

# Monthly Report · October 2026 · Huawei FusionSolar fleet review

10 Huawei plants installed by Solar ESS. Data for 1-24 October 2026, the 24 October day profile, alarms for 1-25 October and live inverter readings on 25 October. Expected October yield is taken as 4.3 kWh per kWp per day, and savings are estimated at 4.5 THB/kWh. Site names are replaced with labels that stay the same in future reports.

**210.9 kWp**

Installed PV (3 plants have no kWp set; 5 kWp assumed)

**7,032 kWh**

PV yield, 1-24 October

**5**

Plants to fix now

**4**

Settings or upgrade

**1**

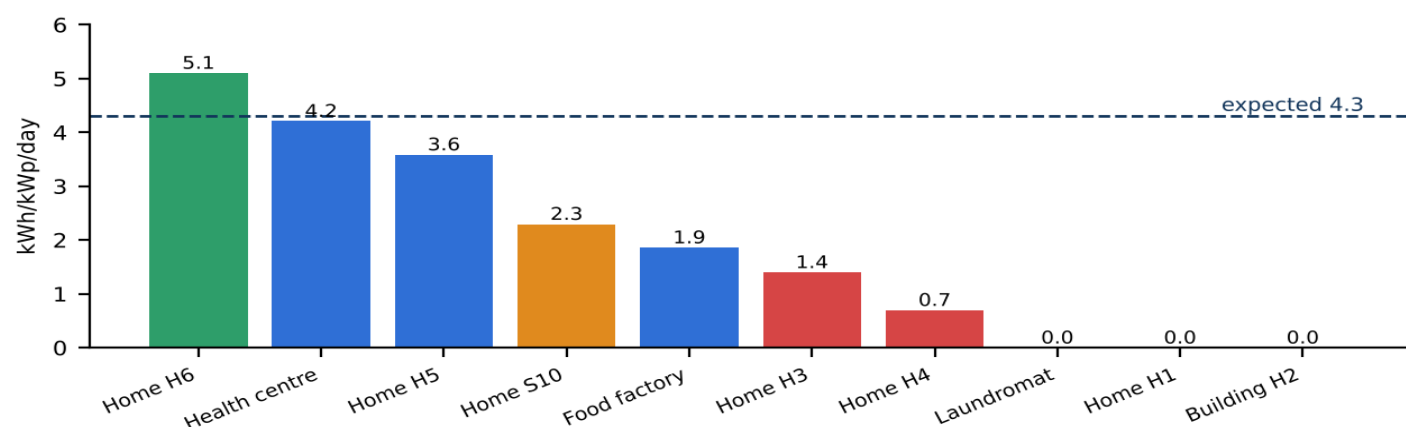
Healthy

## All plants

| Plant                          | kWp   | PV kWh | kWh/kWp per day | Grid buy kWh | Group / main issue                               |
|--------------------------------|-------|--------|-----------------|--------------|--------------------------------------------------|
| Building H2, Chiang Mai        | 53.28 | 0      | -               | -            | ● No data since June 2026                        |
| Home H3, Chiang Rai            | 22    | 647    | 1.40            | -            | ● Constant grid trips - about 65% of energy lost |
| Home H1, Chiang Mai            | 5.55  | 0      | 0.00            | 416          | ● No production since 2 May 2026                 |
| Laundromat, Songkhla           | 5*    | 0      | -               | -            | ● Offline since March 2026 - check if replaced   |
| Home H4, Samut Songkhram       | 4.995 | 84     | 0.70            | 45           | ● Very low yield - 0.7 kWh/kWp                   |
| Home S10, Songkhla             | 5*    | 276    | 2.30            | 0            | ● Meter reads zero - consumption unknown         |
| Food factory, central Thailand | 100   | 4,465  | 1.86            | 5,898        | ● Zero-export curtailment - battery opportunity  |
| Health centre, Chiang Mai      | 5.12  | 517    | 4.21            | 589          | ● Load is double the PV - add panels             |
| Home H5, Chiang Mai            | 5*    | 430    | 3.59            | 224          | ● Exports 62% - battery or load shift            |
| Home H6, Chiang Rai            | 5     | 612    | 5.10            | -            | ● Healthy - watch the grid voltage               |

\* kWp not set in FusionSolar; 5 kWp assumed from the inverter size. Grid buy is blank where the plant has no working power meter.

## Yield per kWp, 1-24 October



Colour = group: red fix now, orange change settings, blue upgrade opportunity, green healthy. The food factory and the health centre are held back by zero export, not by a fault.

