

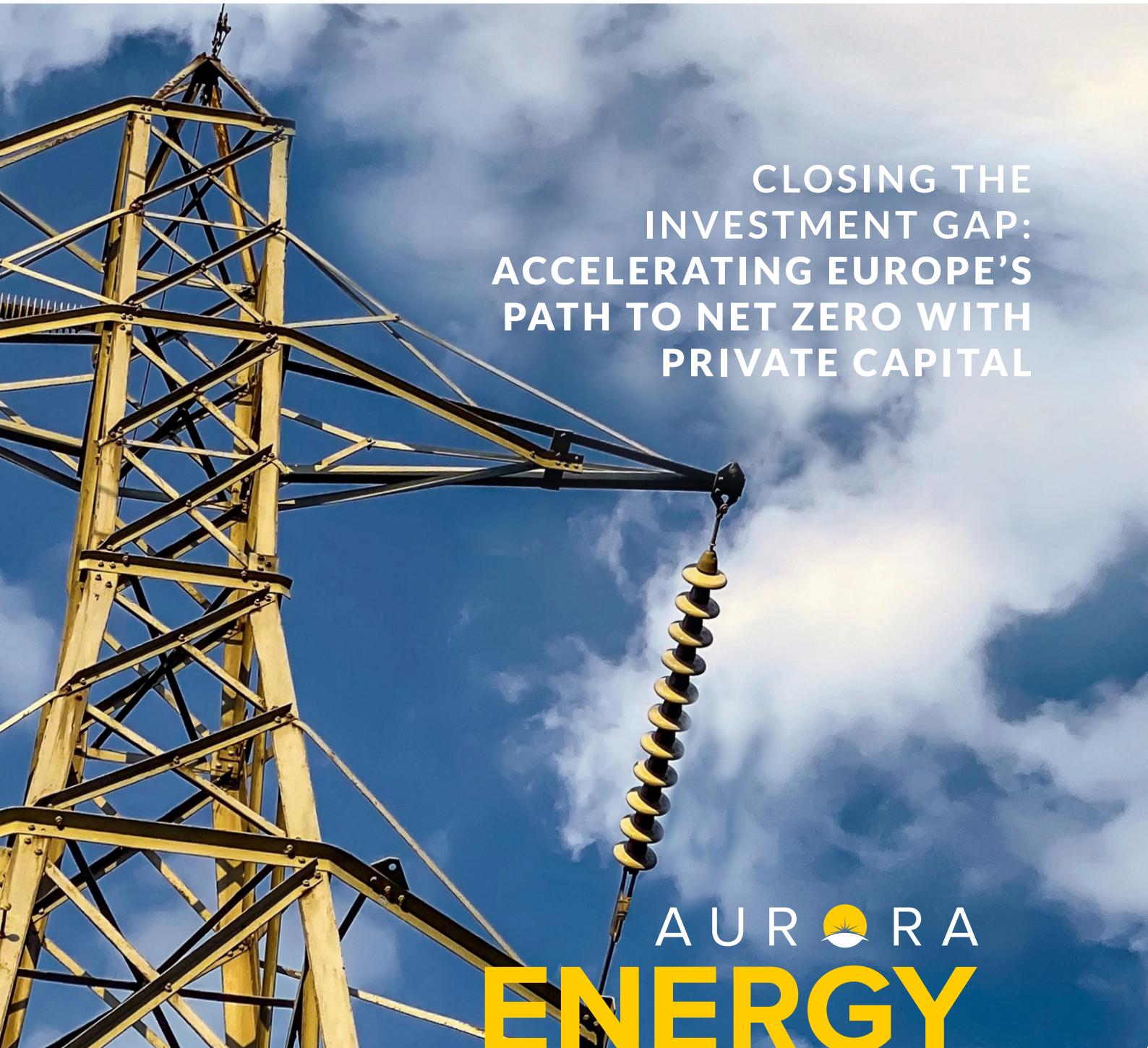
We thank our partners for supporting our event:

PARTNERS:

DENTONS



MEDIA PARTNER:



CLOSING THE  
INVESTMENT GAP:  
ACCELERATING EUROPE'S  
PATH TO NET ZERO WITH  
PRIVATE CAPITAL

AURORA  
**ENERGY**  
**FINANCE**  
**CONFERENCE**

PROGRAMME HIGHLIGHTS

# Leading the energy transition across 80+ countries.

**Dentons, the law firm of the future is here.**

[dentons.com](https://dentons.com)



Scan here for information on Dentons Energy innovative solutions

© 2024 Dentons. Dentons is a global legal practice providing client services worldwide through its member firms and affiliates. Please see dentons.com for Legal Notices.

