RICARDO
Member of WSP

Greek electricity market as part of South East Europe

Insights from Electricity Market Outlook modelling

Power & Gas Forum

April 2026

Introduction

Greek electricity market is not affected only by the domestic developments but also by the wider SEE region

ELECTRICITY MARKET OUTLOOK

Entire European continent modelled

Our advanced PRIMES-IEM simulator, produces 8760-hour yearly simulations and multi-zone market modeling.

By modelling all European countries jointly, our country level projections capture the true dynamics of imports/exports and cross-border scarcity

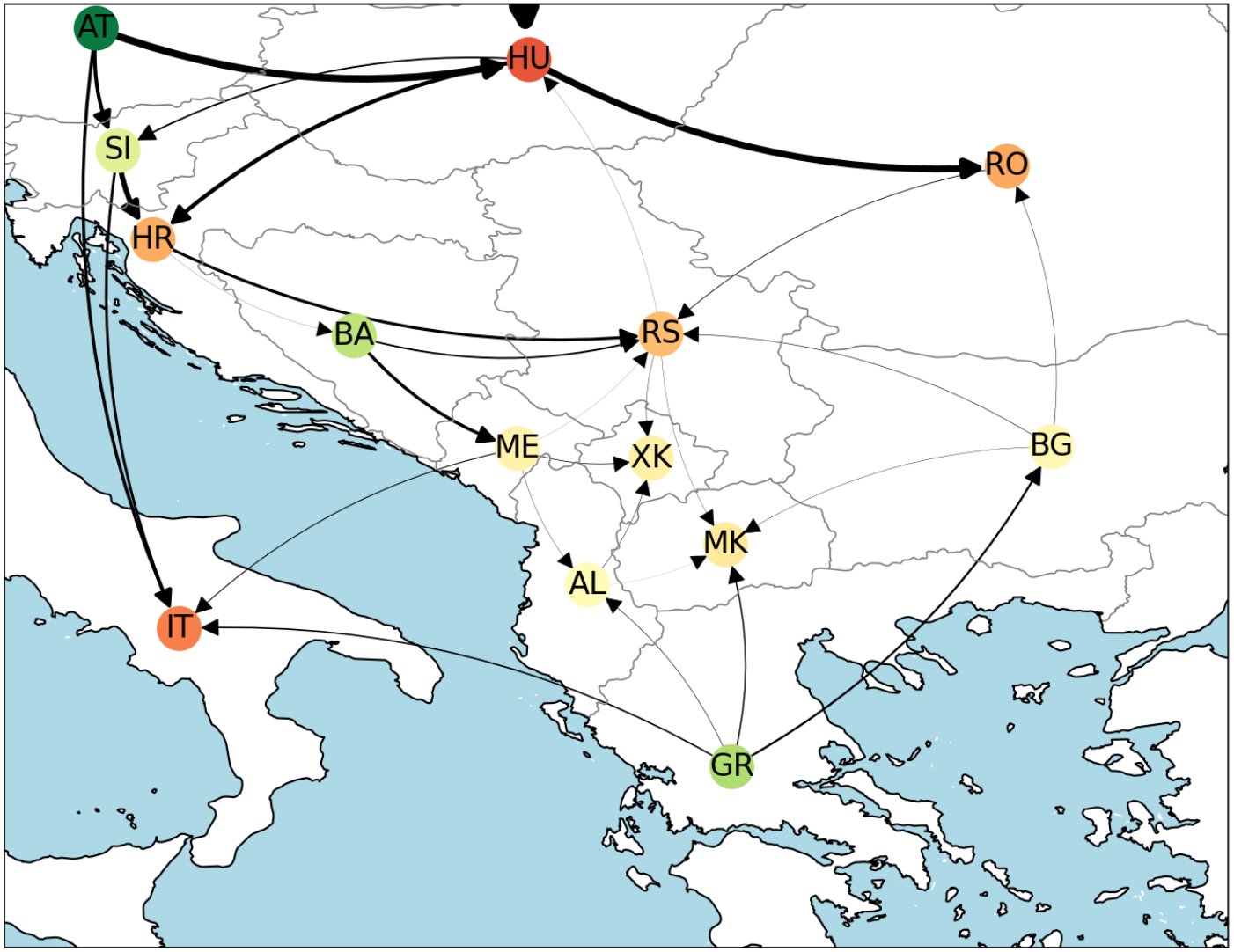
Providing you with the full market story

