

ENERGY STORAGE

Global Conference



PROGRAMME

24 - 26 October 2018
Hotel Le Plaza, Brussels



www.esgc.org

Sponsored by





3rd Energy Storage Global Conference

24–26.10.2018

Brussels

Day 1: Technology – organised with the support of the JRC

10:00 – 10:30	1.1 Welcome and Introduction – EASE and JRC activities
10:30 – 10:50	1.2 Setting The Stage: European Market Monitor on Energy Storage <ul style="list-style-type: none"> Which countries are currently most dynamic concerning storage development from a quantitative point of view (GWh and GW added) and in terms of deployment of innovative technologies? What are the drivers for energy storage development in the different EU countries?
10:50 – 11:10	1.3 Current and Future Storage Applications <ul style="list-style-type: none"> Energy storage systems are often deployed for very specific functions such as time shift or frequency control. Which applications will future energy and power systems need?
11:10 – 11:30	1.4 Levelised cost of storage – novel metrics <ul style="list-style-type: none"> Are traditional ways to estimate LCOE for energy storage adequate? What recent concepts are proposing for?
11:30 – 11:50	1.5 The technology and industrial roadmap for competitive Li-ion technologies: challenges and ambitions for European Players <ul style="list-style-type: none"> From R&D to manufacturing: what are the key issues to develop and industrialize next generation lithium batteries?
11:50 – 12:10	1.6 Battery demand projections and cost assumptions in energy modelling scenarios <ul style="list-style-type: none"> What are the projections on battery demand in global energy scenarios? What are the assumptions on battery costs?
12:10 – 12:30	1.7 EASE Student Award Ceremony
12:30 – 13:30	<i>LUNCH</i>



	Track A Introduction to Energy Storage: Technologies and R&I	Track B Cutting-Edge Developments in Storage Technologies
	<ul style="list-style-type: none"> • What are the different energy storage technologies currently available on the market? • What are their main technical capabilities and applications? • How are R&I projects addressing the different energy storage technologies? • What are the technical and regulatory challenges and issues faced by these projects? • What are the outcomes of these projects? Can their results be monetised? 	<ul style="list-style-type: none"> • What are the latest developments in energy storage technologies? • Which break-through technologies have the potential to replace existing state-of-the-art? • What emerging energy storage concepts are ready to break into the market? • What advances are being made in hybrid energy storage systems (combining two or more storage technologies)?
13:30 – 14:10	1.8 a) Introduction to Large-Scale Energy Storage Technologies: CAES, LAES, Pumped Hydro, Power-to-X	1.8 b) Advances in Large-Scale Energy Storage Technologies: CAES, LAES, Pumped Hydro
14:10 – 14:50	1.9 a) Introduction to Small-Scale Energy Storage Technologies: Batteries, Flow Batteries, Flywheels	1.9 b) Next-Generation Battery Technologies: Flow Batteries, High-Temperature Batteries, Li-ion batteries.
14:50 – 15:20	<i>COFFEE BREAK</i>	
15:20 – 15:40	1.10 a) Presentation of R&I European Project: BRIDGE Project	1.10 b) Behind-the-Meter Storage: Batteries and Thermal Storage
15:40 – 16:00	1.11 a) Presentation of R&I European Projects: Real Value Project	1.11 b) Ultracapacitors: Stabilising the Electricity System
16:00 – 16:20	1.12 a) Presentation of R&I European Projects: GRIDSOL project	1.12 b) Sector Integration: H ₂ and Power-to-X
16:20 – 16:40	1.13 a) Presentation of R&I European Projects	1.13 b) Hybrid Energy Storage Systems



16:40 – 17:00	1.14 a) From HORIZON 2020 to Horizon Europe	1.14 b) Battery recycling: challenges and opportunities
17:00 – 17.20		1.15 b) Safety of stationary storage using Li-ion batteries
17:20 – 17:40	Lessons Learnt/Observations from Day 1	
<div style="display: flex; justify-content: space-between; align-items: center;"> 20:00 <i>OPENING DINNER</i> </div>		



