

October 2026 · SolisCloud · Fleet review: 35 plants

All 35 solar plants Solar ESS monitors on SolisCloud · daily data 1–24 October 2026, 5-minute profiles for 24 October · site names removed

35

plants

32 online · 1 fault · 2 offline

32.0 MWh

solar produced

1–24 Oct

27.6 MWh

bought from the grid

incl. one meter in doubt

2.2 MWh

exported unpaid

at 10 plants

7.7 MWh

delivered by batteries

24 battery plants

What we found

- **Five plants need a site visit or a fault fixed now** – one battery not working (School, Tak), about two-thirds of the panels not producing at a restaurant, a battery model error left for 101 days, solar not recorded at one home and one home offline since 14 September.
- **Settings waste energy at 14 plants:** unpaid export (about 2,000 kWh in 24 days), batteries held full or stopped early at night, grid charging at night, and charge/discharge limits far below what the battery can do.
- **Many batteries are full by 10:00–14:00**, after which the inverters throttle the panels. Moving daytime loads (water heating, pumps, air-con) to midday is the cheapest gain.
- **Six plants are good upgrade candidates** with high grid purchases – a resort, a commercial site, a nursing home and three homes.
- **Monitoring data needs tidying:** 22 of 24 battery plants have no battery size entered, two plants have the wrong PV capacity, two are listed on two platforms and one meter reads inconsistently.

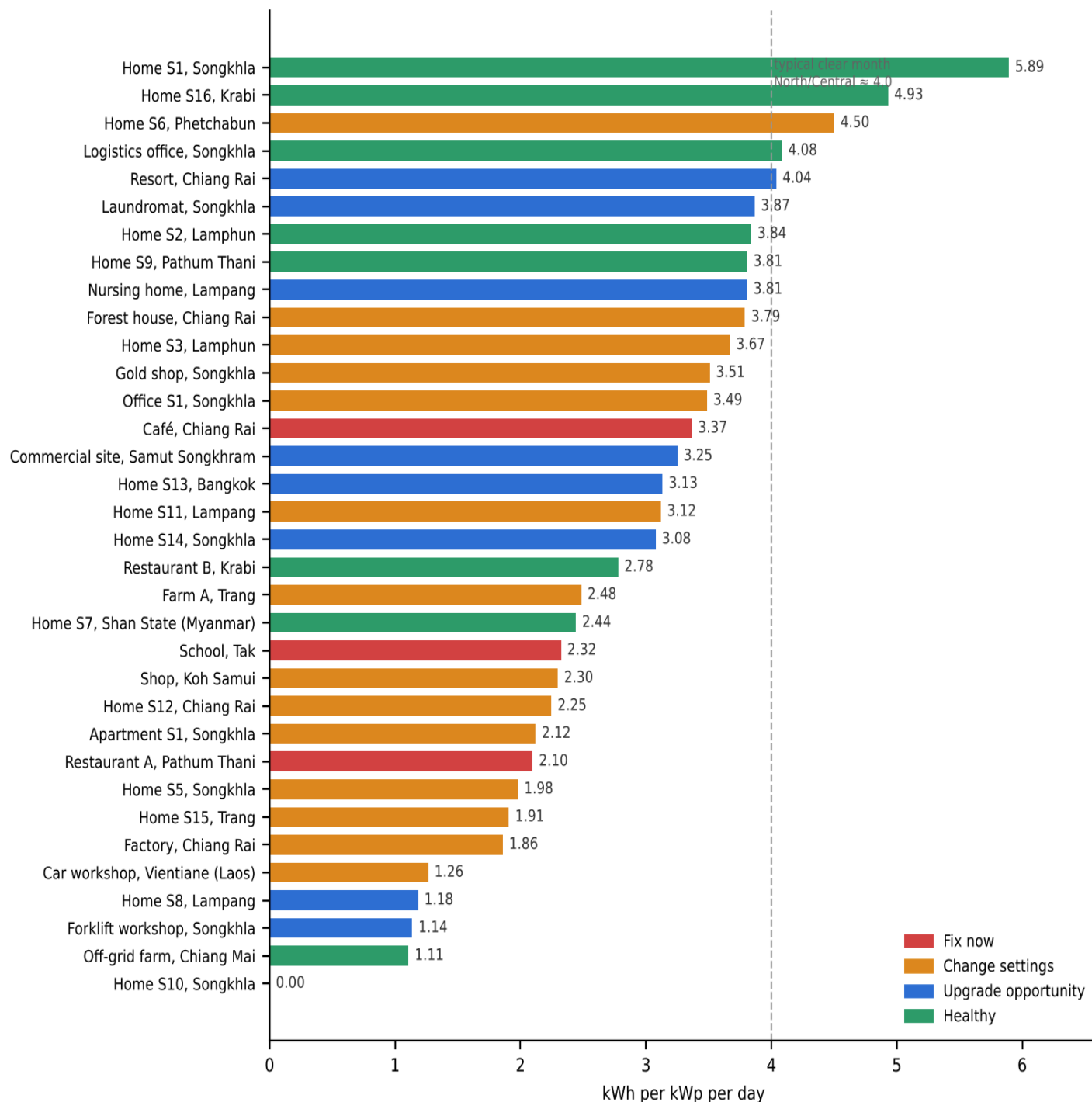
Priority list

Group	Plant	Action	Gain (estimate)
Fix now	Restaurant A, Pathum Thani	String check – about ⅔ of panels not producing	+1,300–1,500 kWh/month
Fix now	School, Tak	Battery BMS communication; reconnect datalogger	+30–40 kWh/day self-use
Fix now	Café, Chiang Rai	Select correct battery model; floor 20%	–5–8 kWh/day grid
Fix now	Home S4, Chiang Rai	Offline since 14 Sep – restore datalogger	data
Fix now	Home S10, Songkhla	Fix AC-coupled plant set-up (two platforms)	data
Change settings	Car workshop, Vientiane (Laos)	No battery: set inverter to 'No battery'; allow export (EDL) or move loads to 10:00–15:00	up to +100 kWh/day (if export allowed)
Change settings	Forest house, Chiang Rai	CT/load position, Self-Use, export 0 W, reserve SOC 20–30%	≈ 700 kWh/month
Change settings	Home S6, Phetchabun	Allow night discharge, raise charge limit, export 0 W	≈ 350 kWh/month
Change settings	Farm A, Trang	Grid over-voltage (56 trips) – PEA / cable check	fewer trips
Change settings	Home S11, Lampang	Turn off night grid charging	–6 kWh/night
Upgrade opportunity	Commercial site, Samut Songkhram	Second battery ≈ 20 kWh	≈ –600 kWh/month grid
Upgrade opportunity	Resort, Chiang Rai	Add ≈ 20 kWp on the 50 kW inverter; meter check	≈ +2,400 kWh/month

Gains are estimates from the 1–24 October data and the 24 October profiles. Southern plants (Songkhla, Trang, Krabi, Surat Thani) had a rainy October.

Rev02 (25 Oct 2026): Vientiane car workshop – no battery installed; moved from Fix now to Change settings.

Solar yield per kWp - every plant (1-24 Oct, kWh per kWp per day)



Home S4 (offline) is not shown. A low bar is not always a fault: plants with a full battery or no daytime load throttle their panels (see 'Change settings' and 'Upgrade'). Home S1 and Home S16 peak above their registered kWp, so their true yield per kWp is lower than shown.

Issues that repeat across the fleet

Issue	What we saw	What to do
Battery size not entered	22 of the 24 battery plants have no battery capacity entered in SolisCloud, so battery energy and health cannot be tracked.	Enter the battery kWh for every plant (Plant settings → battery capacity).
Unpaid export	About 2,000 kWh went to the grid in 24 days at 10 plants – Forest house, Chiang Rai 417, Home S6, Phetchabun 359, Apartment S1, Songkhla 225, Home S5, Songkhla 223, Factory, Chiang Rai 207, Office S1, Songkhla 163, Gold shop, Songkhla 156, Resort, Chiang Rai 115, Home S12, Chiang Rai 94, Home S15, Trang 81 kWh.	Without a PEA sell-back contract, set export limit 0 W (Solar Sell off) and charge the battery first.
Battery full by midday, panels throttled	At least 15 battery plants are full by 10:00–14:00 and the inverter then throttles the panels (e.g. Home S8, Lampang 10:00, Home S15, Trang 10:15, Commercial site, Samut Songkhram 12:45).	Run water heaters, pumps, air-con and EV charging 10:00–15:00; add battery where the evening grid use is high.
Low battery charge / discharge limits	Shop, Koh Samui (charge 2.2 kW), Home S3, Lamphun (discharge 1.6 kW), Farm A, Trang (3.2 kW), Home S8, Lampang (1.5 kW).	Raise the charge/discharge current limits up to the battery BMS rating.
Batteries not working	School, Tak shows 100% all day with no charging; Café, Chiang Rai has a battery model error.	Site check of BMS cable, battery breaker and battery model selection.
Wrong plant set-up	Home S10, Songkhla records no solar (AC-coupled to a Huawei inverter); Home S1, Songkhla and Home S16, Krabi peak above their registered kWp; Laundromat, Songkhla and Home S10, Songkhla are listed twice (Solis + Huawei).	Correct PV capacity and plant type so monthly reports are right.
Grid voltage trips	Farm A, Trang 56 over-voltage trips, Forklift workshop, Songkhla 17 under-voltage, Home S13, Bangkok 10 over-voltage, Home S1, Songkhla 8 under-voltage.	Measure voltage at the meter; ask PEA to adjust the transformer tap; check AC cable sizes.
Rainy south	Songkhla, Trang, Krabi and Surat Thani had a wet October; 2–3 kWh/kWp/day is normal there this month.	Compare southern plants with each other, not with the north.

Recommended standard settings for hybrid plants without a sell-back contract

Work mode	Self-Use (not Backup/Reserve unless the owner needs outage backup)
Export limit	On, 0 W (Solar Sell off) – the battery charges first, then panels follow the load
Battery low / overdischarge SOC	20% (LFP); reserve SOC 20–30% only where outage backup is wanted
Battery charge / discharge current	Up to the battery BMS rating – not the 25–50 A default
Grid charging	Off, unless on a TOU tariff with a cheap night rate
Time-of-Use slots	Charge 00:00–24:00 from solar; discharge allowed 00:00–24:00
Battery model	The exact model installed – a wrong model limits the battery
Plant settings	Correct PV kWp, battery kWh and plant type (AC-coupled where applicable)

Always check the battery datasheet / BMS limits before raising current, and confirm with the owner before changing backup reserve.

