

LET'S



SOLARPOWER SUMMIT 2025
WELCOME TO THE SOLAR FLEX ERA

FLEX

LET'S FLEX ENERGY
FINANCING TO
REINFORCE THE
HYBRIDS BUSINESS
CASE



LET'S FLEX

SOLARPOWER SUMMIT 2025



Moderator

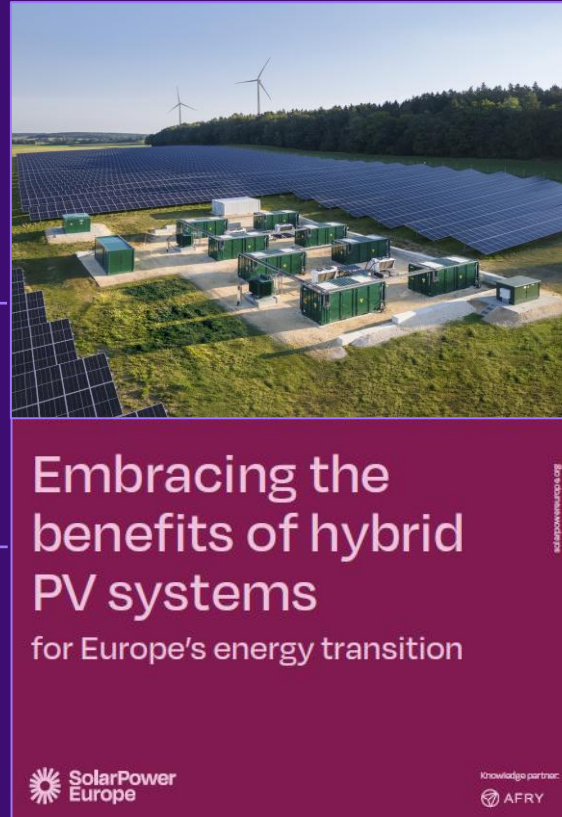
SIMON DUPOND

Policy Advisor,
SolarPower Europe

Embracing the benefits of Hybrid PV systems for Europe's energy transition

Hybrid PV
Benefits

Regulatory
Framework
Assessment



Market Data

Policy
Recommendations

LET'S FLEX

SOLARPOWER SUMMIT 2025

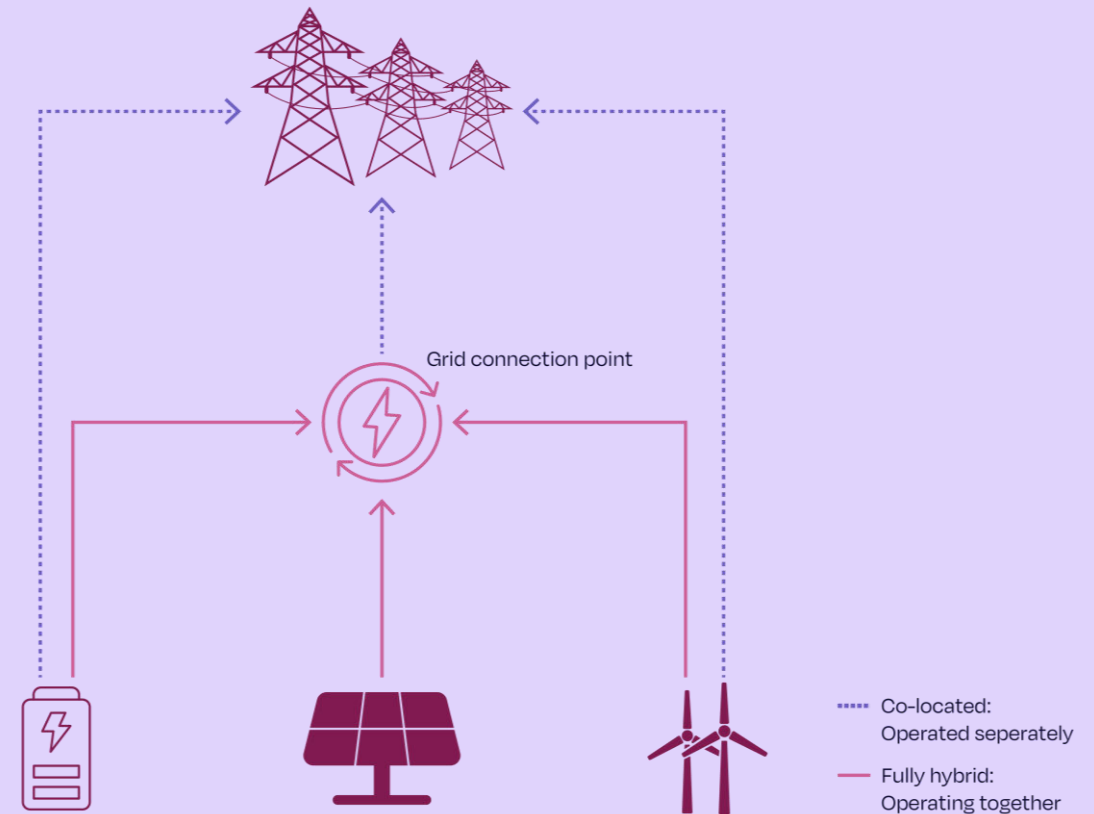
WELCOME TO THE SOLAR FLEX ERA

Defining Hybrid PV systems

Hybrid PV systems are **the combination of technologies in the same facility** which are sharing a **single grid connection access point**.

Two different structures can be observed:

- **Co-located:** The assets are operated independently, but share the grid connection point.