Comprehensive range of energy market data

De-code data into actionable insights and projections that tell a coherent story

Constantly monitor the market to quickly identify and address changes impacting your business

South East Europe trends



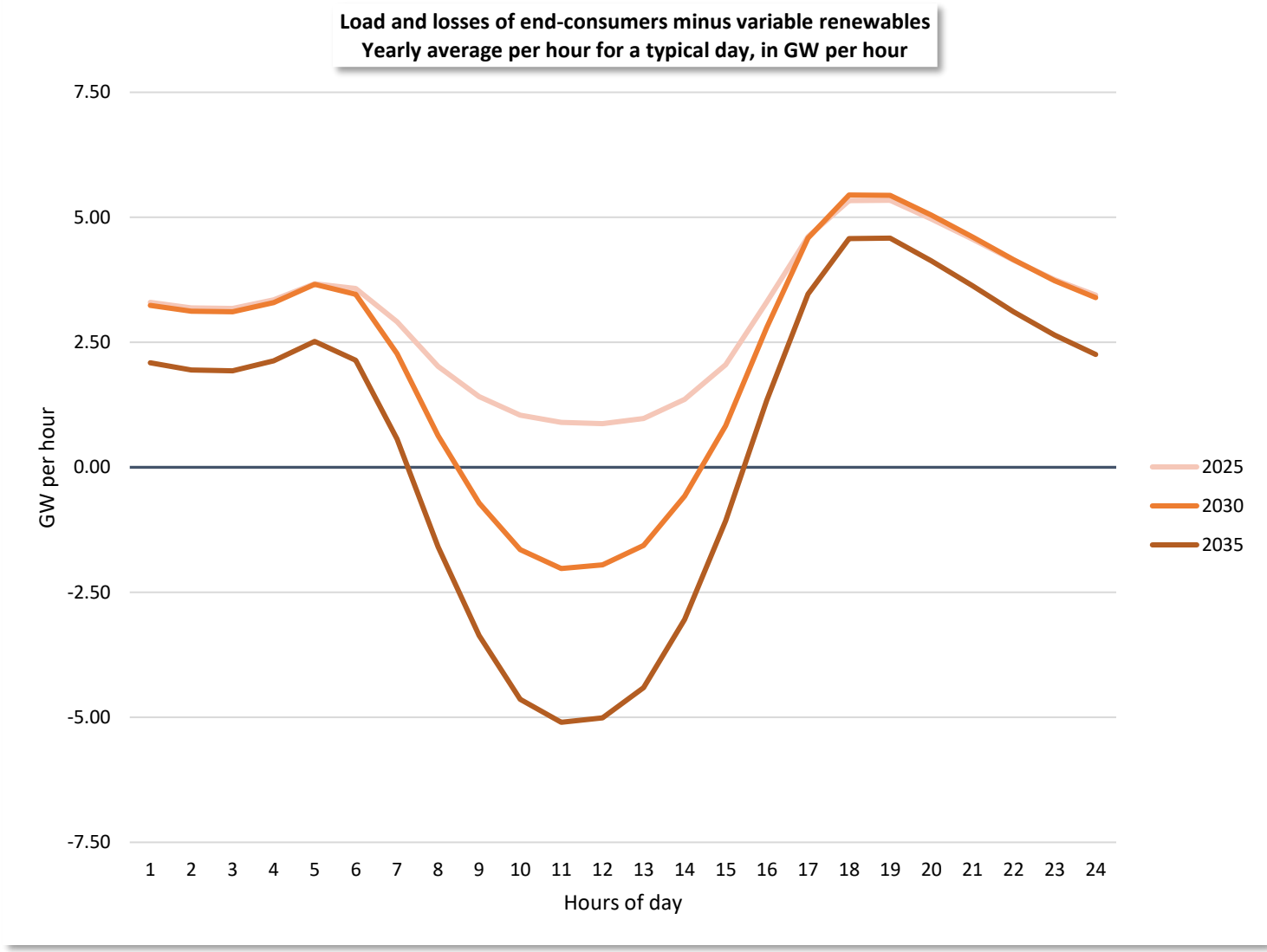
Stylized flows based on EMO Trends scenario for the upcoming years

- RES expansion is significant in most countries
- Storage deployment in BG RO is very rapid
- RES and nuclear baseload seem to be replacing ageing lignite fleet of neighboring countries
- Greece establishes as main net exporter in the region