FIX NOW · 5 plants

Home S4, Chiang Rai

17.76 kWp · 10 kW 1-phase hybrid inverter · no battery

Offline since 14 Sep

-	-	-	-	-	-
kWh solar	kWh/kWp/day	solar share of use	kWh/day bought	kWh exported	kWh/day from battery

No data on 24 Oct

No data in October

24 October, 5-minute data

What we found

- No data for six weeks: last upload 14 Sep 2026, so October production is unknown.
- 17.76 kWp of panels on a 10 kW inverter (DC/AC 1.78) – heavy clipping at midday is likely even when it is online.

Daily totals, 1–24 October

What to do

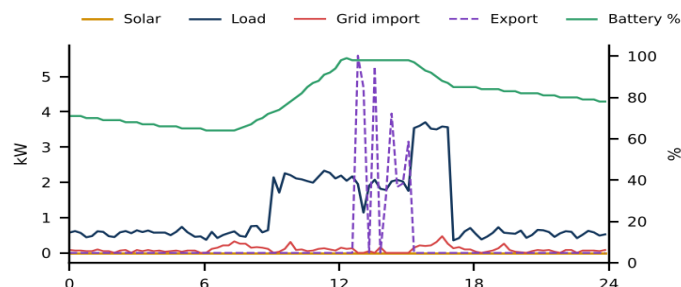
- Site visit or phone call: check the inverter is on and the WiFi/4G datalogger is powered and connected; re-pair it to the router if the WiFi password changed.
- Once online, check midday output against the 10 kW limit; consider moving part of the array to a second inverter.

Home S10, Songkhla

10 kWp · 16 kW 1-phase hybrid inverter · battery

Solar not recorded on SolisCloud

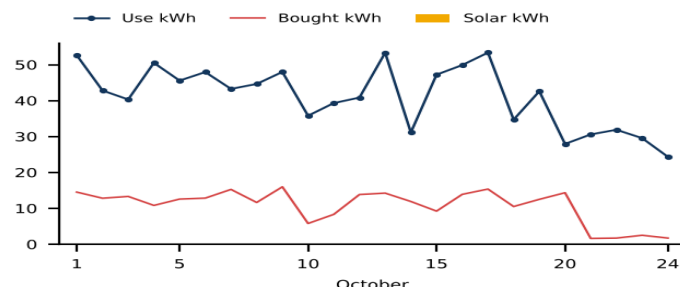
0	0.00	74%	10.7	30	15.3
kWh solar	kWh/kWp/day	solar share of use	kWh/day bought	kWh exported	kWh/day from battery



24 October, 5-minute data

What we found

- SolisCloud shows 0 kWh solar all month, but the battery still charges 5 kW at midday and the meter sees power coming in.
- The panels appear to be on a separate inverter on another monitoring platform (listed there with 0 kWp), AC-coupled to this hybrid inverter.
- Two battery over-voltage alarms (OV-Vbatt) in October.



Daily totals, 1–24 October

What to do

- Fix the plant set-up: on SolisCloud mark the 10 kWp as AC-coupled (or set PV capacity to 0) and enter the real 10 kWp on the Huawei plant, so each platform reports correctly.
- Check battery charge voltage settings after the OV-Vbatt alarms.

Car workshop, Vientiane (Laos)

50 kWp · 50 kW 3-phase hybrid inverter · no battery

No battery · zero export throttles 50 kWp

Moved from Fix now to Change settings in Rev02

1517

kWh solar

1.26

kWh/kWp/day

63%

solar share of use

35.3

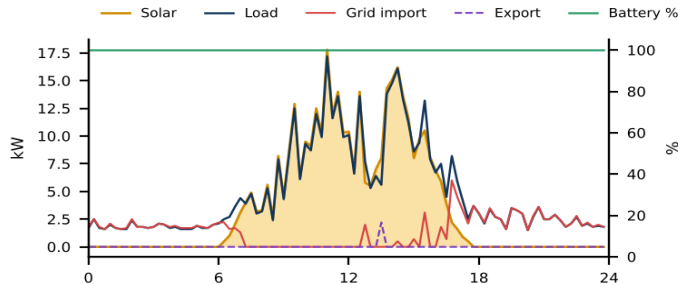
kWh/day bought

14

kWh exported

0.0

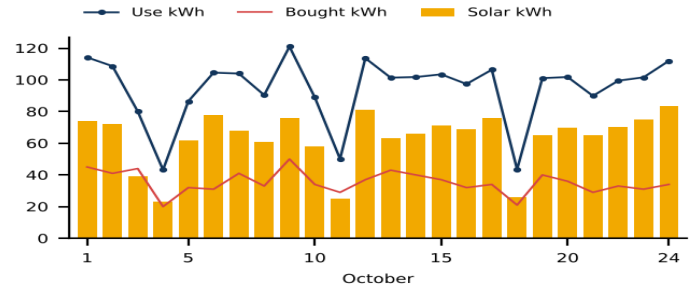
kWh/day from battery



24 October, 5-minute data

What we found

- Lowest yield in the fleet: 1.26 kWh/kWp/day (63 kWh/day from 50 kWp); peak only 17.8 kW on a clear day.
- No battery is installed. The '100% SOC' reading comes from a battery type still selected in the inverter.
- With zero export and no storage, the inverter can only produce what the workshop uses at that moment, so most of the array is throttled at midday. At night the site buys 2-6 kW.



Daily totals, 1-24 October

What to do

- Set the inverter battery option to 'No battery' (being done remotely, October 2026).
- Ask EDL whether grid export or a feed-in contract is possible. If yes, replace zero export with an export limit: up to +100 kWh/day.
- Run compressors and other heavy workshop loads 10:00-15:00.
- Consider a battery only if evening grid use justifies it.

Restaurant A, Pathum Thani

24 kWp · 20 kW 3-phase hybrid inverter · no battery

About 2/3 of panels not producing

1208

kWh solar

2.10

kWh/kWp/day

21%

solar share of use

182.1

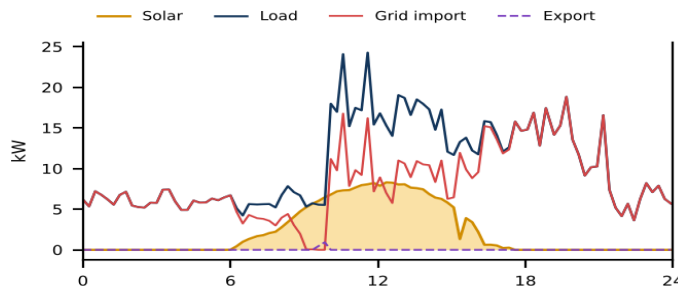
kWh/day bought

22

kWh exported

0.0

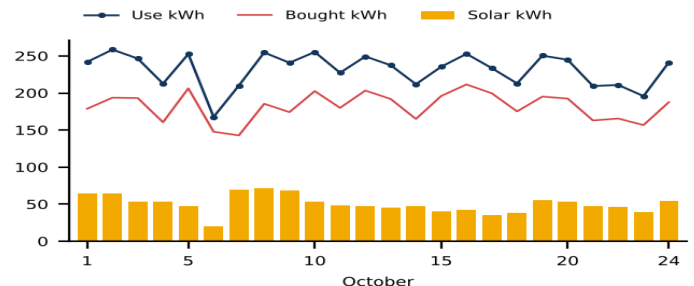
kWh/day from battery



24 October, 5-minute data

What we found

- 24 kWp but only 8.3 kW peak on 24 Oct (0.35 kW per kWp) while the restaurant was importing 15-18 kW – nothing should be limiting the panels.
- Yield 2.1 kWh/kWp/day against 3.8-4.0 at similar central/northern sites.
- Solar covers only 21% of a very large load (231 kWh/day).



Daily totals, 1-24 October

What to do

- Site check of every string: DC isolators, fuses, MC4 connectors and MPPT input currents; one or two strings are probably disconnected or tripped.
- Expected gain once fixed: about 1,300-1,500 kWh/month.

School, Tak

30.96 kWp · 50 kW 3-phase hybrid inverter · no battery

Battery not working · offline

1726

kWh solar

2.32

kWh/kWp/day

42%

solar share of use

84.8

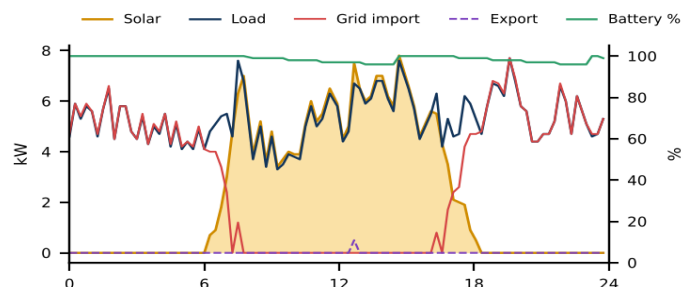
kWh/day bought

13

kWh exported

0.0

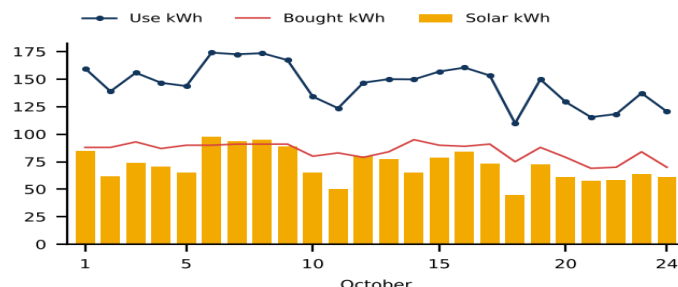
kWh/day from battery



24 October, 5-minute data

What we found

- Went offline at 01:01 on 25 Oct.
- Battery reads 96–100% all day and never charges or discharges; 34 battery-management (BMS) alarms in October.
- Without the battery the inverter limits solar to the school's load: only 7.8 kW peak from 31 kWp, 2.3 kWh/kWp/day.
- Buys about 85 kWh a day from the grid.



Daily totals, 1–24 October

What to do

- Restore the datalogger connection.
- Check the battery: BMS communication cable (CAN/RS485), battery breaker and the battery model selected in the inverter; clear the BMS alarms.
- With the battery working, midday surplus can be stored for the afternoon – expected 30–40 kWh/day more solar used.