- **Fully hybrids:** The assets are operated jointly by the same entity, leading to an optimised usage of the grid connection point.



Defining Hybrid PV systems

Solar PV + Storage



Solar PV + Wind



LET'S FLEX

SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

LET'S FLEX

SOLARPOWER SUMMIT 2025



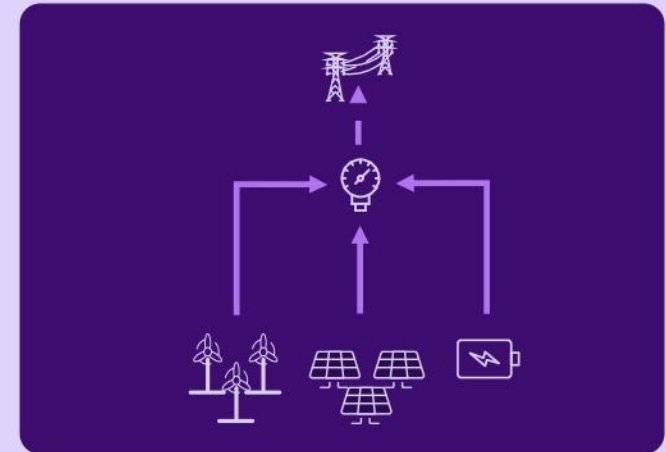
FINDINGS ON THE BENEFITS OF HYBRID PV SYSTEMS

STEPHEN WOODHOUSE

Director,
AFRY

Net-zero means a deep transformation

- Change is needed to integrate new RES capacity and accommodate new types of power demand as a lot of sectors electrify
- As demand and capacity on the system increase, we will **eventually need to upgrade and expand our grid**
- However, there are other solutions that can be used in the short term, but also in the long term, to increase renewable deployment and avoid grid congestion, by **using the existing infrastructure more efficiently**



