



Making smart energy flow

Montel Energy Deep Dives Benelux

Amsterdam – 14.10.2026





Making smart energy flow

European Renewables & BESS Optimization Platform





**Top-performing
UK BESS optimiser**
Ranked by Enact



Utility Scale BESS
750 MW
→ **1,200 MW**
contracted by 2028



Turnover H1 2026
+€ 85 million



Team
60 colleagues

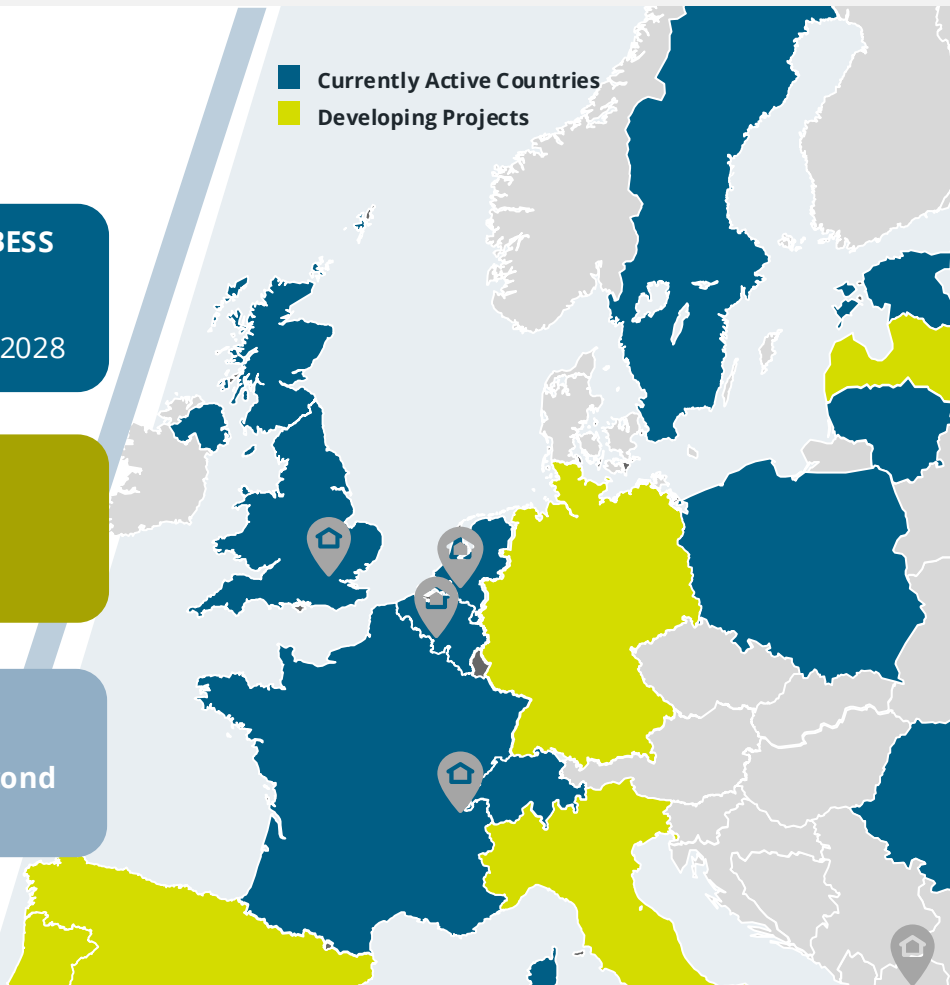


**10.000 Connection
Points**



**2.000 Trading
Signals per second**

 **Currently Active Countries**
 **Developing Projects**





A short overview of our history

Since 2012 Yuso has built up expertise in all branches of the energy world, from renewables to flexibility

Incorporation of Yuso in Belgium

2012

2013

First energy flows.

100 MWp injection portfolio achieved.

2015

2016

1st large-scale storage with a 10 MW battery project in NL.

100% green B2B energy supplier in BE.

2017

2018

Strategic partnership with Nippon Koei for large-scale storage.

1st B2B flexibility service: steering of local battery storage.

2021

2022

100 MWh battery project in BE, entry to the UK-market and the first delivery of balancing services.

Extending our B2B flexibility offer with PV curtailment.