Café, Chiang Rai

23.22 kWp · 15 kW 3-phase hybrid inverter · battery

Battery model error for 101 days

1876

kWh solar

3.37

kWh/kWp/day

75%

solar share of use

26.9

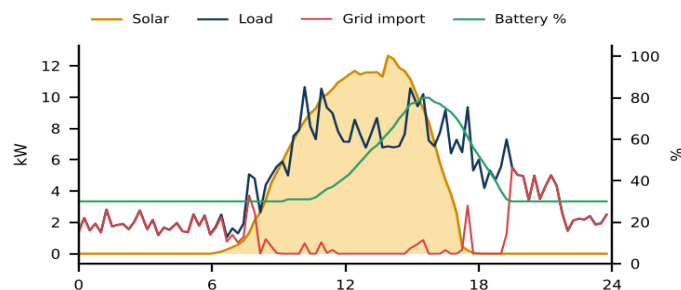
kWh/day bought

0

kWh exported

19.8

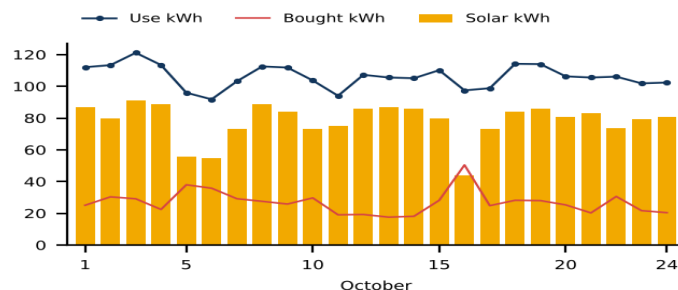
kWh/day from battery



24 October, 5-minute data

What we found

- Active alarm 'BattChoose-Err' since 15 Jul 2026: the battery model selected in the inverter does not match the battery.
- The battery only works between 30% and 80% and never reaches full, so evening power is bought from the grid (27 kWh/day).
- 23.2 kWp on a 15 kW inverter – peak 12.6 kW, so clipping is small.



Daily totals, 1–24 October

What to do

- Select the correct battery model in the inverter and restart it (as the alarm advises).
- Then set the battery low/overdischarge SOC to 20% so the full battery is used.
- Expected: 5–8 kWh/day less grid.

CHANGE SETTINGS · 14 plants (incl. Car workshop, Vientiane – see page 5)

Factory, Chiang Rai

20 kWp · 20 kW 3-phase hybrid inverter · no battery

Meter readings · export on closed days

892

kWh solar

1.86

kWh/kWp/day

35%

solar share of use

62.2

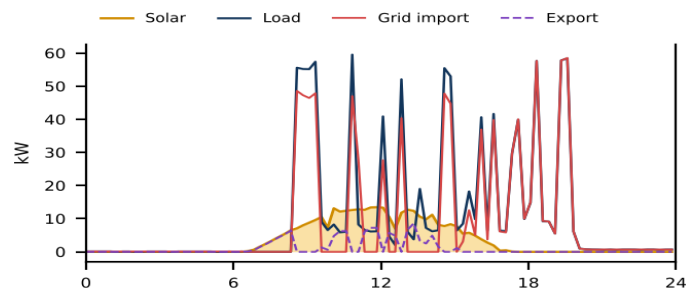
kWh/day bought

207

kWh exported

0.0

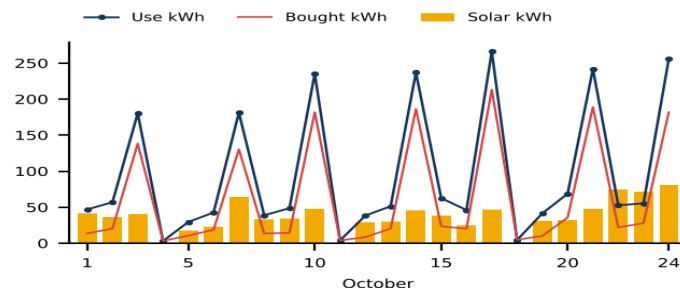
kWh/day from battery



24 October, 5-minute data

What we found

- Load readings jump to 55 kW for single samples and grid readings swing ± 48 kW – meter/CT readings are unreliable.
- 207 kWh exported; production near zero on Sundays (4, 11, 18 Oct) when the factory is closed.



Daily totals, 1-24 October

What to do

- Finish the CT/meter check and confirm zero export works.
- Balance the load across the three phases (being monitored separately).

Home S15, Trang

10 kWp · 10 kW 3-phase hybrid inverter · battery

Battery full by 10:15 · curtailed

458

kWh solar

1.91

kWh/kWp/day

70%

solar share of use

5.9

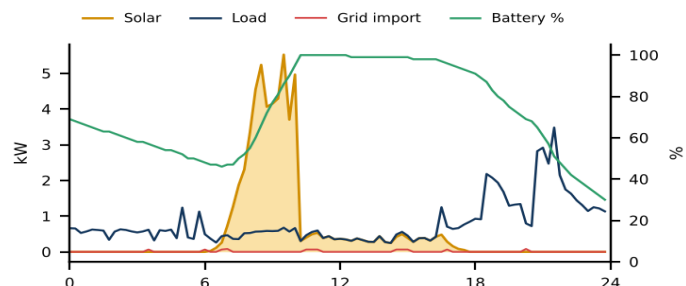
kWh/day bought

81

kWh exported

10.0

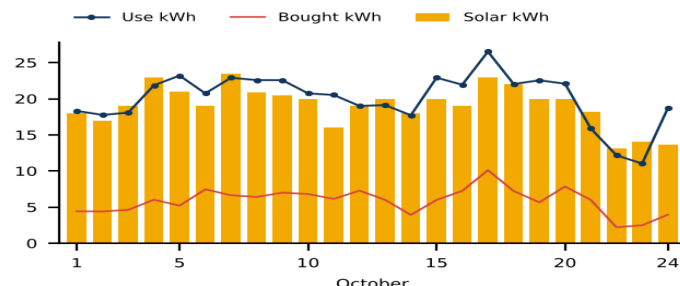
kWh/day from battery



24 October, 5-minute data

What we found

- Battery is full by 10:15, after which the panels are throttled to the house load (0.3-0.5 kW).
- Only 1.9 kWh/kWp/day; 81 kWh exported unpaid.



Daily totals, 1-24 October

What to do

- Move daytime loads (water heater, washing, air-con, pump) to 10:00-15:00.
- Set export limit to 0 W, or consider a larger battery if evening use grows.

Home S5, Songkhla

15 kWp · 15 kW 3-phase hybrid inverter · battery

Battery only used 50-98% · export

713

kWh solar

1.98

kWh/kWp/day

69%

solar share of use

10.4

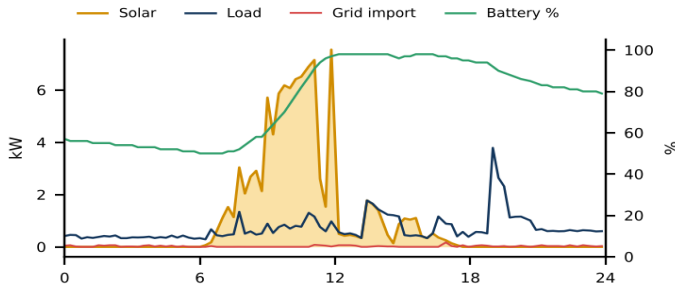
kWh/day bought

223

kWh exported

21.3

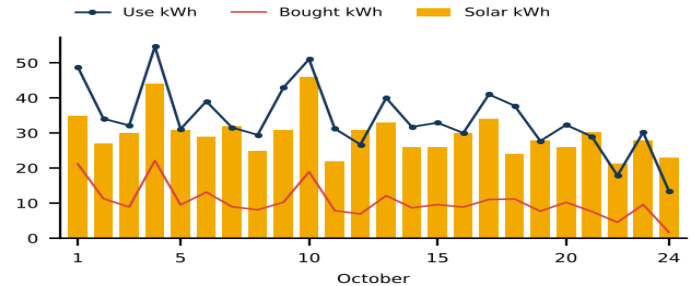
kWh/day from battery



24 October, 5-minute data

What we found

- Battery never goes below 50% – about half of it is never used.
- Sells 223 kWh to the grid while buying 251 kWh (unpaid export).
- Battery full by noon, then solar is throttled; 29 alarms.



Daily totals, 1-24 October

What to do

- Lower battery low/overdischarge SOC to 20%.
- Set export limit to 0 W (Solar Sell off) unless the owner has a sell-back contract.
- Expected: 6-9 kWh/day less grid.

Apartment S1, Songkhla

15 kWp · 15 kW 3-phase hybrid inverter · battery

225 kWh exported

763

kWh solar

2.12

kWh/kWp/day

68%

solar share of use

10.6

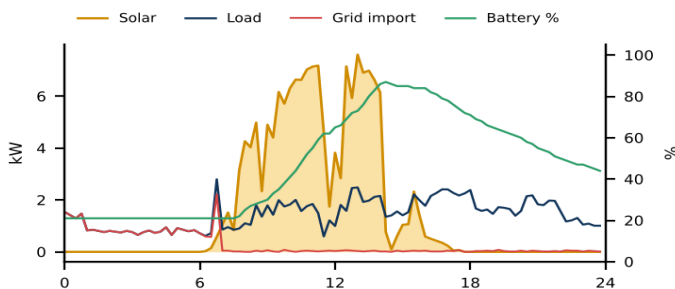
kWh/day bought

225

kWh exported

19.4

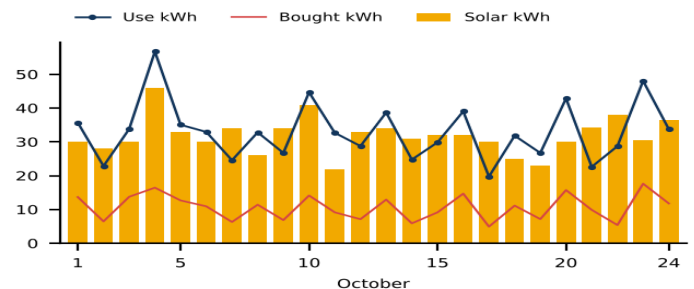
kWh/day from battery



24 October, 5-minute data

What we found

- Sells 225 kWh while buying 255 kWh (unpaid export).
- Battery cycles 21-87%; yield 2.1 kWh/kWp/day (rainy southern October).



Daily totals, 1-24 October

What to do

- Set export limit to 0 W / Solar Sell off, so surplus goes to the battery first.
- Check the Time-of-Use charge slots allow charging all day.

