



**CLEANHORIZON**  
The Energy Storage Experts

## Energy Storage Online Sessions – June 2022



# Energy Storage Online Sessions – June 2022

---

- 1- Introduction to energy storage
  - 2- Business models and revenue streams in Europe
- 

Session 1: June 21st, 2:00 PM – 5:00 PM CEST

Session 2: June 23rd, 2:00 PM – 5:00 PM CEST



## Our Team of Experts



### **Michael Salomon , Ph.D.**

#### **CEO**

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.



### **Corentin Baschet, MSc.**

#### **Head of Market Analysis**

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.



## Our Team of Experts



### **Naim El Chami, MSc.**

#### **Senior Hydrogen and Energy Storage Analyst – Training Manager**

Naim completed two Engineer's degrees at CentraleSupélec (France) and Saint Joseph's University (Lebanon). He obtained his Digital Economics and Network Industries Master's degree from Paris Dauphine University and Paris-Saclay University (France).

At Clean Horizon, Naim has been in charge of conducting multiple energy storage studies on geographies as different as the United States, Latin America, Europe and the Middle East. He is spearheading knowledge management activities in the company as the one-stop person both for market analysis - due to his involvement in Clean Horizon's CHESS storage project database - and regulatory watch. He supports the hydrogen team from the regulatory and market knowledge angles.



### **Rachel Locquet, MSc.**

#### **Hydrogen and Energy Storage Analyst**

Rachel completed her Engineer's degree at Institut d'Optique (France) and pursued with a double degree at Imperial College London (United Kingdom) where she completed her Sustainable Energy Futures Msc. Her Masters thesis enabled her to use her mathematical modelling skills to suggest an optimum electrification strategy to a region of Sri Lanka using the GAMS modelling tool.

At Clean Horizon, Rachel specializes in the optimization of hydrogen production and storage systems dispatch: she uses her modelling skills and electricity market knowledge to create complex, market-based business models to optimize the design of renewable + hydrogen plants.



# Webinar training – Session 1

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

**Objectives:** This session is a great introduction to:

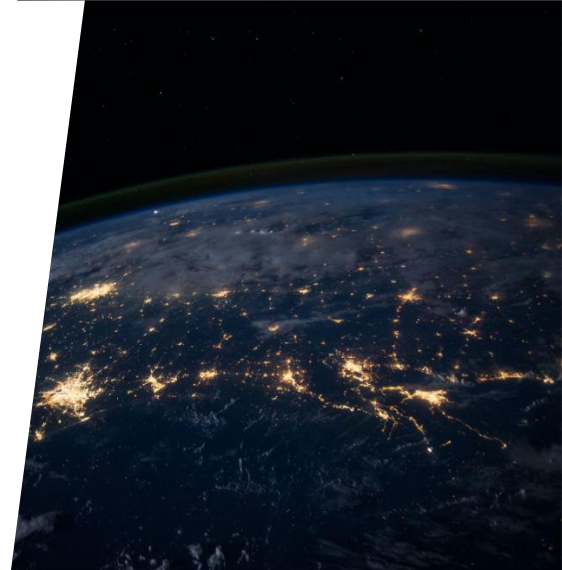
- Global energy storage markets, taking a look at the broader picture from an international perspective
- Energy storage technologies and applications

### **Who should attend?**

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

**Prerequisites:**           None

17/05/2022





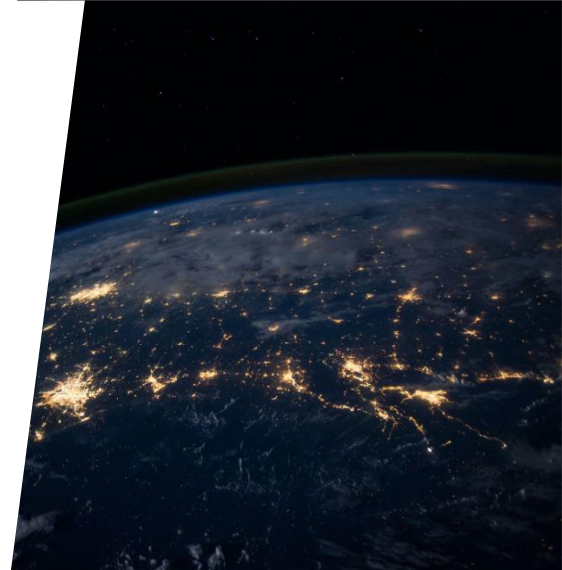
# Webinar training – Session 1

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

**When:** June 21st 2022, 2:00 PM to 5:00 PM CEST

**What's included:** 3-hour live webinar  
Q&A  
Training slides

**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



17/05/2022



# Detailed agenda – Session 1

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

### **1. Introduction to international storage markets**

- 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. 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 2022*

