

# 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**

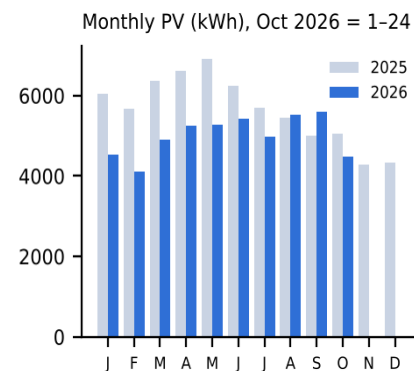
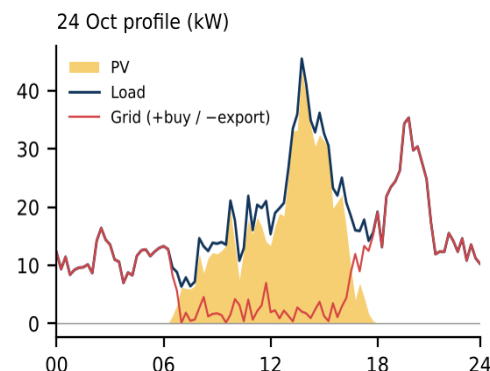
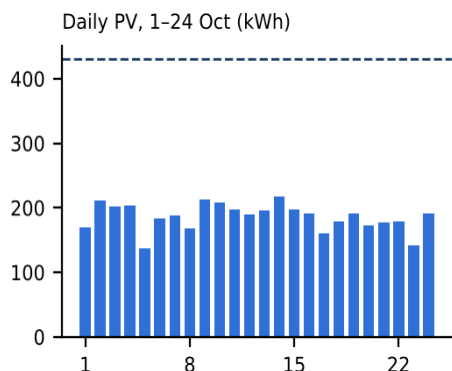
Consumption

**5,898 kWh**

Bought from grid

**1 kWh**

Exported



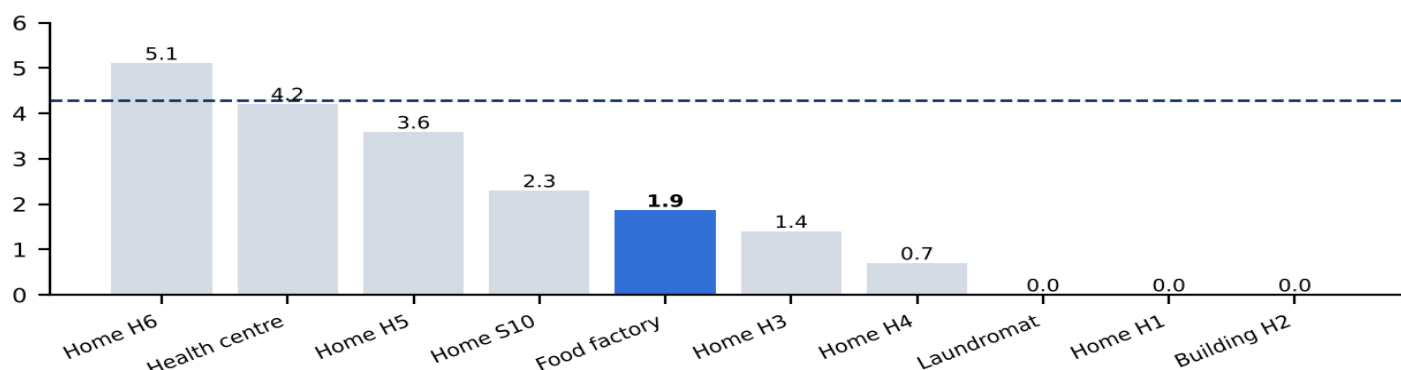
## What we found

- 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.

## How this plant compares (kWh/kWp per day, 1-24 Oct)



Rank 5 of 10 Huawei plants. Dashed line = expected 4.3 kWh/kWp per day.