

DOE ELECTRICITY ADVISORY COMMITTEE

ENERGY STORAGE SUBCOMMITTEE UPDATE

October 2021



Agenda

2021 Energy Storage Plan Assessment

2021 Topics and Products

Energy Storage Operations Optimization

Power to Gas / Hydrogen

The Big Picture Revisited: What's Here,
What's Coming, and What's Missing?

2021 Energy Storage Plan Assessment

Statutory Requirement

Energy Independence and Security Act of 2007 (EISA), Title VI, Section 641(e), Section 641(e)(4): “. . . every five years [the Energy Storage Technologies Subcommittee], in conjunction with the Secretary, shall develop a five-year plan for ... domestic energy storage industry for electric drive vehicles, stationary applications, and electricity transmission and distribution.”

Scope

Build on ESGC Recommendations, DOE’s Final Energy Storage Roadmap, and February meeting panel insights.
Follow statutory requirement to provide input on holistic view of energy storage industry, applications, and impact.

Process

Aug. 2020: Recommendations to Energy Storage Grand Challenge
2020-Q1 2021: Review of Energy Storage 10-Year Roadmap
April 2021: Report voted unanimously

Topics of Focus

Optimizing energy storage operations and benefits

How can DOE contribute to helping maximize the benefits of energy storage? What is left to do?

Feb 2021: Panel - Integration of Energy Storage into the Bulk Power Supply

Power to Gas / Hydrogen

What is the role of hydrogen and power to gas technologies in the decarbonization and long-term strategy of the electric and gas sectors?

May 2020: Panel – Electric Industry Experience with Long Term Energy Storage and Power-to-Gas Storage

June 2021: Panel - Working Together Towards a Sustainable and Resilient Zero Carbon Emission Future: Hydrogen, Batteries, & Natural Gas

The Big Picture Revisited: What's Here, What's Coming, and What's Missing?

Time to revisit the big picture: What is the ultimate goal? What does 2030 and beyond look like? How is the state of the energy storage and enabling technologies contributing to that goal? What is the role of EV Storage on Grids?



Questions