## What to do first

- 1 Home H1, Chiang Mai** ≈ 715 kWh/month · ≈ 3,218 THB  
 No output for 6 months. Likely an AC breaker or cable fault, a short site visit.
- 2 Building H2, Chiang Mai** ≈ 5,000 kWh/month · ≈ 22,500 THB  
 53 kWp with no monitoring for 4 months. Restore the logger's internet and confirm the inverter is running.
- 3 Home H3, Chiang Rai** ≈ 1,900 kWh/month · ≈ 8,550 THB  
 Grid trips are losing about 64 kWh a day. Check the grid source and voltage, then fix the meter link.
- 4 Home H4, Samut Songkhram** ≈ 540 kWh/month · ≈ 2,430 THB  
 Very low yield, getting worse every month. Check strings, shading and dirt.
- 5 Laundromat, Songkhla**  
 Offline since March. Confirm whether it was replaced by the SolisCloud inverter.
- 6 Food factory, central Thailand** ≈ 5,400 kWh/month · ≈ 24,300 THB  
 About 240 kWh a day lost to zero export. Offer a 150–200 kWh battery.
- 7 Health centre, Chiang Mai** ≈ 600 kWh/month · ≈ 2,700 THB  
 Load is about twice the PV. Offer about 5 kWp more PV and a second inverter.
- 8 Home H5, Chiang Mai** ≈ 200 kWh/month · ≈ 900 THB  
 Exports 62%. Offer load shifting or a small battery.
- 9 Home S10, Songkhla**  
 Power meter reads zero. Fix the CT or RS485 link and set the kWp.
- 10 Home H6, Chiang Rai**  
 Healthy. Measure the midday grid voltage, which has caused 1,097 short trips.

Monthly values are energy lost or not used, estimated from expected yield (4.3 kWh/kWp/day) or from the load profile. For Building H2 the value is what it produced in the same months of 2025; we can't tell whether it is still producing. For the food factory it is the curtailed PV that a battery could recover.

## Fleet-wide notes

- High grid voltage is a pattern: Home H3 (246–250 V), Home H6 (244 V) and Home H5 all trip on overvoltage. We will bring a voltage logger on the next visits.
- Three plants have no kWp set in FusionSolar, so their yield per kWp can't be tracked. We will set them on the next visit.
- Two sites also appear on SolisCloud (the laundromat and Home S10). We will confirm which system is installed now, so that each plant is reviewed once.
- Next review: 3 November 2026. For each plant fixed this month, the November report will compare output before and after.

Part of the Monthly Report series. See also the SolisCloud and DeyeCloud reviews for October 2026 on [www.solaress.org](http://www.solaress.org).

## Building H2, Chiang Mai

No data since June 2026

[Fix now](#)

**53.28 kWp**

PV · 50 kW inverter

**0 kWh**

PV, 1-24 Oct

-

kWh/kWp/day

-

Consumption

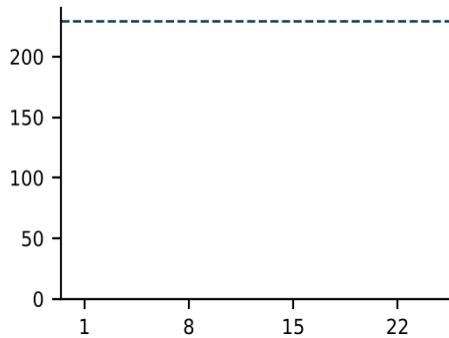
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Bought from grid

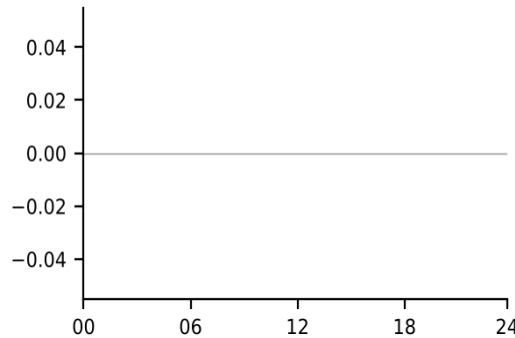
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Exported

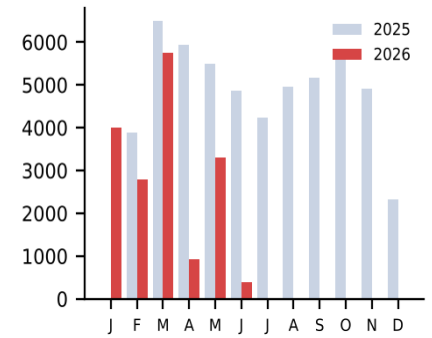
Daily PV, 1-24 Oct (kWh)



24 Oct profile (kW)



Monthly PV (kWh), Oct 2026 = 1-24



### What we found

- The SmartLogger, the 50 kW inverter and both power meters show as disconnected. The last production data is from June 2026 (385 kWh), and the active alarm is "Network Connection Error".
- In 2025 this 53 kWp system made 3,900-6,500 kWh a month. We can't tell from the cloud whether it is still producing, so up to about 5,000 kWh a month is unmonitored.
- Total yield recorded so far is 125,225 kWh.