2024



Storage



E-Boilers



EV charging



PV Curtailment



Wind



Heat Pumps



2026 & beyond

AGGREGATION OF RENEWABLES

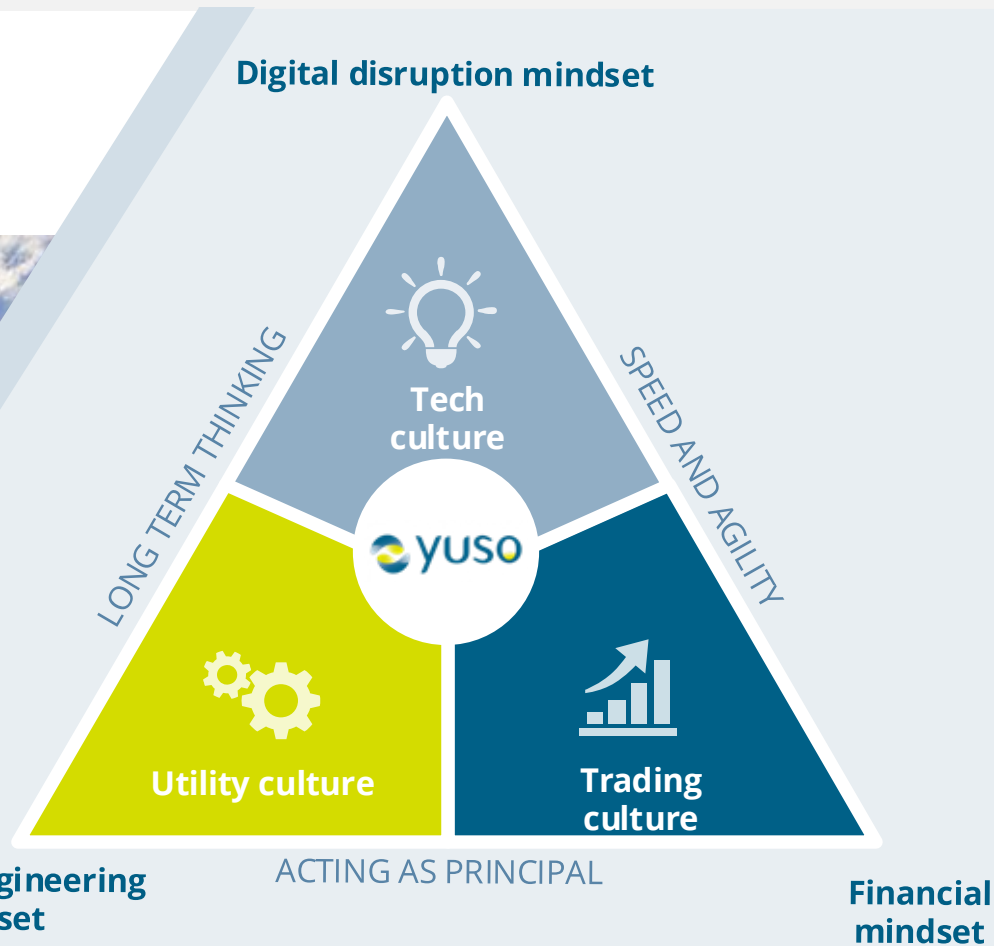
LARGE-SCALE STORAGE

B2B GREEN ENERGY DELIVERY

B2B FLEXIBILITY



Yuso's unique DNA





BESS RtM European assets under management



 **Ruien 25MW/ 100MWh**



 **Deux Acren 50MW/ 100MWh**



 **Balen 25MW/ 100MWh**



 **Harmignies 75MW/ 300MWh**



 **Cuxton 50MW/ 50MWh**



 **Castor 21MW/ 44MWh**



 **Antares 50MW/ 99MWh**



 **Hertz 1 100MW/ 200MWh**



 **Tollgate 50MW/ 50MWh**



 **Aruno 70MW/ 155MWh**



 **ViaSolis 150MW/ 400MWh**



 **Hertz 2 100MW/ 200MWh**



Our unique selling proposition



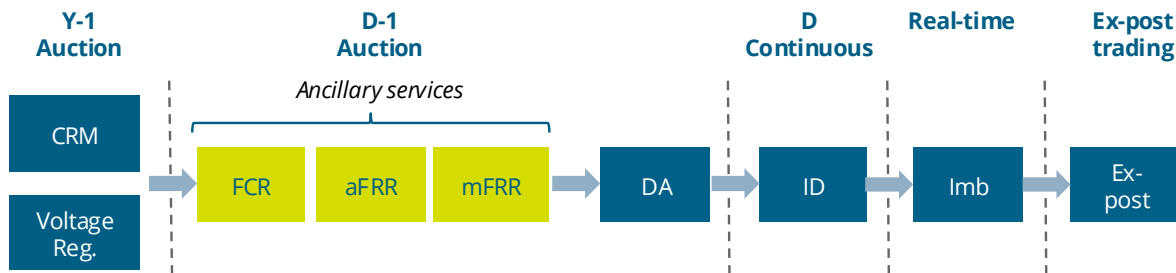
Route-to-Market Services

- Trading on **ancillary** & **wholesale** markets
- Merchant / floors / tolling
- Real-time & ex-post **dashboards**
- Continuous live **(re)dispatch**
- **Regulatory** reporting - REMIT & UMM
- **Ex-post** trading & **voltage regulation**



