retreat centre, Villa A and Home B come from curtailment, not weak panels.

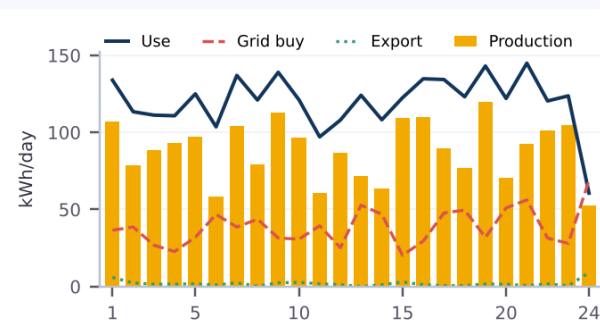


2. Plant by plant (highest priority first)

Apartment building, Trang

Urgent · Investigate

Trang province · 12 kWp · Hybrid + battery + AC-coupled PV · Battery 80 kWh (1,500 Ah) · Online – abnormal behaviour on 24 Oct



Production/day

88.6 kWh

Yield

7.38 kWh/kWp

Use/day

120.1 kWh

Grid buy/day

38.6 kWh

Export/day

1.9 kWh

Solar share

68%

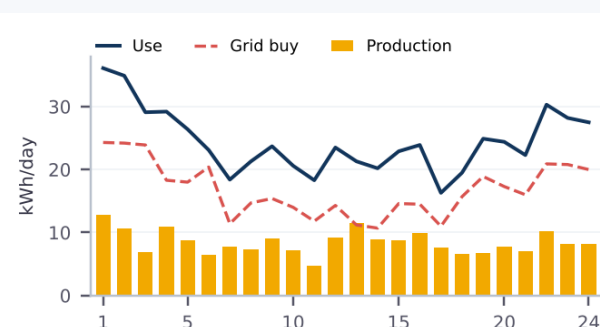
Finding. Normally ≈ 55 kWh/day from the hybrid's panels plus ≈ 38 kWh/day from AC-coupled PV, battery cycling 40–60 kWh. On 24 Oct the battery charged from the grid overnight (38% $\rightarrow$ 99%) and stayed full: hybrid PV fell to 7.2 kWh and 9.1 kWh was exported. Grid Charge reads Disabled and no remote change is logged – a local change or BMS force-charge.

Action. Urgent: check work mode, Time-of-Use and the BMS with the owner or on site; ≈ 50 kWh/day of solar is at stake. Correct the registered capacity (real PV is larger than 12 kWp).

Home B (5 kWp)

Urgent · Grid charging

Thailand · 5 kWp · Hybrid + battery · Battery not recorded · Online



Production/day

8.5 kWh

Yield

1.69 kWh/kWp

Use/day

24.4 kWh

Grid buy/day

16.8 kWh

Export/day

0.0 kWh

Solar share

31%

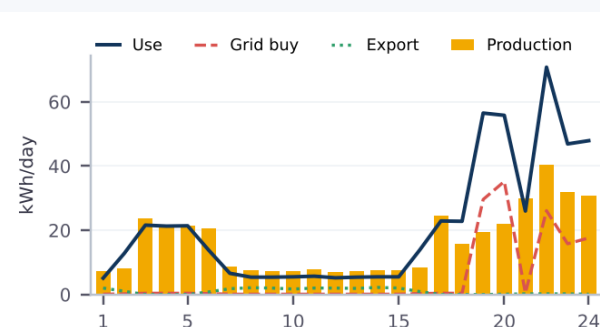
Finding. Only 5–13 kWh/day from 5 kWp (≈ 1.7 kWh per kWp – the lowest in the fleet). The battery is charged from the grid in the late evening and stays at 100% all night while the house runs on the grid; in the morning it is already full, so the panels are throttled to the ≈ 1 kW house load. It only discharges briefly at 14:00–17:00.

Action. Disable grid charging, set the battery floor to 20% and let it discharge all evening and night. Expected: production roughly doubles (≈ 15 –20 kWh/day) and grid purchase drops by ≈ 8 –10 kWh/day.