## Investing to accelerate Energy Transition



Mirova develops investment strategies to finance the energy transition through the construction and management of renewable energy production, storage and clean mobility infrastructure projects worldwide.

**€3.8bn**

in assets under management

**10**

fund vintages

**+1,000**

projects financed in 49 countries

**7.7 GW**

of clean energy installed capacity financed



Source: Mirova, figures since inception as per end June 2024

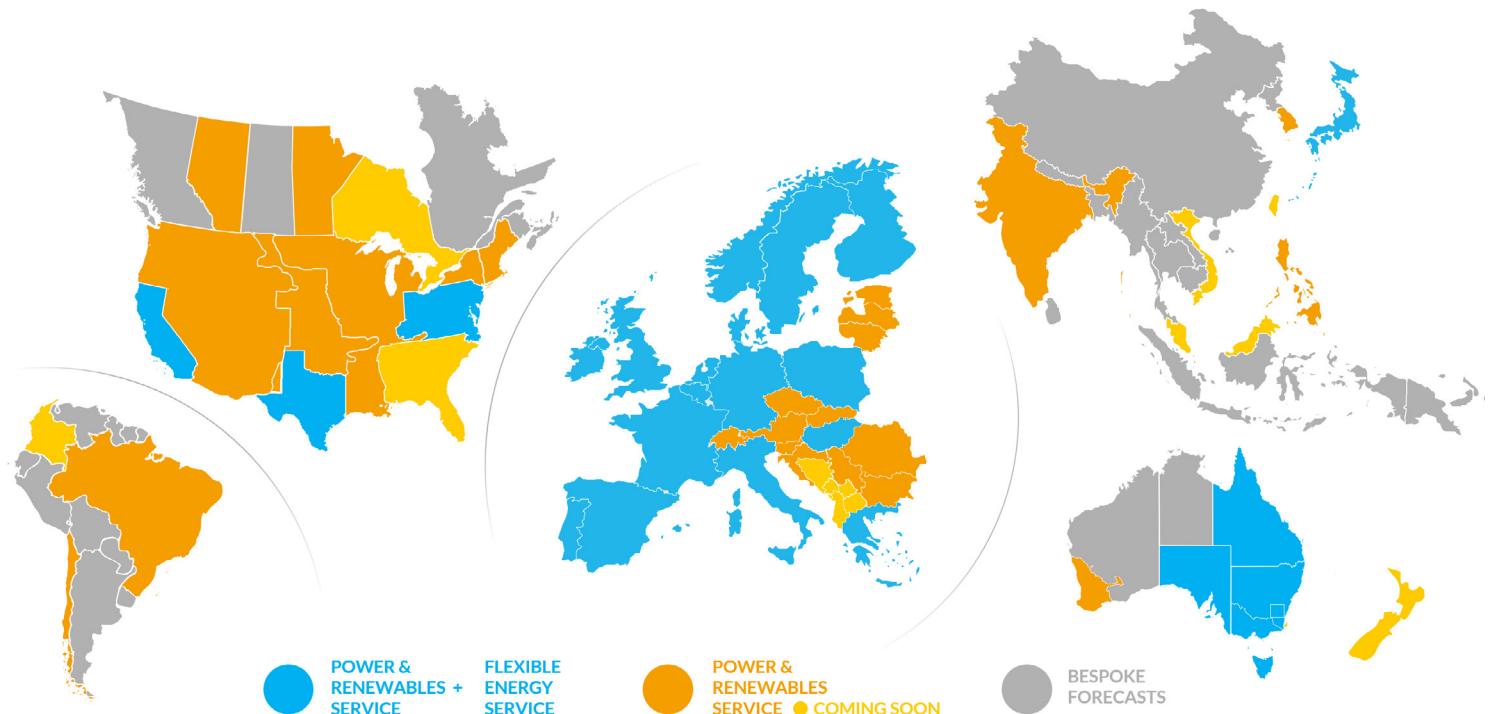
Mirova - Société de gestion de portefeuille – Société Anonyme RCS Paris n°394 648 216 – Agrément AMF n°GP 02-014, 59, avenue Pierre Mendès France – 75013 Paris.  
Mirova est un affilié de Natixis Investment Managers