Why Yuso

- ✓ **One-stop shop platform** for BESS flexibility
- ✓ **Tailored, owner-designed** strategy - no pooling
- ✓ Proven track record **since 2016**
- ✓ **In-house trading** desk, 24/7/365
- ✓ Open-book & **transparent** approach
- ✓ Development-to-commissioning **support**



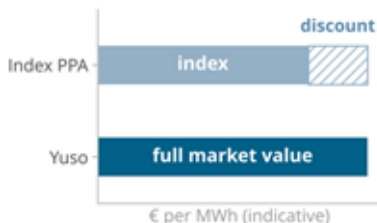


Get the full value of your green electrons

As your BRP, we trade your renewables production, fully open book, for sites >20 MW

1 Full market value

Your profile sold in day-ahead, intraday and imbalance. No fixed discount on an index.



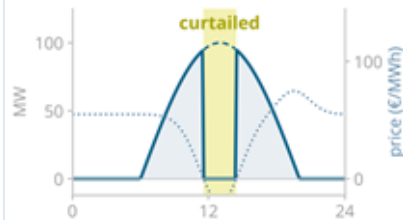
2 Minimal imbalance

Our forecast or yours. We rebalance intraday and keep your position as tight as possible.



3 Flex from curtailment

We curtail when prices turn negative and turn it into revenue. No baseline needed.



4 Open book, profit share

Every trade reported. We share in the realised result, with no platform or €/MWh fee.





Making smart energy flow

Trends & developments over the past 2-3 years





Benelux 2024–2026: four shifts in two years

Fast build-out, saturating ancillaries, wider spreads and a grid that sets the limits

1 Battery build-out

Belgian grid-scale BESS grew almost six-fold in 18 months. Dutch storage doubled to 2.1 GWh in 2025.

144 → 828

MW grid-connected BESS in BE,
Mar 2025 → Oct 2026 (Elia)

2 Ancillaries saturate

New batteries fill FCR and aFRR first. Arbitrage has replaced ancillaries as the main revenue line, as in the UK before.

>€500 → €310

NL 4h BESS margin, €/kW/yr,
2024 → 2026 (Aurora)

3 Spreads widen, and late

Solar deepens the midday dip while evenings stay tight. Intraday spreads are ~4× wider in the last 1–2 hours before delivery.

€75 → €103 → €125

BE day-ahead, avg daily 4h
spread, €/MWh, Jan–Sep 2024
→ Jan–Sep 2025, 9 months 2026
(ENTSO-E)

4 The grid sets the limits

Non-firm connections become the norm (TenneT TDTR, CREG code). Dutch HV fees keep rising; the Belgian storage tariff exemption ends in 2028.

€190k/MW

NL 110/150 kV grid fees, 2027
(S4 Energy)



What it changed for the business case

The battery case still works, but it is won on execution, grid terms and structure

1 Revenue is earned, not reserved

Less paid availability, more trading. Duration and execution close to delivery set the result: the optimiser is a revenue line.

124 %

Yuso (4h) vs Montel 4h benchmark, Jan 2025 – Sep 2026 (Yuso)

2 Grid fees swing the IRR

Full Belgian grid fees would cut IRR by ~8 points. Peak avoidance and flexible connections can halve them. Who bears them is now a key term.

–8 pp

Project IRR under full BE grid fees (Aurora)

3 Debt is sized on the downside

Fully merchant is largely off the table for lenders. Hybrid structures with ~70% contracted revenue dominate; toll offtakers are scarce.

70 / 30

Contracted vs merchant, typical hybrid BESS deal (Centrica, ESEC 2026)

4 Solar and storage need each other

What cuts solar capture rates widens battery spreads. One connection, one portfolio and a baseload hedge give a bankable floor.