Holiday villa A, Koh Samui

Fix settings · Settings

Surat Thani province · 20 kWp · Hybrid + battery · Battery 40.9 kWh · Online



Production/day

16.4 kWh

Yield

0.82 kWh/kWp

Use/day

21.2 kWh

Grid buy/day

5.4 kWh

Export/day

1.0 kWh

Solar share

75%

Finding. The battery stops discharging at 50% SOC, so only about 12–14 kWh of the 40.9 kWh bank is ever used, and on 24 Oct it never got above 78%. In the morning PV was held to 1–3 kW while the battery charged at only ≈ 2 kW – a low charge-current limit. On occupied days the villa bought 16–35 kWh from the grid. On empty days ≈ 2 kWh/day still leaks to the grid.

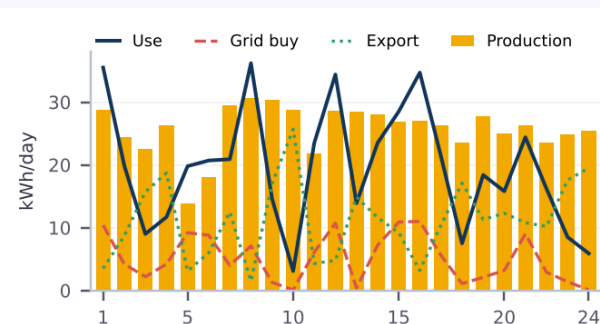
Action. Lower the battery floor to 20%, raise the battery charge current to the battery's rating, and check zero-export. Expected: most of the 16–35 kWh/day grid purchase on occupied days covered by solar.



Office (5 kWp)

Thailand · 5 kWp · Hybrid, battery not in use · Battery none active · Online

Fix settings · Exporting



Production/day

25.7 kWh

Yield

5.14 kWh/kWp

Use/day

19.5 kWh

Grid buy/day

5.1 kWh

Export/day

11.2 kWh

Solar share

74%

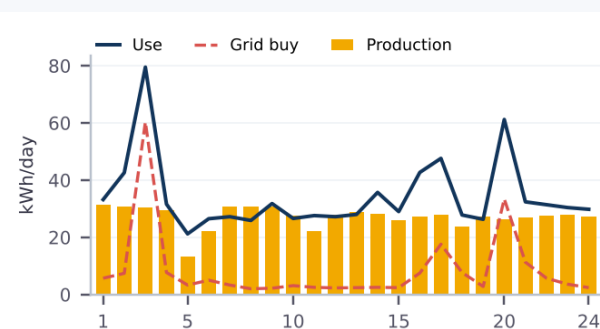
Finding. Good production (≈ 26 kWh/day) but about 11 kWh/day – over 40% – is exported to the grid, up to 26 kWh on days the office is closed. Export is not paid (no sell-back) and may not be permitted on this connection. No battery activity is recorded.

Action. Enable zero export (or confirm the export permit). Offer a battery so the exported energy covers evening and night use.

Residence, Chiang Mai

Chiang Mai province · 6.4 kWp · Hybrid + battery · Battery not recorded · Online

Fix settings · Settings



Production/day

27.2 kWh

Yield

4.26 kWh/kWp

Use/day

34.3 kWh

Grid buy/day

8.5 kWh

Export/day

0.0 kWh

Solar share

75%

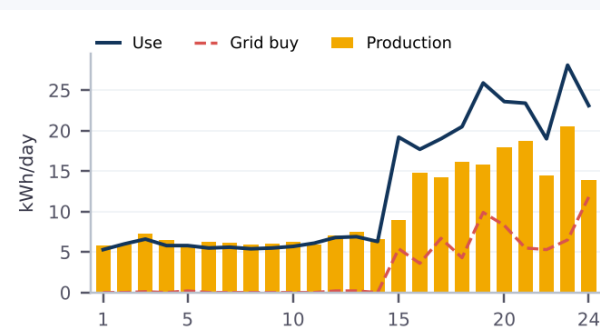
Finding. Strong yield (≈ 4.3 kWh per kWp). But PV is capped flat at ≈ 4.1 kW from 11:00 to 13:00 while the battery is only half full – the battery charges at a fixed ≈ 3.2 kW, which suggests a low charge-current limit. At 22:00–24:00 the house runs on the grid with the battery idle at $\approx 55\%$, a sign of a Time-of-Use slot floor. Large purchases on 3 and 20 Oct (60 and 33 kWh).

