

**H.R. 2986, BEST Act**

As ordered reported by the House Committee on Science, Space, and Technology on February 12, 2020

By Fiscal Year, Millions of Dollars	2020	2020-2025	2020-2030
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	*	572	not estimated
Statutory pay-as-you-go procedures apply?	No	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2031?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

H.R. 2986 would reauthorize and expand the Department of Energy’s (DOE’s) research and development (R&D) program for energy storage systems. Under the program, DOE would develop a strategic plan, conduct research, support testing and validation of energy storage systems, and provide technical assistance. The bill would authorize the appropriation of specific amounts for each year from 2020 through 2024 for those purposes. In 2020, the authorization would be \$62 million. However, DOE’s Office of Electricity has allocated \$55 million in 2020 for research on energy storage technologies. As a result, CBO estimates that H.R. 2986 would increase authorizations in 2020 by \$7 million, the difference between the amount authorized to be appropriated in the bill and the amount allocated for that year.

The bill also would authorize the appropriation of \$50 million annually through 2024 for DOE to award grants for the demonstration of energy storage systems.

Finally, H.R. 2986 would require DOE to conduct research, development, and demonstration activities to advance the recycling of energy storage systems that contain critical minerals (lithium, cobalt, nickel, graphite, etc.). Based on the cost of similar programs, CBO estimates the authorization in 2020 would be \$25 million, with that amount increasing each year to account for anticipated inflation.

For this estimate, CBO assumes that the bill will be enacted in fiscal year 2020. Under that assumption, DOE could incur some costs in 2020, but CBO expects that most of the costs



would be incurred in 2021 and later. Based on historical spending patterns for similar programs, CBO estimates that implementing H.R. 2986 would cost \$572 million over the 2020-2025 period, assuming appropriation of the authorized and estimated amounts.

The costs of the legislation, detailed in Table 1, would primarily fall within budget function 270 (energy).

**Table 1.  
Estimated Increases in Spending Subject to Appropriation Under H.R. 2986**

	By Fiscal Year, Millions of Dollars						2020-2025
	2020	2021	2022	2023	2024	2025	
Energy Storage R&D <sup>a</sup>							
Authorization	7	65	68	72	75	0	288
Estimated Outlays	*	17	42	56	68	55	238
Demonstration Grants							
Authorization	50	50	50	50	50	0	250
Estimated Outlays	*	23	48	50	54	40	215
Critical Mineral Recycling							
Estimated Authorization	25	26	26	27	27	28	159
Estimated Outlays	*	12	25	26	28	28	119
Total Changes							
Estimated							
Authorization	82	141	144	149	152	28	697
Estimated Outlays	*	52	115	132	150	123	572

Components may not sum to totals because of rounding; R&D = research and development; \* = between zero and \$500,000.

a. H.R. 2986 would authorize the appropriation of \$62 million in 2020 for the Department of Energy (DOE) to conduct energy storage R&D. However, DOE has allocated \$55 million in 2020 for those purposes. As a result, CBO estimates that H.R. 2986 would increase authorizations in 2020 by \$7 million, the difference between the amount authorized to be appropriated in the bill and the amount allocated for that year.

On October 22, 2019, CBO transmitted a [cost estimate for S. 1602](#), the BEST Act, as ordered reported by the Senate Committee on Energy and Natural Resources on September 25, 2019. The two pieces of legislation are similar, but each has a different scope and would authorize the appropriation of different amounts. CBO’s cost estimates reflect those differences.

The CBO staff contact for this estimate is Aaron Krupkin. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.