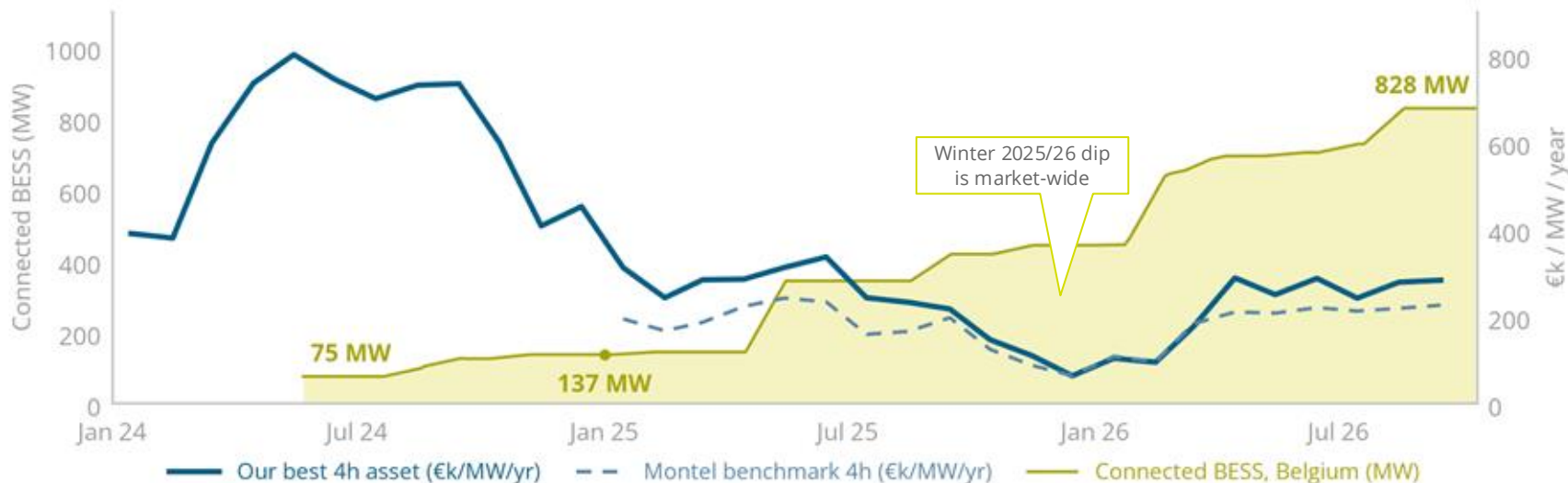
~50 %

BE solar capture rate vs baseload, Jan-Sep 2024–26 (ENTSO-E, Yuso)



Outperformance as BE BESS fleet grows 6x since '25

Connected BESS in BE grew to 828 MW since Jan '25, our 4h asset generally stayed above the Montel 4h benchmark over the period



Source: Elia Open Data, Montel, Yuso. Our best 4h asset calculated as the highest gross revenue/MW before fees.



As the market shifts, our strategy shifts with it

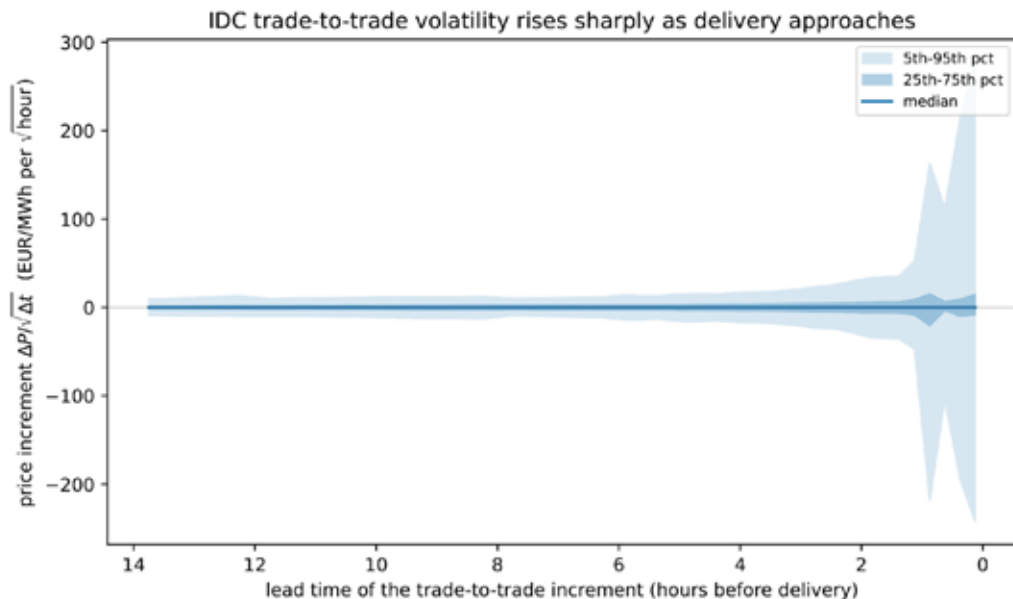
Monthly revenue by market (€/MW/year): from imbalance in 2023, to the ancillary boom of 2024, to a wider wholesale mix since 2025





Value moves to intraday, close to delivery

Belgian intraday continuous (IDC): trade-to-trade price volatility by lead time to delivery