Action. Raise the charge current limit, review the Time-of-Use slots so the battery can discharge all evening, and add the battery size to the plant settings.

Villa C (5 kWp)

Thailand · 5 kWp · Hybrid + battery · Battery not recorded · Online

Fix settings · Grid charging



Production/day

10.2 kWh

Yield

2.04 kWh/kWp

Use/day

12.6 kWh

Grid buy/day

2.8 kWh

Export/day

0.0 kWh

Solar share

78%

Finding. From 16:00 to 19:00 the inverter charges the battery from the grid (≈ 3 kW, SOC 63% $\rightarrow$ 88%), then discharges it at night – buying grid power only to store it, with conversion losses. 16:00–19:00 is also PEA's on-peak window if a TOU meter is used. Villa was mostly empty until 14 Oct.

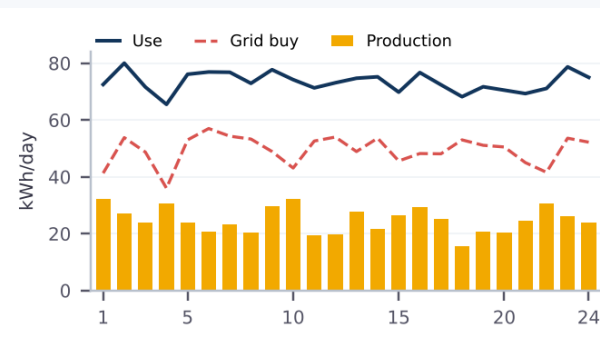
Action. Disable grid charging in the 16:00–19:00 Time-of-Use slot. Expected: most of the 4–12 kWh/day purchase disappears on sunny days.



Commercial building, Songkhla

Songkhla province · 5 kWp · Hybrid + battery · Battery 10.4 kWh · Online

Opportunity · Undersized



Production/day

24.8 kWh

Yield

4.96 kWh/kWp

Use/day

73.4 kWh

Grid buy/day

49.5 kWh

Export/day

0.0 kWh

Solar share

33%

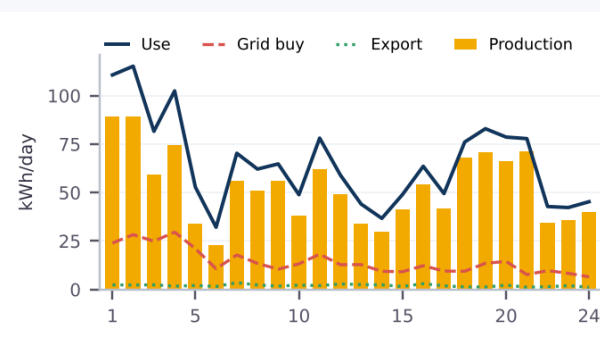
Finding. The building uses 65–80 kWh/day (≈ 3 kW around the clock) against a 5 kWp system, so 60–70% is bought from the grid. The battery is full by noon and then held at 100% until 17:00 while the grid supplies the afternoon load – so midday PV is throttled (peaks of 5.7 kW fall to ≈ 2.8 kW).

Action. Allow the battery to discharge from noon (Time-of-Use slots) so it can absorb midday PV. Propose a larger system – the load supports ≈ 15 –20 kWp with a bigger inverter and battery.

Poultry farm, Chiang Rai

Chiang Rai province · 20 kWp · On-grid, zero export (no battery) · Online

Opportunity · Curtailment



Production/day

52.9 kWh

Yield

2.64 kWh/kWp

Use/day

65.3 kWh

Grid buy/day

14.5 kWh

Export/day

2.1 kWh

Solar share

78%

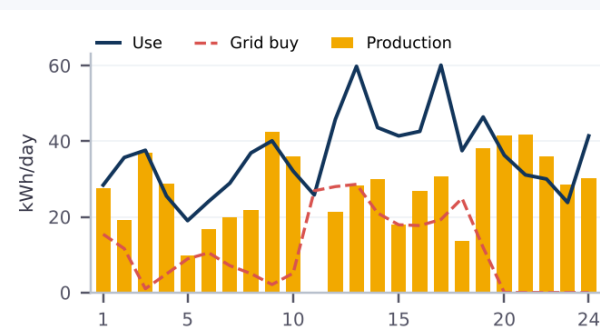
Finding. Zero export holds the 20 kWp array to the farm's load: on 24 Oct output followed the load all day and peaked at 14 kW only when fans/equipment ran. Production swings from 23 to 89 kWh/day with demand. 1–3.5 kWh/day still flows to the grid, and 7–30 kWh/day is bought, mostly at night.