# POWER MARKET SUBSCRIPTION SERVICES



## MARKET ANALYSIS AND FORECASTS FOR ALL POWER MARKET PARTICIPANTS

Subscribe to powerful forecast and data services for tailored research in market developments, policy interpretation, and topical insights on energy markets issues



### POWER & RENEWABLES SERVICE

Power & Renewables market & forecast reports

All relevant forecast data for a renewables business case in Excel

Strategic Insight reports

Regular subscriber Group Meetings

Policy updates

Bilateral workshops

Analyst support

### FLEXIBLE ENERGY MARKET SERVICE

Detailed forecasts on wholesale, balancing, ancillary services & capacity markets

Battery storage gross margin forecasts under revenue stacking models

Regular policy & market updates  
(Available in GB only)

Bilateral workshops

Analyst support

### BESPOKE FORECASTS

Power & Renewables market forecasts provided upon request

Get in touch, book a demo, & hear more about our services:

**Cara Valentine**  
Commercial Manager  
[cara.valentine@auroraer.com](mailto:cara.valentine@auroraer.com)



Explore our  
offerings:  
Scan the  
QR code



# AURORA ENERGY FINANCE CONFERENCE

MAISON DE L'ARTISANAT, PARIS

WEDNESDAY, 9 OCTOBER 2024



Thomas Östros • 3rd+  
Vice President of the European Investment Bank with oversight of Energy, He...  
1w • 1

Great conversation at the opening of the [Aurora Energy Research](#) Finance Conference in Paris with an in-depth look at Europe's Energy Transition.

We addressed funding challenges, balancing public & private investments and I shared how we, at the [European Investment Bank \(EIB\)](#), are advancing the EU's Green Deal and RepowerEU initiatives.



Anissa El Kettar • 2nd  
Managing Director - Renewables - chez BNP Paribas  
1w • 1

Very enriching exchange with top tier industry players and investors at the first edition of Aurora Energy Finance Conference in Paris. Thank you [Aurora Energy Research](#) for inviting me!



Aurora Energy Research  
52,631 followers  
1w • 1

Chaired by [Dr. Casimir Lorenz](#) Lorenz, our Head of Advisory for Central Europe, our first panel discussion of the day at the Aurora Energy Finance Conference 2024 addressed the topic, 'Merchant Risk in Renewable Finance.'

Many thanks to our excellent speakers for their expert insights:

- Joanna Ellis, Chief Commercial Officer, [Nadara](#)
- Anissa El Kettar, Managing Director, Renewables, [BNP Paribas](#)
- Alice Cajani - [MBA](#), Energy Commercialization Director, [Enfinity Global](#)
- Jérôme TRICOT, Markets Director, Energy Transition Infrastructure, [Mirova](#)

#AuroraFinanceConference #EnergyConference #Renewables #EnergyEconomics



Hugo Teixeira, MBA, CFA, CAIA, FCMA, CGMA, SCR • 2nd  
Head of Risk Management Project Finance EMEA at Siemens Bank  
1w • 1

Thanks [Aurora Energy Research](#) for the very interesting conference. The topic below on battery storage presented by [Evangelos Gazis](#) was particular interesting and eye-opening. The revenue stack for battery storage projects varies massively across markets and also within each market. It is critical to understand the battery saturation (which seems to be already occurring in some markets), the renewables' penetration rate as well as the electricity generation structure.

#aurorafinanceconference #renewables #batterystorage #bess #energytransition



Aurora Energy Research  
52,631 followers  
1w • 1

Shifting the focus onto the #BatteryStorage landscape, [Evangelos Gazis](#), our Head of Southeastern Europe presented the final keynote of the day titled, 'Enhancing Returns and Reducing Risks with Batteries.'

#AuroraFinanceConference #Batteries #EnergyConference



Luxera Energy  
816 followers  
1d • Edited • 1

The main discussion at Aurora's #EnergyFinanceConference: How can Renewable Energy (RE) players de-risk private sector investments?