EXPECTED EVOLUTION OF NET LOAD IN GREECE

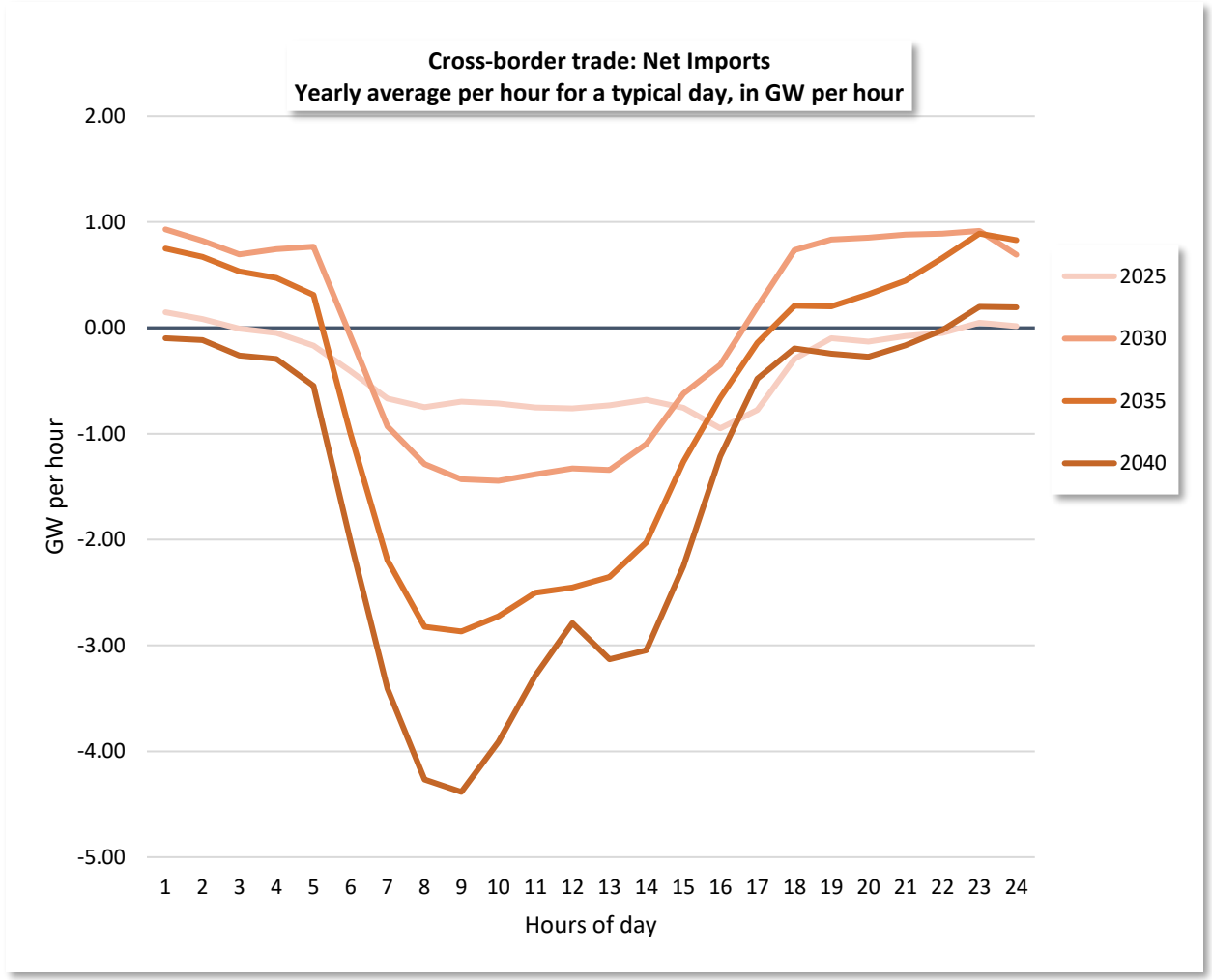
- Renewable generation is expected to exceed demand during noon →negative net load

- This excess RES electricity has to be either:
  - Stored
  - Exported
  - Curtailed