### What to do

1. Call the owner to ask whether the inverter display shows it running, and whether the internet router or SIM at the logger has changed.
2. Restore the SmartLogger's internet connection (router, LAN cable or 4G SIM), then check that all devices reconnect.
3. If the inverter itself is off, send a technician. A 53 kWp system off for 4 months is worth about 90,000 THB in lost energy.

# Home H3, Chiang Rai

Constant grid trips - about 65% of energy lost

Fix now

**22 kWp**

PV · 20 kW inverter

**647 kWh**

PV, 1-24 Oct

**1.40**

kWh/kWp/day

-

Consumption

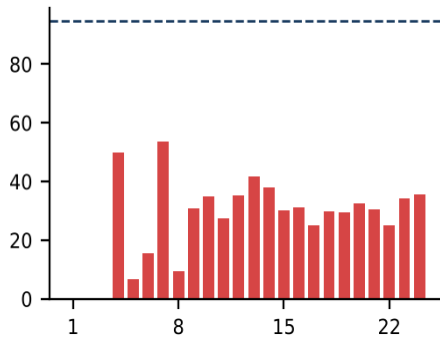
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Bought from grid

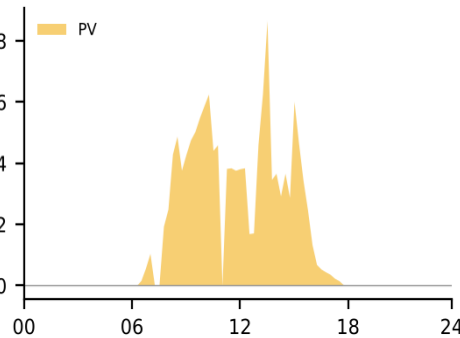
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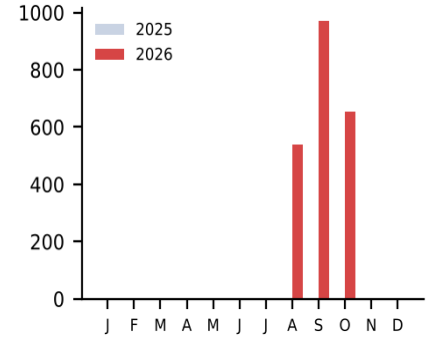
Daily PV, 1-24 Oct (kWh)



24 Oct profile (kW)



Monthly PV (kWh), Oct 2026 = 1-24



## What we found

- 22 kWp on four 5 kW inverters averaged only 30.8 kWh a day (1.4 kWh/kWp) on 4-24 October. At 4.3 kWh/kWp it should make about 95 kWh a day.
- There were more than 4,800 grid trips on all four inverters in October: overfrequency (1,879), overvoltage (1,810), Grid Failed (629) and underfrequency (527). The profile shows output repeatedly dropping to zero.
- Grid voltage at the inverters was already 246-250 V at 10:00 under low load. The overvoltage trip point is about 253 V, so it trips whenever output rises.
- The frequency trips point to an unstable source, such as a weak rural line, a generator, or the output of an off-grid inverter.
- The power meter is disconnected ("Faulty Power Collector"), so FusionSolar has no consumption or grid data.

## What to do

1. Find out what the inverters are actually connected to: the PEA grid, a generator, or an off-grid or backup inverter. If they are AC-coupled behind an off-grid inverter, the settings for that set-up have to be applied.
2. Measure voltage at the meter and at the inverters through a sunny day. If the PEA voltage is high, ask PEA to check the transformer tap. Check that the AC cable to the main board is large enough to keep voltage rise below 2%.
3. Fix the power meter's RS485 link (the CT/LAN cable job already planned) so that consumption and export can be measured.
4. Recovering 60 kWh a day is worth about 8,000 THB a month.

