

**Business Council for Sustainable Energy Comments in Response
to the Department of Energy’s Office of Clean Energy Demonstrations
Request for Information on Energy Storage Demonstration Projects**

June 16, 2022

Re: #DE-FOA-0002777: Request for Information (RFI) on the Long Duration Energy Storage for Everyone, Everywhere Initiative

Submitted via email: EnergyStorage41001RFI@ee.doe.gov

The Business Council for Sustainable Energy (BCSE) appreciates the opportunity to respond to the Request for Information (RFI) from the U.S. Department of Energy (DOE) regarding implementation of the energy storage demonstration programs that are authorized under section 3201 of the Energy Act of 2020.

The Infrastructure Investment and Jobs Act (IIJA) appropriated \$505 million “to advance energy storage systems toward widespread commercial deployment by lowering the costs and increasing the duration of energy storage resources” and thereby provide the appropriations for the three programs above, under IIJA Section 41001.

BCSE commends Congress and the Biden Administration for enactment of the IIJA and seeks to serve as a resource to federal agencies implementing the IIJA programs.

About the BCSE

The BCSE, founded in 1992, is a broad-based clean energy trade association. Its members span many industry sectors, including energy efficiency, energy storage, natural gas, renewable energy, sustainable transportation and emerging decarbonization technologies. BCSE also has an independent small- and medium-size businesses initiative under its banner, the Clean Energy Business Network (CEBN). Together, the BCSE and CEBN represent a broad range of the clean energy economy, from Fortune 100 companies to small businesses working in all 50 states supporting over 3 million U.S. jobs.

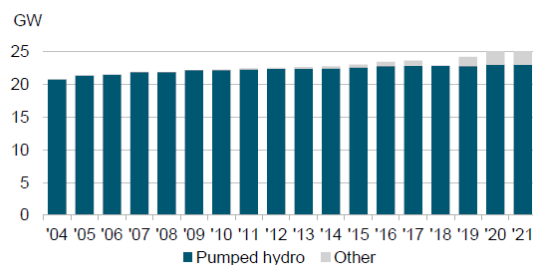
U.S. Energy Storage Market Trends

According to the [2022 Sustainable Energy in America Factbook](#), published by BloombergNEF in partnership with the BCSE, pumped hydropower storage projects account for around 81% of installed energy storage capacity in the U.S. Three new pumped storage projects with a combined capacity of 2.1 GW have received licenses. However, other technologies, mainly lithium-ion batteries, have dominated new energy storage build since 2011.

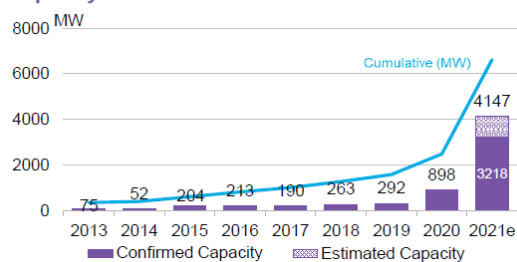
Of note, in 2021, the U.S. commissioned an estimated 4.1GW in utility-scale non-hydropower storage capacity to bring total capacity to 6.6GW. Energy shifting is the dominant use case for new batteries as pairing renewables with storage is becoming a common cost-effective option to displace fossil fuel projects. Further, utilities across the nation are beginning to cite energy-storage technologies in their long-term resource planning and as solutions to their power system flexibility needs.

Deployment: U.S. cumulative energy storage

Commissioned capacity



Non-hydropower commissioned energy storage capacity



With regard to U.S. manufacturing, as of the end of 2021, the U.S. has 59GWh of lithium-ion battery manufacturing capacity commissioned. Capacity expansions were not significant in 2021, but there were major announcements that will lead to a significant ramp-up manufacturing capacity through to 2025:

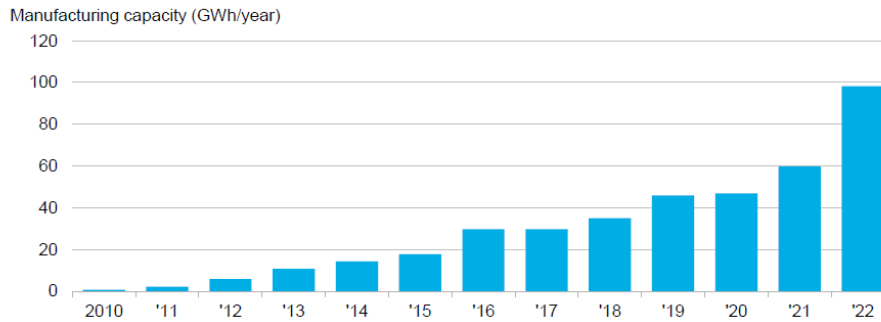
- South Korean SK Innovation and Ford announced a joint venture, BlueOvalSK, to invest \$11.4 billion in two battery manufacturing facilities in Tennessee and Kentucky totaling 129GWh by 2027. The plants are expected to supply batteries to Ford’s electric vehicle models.
- Stellantis announced two separate joint ventures, one with Samsung SDI and the other with LG Energy Solution, to manufacture lithium-ion batteries in North America, which could come on-line in 2024 and 2025, respectively, and could each reach 40GWh capacity.
- GM and LG Energy Solution announced that its joint venture, Ultium Cells, would invest \$4.9 billion to build a second and third battery manufacturing facility in Spring Hill, Tennessee and in Lansing, Michigan coming on-line in 2023 and 2024, respectively.

The U.S. is expected to reach almost 98GWh of battery manufacturing by the end of 2022. Growth will be led by a number of companies including Tesla, SK, GM, LG Energy Solution and their respective partnerships. Most of this scaling up will be for the EV industry.

Deployment: Current and planned manufacturing capacity



U.S. lithium-ion battery manufacturing capacity



General Views on Implementation of Energy Storage Demonstration and Pilot Grant Programs

The [2022 Sustainable Energy in America Factbook](#) data shows the growth of the energy storage market in the U.S. The 41001 energy storage programs funded under IJJA are important for accelerated deployment and the expansion of U.S. manufacturing, employment and supply chains.

Related to the energy storage demonstration and the pilot grant programs, BCSE encourages the utilization of long-term and competitive contracting vehicles. Long-term contracts provide consistent and predictable revenue that can assist in attracting additional investment and lowering the cost of capital. In addition, BCSE supports the use of mechanisms like “anchor tenant” agreements as well as the innovation adder proposal, with at least a ten-year duration.

Further, BCSE supports the use of pilot grant program funds to support efforts to overcome institutional barriers to adoption of energy storage technologies and to demonstrate the community benefits of energy storage projects.

Finally, when considering the realization of equity, environmental and energy justice priorities, energy storage programs can prioritize projects that incorporate brownfield redevelopment. To support community access to microgrids or other integrated technology projects, BCSE recommends that DOE leverage other federal funds, financing, and technical assistance, such as provided by the Rural Utility Service or the Building Resilient Infrastructure and Communities program, in conjunction with Pilot Grant projects, where appropriate.

For detailed responses to the questions provided by DOE in the RFI, BCSE would like to acknowledge the submission made by the American Clean Power Association.

Thank you for the opportunity to share the Council’s views on this RFI. Should you wish to discuss these comments further, please contact BCSE President Lisa Jacobson via email at ljacobson@bcse.org.