620bn€ of private capital annually is required to finance the objectives of the Green Deal & REPowerEU. [Aurora Energy Research](#) estimates a large share to be flowing into Battery Storage (BESS), as Europe needs at least 40GW BESS capacity by 2030 to stabilize the grid and maximize RE usage.

Yet, most of us conference participants agreed that attracting such capital is not a given. Financing conditions of #BESS projects mirror risks like increasing price volatility, ever-changing revenue streams, and limited grid infrastructure. A BESS player itself, we distilled three de-risking approaches from the Aurora panel discussions:

- 💡 Setting up BESS design and business model towards revenue stacking to counter increasingly volatile wholesale markets and lower capture rates
- 💡 Making use of tolling agreements, floor prices, PPAs and capacity markets to ensure fixed incomes and optimize gearing
- 💡 Diversifying projects across locations/regions and considering curtailment in siting to limit risks from regulation and grid bottlenecks

What works best in industry practice and how to streamline financing remains tbd - still, as a fully integrated BESS player with an investment platform in the building, [Luxera Energy](#) has the optimal starting position to find out. So let's get at it 🙌

A big thank you [Aurora Energy Research](#) for hosting an amazing conference in Paris and bringing together all us RE-passionists! Excited to keep the conversation going.

#EnergyFinanceConference #BESS #luxera #batterystorage #flexibility





# AURORA ENERGY FINANCE CONFERENCE



Dear friends & colleagues,

It was an honour to host you in Paris for the inaugural Aurora Energy Finance Conference. What an exceptional afternoon it was, bringing together some of the brightest minds in European energy finance. The event reflected both the diversity and unity of Europe, with many traveling from across the continent to join us.

The day was filled with insightful discussions, knowledge-sharing, and key topics that will help drive Europe's progress toward its Net Zero ambitions. I am confident that this is just the beginning of a successful series of events to come.

Amid the uncertainties and investment challenges facing Europe's energy transition—where renewables and batteries confront evolving risks—one central theme that emerged was the need to shift from a project-by-project approach to a portfolio mindset in both financing and asset management.

First, diverse portfolios—spanning different technologies, contracts, and locations—are often better at mitigating risks than single-geography portfolios backed entirely by subsidies. More crucially, diversified portfolios offer greater opportunities for revenue optimisation and value retention, whether for renewables or batteries, compared to tolling contracts. Finally, successful portfolio strategies depend on active management, both ex ante (e.g., siting to minimise grid curtailment risk, optimising plant layouts for revenue rather than yield) and ex post (e.g., hybridising with batteries, retrofitting renewable assets to participate in balancing markets).

In this highlights pack, we have gathered the key insights and takeaways from the day. While it's impossible to fully capture the experience of being there in person, the energy of the discussions, and the value of the connections made, we hope this summary proves helpful.

A number of people deserve special thanks for their critical contributions to the success of the Aurora Energy Finance Conference 2024. We are deeply grateful to our guest speakers—Alice Cajani, Anissa El Khttar, Bettina Voisin, Christian Schnell, Isabel Rodriguez De Rivera, Joanna Ellis, Jérôme Tricot, Lisa McDermott, and Thomas Östros—for their brilliance and engagement.

We also extend our sincere appreciation to our Partners, Dentons and Mirova, and our Media Partner, Clean Energy Pipeline, for their generous support. Finally, my heartfelt thanks to the entire Aurora team, with special recognition to our Events and Marketing teams for their dedication and expertise in delivering another flawlessly organised event.

We look forward to welcoming you to future Aurora conferences. In the meantime, let's keep the conversation going!

Pierre Denney, Head of France, Aurora



# AURORA ENERGY FINANCE CONFERENCE



## OPENING INTERVIEW – FUNDING EUROPE'S ENERGY TRANSITION

Speakers: Thomas Östros, Vice-President, EIB

Manuel Koehler, Managing Director,  
EMEA, Aurora

As the financial arm of the EU, the European Investment Bank (EIB) plays a central role in supporting the implementation of the Green Deal and RePower EU initiatives. During the opening interview, Manuel Koehler and Thomas Östros had an in-depth discussion about the key challenges and opportunities facing the EIB and explored how the bank is creating the conditions needed to meet the EU's climate goals.