Home S12, Chiang Rai

6.5 kWp · 10 kW hybrid inverter · no battery

New · repeated data · export

263

kWh solar

2.25

kWh/kWp/day

48%

solar share of use

10.1

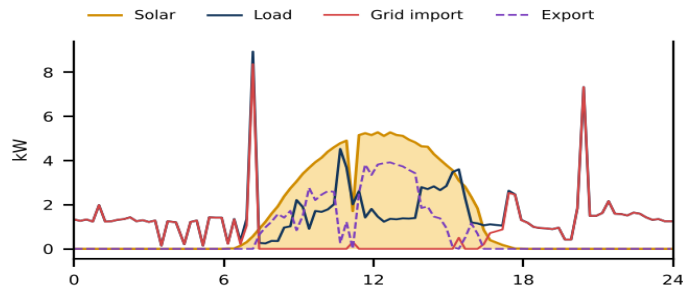
kWh/day bought

94

kWh exported

0.0

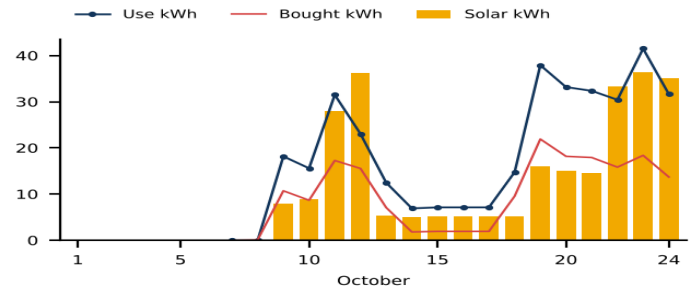
kWh/day from battery



24 October, 5-minute data

What we found

- Connected 7 Oct. 13–17 Oct show exactly the same 5.2 kWh every day – the datalogger was probably not updating.
- No battery; exports up to 3.9 kW at midday (94 kWh so far).
- 6.5 kWp on a 10 kW inverter – room for about 4 kWp more panels.



Daily totals, 1–24 October

What to do

- Confirm the datalogger now reports live data.
- Set export limit to 0 W unless a PEA permit is in place; consider more panels or a battery later.

Shop, Koh Samui

14.19 kWp · 16 kW 1-phase hybrid inverter · battery

Battery charge rate capped

783

kWh solar

2.30

kWh/kWp/day

77%

solar share of use

9.8

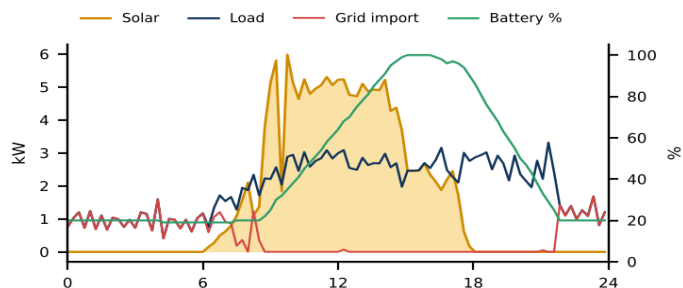
kWh/day bought

0

kWh exported

10.8

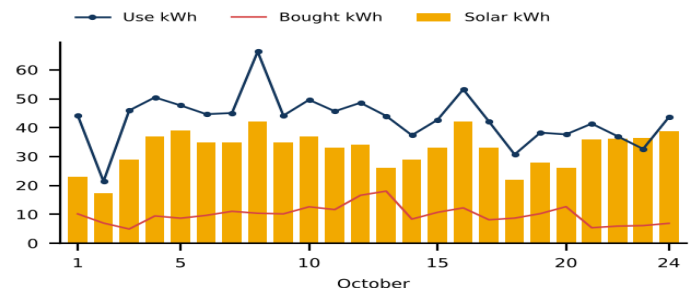
kWh/day from battery



24 October, 5-minute data

What we found

- Battery charges at a flat 2.2 kW for three hours, so the inverter holds the panels at 5–6 kW from 14.2 kWp.
- Battery only full at 14:50; yield 2.3 kWh/kWp/day.



Daily totals, 1–24 October

What to do

- Raise the battery charge current limit (e.g. 50 → 100 A, within the BMS limit) so the battery fills earlier from solar.
- Expected: 4–6 kWh/day more solar used.

Farm A, Trang

10 kWp · 10 kW 1-phase hybrid inverter · battery

56 grid over-voltage trips

596

kWh solar

2.48

kWh/kWp/day

62%

solar share of use

14.0

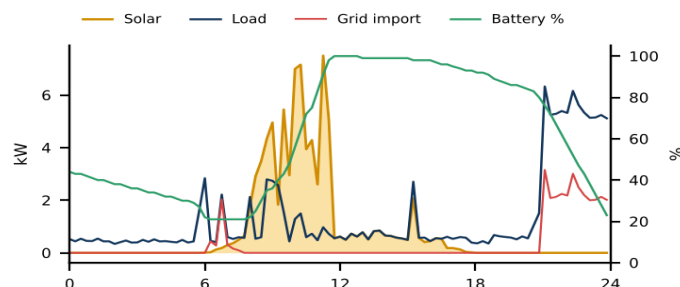
kWh/day bought

0

kWh exported

11.3

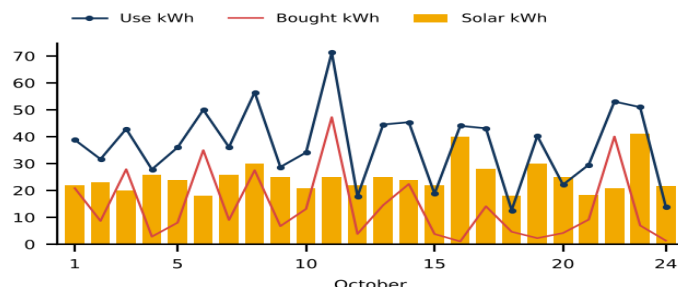
kWh/day from battery



24 October, 5-minute data

What we found

- 56 'OV-G-V01' grid over-voltage alarms in October – the inverter disconnects each time and production stops.
- Battery discharge is capped at about 3.2 kW while the evening load is 5 kW, so the grid supplies the rest.
- Battery full by 11:30, then the panels are throttled for the rest of the day.



Daily totals, 1-24 October

What to do

- Measure grid voltage at the meter; ask PEA to check the transformer tap if it is above 240-250 V. Check AC cable size/voltage drop to the inverter.
- Raise the battery discharge current limit (within the BMS limit).
- Move pumps and other big loads to 11:00-15:00; a second battery would also use the afternoon surplus.

Home S11, Lampang

13.265 kWp · 8 kW 1-phase hybrid inverter · battery

Grid charging at night · 5 days down

993

kWh solar

3.12

kWh/kWp/day

88%

solar share of use

5.7

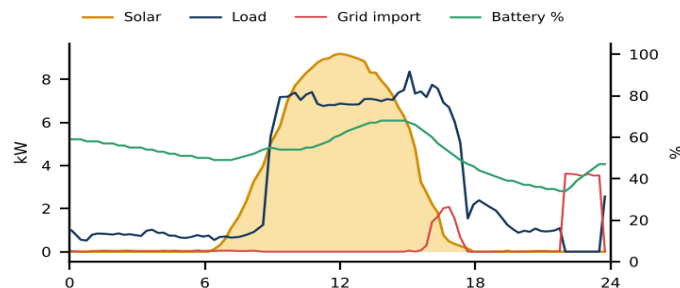
kWh/day bought

0

kWh exported

15.8

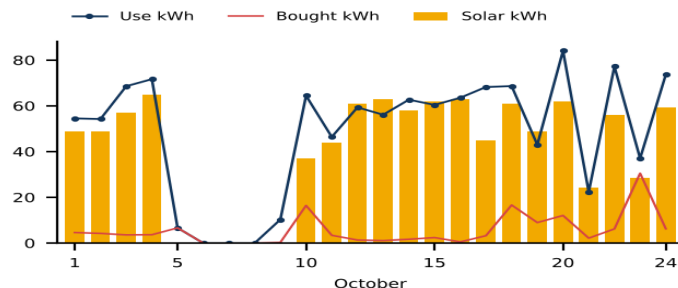
kWh/day from battery



24 October, 5-minute data

What we found

- Battery charges from the grid at about 4.2 kW from 22:00 to 23:30 (≈6 kWh a night bought just to fill the battery).
- No production 5-9 Oct (5 days).
- 13.3 kWp on an 8 kW inverter (DC/AC 1.66).



Daily totals, 1-24 October

What to do

- Turn off grid charging / the night charge time slot unless the owner is on a TOU tariff and wants it.
- Find out why the system stopped 5-9 Oct (inverter fault, breaker, or power cut) and enable fault notifications.
- Watch midday clipping; the extra panels mainly help mornings and afternoons.

Office S1, Songkhla

8 kWp · 8 kW 1-phase hybrid inverter · no battery

Data gaps · 163 kWh exported

670

kWh solar

3.49

kWh/kWp/day

65%

solar share of use

11.2

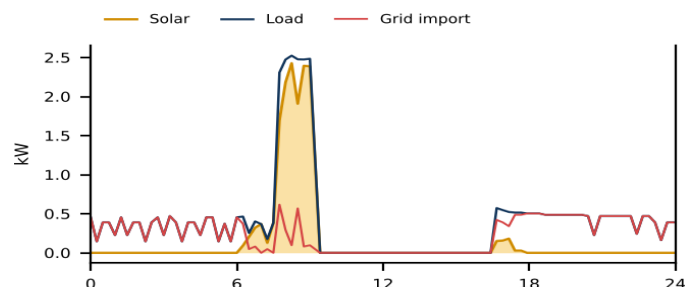
kWh/day bought

163

kWh exported

0.0

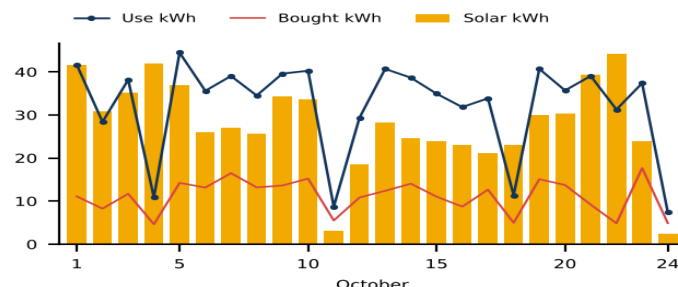
kWh/day from battery



24 October, 5-minute data

What we found

- Data missing for hours (e.g. 09:15–15:30 on 24 Oct, and 11 Oct) – the datalogger drops out.
- No battery; 163 kWh exported unpaid.