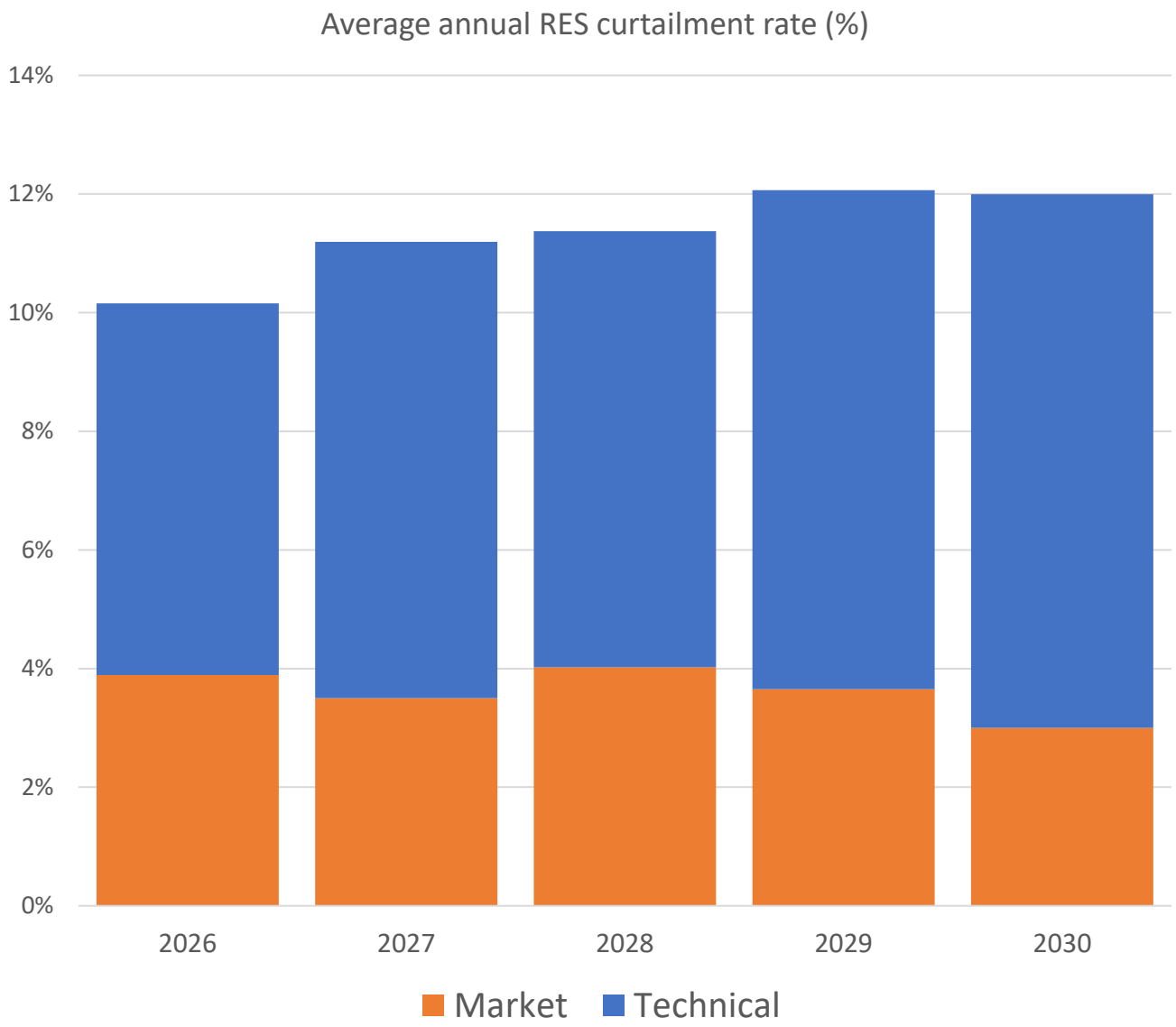


EVOLUTION OF NET IMPORTS

- While net exporter the diurnal pattern shows some variability:
- Exports during noon and imports during evening. If domestic storage economics are tough, exporting excess daytime solar to the wider SEE region is the alternative to mitigate extreme curtailments.
- This assumes neighboring countries have complementary demand profiles and/or enough storage.
- Evening imports may affect economics of domestic plants and storage units