### Highlights included the following:

- The EIB views the EU's climate initiatives as critical to its success; these structured frameworks are necessary for overcoming "traditional market forces," which would not decarbonise at the pace now required to meet climate targets. In practice, these frameworks allowed the EIB to invest 21 billion € into energy initiatives last year, with a strict no-gas or coal policy, providing significant lending power to the renewables and low-carbon technology markets.
- The EIB's lending is concentrated in three distinct pillars: renewables, efficiency, and grids. While "energy efficiency comes first" it has been a more challenging sector given the decentralised nature. Grid infrastructure investment remains a focus as a means of unlocking higher renewable penetration—a topic addressed throughout the conference.
- Comparing Europe's approach to other global superpowers highlights limitations and new challenges faced by the EIB. The United States' IRA tax credits system has been impressively effective, largely due to its simplicity, but the EU's lack of joint tax policy would limit this type of mechanism in the EU. And while China's role in lowering solar PV costs has spurred greater adoption of solar in the EU, domestic production is now more at risk.
- Despite Europe's tax policy and reliance on China, Europe has remained "the leading continent in many clean technologies," with the EIB able to foster greater innovation in capital markets. The key to this is the EIB's ability to take on more risk than private markets: while "major commercial banks have reached their limits on their balance sheets," the EIB is able to lend to emerging technologies like floating offshore wind or green hydrogen production, ensuring the EU continues to lead the way globally.



# ORIGIN

OUR ULTIMATE MARKET ANALYTICS SOFTWARE

Quantify opportunities & risks to your investments with Origin, our ultimate power market analytics software

**Reliable:** The exact same cutting-edge model used by Aurora

**Up-to-date:** Fully calibrated & continuously updated with data

**Intuitive:** User friendly, requires minimal training & onboarding

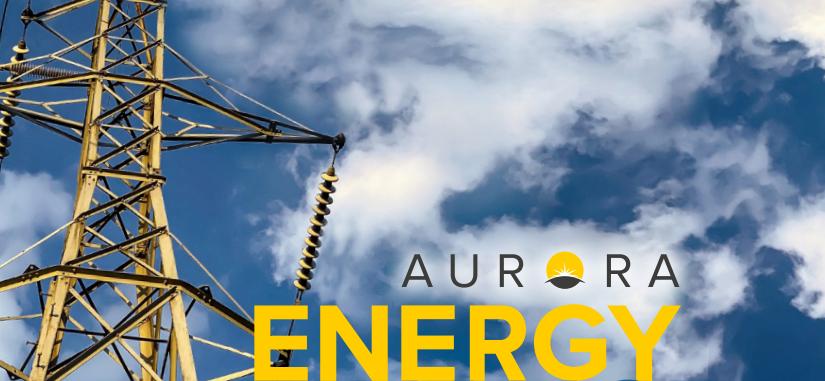
**Origin** is used by leading utilities, developers, funds, TSOs & consultants



Visit our website:



[auroraer.com/  
software/origin](http://auroraer.com/software/origin)



# AURORA ENERGY FINANCE CONFERENCE



## AURORA KEYNOTE – MANAGING GRID CURTAILMENT RISK IN EUROPE

Speaker: Ana Barillas, Managing Director, Iberia & LATAM, Aurora

Grid curtailment has become a key concern for most players in the renewables market, as wind, solar, and battery assets are curtailed in their capacity to export the entirety of their output to the grid due to local congestions. Although this issue is still emerging, it is expected to grow: as the pace of renewable asset development outstrips grid reinforcement, grid curtailment will likely occur more frequently, leading to additional costs for system operators.

This issue is now particularly evident in renewable-heavy power systems such as the UK and Spain, where large, new solar and wind capacities are being developed in localised regions with higher load factors but far from major consumption centres. Insufficient grid investment exacerbates this issue, resulting in less efficient integration of renewables and significant investment uncertainties.

Several solutions are being explored: transmission system operators (TSOs) are undertaking massive grid expansion projects, and demand growth is expected to help absorb excess renewable generation. On an asset-specific level, developers are increasingly investing in co-location, and revenue diversification strategies can help better manage curtailment risk.