# Home H1, Chiang Mai

No production since 2 May 2026

[Fix now](#)

**5.55 kWp**

PV · 5 kW inverter

**0 kWh**

PV, 1-24 Oct

**0.00**

kWh/kWp/day

**416 kWh**

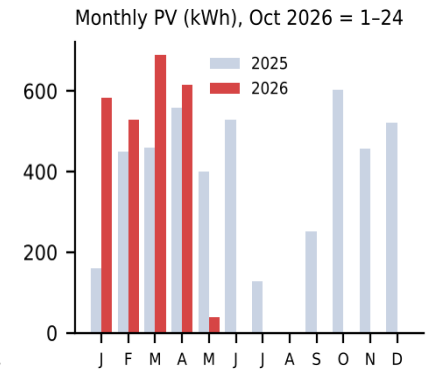
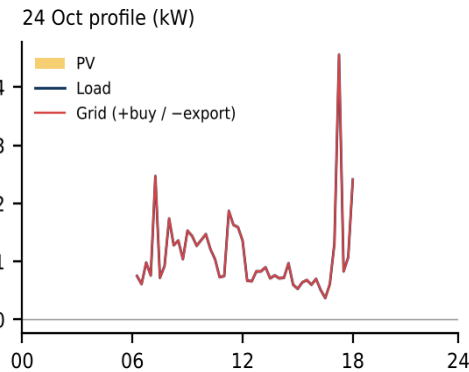
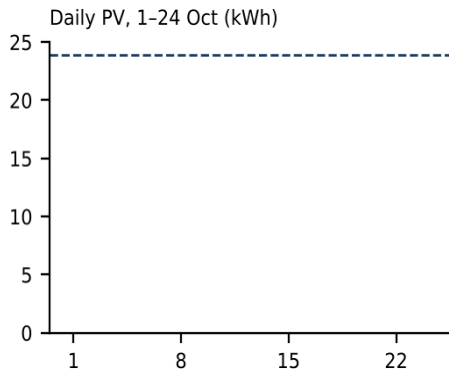
Consumption

**416 kWh**

Bought from grid

**0 kWh**

Exported



## What we found

- The inverter has produced nothing since 2 May 2026 at 12:14. It still reports "Grid Failed" and reads 0 V and 0 Hz on the grid side, so it cannot see the grid at all.
- The house keeps buying all its power from the grid: 416 kWh in 1-24 October, and 360-720 kWh a month since May.
- In January-April 2026 the system made 530-690 kWh a month. About 6 months of production, roughly 3,500 kWh, has been lost so far.

## What to do

1. Site visit: check the AC breaker or isolator between the inverter and the main board, then the AC cable and terminals at the inverter. A tripped or switched-off AC breaker is the most likely cause.
2. If the breaker trips again, test the cable insulation and the inverter's AC relay before switching back on.
3. Once it's running again, confirm that FusionSolar shows a grid voltage of about 230 V and normal production the next sunny day.

# Laundromat, Songkhla

Offline since March 2026 - check if replaced

[Fix now](#)

**5 kWp\***

PV · 5 kW inverter

**0 kWh**

PV, 1-24 Oct

-

kWh/kWp/day

-

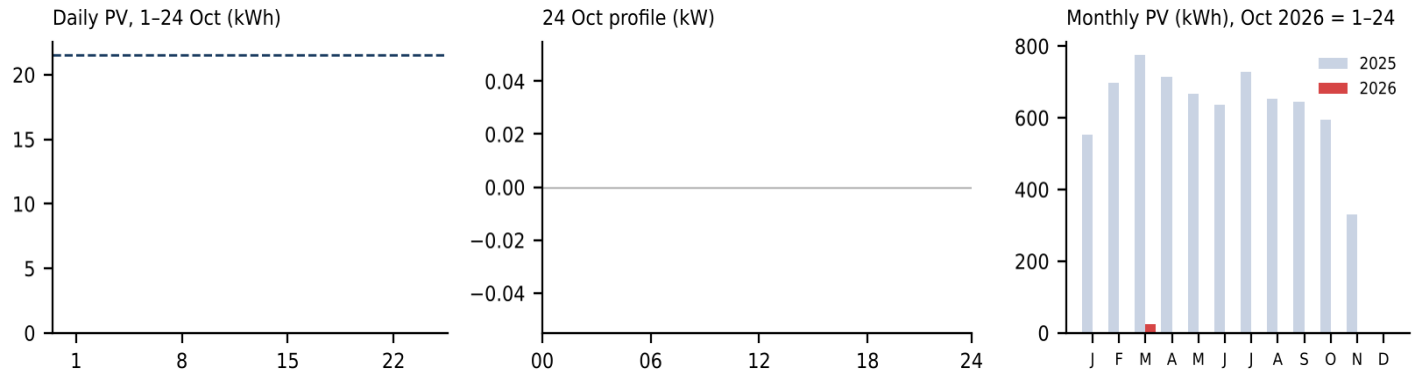
Consumption

-

Bought from grid

-

Exported



## What we found

- The Huawei inverter and dongle have been disconnected since March 2026, with a "Network Connection Error" alarm since 23 March. The plant capacity is set to 0 kWp.
- It made 590-770 kWh a month in 2025. The same laundromat also appears on SolisCloud, so the Huawei inverter may have been replaced.