The curtailment reality



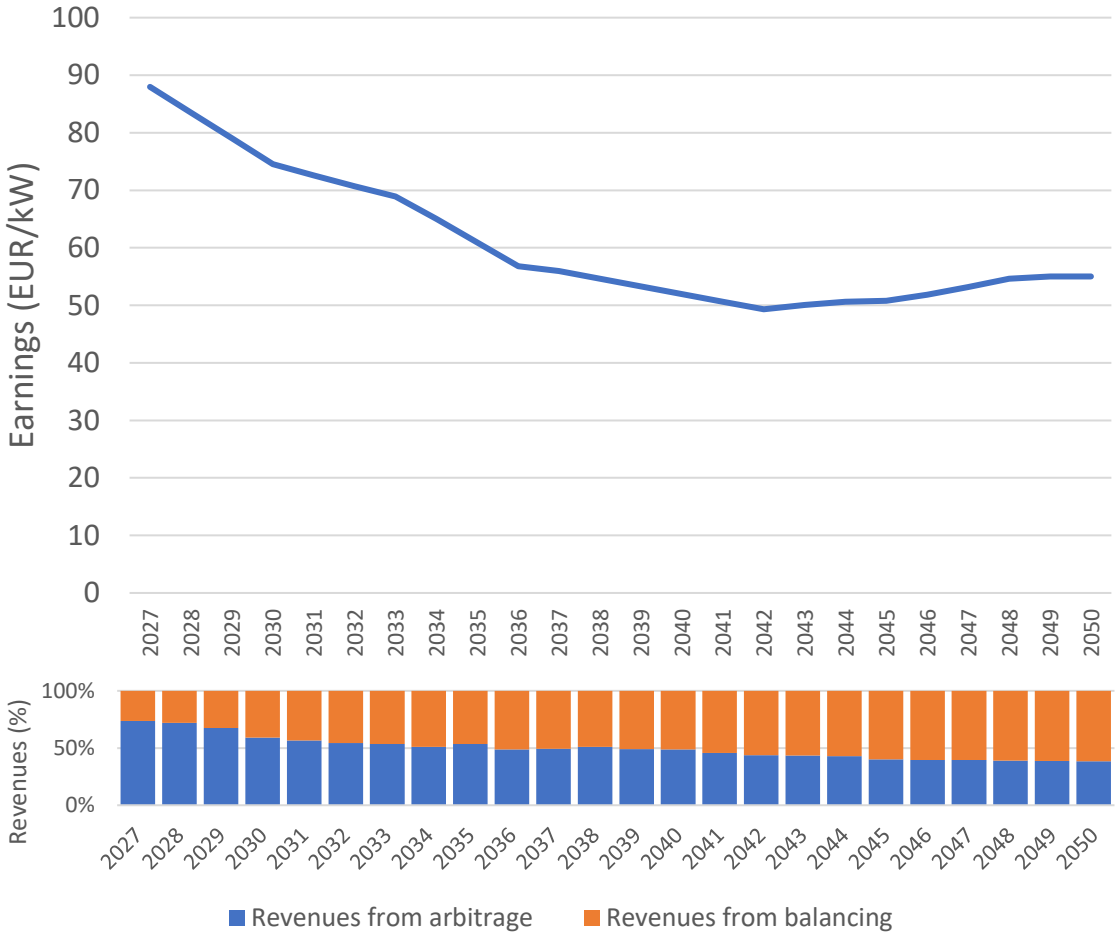
But curtailment varies based on:

- **Technology type**: mostly solar during the first years but later on also wind projects will be affected
- **Contract type**: FiP, FiT, merchant are not affected the same!
- Other local grid constraints

Curtailment seasonality patterns exist

Projections are based on EMO Trends scenario assuming that there are no further delays in storage deployment. If storage lags, market curtailments could skyrocket.

What do the above mean for Storage economics?



The success of the Greek (and SEE) electricity market depends on two factors:

- physically avoiding RES curtailment (colocation ?)
- finding a financially viable business model for the storage that provides this flexibility (tolling ?)

While batteries can capture strong revenues in today's volatile/scarce market, long-term bankability points heavily toward tolling and contracted revenues. Without that the extreme volatility introduces high revenue uncertainty, making the cost of capital (WACC) very expensive

Pure merchant models seems to struggle to hit hurdle rates consistently, securing predictable, stable revenues over a long period through **tolling agreements** or state-backed capacity mechanisms becomes the superior, and often necessary, route to bankability and cheaper financing.

Conclusions

- EMO provides projections on the financial performance of RES and storage technologies.
- The increase in total storage capacity and developments in neighboring countries reduces the price differential, thereby decreasing the revenues of storage plants, but provides a relief for suppressed noon prices and market curtailments.
- The portfolio of RES and storage still faces issues with pure merchant market revenues; bilateral contracts are a potential solution.

- Investment decisions require multiple overall market and regional simulations, not just asset level assessments

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BECOME PART OF OUR STORY

Come talk to us

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