Median ≈ 0

no drift: intraday prices behave like a martingale

$\sim 4\times$ wider spread

from 10 h before delivery to the last 1–2 h

Optionality sits late

whoever can still act close to delivery earns it

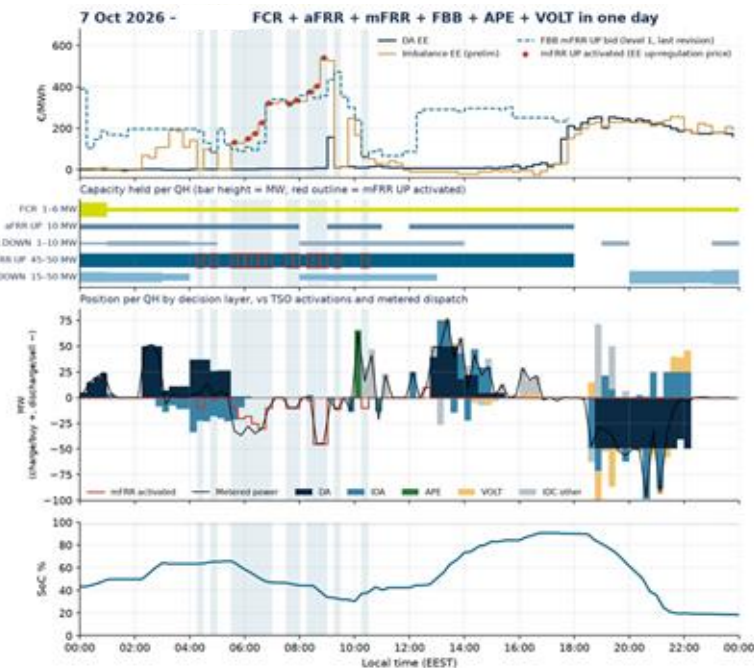
OPCOM still to implement in last h



Example day: four layers stacked

One asset, four revenue layers, and a morning system shortage that shows the stack reacting in real time: capacity reserved, energy bids re-priced, SoC rebuilt, intraday traded around it.

- **Capacity reserved (all day):** FCR, aFRR and mFRR held alongside the energy plan, about half the power committed to the TSO.
- **Shortage hit, bids re-priced (05:30–08:45):** energy bids re-priced 163 times, from ~€100 up to €542/MWh; Yuso asset set the imbalance price in several quarter-hours. ~5x revenue per activated MWh vs a static bid.
- **SoC rebuilt at the right price:** SoC fell to 30%; bought back in intraday below the activation price, refilled to 91% at near-zero midday prices, discharged into the €250 evening peak.
- **Intraday traded around it (all day):** continuous small trades within the safe SoC band, bought at €206, sold at €222 on average.





Making smart energy flow

Hybrid PPA's De-risking renewables + BESS

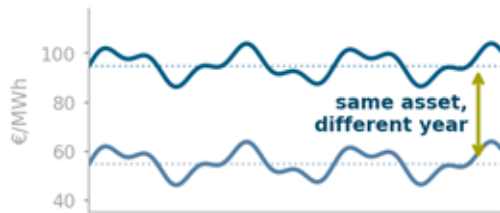


A standalone renewable asset carries three price risks

Before the battery: what a merchant renewable asset is exposed to

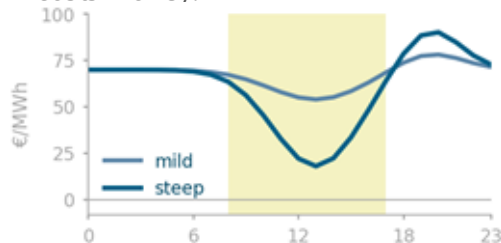
1 Flat price level

The absolute level of the market. Higher prices, more revenue; lower prices, less. The asset takes what the market gives.



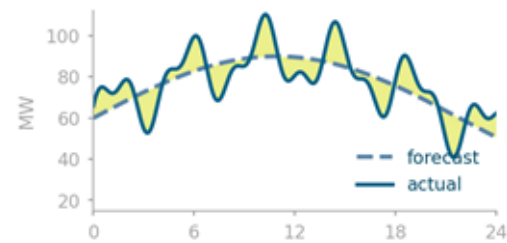
2 Capture rate

How much of the baseload price the asset captures. Cannibalization steepens the duck curve — in the worst hours production earns nothing, or costs money.