## What to do

- Confirm with the owner or technician whether the Huawei inverter is still installed.
- If it was replaced, close this plant in FusionSolar so it stops showing as faulty. If it is still installed, reconnect the dongle to Wi-Fi.

\* kWp not set in FusionSolar; 5 kWp assumed.

# Home H4, Samut Songkhram

Very low yield - 0.7 kWh/kWp

Fix now

**4.995 kWp**

PV · 5 kW inverter

**84 kWh**

PV, 1-24 Oct

**0.70**

kWh/kWp/day

**74 kWh**

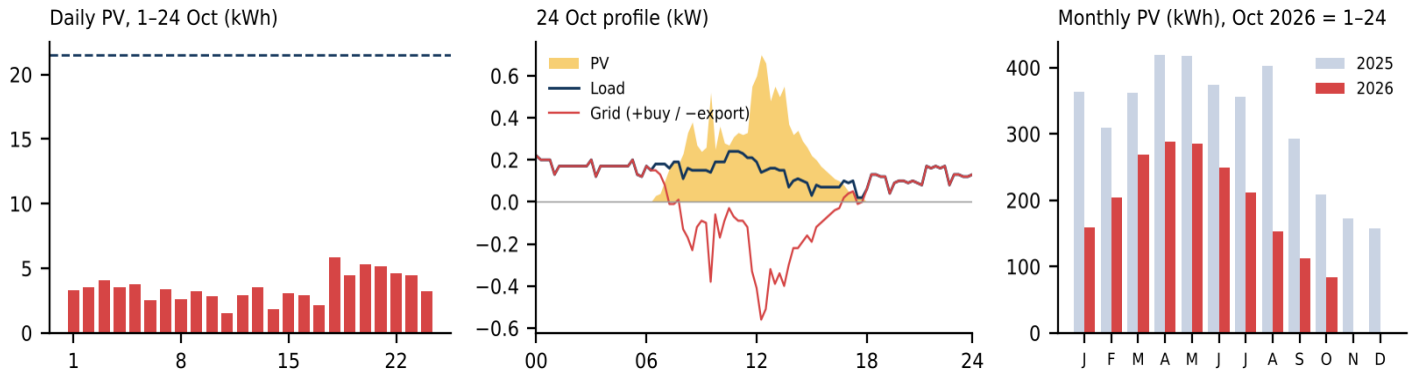
Consumption

**45 kWh**

Bought from grid

**55 kWh**

Exported



## What we found

- It made only 83.7 kWh in 24 days, or 0.70 kWh per kWp per day. A healthy system makes about 4-5 (Home H6 made 5.1).
- At 10:00 on 25 October the inverter was putting out 0.26 kW from 4.995 kWp. Home H6 was putting out 2.5 kW from 5 kWp at the same time.
- The monthly yield is falling: 288 kWh in April and 285 in May, then 249, 211, 153 and 112 kWh, and now 84 kWh in October. Even its best month in 2025 (418 kWh) was low.
- There was a grid fault on 8 October (undervoltage, Grid Failed and a power meter fault). The meter and export data look normal now.

## What to do

1. Site check: look for shading from trees or new buildings, heavy dirt, and burnt or loose MC4 connectors. Measure the open-circuit voltage of each string.
2. Compare the string voltage with the design. If one string is open-circuit, the inverter will be running on only part of the array.
3. Clean the panels and trim any trees, then check the yield again after 1 week.

# Home S10, Songkhla

Meter reads zero - consumption unknown

[Change settings](#)