Action. Schedule pumps, feed and cooling equipment between 10:00 and 15:00; tighten the zero-export setting. A battery (≈ 20 –30 kWh) would capture the curtailed midday energy for night use – a good proposal opportunity.

Home D, Chiang Mai

Chiang Mai province · 10 kWp · Hybrid + battery · Battery not recorded · Online (plant time zone set to UTC+06:30)

Watch · Improved



Production/day

26.8 kWh

Yield

2.68 kWh/kWp

Use/day

36.4 kWh

Grid buy/day

11.2 kWh

Export/day

0.0 kWh

Solar share

69%

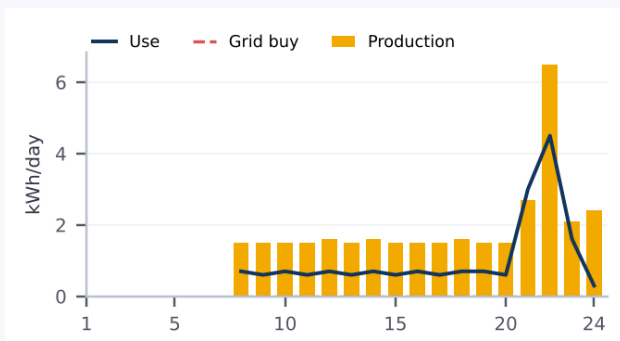
Finding. Zero production on 11 Oct (a fault or outage). 12–19 Oct bought 12–29 kWh/day with poor battery use. Since 20 Oct no grid power at all and the battery cycles properly (full by 10:00, down to $\approx 25\%$ by 22:00) – something was corrected. The plant time zone is set to UTC+06:30, not Thailand's UTC+07:00.

Action. Set the plant time zone to UTC+07:00 so schedules line up; confirm what changed on 20 Oct and record it; check the cause of the 11 Oct outage.



Retreat centre (8 kWp)

Thailand · 8 kWp · Hybrid + battery · Battery 314 Ah (≈16 kWh) · OFFLINE since 24 Oct 16:09; no data 1-7 Oct

[Check comms](#) · Offline / comms

Production/day

2.0 kWh

Yield

0.25 kWh/kWp

Use/day

1.1 kWh

Grid buy/day

0.0 kWh

Export/day

0.0 kWh

Solar share

100%

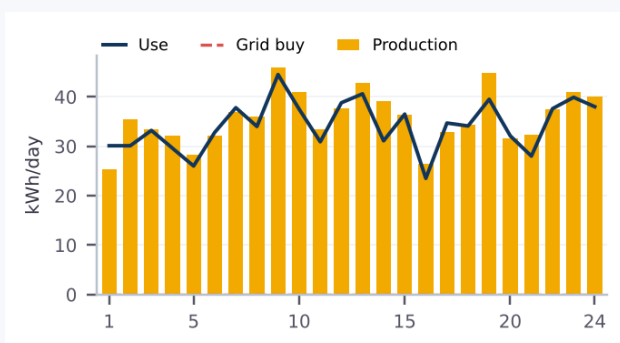
Finding. Site load is tiny (50-80 W), so the battery is full by 09:00 and the 8 kWp array produces only 1.5-2.5 kWh/day - demand-limited, not a fault. Monitoring stopped at 16:09 today and there is no data for 1-7 October.

Action. Check the site Wi-Fi/router and the data logger. If the center is used more in future, the system has plenty of spare capacity.