Key insights from this analysis include the following:

- Curtailment is highly concentrated, with ten provinces in Spain accounting for 93% of non-compensated curtailment; it is also heavily skewed toward the summer months.
- In Spain, curtailment is not always compensated; uncompensated curtailment increased from 1,089 GWh in 2022 to 1,207 GWh in 2023.
- In 2023 alone, nearly 30 TWh of generation was lost to grid curtailment across six countries, costing nearly 9 billion €.



Click [HERE](#) to view the presentation



## PANEL DISCUSSION – MERCHANT RISK IN RENEWABLE FINANCE

Chair: Casimir Lorenz, Head of Advisory, Central Europe, Aurora

Panelists: Anissa El Kettar, Managing Director, Renewables, BNP Paribas

Jérôme Tricot, Markets Director, Energy Transition Infrastructure, Mirova

Joanna Ellis, Chief Commercial Officer, Nadara

Alice Cajani, Energy Commercialization Director, Enfinity Global

Renewables deployment been a success story across Europe's varied markets, despite the differences in regulation, grid infrastructure, and resources. The financing of these projects has followed similar trends across markets but will need to evolve to the changing regulatory outlook. During this session, the panellists had an in-depth discussion on how managing merchant risks, evolving support schemes, and new challenges like grid curtailment can impact securing competitive financing.

Highlights included the following:

- Europe's renewables market has matured over the last two decades, with technical risk now no longer a major factor: "We are dealing with vanilla" as Anissa El Kettar put it. Even so, exposure to merchant risk must still be actively managed in the current climate. While the early 2010s were characterised by fully contracted revenues, the high-power prices brought on by Ukraine fuelled a strong appetite for merchant exposure. However, today's more muted demand, lower prices, and increased volatility has resulted in project financing targeting a middle ground. Regulated revenues are still necessary to protect the investment during market volatility, but there should be enough merchant left to access the upside.
- "Blending merchant risk at a portfolio level," rather than project level, is an emerging financing trend according to Joanna Ellis. Cross-border portfolios, particularly, offset risk through market diversification by mixing differing regulated revenues, diluting large off-takers, and augmenting balance sheets with ancillary services.
- While the exact approach of "measuring" risk varies, active management hedging methods discussed included relying on third party deterministic and stochastic forecasting, the importance of back casting, and maintaining an adaptable approach to react to rapidly changing market dynamics.
- As Europe's power markets evolve, new challenges, such as growing grid curtailment, will continue to arise; innovative project financing, such as portfolio blending, will be key to bridging volatile periods.



# Introducing CHRONOS

The only  
bankable battery  
valuation software  
you'll ever need

The investment opportunities for battery storage is expansive, but that means they can easily become overwhelming.

Fortunately with Chronos, the answers are at your fingertips.



Run thousands of valuations

Scan hundreds of sites

Optimise your tech

Compare hundreds of trading strategies

Assess your sites for co-location

Chronos is powered by Aurora's bankable curves, giving you reliance-ready results for due diligence, transactions, and financing.

Supported by world-class storage and market experts from Aurora, Chronos empowers you to get it right.



TRY OUT  
CHRONOS  
ON YOUR  
PROJECT



**CHRONOS**  
Battery valuations, perfected.



# AURORA ENERGY FINANCE CONFERENCE

## AURORA KEYNOTE – ENHANCING RETURNS AND REDUCING RISKS WITH BATTERIES

Speaker: Evangelos Gazis, Head of Southeastern Europe, Aurora

As the rollout of renewables in Europe continues, the grid is seeing increasing intermittency and volatility—a trend that will worsen as more renewables enter the system and push out existing stable baseload power. System flexibility is vital, and batteries can best provide this across Europe. Aurora forecasts that European battery capacity will reach 40 GW by 2040, and the financing of such flexible projects is just getting started.

Highlights from the session include the following:

- Batteries across Europe source revenues from a range of markets, mixing energy arbitrage and capacity-based markets. To maximise returns and minimise risks, batteries need to stack revenues from these different markets, whether wholesale or balancing markets. However, the markets in which they participate will vary depending on the country and battery's duration.
- Batteries face cannibalisation risks, especially in ancillary markets, which are shallower compared to wholesale markets.
- There are three main contracting paradigms for batteries in Europe to ensure consistent revenue streams and reduce business case risk:
  - Capacity markets: These are prevalent in most European markets, offering remuneration based on derated battery capacity. Currently, derating factors are high (e.g. 95% for a 4-hour battery in Poland), but these will cannibalise and decrease over time.
  - CfD mechanisms are mostly popular in Southeast Europe: In Greece, 1.5 GW are currently under procurement through CfDs. These contracts are based against a reference gross margin benchmark, which rewards overperforming assets.
  - Offtake agreements are less common in Europe: Merchant risk exposure is split between an offtaker and developer, allowing greater access to debt financing and higher gearing rates.