**5 kWp\***

PV · 5 kW inverter

**276 kWh**

PV, 1-24 Oct

**2.30**

kWh/kWp/day

**276 kWh**

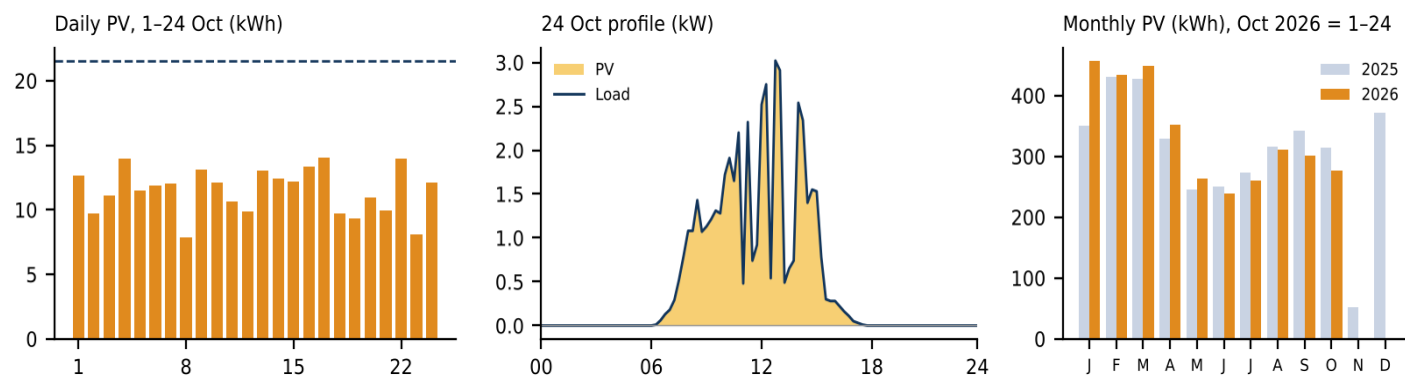
Consumption

**0 kWh**

Bought from grid

**0 kWh**

Exported



## What we found

- The power meter reads 0 kW all day and night. FusionSolar therefore shows consumption equal to PV, and zero grid purchase since June 2025.
- It made 275.6 kWh in 24 days, or 11.5 kWh a day. The plant capacity is not set (0 kWp), and output is choppy with a peak of about 3 kW.
- The same home is also listed on SolisCloud.

## What to do

1. Check the power meter's CT direction and its RS485 wiring to the inverter. A meter that reads zero means any export limit isn't working properly.
2. Enter the real PV capacity (kWp) in FusionSolar so the yield per kWp can be tracked.
3. Check the active power limit setting on the inverter. If the array is about 5 kWp, a 3 kW peak with frequent dips is too low.

\* kWp not set in FusionSolar; 5 kWp assumed.

# Food factory, central Thailand

## Zero-export curtailment - battery opportunity

Upgrade opportunity

**100 kWp**

PV · 100 kW inverter

**4,465 kWh**

PV, 1-24 Oct

**1.86**

kWh/kWp/day

**10,363 kWh**

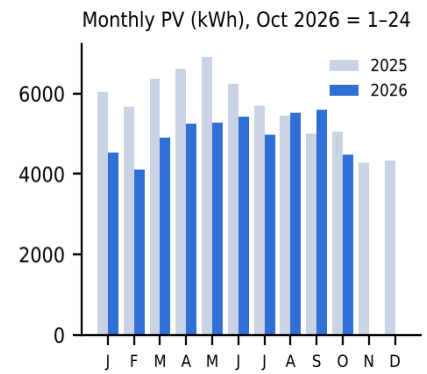
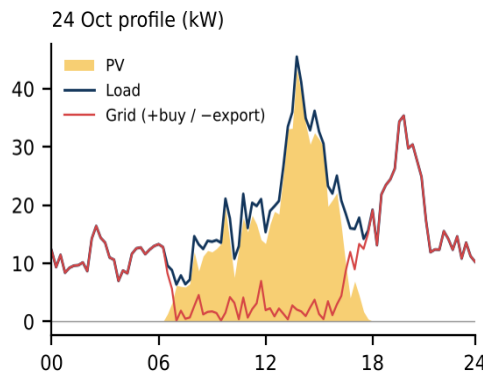
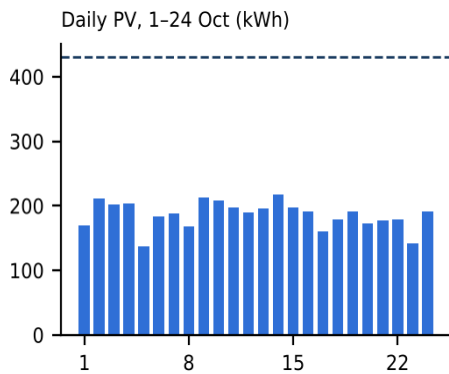
Consumption

**5,898 kWh**

Bought from grid

**1 kWh**

Exported



### What we found

- 100 kWp on two 50 kW inverters made 186 kWh a day (1.86 kWh/kWp). Output follows the factory load: the meter shows only 0.1-7 kW drawn from the grid at midday, while PV stays well below its capacity.
- On 24 October PV peaked at 43 kW when the array could have given 70-80 kW. At 4.3 kWh/kWp, about 240 kWh a day is being held back by the zero-export limit.
- The factory bought 5,898 kWh from the grid in 1-24 October, mostly in the evening and at night (25-35 kW from 18:00 to 21:00).
- Both inverters are healthy and evenly loaded, with phase voltages of 231 V.