Garden home, Myanmar

Myanmar (border area) · 10 kWp · Hybrid + battery, no grid use · Battery not recorded · Online (UTC+06:30, correct for Myanmar)

Healthy



Production/day

35.7 kWh

Yield

3.57 kWh/kWp

Use/day

34.2 kWh

Grid buy/day

0.0 kWh

Export/day

0.0 kWh

Solar share

100%

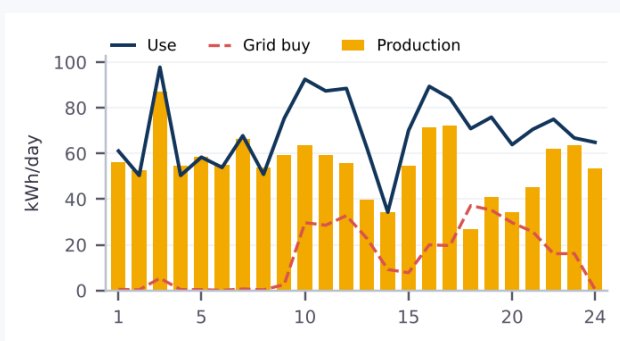
Finding. Fully self-supplied all month: 25-46 kWh/day produced and used, battery cycling 15-20 kWh a night (full by ≈14:00, ≈38% by morning). Only small afternoon curtailment once the battery is full.

Action. No action needed. Shift any flexible daytime loads to 13:00-16:00 to use the last of the afternoon solar.

Holiday villa B, Koh Samui

Surat Thani province · 20 kWp · Hybrid + battery · Battery 45 kWh · Online

Healthy



Production/day

55.1 kWh

Yield

2.75 kWh/kWp

Use/day

69.3 kWh

Grid buy/day

14.2 kWh

Export/day

0.0 kWh

Solar share

79%

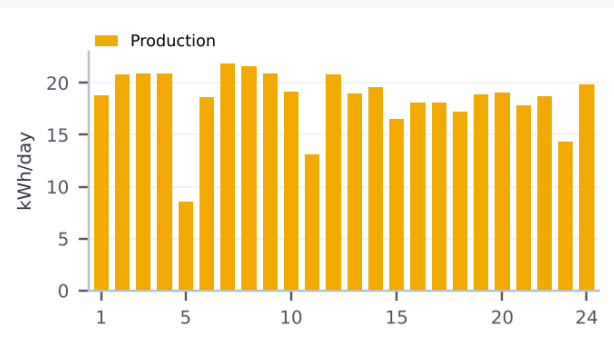
Finding. Working well: battery full by about 13:00, discharging through the night (99% → ≈60%), no export. Grid purchases of 20-37 kWh happen on days with 85-90 kWh of use or after cloudy days (18-21 Oct).

Action. No urgent action. If high-use days continue, a battery extension or more PV would cut the remaining purchases.

On-grid building, Chiang Rai

Healthy

Chiang Rai province · 5 kWp · On-grid (no battery) · Online (inverter sleeps at night)



Production/day

18.5 kWh

Grid buy/day

-

Yield

3.69 kWh/kWp

Export/day

-

Use/day

-

Solar share

-

Finding. Grid-tied 5 kWp producing about 18.5 kWh/day (3.7 kWh per kWp) – a good yield for October. Only production is metered, so self-use and export are not visible.

Action. No action needed. Consider adding a CT/meter so consumption and export can be monitored.

3. Plants not reporting

Home E (5.5 kWp) · 5.5 kWp · OFFLINE since 24 May 2025

Finding. No data for 17 months (last update 24 May 2025). Lifetime production recorded: 6.99 MWh.

Action. Contact the owner: reconnect the logger to Wi-Fi, or remove the plant from the account if the system is no longer ours to monitor.

Warehouse (5 kWp) · 5 kWp · OFFLINE – never reported

Finding. The plant was created but has never sent any data.

Action. Finish commissioning the logger (Wi-Fi setup and device binding), or delete the empty plant.

The retreat centre also stopped reporting at 16:09 today; its October data up to then is included in section 2.

How this review was made

Daily production, consumption, grid purchase, grid export and battery charge/discharge were taken from each plant's DeyeCloud records for 1–24 October 2026 (24 October up to about 23:40). Today's 5-minute power profiles were used to see when batteries charge, how far they discharge and whether PV is being held back. Inverter settings were read directly only where noted (the Trang apartment). Settings-related findings are inferred from the power profiles and should be confirmed in Device Control before changing anything; estimated gains depend on weather and occupancy. Sites outside Solar ESS's own installations may need the owner's agreement before settings are changed.