### Objectives:

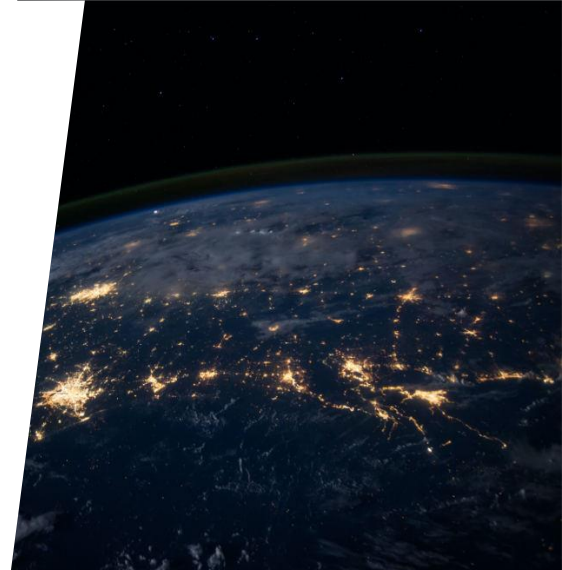
- Understanding of the market structure in Europe and its benefits for energy storage
- Understanding of the market developments for storage to provide a variety of services across the electricity supply chain (generation, transmission, distribution)

### 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 maximize benefits.

Prerequisites:           None







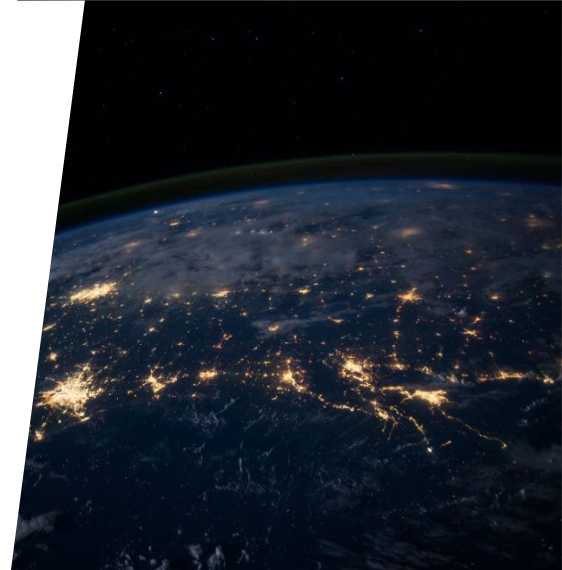
# Webinar training – Session 2

## *Business models and revenue streams for energy storage in Europe in 2022*

**When:** June 23rd 2022, 2:00 PM to 5:00 PM CEST

**What's included:** 3-hour live webinar  
Q&A  
Training slides

**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



17/05/2022



## Detailed agenda – Session 2

# *Business models and revenue streams for energy storage in Europe in 2022*

### 1. Introduction to European storage markets

- Overview of 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



## Detailed agenda – Session 2

# *Business models and revenue streams for energy storage in Europe in 2022*

### 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 Poland and Germany

### 7. Conclusion

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

## ONLINE REGISTRATION on

:

### ***Interested in signing up for both sessions (when applicable)?***

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.

### ***Interested in enrolling multiple participants?***

You can benefit from a group discount (3 - 5 participants from the same company): benefit from a total price of 1 000 EUR net of VAT per session !

***You will need to create your online client account to proceed with payment through PayPal. Once your payment is done, you will receive a confirmation of your registration by email (please check on your spam box).***

## **CANNOT REGISTER ONLINE?**

In order to receive a proforma invoice and pay through bank transfer, please send an email to [accounting@cleanhorizon.com](mailto:accounting@cleanhorizon.com) to including:

- The company name, its billing address, its VAT number and any other mention (such as purchase order) needed by your finance department,
- The title of the training webinar for which you want to book attendance
- The first name and family names of the attendee(s)

**FOR MORE INFO, please feel free to contact us at [training@cleanhorizon.com](mailto:training@cleanhorizon.com)**



**CLEANHORIZON**  
The Energy Storage Experts

**If you have any questions, please reach out to:**

**[training@cleanhorizon.com](mailto:training@cleanhorizon.com)**