3 Imbalance

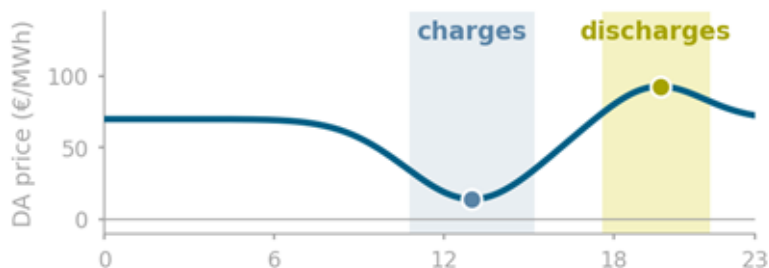
Forecast error. The producer pays the TSO or keeping the grid balanced and the frequency stable. On a standalone asset this is pure cost.



A battery can neutralize 2 of those 3 risks

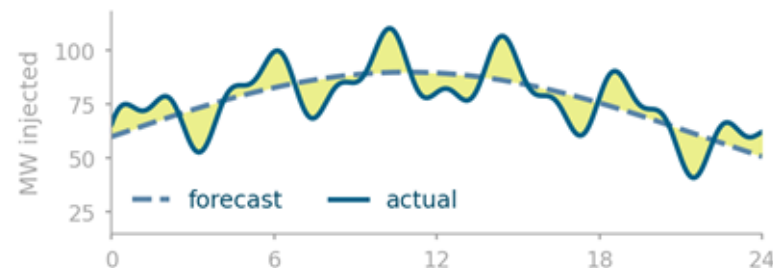
Market conditions that hurt renewable generation are the ones that make a BESS profitable

Capture rate **neutralized**



The steeper the cannibalization, the wider the intraday spread. The battery buys low and sells high.

Imbalance **neutralized**



More forecasting error means more balancing asset activation. BESS capacity is reserved by the TSO against payment of a premium, then activated and paid to absorb or release energy over short periods, aFRR, mFRR

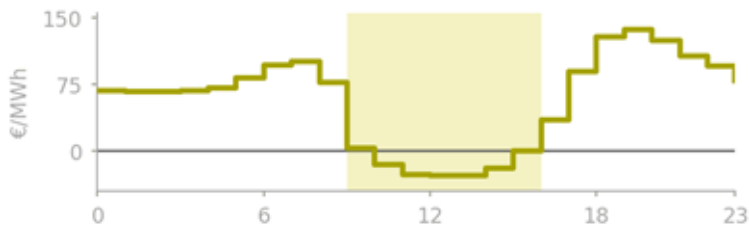
The third risk stays open — but the battery is largely indifferent to it. It earns in volatile price environments, whatever the absolute price level of the market happens to be.



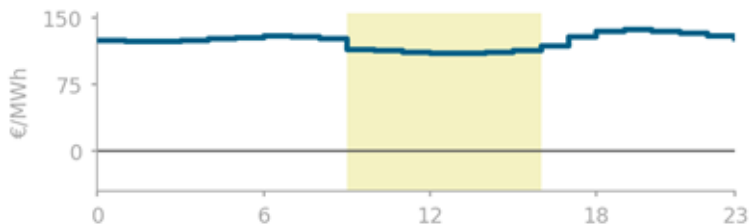
Generation and storage revenues move in opposite directions

The scenario that starves one is the scenario that feeds the other

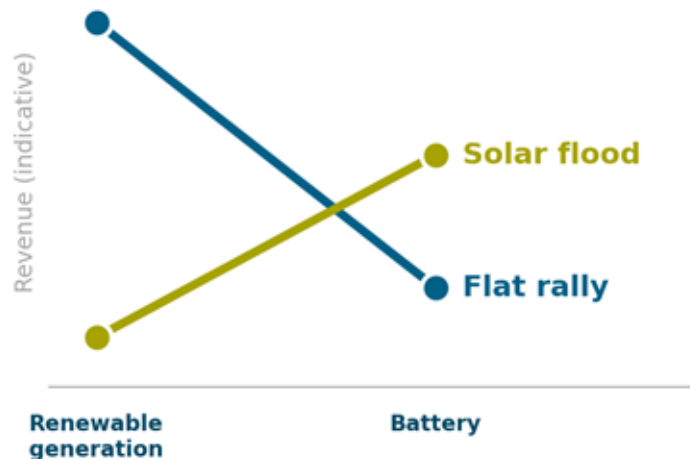
Solar flood low prices, deep midday cannibalization