Daily totals, 1–24 October

What to do

- Check the WiFi signal at the datalogger; move the router or add a repeater.
- Set export limit to 0 W, or add a battery to use the surplus in the evening.

Gold shop, Songkhla

6 kWp · 6 kW 1-phase hybrid inverter · no battery

Export · zero-export from 16 Oct

505

kWh solar

3.51

kWh/kWp/day

62%

solar share of use

9.1

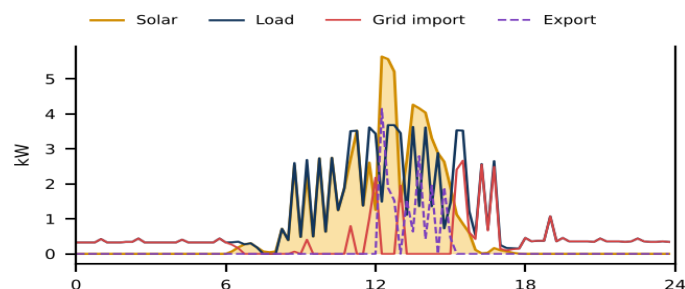
kWh/day bought

156

kWh exported

0.0

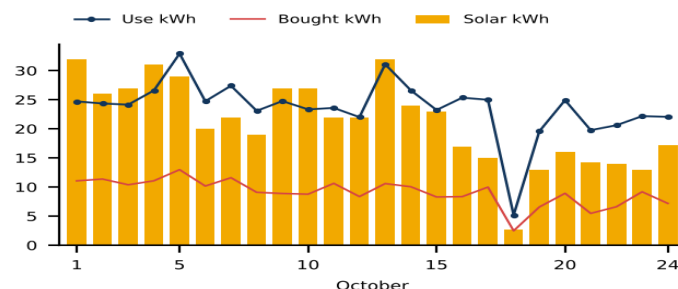
kWh/day from battery



24 October, 5-minute data

What we found

- No battery. 156 kWh exported before 16 Oct; from 16 Oct export stops but daily solar also drops from 20–30 to 13–17 kWh – the panels are now throttled to the shop load.



Daily totals, 1–24 October

What to do

- A 10 kWh battery would store about 8–10 kWh/day that is now lost.
- Otherwise move shop loads (air-con, polishing) to the sunniest hours.

Home S3, Lamphun

8 kWp · 8 kW 1-phase hybrid inverter · battery

Discharge capped 1.6 kW · floor 35%

705

kWh solar

3.67

kWh/kWp/day

60%

solar share of use

19.4

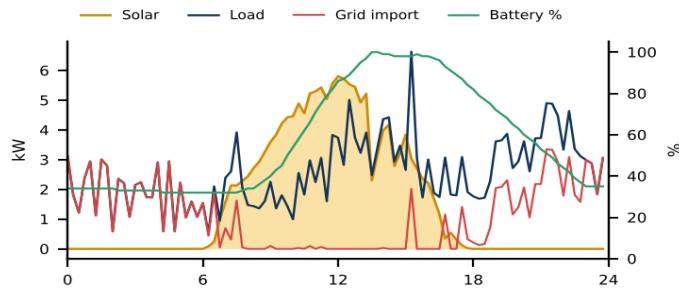
kWh/day bought

0

kWh exported

10.3

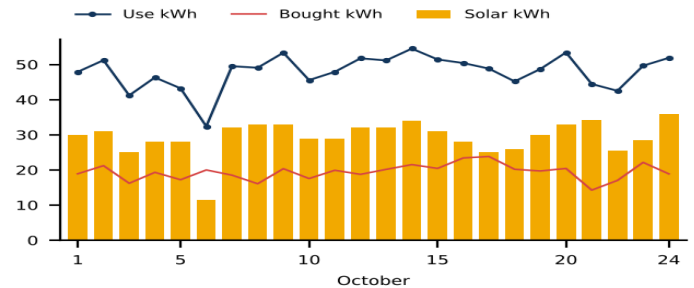
kWh/day from battery



24 October, 5-minute data

What we found

- At night the battery discharges at only 1.6 kW while the house uses 3-5 kW; the grid supplies the rest (19 kWh/day bought).
- Battery stops at about 35% in the morning.
- Battery full by 13:30, then solar is throttled.



Daily totals, 1-24 October

What to do

- Raise the battery discharge current limit and lower the battery low SOC to 20%.
- Expected: 4-6 kWh/day less grid.

Forest house, Chiang Rai

9.28 kWp · 8 kW 1-phase hybrid inverter · battery

Battery reserved · 417 kWh exported

844

kWh solar

3.79

kWh/kWp/day

52%

solar share of use

15.3

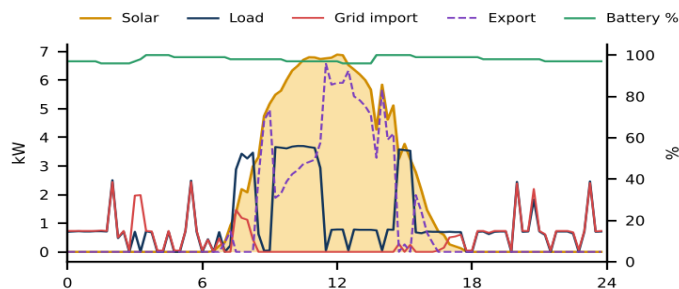
kWh/day bought

417

kWh exported

3.7

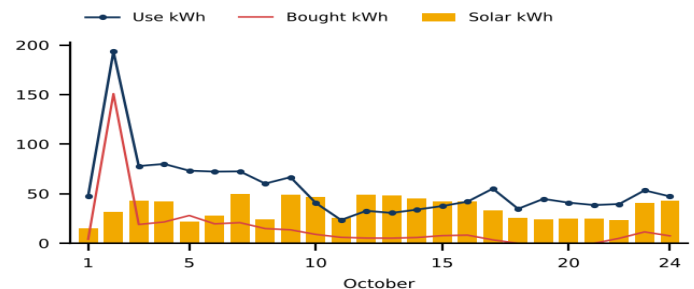
kWh/day from battery



24 October, 5-minute data

What we found

- Battery sits at 96-100% and is not used: the house buys power at night while the battery is full.
- All house load is on the backup port, and the grid CT does not see it - the inverter exports up to 6.6 kW at midday: 417 kWh sent to the grid in 24 days, unpaid.
- 132 alarms in the period, mostly NO-Grid.



Daily totals, 1-24 October

What to do

- Move the house load (or the CT) so the meter measures the whole house; set Work Mode to Self-Use and export limit to 0 W.
- Lower the backup/reserve SOC to 20-30% so the battery covers the night.
- Expected: about 400 kWh/month less export and 300 kWh/month less grid purchase.

Home S6, Phetchabun

8 kWp · 8 kW 1-phase hybrid inverter · battery

Battery stops at night · 359 kWh exported

864

kWh solar

4.50

kWh/kWp/day

51%

solar share of use

18.7

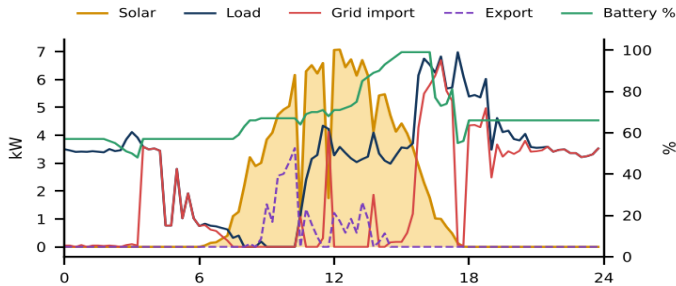
kWh/day bought

359

kWh exported

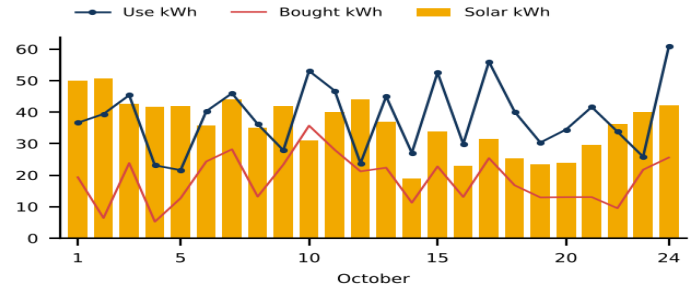
12.5

kWh/day from battery



What we found

- At night the battery stops discharging with 66% left while the house buys 3.4 kW from the grid.
- At midday the battery charges at only about 3 kW and the rest (up to 3.5 kW) is exported: 359 kWh in 24 days, unpaid.
- Good yield (4.5 kWh/kWp/day).



What to do

- Check Time-of-Use / discharge time slots: allow discharge 00:00-24:00 down to 20%.
- Raise the battery charge current limit (within the battery's BMS limit) and set the export limit to 0 W unless the owner has a PEA sell-back contract.
- Expected: about 350 kWh/month more self-use.

UPGRADE OPPORTUNITY · 8 plants

Forklift workshop, Songkhla

20 kWp · 20 kW 3-phase hybrid inverter · no battery

Panels throttled · no daytime load

546

kWh solar

1.14

kWh/kWp/day

76%

solar share of use

7.6

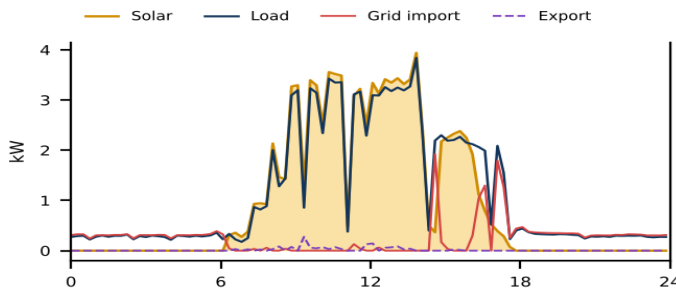
kWh/day bought

14

kWh exported

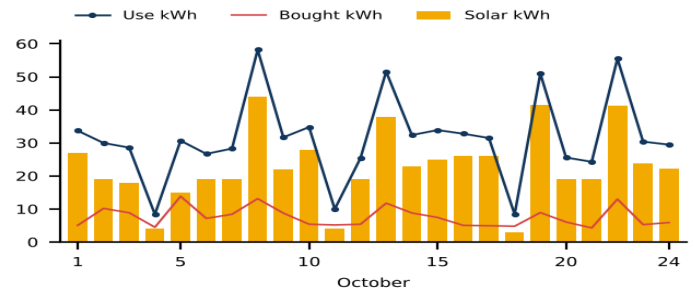
0.0

kWh/day from battery



What we found

- Lowest yield on a 20 kWp system: 1.14 kWh/kWp/day. No battery and zero export, so the inverter only produces what the site uses (3.9 kW peak).
- Site uses only 31 kWh/day; 17 grid under-voltage alarms.