### What to do

1. Offer a battery of about 150-200 kWh. It would store the curtailed midday energy and use it from 17:00 to 23:00, cutting grid purchase by about 180 kWh a day, worth around 24,000 THB a month.
2. Lower-cost step: move flexible loads (boilers, pumps, cold rooms, cleaning) to 10:00-14:00.
3. Check whether the factory can apply for PEA export, so surplus can be sold instead of thrown away.

# Health centre, Chiang Mai

Load is double the PV - add panels

Upgrade opportunity

**5.12 kWp**

PV · 5 kW inverter

**517 kWh**

PV, 1-24 Oct

**4.21**

kWh/kWp/day

**1,105 kWh**

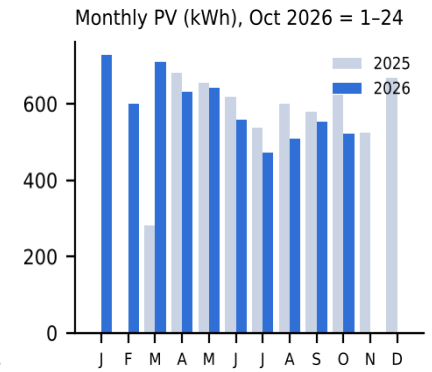
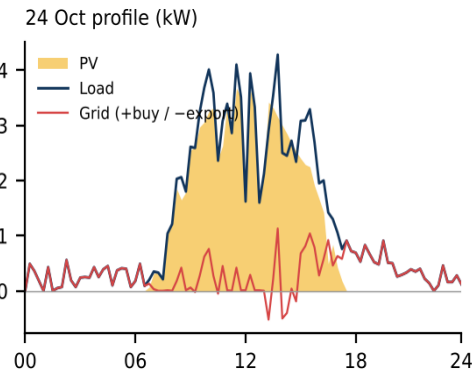
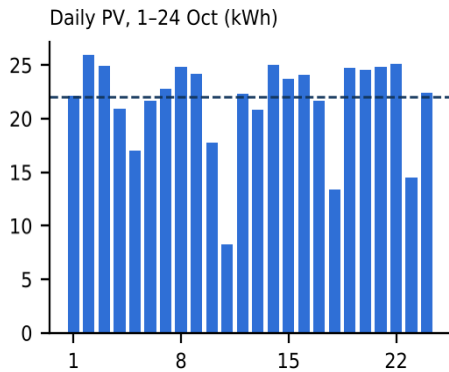
Consumption

**589 kWh**

Bought from grid

**1 kWh**

Exported



## What we found

- 5.12 kWp with optimizers made 21.6 kWh a day (4.2 kWh/kWp), close to what we expect. All 8 optimizers are working evenly.
- The health centre used 1,105 kWh in 24 days but PV covered only 47%. It bought 589 kWh and exported almost nothing (1.2 kWh).
- At midday PV follows the load, with the meter close to 0 kW, so the zero-export limit is holding output back slightly on low-load days.

## What to do

1. Propose about 5 kWp more PV with a second inverter (the existing 5 kW three-phase inverter is fully used). That would cover about 600 kWh a month more and save around 2,700 THB a month.
2. Keep zero export on. If the panels are added, check the daytime load first, as weekend load is lower.