Flat rally high prices, compressed intraday spreads



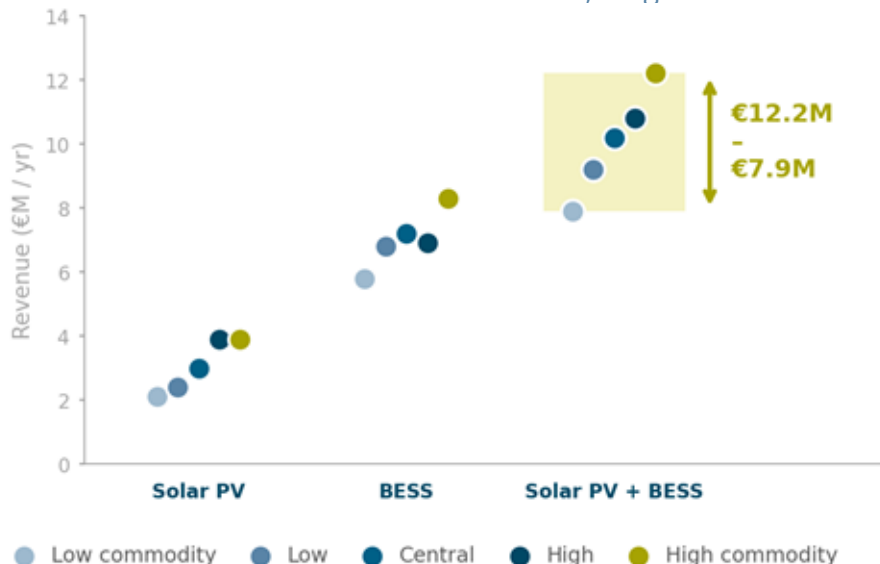
Revenue by asset each scenario inverts the other





Two risks solved — the third still sets the revenue

100 MW solar PV + 50 MW / 200 MWh BESS, Belgium · five Montel price scenarios, both assets merchant



The combined band

€7.9M – €12.2M

per year, same asset, same five scenarios

A 1.5× range on the top line

The battery has taken out capture rate and imbalance risks. What is left is the absolute price level, and it moves both assets the same way.

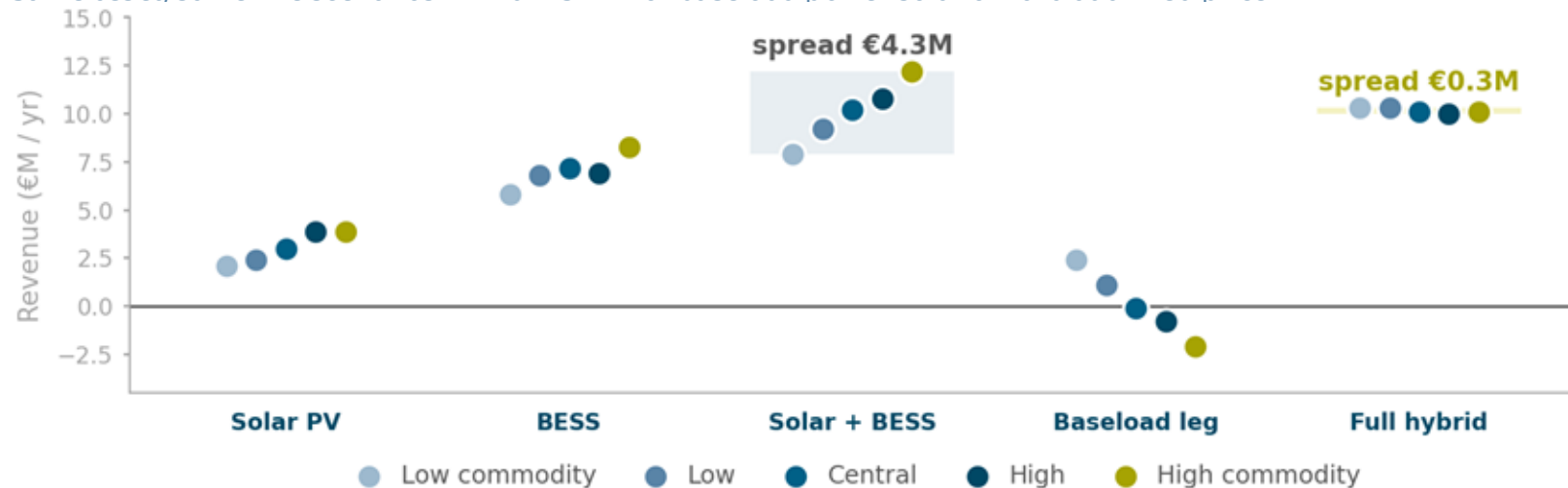
Debt is sized on the bottom

A lender underwrites €7.9M, not the €10.2M central case.

Merchant basis the renewable asset is sold against day-ahead prices and pays its own imbalance cost; the battery runs without floor or tolling, earning from wholesale and ancillary markets.

Selling baseload at a fixed price closes the third risk

Same asset, same five scenarios — with 15 MW of baseload power sold forward at a fixed price



Prices rise

The baseload leg loses, and the renewable leg more than covers it.

