

Support the Better Energy Storage Technology (BEST) Act

(<u>S.1602</u>/<u>H.R.2986</u>)

The bipartisan BEST Act introduced by Senator Collins (R-ME) and Rep Bill Foster (D-II) authorizes \$300 million over five years to reduce the cost of grid-scale energy storage systems. One of the biggest impediments to greater use of grid-scale energy storage is cost. The bill aims to increase the affordability of storage by directing the Department Of Energy (DOE) to pursue a strategic plan through demonstration projects and implementing cost targets. Our nation's electricity system is intricate and has a vast assortment of entities involved in its functionality. Therefore, in order to accomplish the desired energy storage innovation on a grid-scale the BEST Act instructs the DOE to implement a 10-year strategic plan for a program that would coordinate federal agencies, national labs, and private industries to advance storage technologies that can provide days, even months, of capacity. Specifically, the bill focuses grid-scale energy storage research and development on:

- Highly flexible power systems with a minimum duration of 6 hours and with a lifetime of at least 8,000 cycles of discharge at full output and 20 years of operation;
- Long duration storage systems with power output of 10 to roughly 100 hours, with a lifetime of at least 1,500 cycles and 20 years of operations;
- Seasonal storage systems that can store energy over several months and address seasonality concerns.
- Supports up to five demonstration projects to advance commercialization of grid-scale energy storage technologies.

Grid-scale energy storage systems provide a range of benefits including increased resilience and reliability on the grid. Next-generation energy storage devices will also complement the growth of clean, renewable resources on the power grid, replacing other sources of energy that release harmful emissions that exacerbate climate change. In addition to these benefits, energy storage systems can help decrease energy costs by reducing the need for expensive peak power.

The bill has been passed through the House Science, Space, and Technology Committee and passed through the Senate Energy and Natural Resources Committee. Passed through the House as part of H.R. 4447 on September 24, 2020.