LET'S FLEX

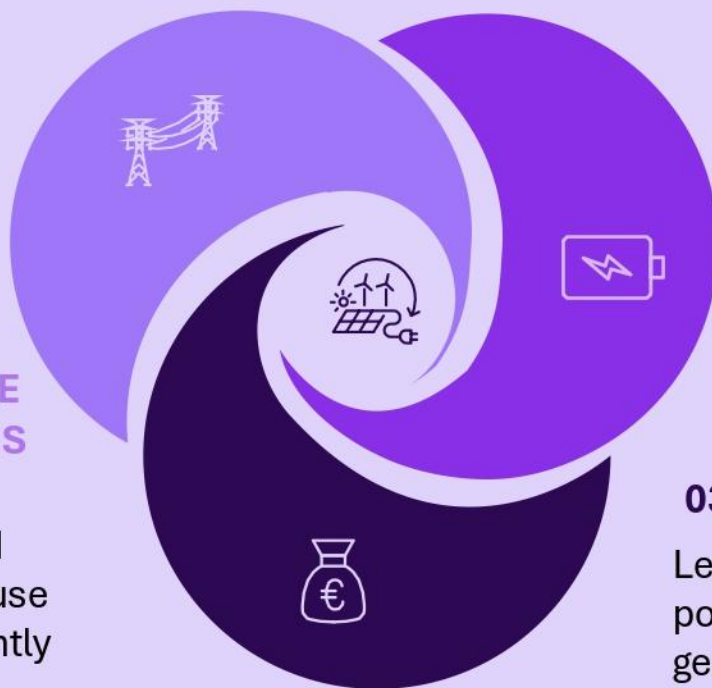
SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

Hybrids can help with the energy transition

01 | MORE EFFICIENT USE OF EXISTING RESOURCES

With different generation technologies behind a grid connection point we can use land and grid more efficiently



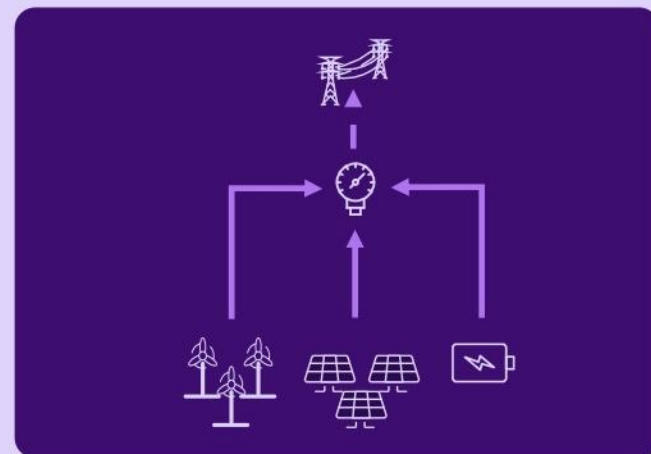
02 | IMPROVED USE OF STORAGE

Storage can be used to manage both system-wide and local curtailment. Allowing to withdraw from the grid can help take full advantage of the storage, which is part of a hybrid