In conclusion, batteries will be increasingly essential in the European market and have access to a range of financing options to try and mitigate the risks posed by merchant exposure and cannibalisation.



Click [HERE](#) to view the presentation



# AURORA ENERGY FINANCE CONFERENCE



## PANEL DISCUSSION – FINANCING STRUCTURES FOR BATTERY PROJECTS

Chair: **Jesse Hettema**, Head of Netherlands & Belgium, Aurora

Panellists: **Bettina Voisin**, Head of Project Financing, Neoen  
**Christian Schnell**, Partner, Co-Head of the Europe Energy Group, Dentons

**Isabel Rodriguez de Rivera**, Managing Director, Renewable Energy Investments, Glennmont

**Lisa McDermott**, Managing Director, Project and Infrastructure Finance, ABN Amro

Battery storage is set to play a pivotal role in Europe's energy transition, with over 40 GW of new capacity expected by 2030. This session delved into the complexities of financing battery storage projects, focusing on key aspects such as the importance of revenue stacking and the evolving landscape of ancillary services, which are becoming increasingly saturated. The discussion also examined the significance of contracting models like Capacity Markets and Offtaker Agreements in mitigating risks and improving the bankability of projects.

Industry experts on the panel highlighted the potential of batteries to stabilise energy portfolios and discussed whether broader regulatory changes are needed to unlock the sector's full potential.

Key points discussed by the panel included:

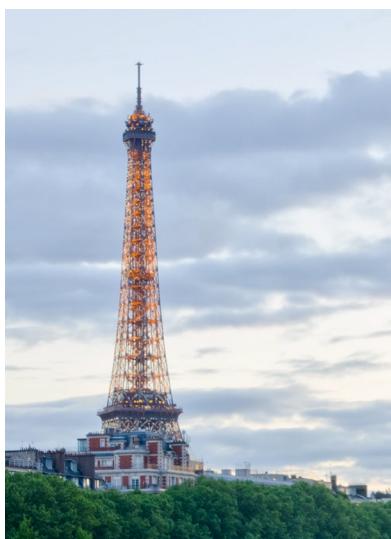
- The growing challenge of ancillary services saturation, making revenue stacking crucial for project viability
- The role of Capacity Markets and Offtaker Agreements in reducing merchant risk and improving financing prospects
- The potential need for regulatory reforms to fully integrate battery storage and minimise project risks



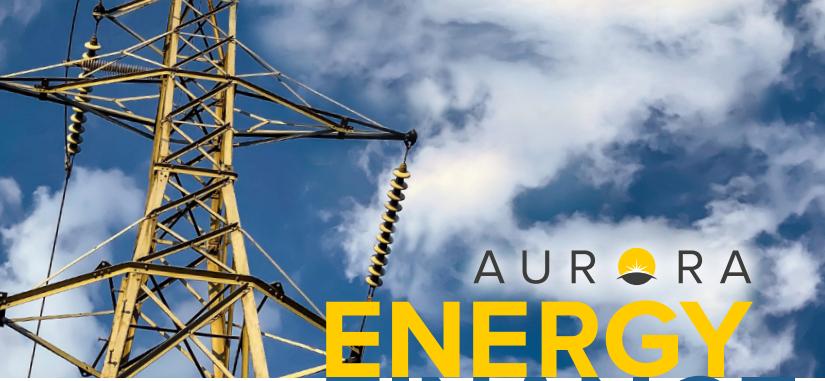
# AURORA ENERGY FINANCE CONFERENCE



**WATCH THE HIGHLIGHTS VIDEO**



Tweet: @AuroraER\_Oxford #AuroraEnergyFinanceConference



# AURORA ENERGY FINANCE CONFERENCE



Tweet: @AuroraER\_Oxford #AuroraEnergyFinanceConference

# AURORA HYDROGEN MARKET SERVICES

Available  
in EUROPE  
& APAC

Your all-inclusive Hydrogen Market Service featuring analysis, forecasts, timely insights, and networking opportunities with senior representatives from industry and government.