Prices fall

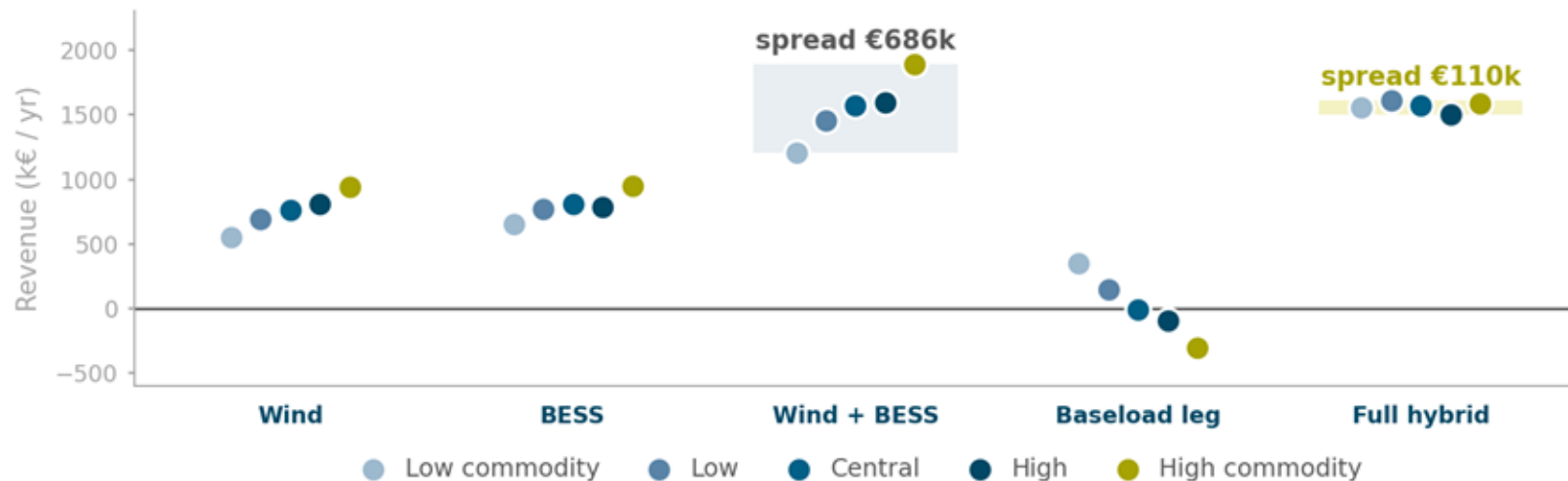
The baseload leg pays out, funding what the renewable no longer earns.

Either way

The two move against each other; what is left is close to fixed.

The same structure on a wind asset

7 MW onshore wind + 5 MW / 20 MWh BESS — with 2.2 MW of baseload power sold forward



Spread narrows from €686k to €110k

The same three legs on a different technology — the band closes just as tightly.

Closer to a baseload shape

Higher load factor and no midday collapse, so a given hedge covers more of the output.

Sized from the asset

2.2 MW against 7 MW of wind — the volume follows the revenue profile.

Why baseload works for a hybrid asset but not for a standalone renewable

A baseload hedge against a standalone asset is a mismatch but the battery can help mitigate it

Never against a standalone renewable

Sell a flat block against a peaky asset and you are over-hedged whenever it is not producing, and under-hedged whenever it is. Both deltas land at the worst possible prices: the surplus is dumped into the midday trough, the shortfall bought back at the evening peak.



With the battery filling the flat hours, that mismatch largely disappears.

1 Liquidity

A pay-as-produced PPA or a battery tolling is bespoke — only a handful of counterparties can price it. Baseload is the standard product: utilities, traders, banks, hedge funds, industrials, hyperscalers and data centres all quote it. More bidders means competitive tension and a tighter bid-ask.

2 Duration

Baseload can be quoted and hedged out to ten years. A bespoke shape or a tolling is far harder to place for that tenor — and tenor is what a lender gives credit for.

How Yuso works with you

A simulation tool built for hybrid assets — and the trading desk that runs them afterwards



Yuso Hybrid PPA Simulator — assumptions edited live, 2027–2032 re-run in the browser, across all price scenarios.

Route to market

We trade and optimize both assets: day-ahead, intraday, imbalance and ancillary services.

1 Size the battery

Power and duration against your renewable capacity — one, two or four hours, and what each is worth.

2 Size the hedge

Set to the revenue distribution you are comfortable with — keep more upside if you want it.

3 Your site, your market

Grid connection limits, injection and offtake caps and grid fees, across most European markets.

Hedge execution

We bring the baseload counterparty and run the process that prices it.

We are ready
for the future...

How about you?

origination@yuso.com