# Home H5, Chiang Mai

Exports 62% - battery or load shift

Upgrade opportunity

**5 kWp\***

PV · 5 kW inverter

**430 kWh**

PV, 1-24 Oct

**3.59**

kWh/kWp/day

**386 kWh**

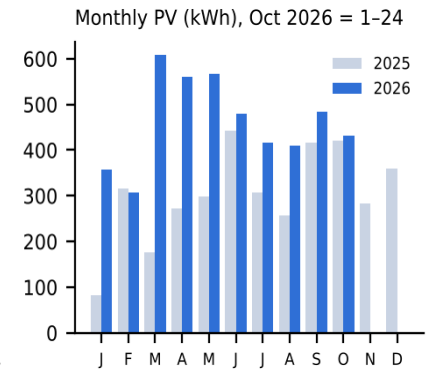
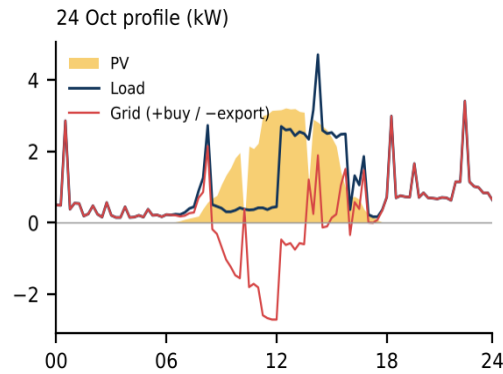
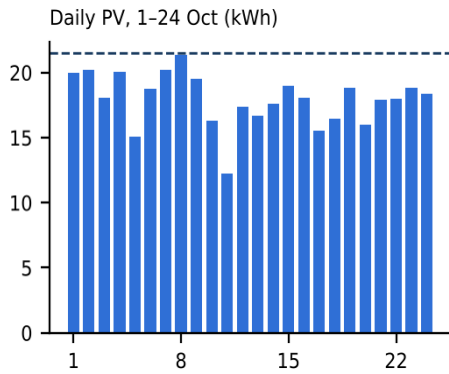
Consumption

**224 kWh**

Bought from grid

**269 kWh**

Exported



## What we found

- It made 430 kWh in 24 days, or 17.9 kWh a day: 3.6 kWh/kWp if the array is 5 kWp. The capacity is not set in FusionSolar.
- It exported 269 kWh (62% of PV) at midday and bought 224 kWh in the evening and at night. Only 162 kWh of PV was used directly in the home.
- There were 46 short grid overvoltage trips in October; output impact was small.

## What to do

1. Enter the real PV capacity (kWp) in FusionSolar.
2. Suggest moving water heating, laundry and air-con pre-cooling to 10:00-15:00.
3. Offer a 5-10 kWh battery if export is credited at 2.20 THB/kWh or less. It would cut evening grid purchase by about 200 kWh a month.

\* kWp not set in FusionSolar; 5 kWp assumed.

# Home H6, Chiang Rai

## Healthy - watch the grid voltage

Healthy

**5 kWp**

PV · 5 kW inverter

**612 kWh**

PV, 1-24 Oct

**5.10**

kWh/kWp/day

-

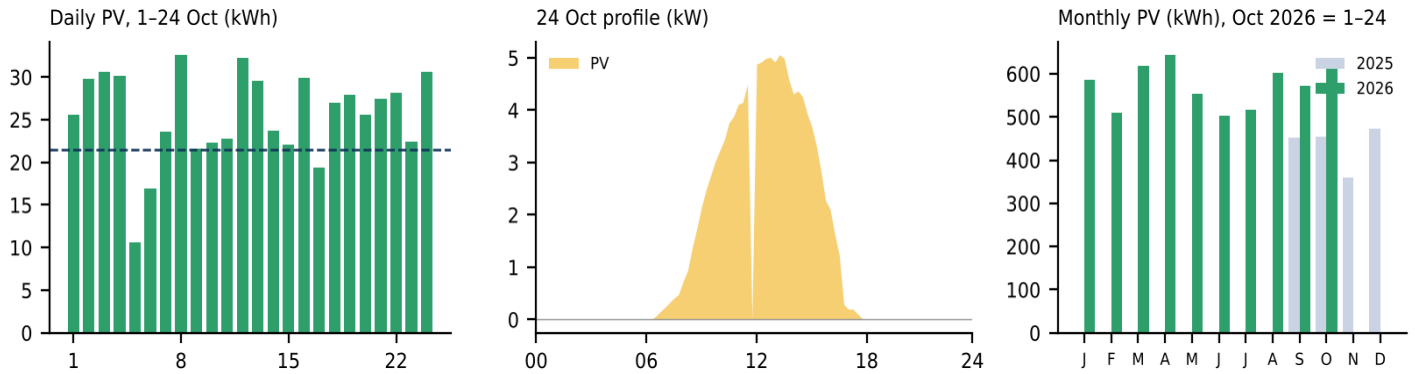
Consumption

-

Bought from grid

-

Exported



## What we found

- It made 612 kWh in 24 days (5.1 kWh/kWp per day), the best in the fleet. That is already more than the 455 kWh it made in the whole of October 2025.
- However, there were 1,097 grid overvoltage trips in October. Grid voltage was already 243.6 V at 10:00. Each trip is short, so the energy lost is small for now.
- There is no power meter, so consumption and export aren't recorded.

## What to do

1. Measure the voltage at the meter at midday. If it often goes above 250 V, ask PEA to check the transformer tap.
2. Optional: add a Huawei smart meter to record consumption and export.