03 | COST REDUCTIONS

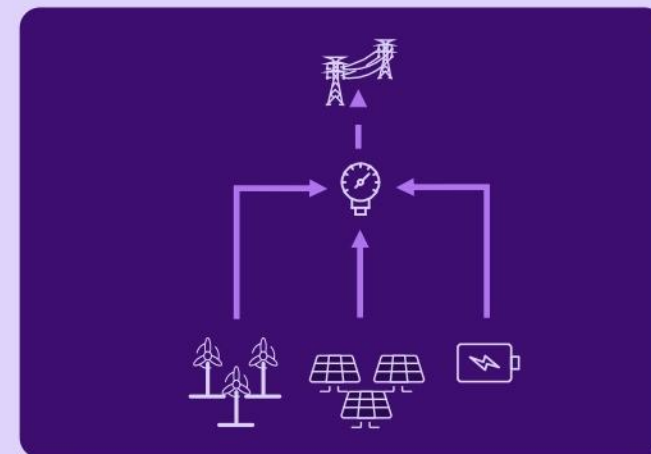
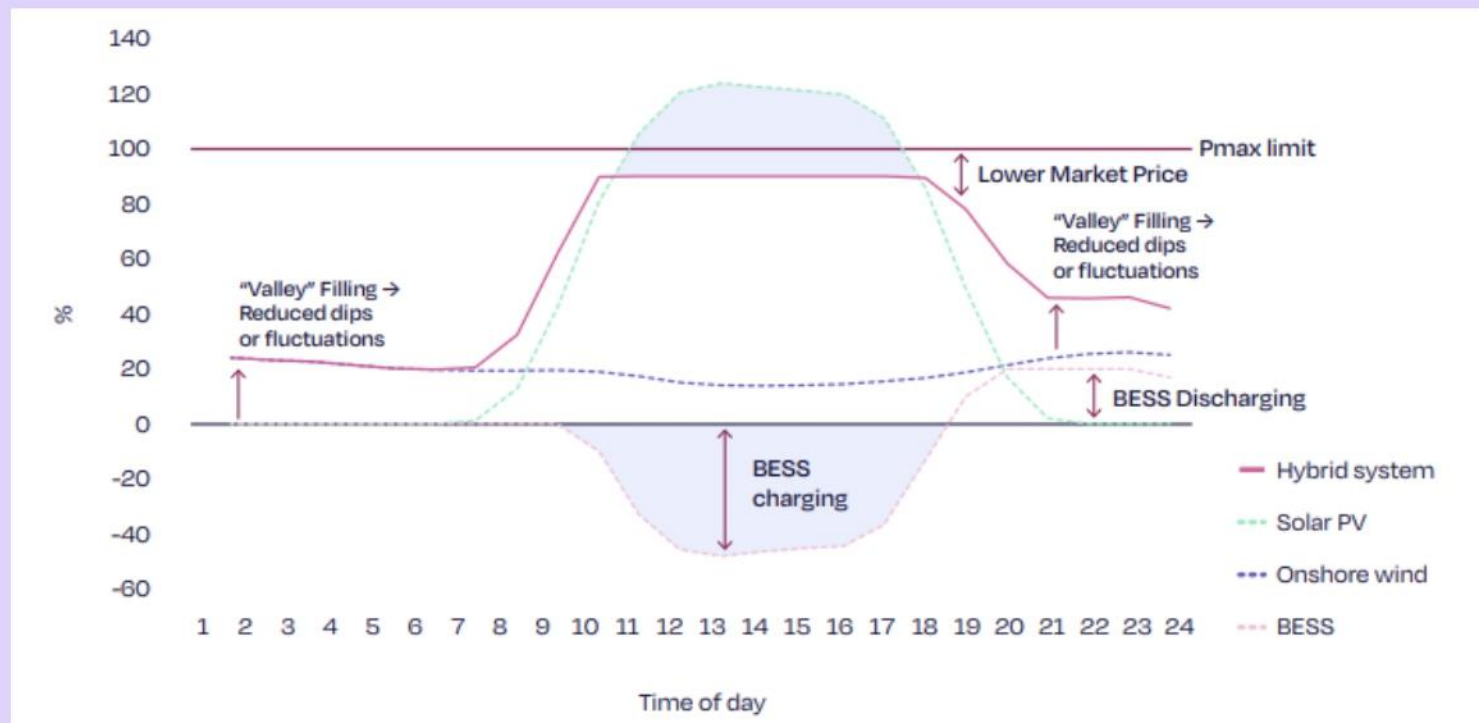
Less need for grid investment and potentially lower cost of capital for generation technologies



LET'S FLEX

SOLARPOWER SUMMIT 2025 WELCOME TO THE SOLAR FLEX ERA

With hybrids we can get the most out of our finite grid

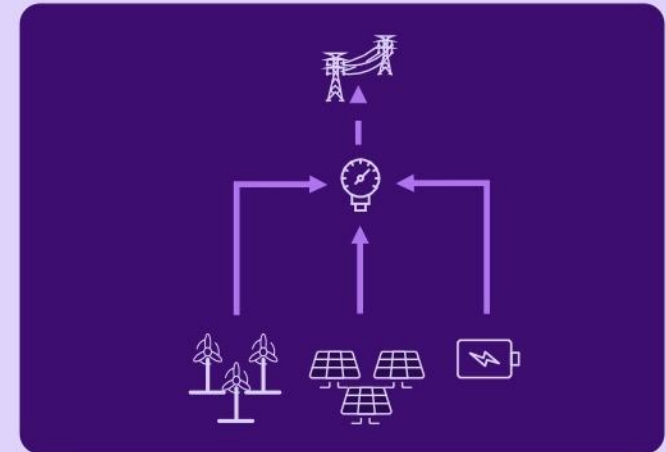


LET'S FLEX

SOLARPOWER SUMMIT 2025 WELCOME TO THE SOLAR FLEX ERA

How can we enable hybrids?

