



CLEAN HORIZON
The Energy Storage Experts



Online energy storage training sessions 2021

Introduction to energy storage

March 16th, 2pm-5pm CET

Business models and revenue streams in Europe

March 18th, 2pm-5pm CET





Clean Horizon was started in 2009 as a “one-stop shop” consultancy 100% focused on energy storage

MARKET ANALYSIS



Our experts track the development of energy storage markets and related regulations on all continents and leverage this knowledge to develop go-to-market strategies tailored to our customers' needs.

Update from the Field
Monthly analysis Notes

CHES
Storage projects database

TECHNICAL CONSULTING



Relying on CRE-STORE, our dedicated energy storage modeling tool, we act as owner's engineer and lender's engineer for IPPs worldwide.

We also work for national utilities to help them quantify their energy storage master plan.

CRE-STORE
Storage simulation tool

Webinar training: session 1

Introduction to energy storage: applications, technologies, costs and risks



Speaker

Michael SALOMON Ph.D.
CEO
Clean Horizon

Michael obtained his engineer's degree at Mines ParisTech in France and his Ph.D. at Stanford in the USA. He witnessed the booming of cleantech venture capital and entrepreneurship while an academic in the Silicon Valley, and then went on to become a management consultant at McKinsey in Paris.

In 2009, he founded Clean Horizon in Paris which he has led and grown since then. Since its creation, Clean Horizon has confirmed its status as the only, boutique consultancies in the world specialized solely on energy storage.

Clean Horizon is active globally (Europe, Africa, Americas, Asia) both as a market analyst and as a technical consultancy focusing on energy storage.

Agenda:

[See the detailed agenda on next slide](#)

What's included:

- 3-hour live webinar
- Q&A
- Training slides

When:

March 16th 2021, 2pm to 5pm CET

Price:

400 EUR net of VAT per participant

GROUP DISCOUNT (3 - 5 participants from the same company)

Benefit from a total price of 1 000 EUR net of VAT per session

Who should attend?

Any stakeholder interested in understanding the energy storage markets and the different technologies available

Session prerequisites:

None

Session objectives:

This introductory session to energy storage is a great introduction to

- Global energy storage markets, taking a look at the broader picture from an international perspective
- Energy storage technologies and applications



Webinar training: session 1

Detailed agenda

1. Introduction to the storage markets worldwide

- Brief overview of energy storage technologies
- Energy storage leaderboard
- Main applications of utility-scale energy storage

2. Lithium-ion: what to expect for the next decade ?


- Breakdown of the turn-key battery storage system cost
- NMC vs LFP, what is at stake
- The fire risk explained
- Recycling & repurposing

3. Beyond lithium-ion

- Is long-duration storage a myth ?
- Green hydrogen, what has changed in 2021 ?

4. Global market trends

- Choosing between AC- and DC- coupling
- Aggregation: a must-have for storage
- The economics behind renewable-plus-storage PPAs



Webinar training: session 2

Business models and revenue streams for energy storage in Europe in 2021

Speaker



Corentin BASCHET
MSc.

**Head of Market Analysis
Clean Horizon**

Corentin Baschet graduated in engineering at Ecole des Ponts et Chaussées in Paris and studied his master in sustainable energies at the Imperial College in London. He first developed his technical skillset by working in anaerobic submarine energy propulsion systems and racing yachts electricity system.

At Clean Horizon, Corentin is the Head of market analysis activities, thus overseeing one of the two business units of the company. As such, he acts as project manager on key market analysis projects. In parallel he maintains a hands-on approach of key development markets for the ESS market.

Corentin has worked on more than 50 engagements regarding energy storage since 2017.

Agenda:

[See the detailed agenda on next slide](#)

What's included:

- 3-hour live webinar
- Q&A
- Training slides

When:

March 18th 2021, 2pm to 5pm CET

Price:

400 EUR net of VAT per participant

**GROUP DISCOUNT (3 - 5 participants
from the same company)**

*Benefit from a total price of 1 000 EUR
net of VAT per session*

Who should attend?

Investors, developers, independent power producers willing to have a good level of understanding of the different revenue streams available for storage system in Europe.

This session is also a good opportunity for stakeholders worldwide to understand how the European market structure enables storage development through revenue stacking to maximise benefits.

Session prerequisites:

None

Session objectives:

- Understanding of the market structure in Europe and its benefits for energy storage
- Understanding of the market developments for storage to provide a variety of services across the electricity supply chain (generation, transmission, distribution)



Webinar training: session 2

Detailed agenda

1. Introduction to the European storage markets

- Overview of the installed capacity per country

2. Capacity markets

- Why do we need capacity payments
- The strike price model VS the availability model
- Example of the French long-term capacity auction

3. Frequency Containment Reserve

- The FCR cooperation
- FCR price : where will the decline end ?

4. Fast frequency control services

- The growing need for fast frequency control
- Example of the Dynamic Containment, Great Britain's most lucrative ancillary service

5. Secondary reserve markets

- The PICASSO cooperation project
- How to generate revenue with storage assets on the aFRR
- Example of Belgium: energy storage takes advantage of Elia's new aFRR format

6. Renewable-plus-storage auctions in Iberian countries

- Spain VS Portugal: what will be the role of storage in the next auctions ?

7. Conclusion

- Mapping of the major opportunities for storage in Europe
- A quantitative forecast of the storage landscape in 2025



HOW TO ENROL ?

ONLINE REGISTRATION on www.cleanhorizon.com/online store:

Session 1: [Energy storage: introduction to markets, technologies, costs and risks](#)

Session 2: [Markets and Regulations for storage in Europe](#)

You will need to create your client account to proceed with your registration.

Interested in signing up for both sessions?

You can benefit from an additional discount if you sign up to the 2-in-1 session package!!!

Please select our 2-in1 training webinar in our online store.

FOR MORE INFO, please feel free to contact us at training@cleanhorizon.com



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