## What does the Hydrogen Market Service include?

### Our Market Reports & Forecasts

comprehensively analyse hydrogen demand, production costs, market prices, and regulations, across fifteen European countries as well as bespoke coverage in several APAC countries.

### The Global electrolyser project database

keeps you informed with all key projects listed and updates to the development pipeline.

### Policy Updates

provide up-to-date analysis of the latest regulatory and policy shifts, highlighting their affects on market dynamics and identifying actionable opportunities for industry stakeholders.

### Timely Strategic Insight Reports

equip you with deep dives into topical issues in the evolving hydrogen market exploring country, policy, and technology.

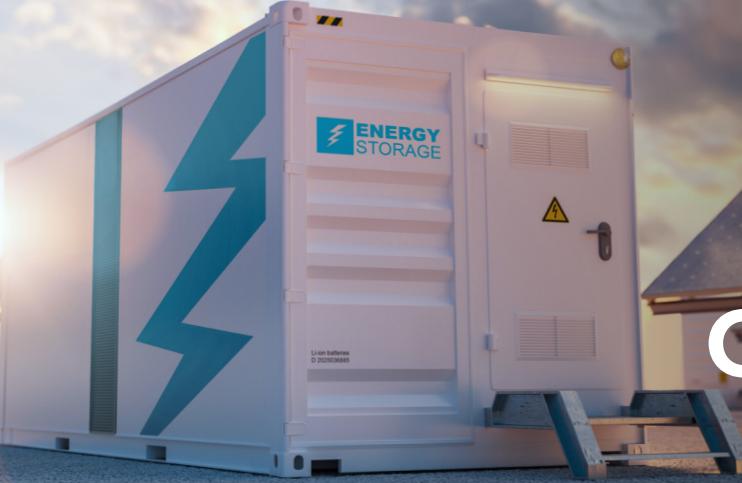
### Need something more bespoke?

Our Advisory team can offer tailored research, with recent projects including pricing analysis, asset forecasting, and strategic reviews.

To find out more, scan the QR code or go to:

<https://auroraer.com/european-hydrogen-market-service/>





# AURORA Battery Conference

LONDON 2024

**CHARGING AHEAD:  
UNLOCKING INVESTMENTS IN  
EUROPE'S BATTERY STORAGE MARKET**

**LONDON, TUESDAY 12 NOVEMBER**

The need for flexible energy storage is increasing with rising decarbonisation ambitions & growing renewables penetration. Blending Aurora's innovative analysis with perspectives from industry experts, attendees are guaranteed to be intellectually challenged at this leading event.



# AURORA SPRINGFORUM

LONDON 2025

The Aurora Spring Forum, the leading annual gathering of the European energy industry, returns in 2025—now in London and extended to one and a half days. This unmissable event brings together the most senior industry experts, policymakers, and investors to address the key challenges facing the decarbonization of the energy system. With more time for in-depth analysis, intellectual engagement, and exclusive networking, this event is where the future of the energy transition takes shape.

**LONDON, WEDNESDAY 21 & THURSDAY 22 MAY 2025**

For more information about our events, please get in touch:

**Ángel Cervera**, Event Content Producer, Aurora  
T: +44 1865 952700 angel.cervera@auroraer.com

**Priscilla Castro**, Senior Event Content Producer, Aurora  
T: +49 30 1208 4969 priscilla.castro@auroraer.com

Find out more,  
visit: <https://auroraer.com/events>





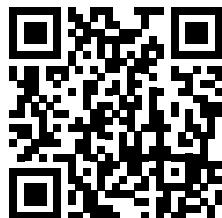
E N E R G Y   R E S E A R C H

ATHENS | AUSTIN | BERLIN | MADRID | GURUGRAM | MELBOURNE

NEW YORK | OAKLAND | OXFORD | PARIS | ROME | SÃO PAULO

SINGAPORE | STOCKHOLM | SYDNEY | TOKYO

Scan here for our contact details



**CRITICAL  
ENERGY  
MARKET  
ANALYTICS**