- Streamline the permitting process – make it easier to amend production licenses and avoid double permitting
- Avoid strict requirements in terms of relative capacity sizing
- Allow withdrawing from the grid in the case of hybrids with storage
- Enable market participation on an equal footing – hybrids should be in a position to participate in all markets, including ancillary services and capacity markets, as all other technologies



LET'S FLEX

SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

LET'S FLEX

SOLARPOWER SUMMIT 2025



POLICY RECOMMENDATIONS

MATHILDE CATRYCKE

Senior EU Affairs Manager,
Engie

Policy Recommendations

1. The EU and its Member States should recognise **hybrid solar systems** as key contributors to the EU's **energy security, competitiveness and decarbonisation goals**.
2. Regulators and grid operators should **improve grid connection procedures** for hybrid PV.
3. Member States should **improve permitting** for hybrid PV by implementing the streamlined procedures in the Renewable Energy Directive.
4. The EU and its Member States should ensure **support schemes** are **adapted** to hybrid PV projects.
5. **Grid tariffs** need to be adapted to promote the **decentralisation** of energy systems and **better integration** of renewable energy sources with battery storage, **addressing** issues like **high connection fees** and **double charging** of storage assets..
6. Hybrid renewable projects should receive **Guarantees of Origin** for all renewable electricity **generated and stored**.



Support schemes should be adapted to Hybrid PV projects

Hybrid PV systems should have the opportunity to compete on equal terms with stand-alone PV in **traditional renewable energy auctions**, as is done in the United Kingdom.



RES Allocation Rounds (AR) in the UK

Member States should grant **CAPEX support** for storage under hybrid projects

Best practices

Country	Support
	Grant covering 40% of the battery's CAPEX
	Grant covering 20% of the battery's CAPEX
	Grant covering up to 50% of the battery's CAPEX

LET'S FLEX

SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

Support schemes should be adapted to Hybrid PV projects

Member States should allow **value stacking** for assets under support schemes



Innovation Auction in Germany



Minimum RES utilisation in Portugal

Capacity Markets should design and make use of adequate **de-rating factors** for **hybrids**

Location	Support
	There is no de-rating factor methodology for solar + storage hybrids in the EU.
	De-rating factor calculation methodology considers discharge duration of a storage technology.
	De-rating factor calculation methodology considers discharge duration of a storage technology.

LET'S FLEX

SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

Support schemes should be adapted to Hybrid PV projects

CfD design must account for hybrid projects with storage:

By designing two-sided **CfDs as pay-as-produced contracts** where the energy is settled at **the point and time of generation** and not when exported to the grid.



The approach values the RES asset at the time of generation under the CfD, regardless of when electricity is dispatched to the grid.

LET'S FLEX

SOLARPOWER SUMMIT 2025

WELCOME TO THE SOLAR FLEX ERA

GOs should be issued for all renewable electricity generated and stored

Refining the GO framework for stored electricity can support:

- **Grid flexibility**, by allowing batteries to provide ancillary services with certified renewable electricity
- **Decarbonisation**, by ensuring renewable energy used in CfDs and PPAs is properly certified



Neither the EU nor national regulations provide clear guidance on how to certify renewable energy once it has passed through a storage system.

LET'S FLEX



Guillaume Gonzalez

Electricity market design expert,
DG COMP, European Commission



Mathilde Catrycke

Senior EU Affairs Manager,
Engie



Stephen Woodhouse

Director,
AFRY



Simon Dupond

Policy Advisor,
SolarPower Europe

SOLARPOWER SUMMIT 2025

SPEAKERS