MASTERING ENERGY STORAGE AND CHARGING ELECTRIC VEHICLES

Introduction

In The Mastering Energy Storage & Charging Electric Vehicles (EVs) workshop. There are two modules available: **Mastering Energy Storage** and **Charging Electric Vehicles – Grid Impacts & Value Chain Opportunities.** The course is ideal but not limited to professionals from investment community or who are working within the power sector in a commercial or business development role.

For professionals from investment community, electricity storage presents a fast-growing market opportunity which they are keen to investigate. This workshop will assist in gaining an independent perspective on the competing options, the economic environment in which storage projects operate, and the operational and revenue risks which are important to them.

Main Objectives

On the other hand, this workshop provides a clearly explained, multi-faceted understanding of how, where and why electricity storage is disrupting existing markets and business models for professionals who are working within the power sector in a commercial or business development role, so that they can understand new market opportunities and competitive risks facing own business.

Who should attend?

The training course is designed for investors, developers and policymakers assess new market opportunities and risks during the integration of growing fleets of electric vehicles into transitioning electricity systems.

Module I: Mastering Energy Storage

Overview

A comprehensive understanding of business opportunity, competition & risk in this key growth sector.

Do you understand the technology solutions, business considerations and market environments driving the booming energy storage market?

This training course provides a timely, comprehensive and business-focused

Summary of the energy storage landscape. It covers the variety of competing storage technologies and describes the variety of problems they can address, at a wide range of deployment sizes and timescales. It also considers alternatives to storage and barriers to its market growth, making it essential for those seeking to evaluate risks as well as opportunities.

Attendees will leave with a clear understanding of why and where storage markets are growing, what could limit this growth and what the future trends will be.

If you are thinking of investing in or developing an energy storage business, this course provides your essential grounding in the core issues.

Objectives

- Speak the language of electricity storage: terminology and concepts explained
- Language designed for non-engineers; particularly senior, commercial executives & investors
- Core knowledge building, plus examples from around the world
- Discussion of market analysis variables
- Quantification of key issues using simple numerical calculations and Excel-based tools
- Understand the key variables determining the economics of electricity storage
- Review current and emerging market opportunities for electricity storage
- Navigate complex, multi-service contractual relationships
- Be better able to converse with storage project partners, suppliers or investors
- Know what to look for when evaluating electricity storage market opportunities
- Be better able to identify key investment and project development risks
- Understand the key variables determining the economics of electricity storage projects
- Learn and discuss how financial returns and risks will arise in the electricity storage market
- Learn how to analyse and critique electricity storage business models

Topic Highlights

Day 1: Energy Storage Drivers & Technologies

- The Energy Storage Landscape and Market Drivers
- Battery Solutions Explained
- Non-Battery Solutions Explained and Assessed
- Segmenting and Assessing the Market(s) for Competing Energy Storage Technologies

Day 2: Energy Storage in Practice

- Energy Storage for Grid Services Including Frequency Response
- Energy Storage for Time-Shifting, Including Peak Power and Capacity
- Energy Storage Behind-the-Meter with C&I Customers
- Consumer, Community and Off-Grid Energy Storage

Day 3: Projects, Money & the Value Chain

- Energy Storage Project Development
- Energy Storage Economics and Financing
- Assessing the Energy Storage Value Chain
- Closing Comments

Module II: Charging Electric Vehicles – Grid Impacts & Value Chain Opportunities

Overview

Are you ready for the challenges & opportunities of electric vehicle (EV) charging?

This is an EV course for those in the electricity infrastructure and supply business. It introduces you to key power system issues arising from the transition from fossil-fuelled to electric vehicles. What challenges arise from the need to charge grid-connected vehicles and what new business opportunities and all-new power system applications and services are created?

ou'll leave with a thorough grounding in the critical business issues (opportunities and risks) resulting from this disruptive market transition. You'll be presented with a mix of current market data, case studies, contrasting opinions and scenarios.

To help you better understand the variables and uncertainties that exist in reality, we'll illustrate and discuss quantitative calculations; with all calculators and models available to take away and use after the course.

Objectives

- Clear, independent and business-focused introduction
- Language designed for non-engineers; particularly senior, commercial executives & investors
- Core knowledge building, plus examples from around the world
- Discussion of market analysis variables & value chain scenarios
- Quantification of key issues using simple numerical calculations and Excel-based tools
- Review examples and projects in charging infrastructure and charging control from around the world
- Be better able to converse with EV and grid project partners, suppliers or investors
- Identify key power system business opportunities which arise from the growth of EVs

Topic Highlights

Day 4: EVs & the Power System

- EV Market Drivers and Charging Trends
- The Impact of EVs on Transitioning Power Systems
- Charging Networks and the Distribution Systems
- Smart Charging and Managed Power Demand

Day 5: The Evolving Value Chain for EV Charging

- Players, Strategies and New Business Opportunities
- Assessing the Case for Vehicle-to-Grid (V2G)
- Evaluating the Impact of Changing Vehicle Usage and Technology Trends
- Summary: Competitive Landscape Analysis in the EV Charging Sector