What to do

- Charge forklifts and run compressors between 10:00 and 15:00 to use the free solar.
- A battery is not worth it at today's low grid purchase (8 kWh/day). Check grid voltage because of the under-voltage trips.

Home S8, Lampang

15.24 kWp · 16 kW 1-phase hybrid inverter · battery

Not dirty - just full

433

kWh solar

1.18

kWh/kWp/day

96%

solar share of use

0.9

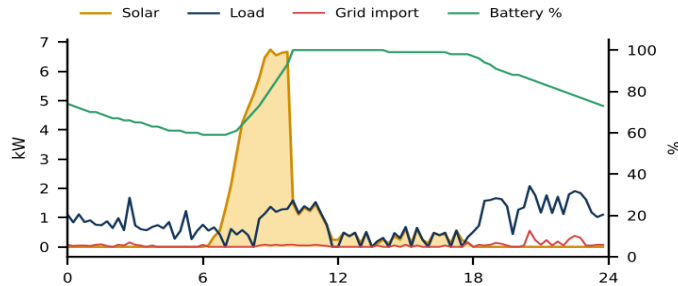
kWh/day bought

0

kWh exported

10.7

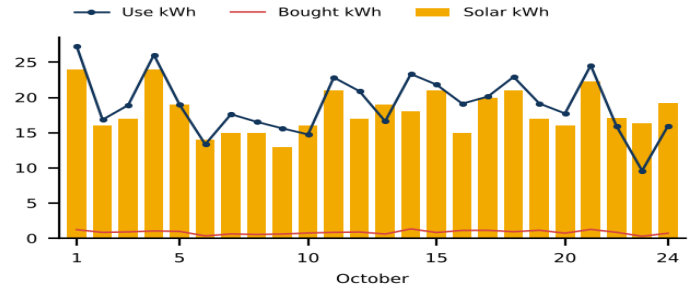
kWh/day from battery



24 October, 5-minute data

What we found

- Low yield (1.18 kWh/kWp/day) is NOT dirty panels: the battery is full by 10:00 and the inverter then throttles the panels to the 0.5-1.5 kW load.
- Buys almost nothing from the grid (21 kWh in 24 days). Battery discharge capped at 1.5 kW.



Daily totals, 1-24 October

What to do

- Panel cleaning will not raise output – no need.
- Use the surplus: electric water heating, pumping, air-con or EV charging in the daytime.

Home S14, Songkhla

10 kWp · 10 kW 1-phase hybrid inverter · battery

Battery too small for evenings

739

kWh solar

3.08

kWh/kWp/day

54%

solar share of use

24.7

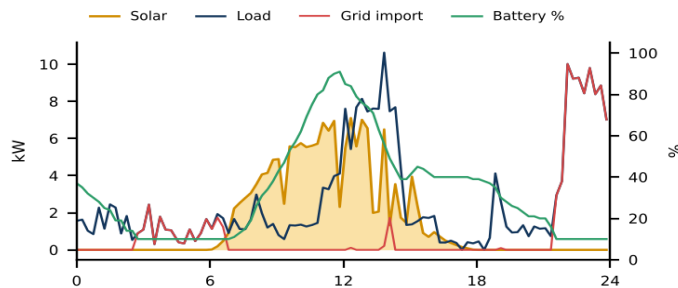
kWh/day bought

0

kWh exported

12.0

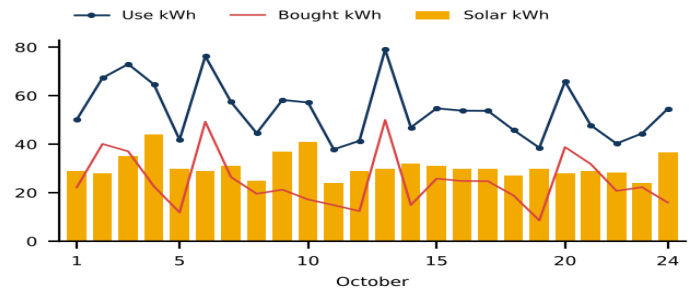
kWh/day from battery



24 October, 5-minute data

What we found

- Battery reaches its 10% floor by about 21:30; evening load 9-10 kW then comes from the grid (25 kWh/day bought).
- Battery low SOC set to 10% – very deep for daily cycling.



Daily totals, 1-24 October

What to do

- Add 10-15 kWh of battery.
- Raise the battery low SOC to 15-20% to protect battery life.

Home S13, Bangkok

20 kWp · 20 kW 3-phase hybrid inverter · no battery

Add battery 20-30 kWh

1503

kWh solar

3.13

kWh/kWp/day

39%

solar share of use

98.4

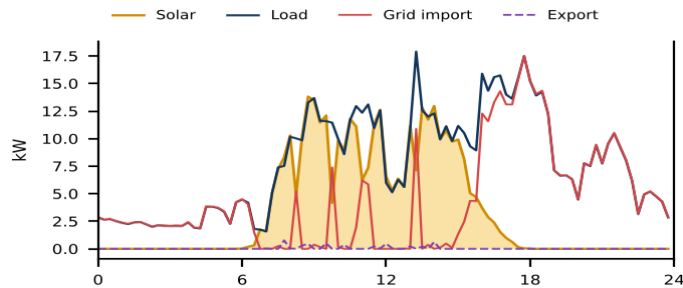
kWh/day bought

19

kWh exported

0.0

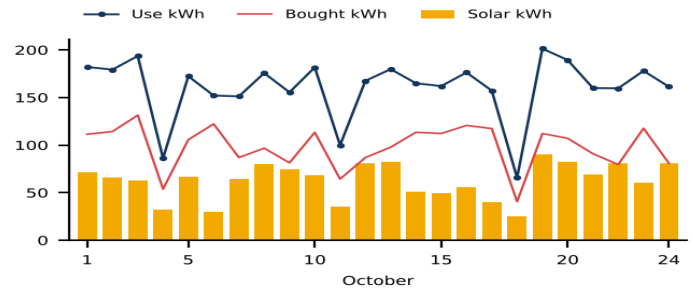
kWh/day from battery



24 October, 5-minute data

What we found

- No battery on a hybrid inverter. Evening load 10-17 kW, buying 98 kWh/day.
- Solar 3.1 kWh/kWp/day (Bangkok). 10 grid over-voltage trips in October.



Daily totals, 1-24 October

What to do

- Add 20-30 kWh of battery: about 600-900 kWh/month less grid.
- Measure grid voltage at the meter because of the over-voltage trips.

Commercial site, Samut Songkhram

20.079 kWp · 20 kW hybrid inverter · battery

Second battery: ≈ +600 kWh/month

1566

kWh solar

3.25

kWh/kWp/day

51%

solar share of use

63.2

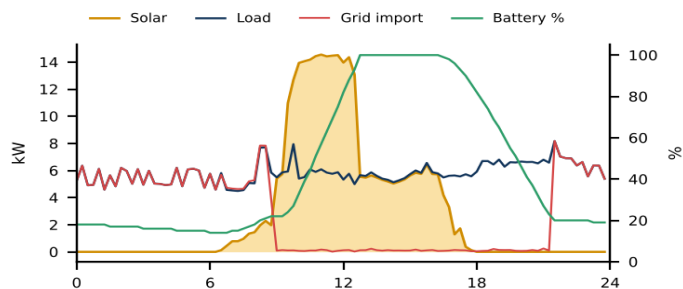
kWh/day bought

1

kWh exported

26.2

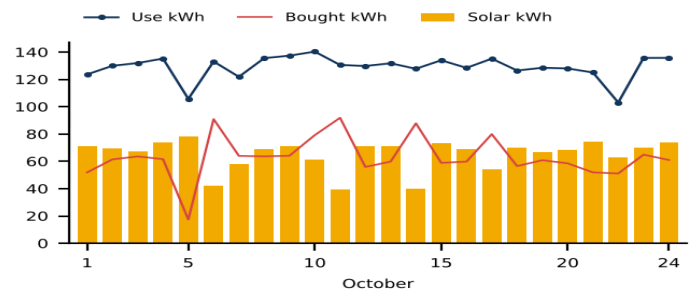
kWh/day from battery



24 October, 5-minute data

What we found

- Battery full by 12:45; the panels then drop from 14.5 kW to 5.5 kW for three hours (about 20 kWh/day thrown away).
- Battery empty by 21:30; the site then buys 6-7 kW all night (63 kWh/day).
- Yield 3.25 kWh/kWp/day.



Daily totals, 1-24 October

What to do

- Add a second battery of about 20 kWh - it would absorb the afternoon surplus and cover the late evening: about 600 kWh/month less grid.
- Keep battery low SOC at 20%.

Nursing home, Lampang

25.08 kWp · 20 kW 3-phase hybrid inverter · no battery

Add PV + battery

2291

kWh solar

3.81

kWh/kWp/day

38%

solar share of use

154.1

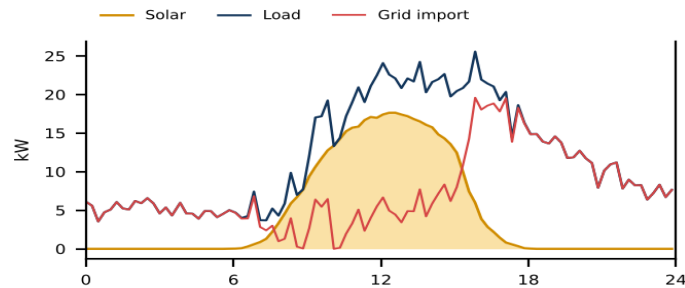
kWh/day bought

3

kWh exported

0.0

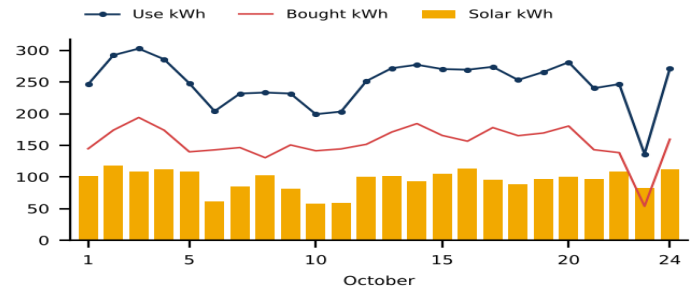
kWh/day from battery



24 October, 5-minute data

What we found

- Solar is fully used (good yield 3.8 kWh/kWp/day) but covers only 38% of the load (249 kWh/day).
- 25 kWp on a 20 kW inverter, no battery; the home buys 154 kWh/day, including 7–14 kW at night.