Day 2: Energy Storage Policy and Regulation

09:00 – 09:15	2.1 Welcome and Opening Statement
09:15 – 09:45	2.2 Keynote Speech on Storage Policy
09:45 – 10:45	<p>2.3 Energy Storage Policy: The International Perspective</p> <p><i>Presentations followed by Q&A</i></p> <ul style="list-style-type: none"> • How are energy storage markets developing in China, Australia, the United States and India? • How have the regulatory frameworks and policies shaped storage development?
10:45 – 11:15	COFFEE BREAK
11:15 – 12:00	<p>2.4 Energy Storage Policy: The EU Member States Perspective</p> <p><i>Presentations followed by Q&A</i></p> <ul style="list-style-type: none"> • How are EU member states promoting energy storage at national and local level? • How do member states see the link between energy storage legislative framework and energy storage business growth?
12:00 – 12:45	<p>2.5 European Energy Market Design for Storage</p> <p><i>Panel Discussion</i></p> <ul style="list-style-type: none"> • Are the market design proposals in the “Clean Energy for All Europeans” Package a game changer for storage? What further steps must be taken to support energy storage deployment? • How could the issue of grid tariffs and fees be addressed? • Which success stories/lessons individual countries could be applied at EU level?
12:45 – 13:45	LUNCH
13:45 – 14:00	2.6 Storage : a Pre-requisite for Decarbonisation of the Economy



2.7 Energy Storage in Transmission and Distribution Grids

Presentations and panel discussion

14:00 – 15:15

- What would be the value of TSOs and DSOs operating energy storage technologies for infrastructure services?
- How can we maximise the value of energy storage technologies owned and operated by regulated entities? Could regulated and market services co-exist?
- How could the EU regulatory framework adapt to such applications?
- How can regulators support market-based procurement of energy and ancillary services that allows energy storage to compete on a level playing field?
- What about long-term contracts for balancing and ancillary services?
- What about ownership of energy storage which are “fully integrated network components” by regulated entities?

15:15 – 15:45

COFFEE BREAK

2.8 Energy Storage and Mobility

Presentations and panel discussion

15:45 – 17:00

- What is the impact of EVs on local distribution grid and on long-term planning?
- Could BEVs and FCEVs provide the grid with system services? If so, how could these services be monetised?
- What is the role of policymakers to facilitate this shift to BEVs and FCEVs and support prosumers?
- Road, maritime, aviation transport: which one of BEVs or FCEVs will take the lead on these different segments?
- What about BEVs and FCEVs environmental impact and capacity to integrate RES?

17:00 – 17:15

Lessons learnt/Observations from Day 2

19:30

GALA DINNER



Day 3: Market Drivers

09:00– 09:05	3.1 Welcome and Opening Statement
09:05 – 09:20	3.2 Keynote Speech
09:20 – 10:30	3.3 The Economics of Energy Storage Projects <ul style="list-style-type: none"> • What are the multiple revenue streams available to energy storage projects? • What are the different costs impacting the business success of energy storage projects? • Financing Energy Storage: What is the rationale behind private investors' decision to invest in energy storage? How do they mitigate the investment risk?
10:30 – 11:00	<i>COFFEE BREAK</i>
11:00 – 13:00	3.4 Presentation of Replicable Energy Storage Business Cases <ul style="list-style-type: none"> • How do energy storage developers maximise the revenue of energy storage projects? What about revenue stacking? • What are the regulatory barriers faced by energy storage developers? • Early move, portfolio diversification and partnership: key success factors for energy storage developers?
13:00 – 13:15	Closing Keynote
13:15 – 13:30	Closing Remarks
13:30 – 14:30	<i>LUNCH</i>

The Energy Storage Global Conference

is organised by



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