Daily totals, 1–24 October

What to do

- Add a second inverter with 20–25 kWp more panels (+2,000–2,500 kWh/month).
- Add a battery for the night load.

Laundromat, Songkhla

5.8 kWp · 10 kW 3-phase hybrid inverter · battery

Add 4 kWp panels

538

kWh solar

3.87

kWh/kWp/day

84%

solar share of use

4.4

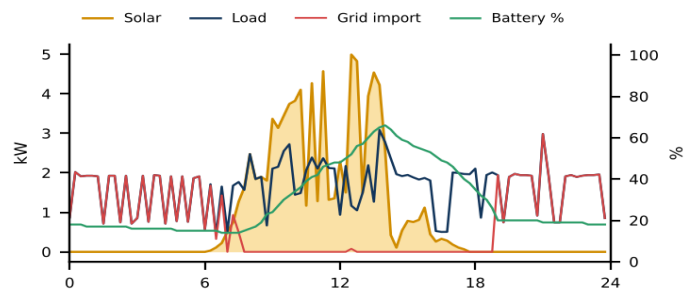
kWh/day bought

46

kWh exported

11.5

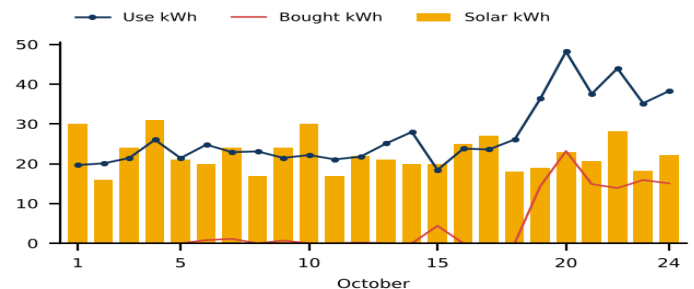
kWh/day from battery



24 October, 5-minute data

What we found

- 5.8 kWp on a 10 kW inverter (DC/AC 0.58); battery never gets above 66%.
- Buys 3 kW at night; 84% solar share.
- Also listed on Huawei FusionSolar with 0 kWp – duplicate plant.



Daily totals, 1–24 October

What to do

- Add about 4 kWp of panels (inverter has room): about +450 kWh/month.
- Remove or merge the duplicate Huawei listing.

Resort, Chiang Rai

30.03 kWp · 50 kW 3-phase hybrid inverter · no battery

Add 20 kWp · meter check

2911

kWh solar

4.04

kWh/kWp/day

67%

solar share of use

209.5

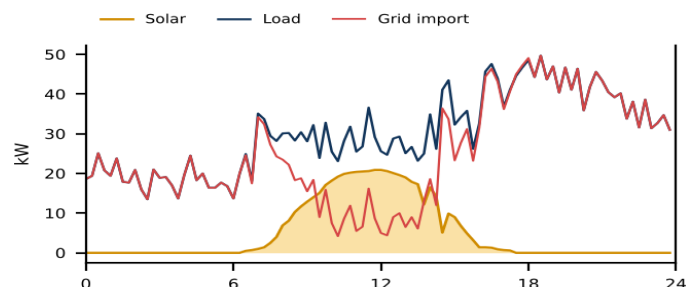
kWh/day bought

115

kWh exported

0.0

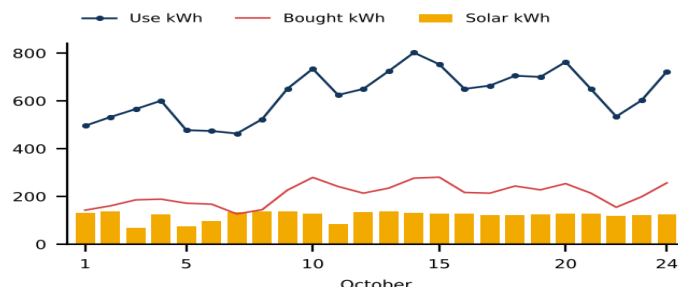
kWh/day from battery



24 October, 5-minute data

What we found

- Very large load: 628 kWh/day. Solar 30 kWp gives 4.0 kWh/kWp/day (good) but covers only a small part.
- Meter figures do not add up: the 24 Oct profile shows 30–49 kW imported overnight, far more than the 210 kWh/day daily import figure.
- 50 kW inverter with only 30 kWp of panels.



Daily totals, 1–24 October

What to do

- Check the grid meter / CT ratio setting so import and load are reported correctly.
- Add about 20 kWp of panels on the existing 50 kW inverter: about +2,400 kWh/month.
- Battery storage for the evening peak is the next step.

HEALTHY · 8 plants

Off-grid farm, Chiang Mai

6 kWp · 6 kW hybrid inverter · battery

Off-grid · oversized for load

159

kWh solar

1.11

kWh/kWp/day

100%

solar share of use

0.0

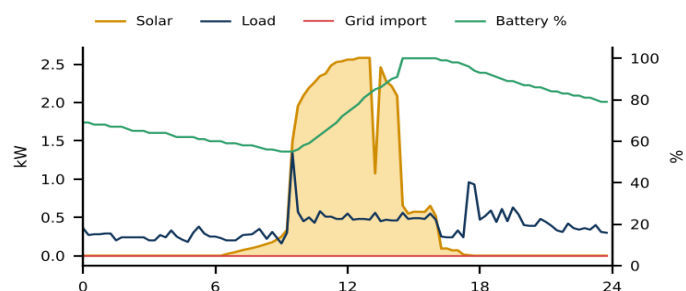
kWh/day bought

0

kWh exported

3.8

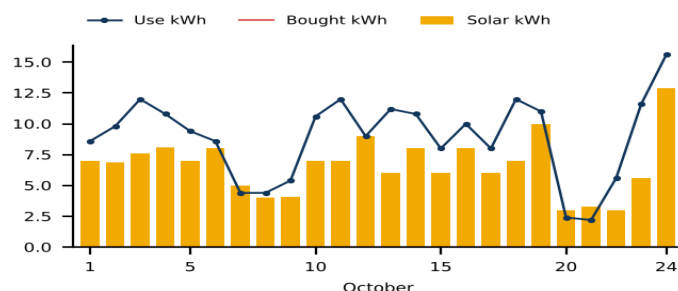
kWh/day from battery



24 October, 5-minute data

What we found

- Off-grid: all load (≈4 kWh/day) on the backup port; battery full by 14:30.
- Low yield (1.1 kWh/kWp/day) only because there is little to power.



Daily totals, 1–24 October

What to do

- No action; extra daytime loads can be added freely.

Home S7, Shan State (Myanmar)

10.24 kWp · 8 kW 1-phase hybrid inverter · battery

92% solar

600

kWh solar

2.44

kWh/kWp/day

92%

solar share of use

2.2

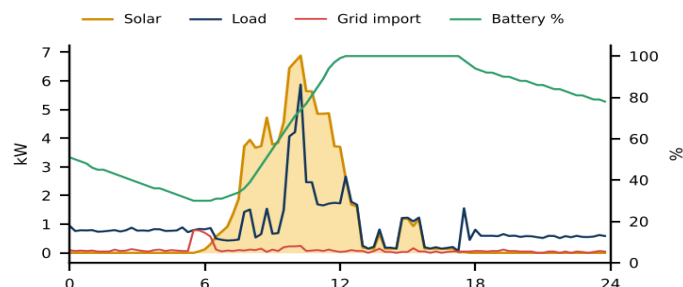
kWh/day bought

0

kWh exported

11.2

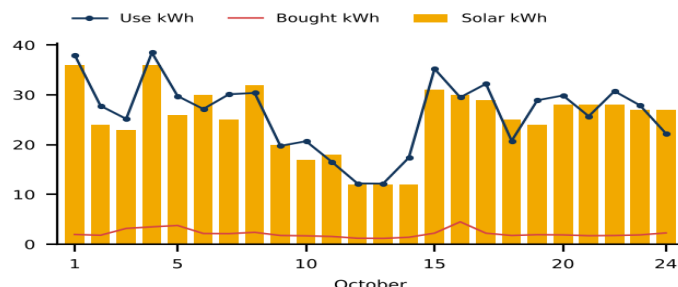
kWh/day from battery



24 October, 5-minute data

What we found

- 92% solar share. Time zone UTC+06:30 is correct for Shan State, Myanmar.
- Battery full by 12:00, then solar throttled; 10.24 kWp on 8 kW inverter.



Daily totals, 1-24 October

What to do

- No action; daytime loads could use the afternoon surplus.

Restaurant B, Krabi

10 kWp · 10 kW 1-phase hybrid inverter · battery

97% solar

667

kWh solar

2.78

kWh/kWp/day

97%

solar share of use

0.9

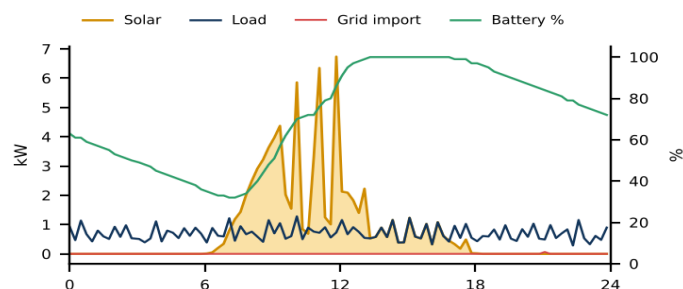
kWh/day bought

0

kWh exported

11.0

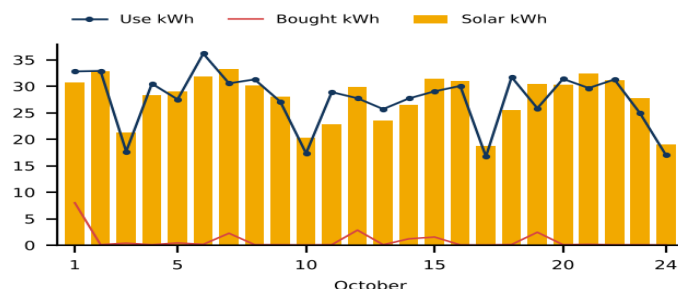
kWh/day from battery



24 October, 5-minute data

What we found

- 97% solar share; battery full by 12:50, then solar is throttled.



Daily totals, 1-24 October

What to do

- No action. Run extra loads at midday if needed.

Home S9, Pathum Thani

6.45 kWp · 8 kW hybrid inverter · battery

Healthy

589

kWh solar

3.81

kWh/kWp/day

69%

solar share of use

10.8

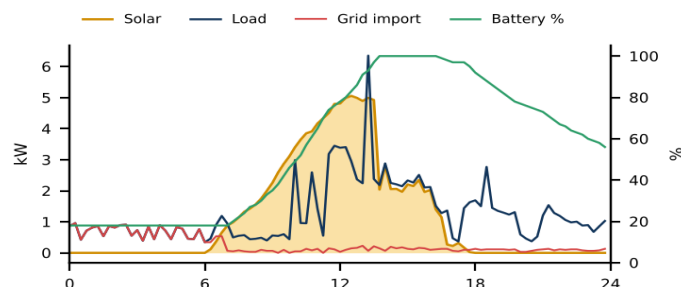
kWh/day bought

0

kWh exported

10.5

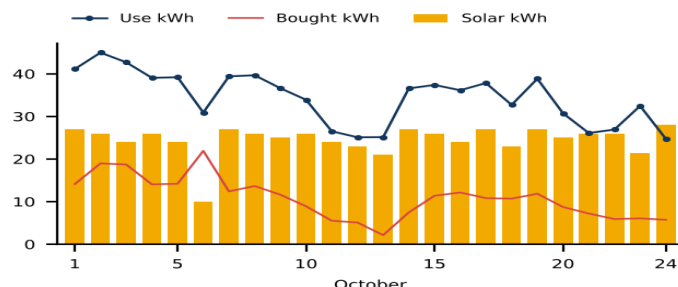
kWh/day from battery



24 October, 5-minute data

What we found

- 3.8 kWh/kWp/day; 69% solar share; battery full by 13:45 and empty before dawn.



Daily totals, 1-24 October

What to do

- A small extra battery (5 kWh) would cover the early-morning grid use.

Home S2, Lamphun

8 kWp · 8 kW 1-phase hybrid inverter · battery

90% solar

737

kWh solar

3.84

kWh/kWp/day

90%

solar share of use

3.2

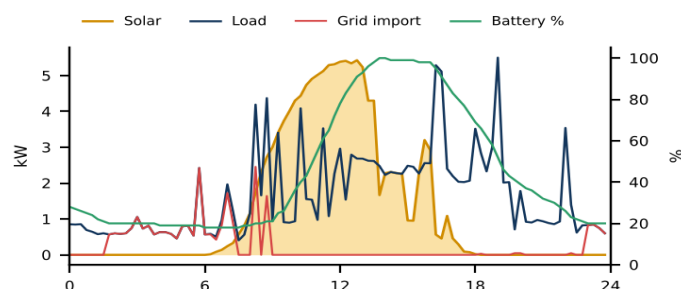
kWh/day bought

0

kWh exported

12.4

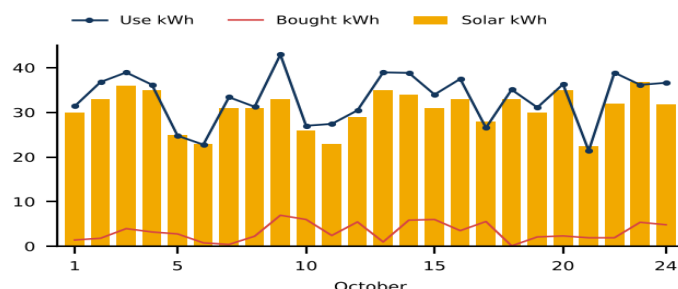
kWh/day from battery



24 October, 5-minute data

What we found

- 90% solar share; 3.8 kWh/kWp/day; battery full by 13:30.



Daily totals, 1-24 October

What to do

- No action.

Logistics office, Songkhla

8.12 kWp · 8 kW 1-phase hybrid inverter · battery

Healthy

796

kWh solar

4.08

kWh/kWp/day

77%

solar share of use

9.4

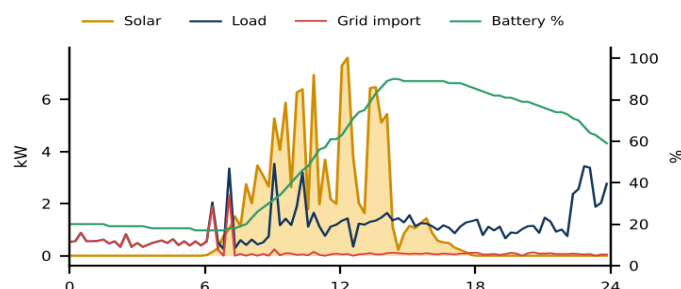
kWh/day bought

0

kWh exported

15.1

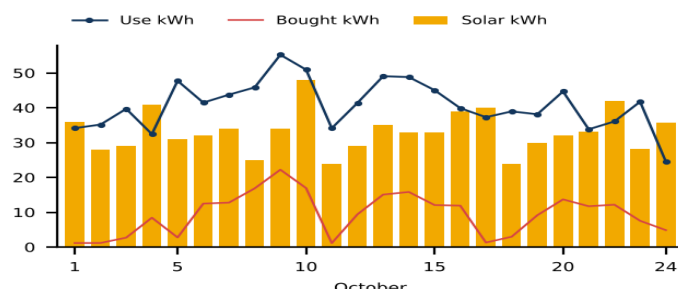
kWh/day from battery



24 October, 5-minute data

What we found

- 4.1 kWh/kWp/day (south); 77% solar share; battery 17-90%.



Daily totals, 1-24 October

What to do

- No action.

Home S16, Krabi

10 kWp · 10 kW 1-phase hybrid inverter · battery

98% solar · check kWp

1183

kWh solar

4.93

kWh/kWp/day

98%

solar share of use

0.9

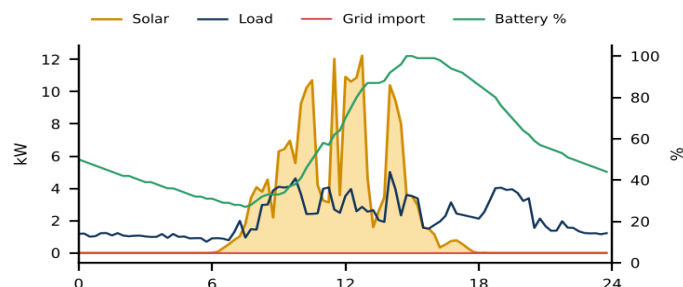
kWh/day bought

0

kWh exported

22.7

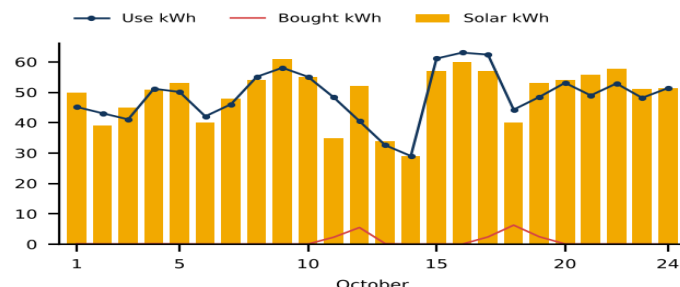
kWh/day from battery



24 October, 5-minute data

What we found

- Runs almost fully on solar (98%); grid nearly unused.
- Peak 12.2 kW on '10 kWp' - the registered capacity is probably too low.



Daily totals, 1-24 October

What to do

- Correct the PV capacity in SolisCloud. No other action.

Home S1, Songkhla

10 kWp · 10 kW 1-phase hybrid inverter · battery

Best yield · check kWp

1414

kWh solar

5.89

kWh/kWp/day

75%

solar share of use

18.3

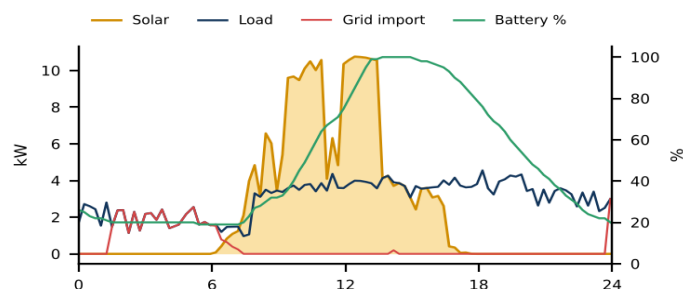
kWh/day bought

0

kWh exported

24.0

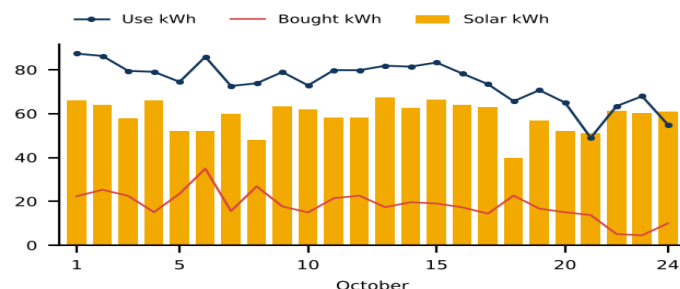
kWh/day from battery



24 October, 5-minute data

What we found

- Best yield in the fleet: 5.9 kWh/kWp/day. Peak 10.8 kW on '10 kWp' - the registered capacity is probably lower than the panels installed.
- Battery full by 13:10; 8 low-battery and 8 under-voltage alarms.



Daily totals, 1-24 October

What to do

- Correct the PV capacity in SolisCloud.
- A second battery would use the afternoon surplus (battery full by 13:10).



How this review was made

- Source: SolisCloud monitoring for all plants Solar ESS installed and monitors there, read on 25 October 2026 (read only – no settings were changed).
- Daily energy for 1–24 October (25 October excluded as incomplete); 5-minute power and battery profiles for 24 October.
- kWh/kWp/day = solar energy ÷ registered PV capacity ÷ days with data. Solar share of use = (use – grid purchase) ÷ use.
- 'Exported unpaid' assumes no PEA sell-back contract.
- Site names, owners, serial numbers and exact addresses are removed; each plant keeps the same label in future monthly reports.
- Gains are estimates and are confirmed on site before any work. Solar ESS supplies energy from the solar system only and is not responsible for the electrical system inside customers' buildings.