

H.R. 5374, Advanced Geothermal Research and Development Act of 2019
 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)	0	451	701
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
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

H.R. 5374 would authorize the appropriation of specific amounts each year over the 2021-2025 period for the Department of Energy (DOE) to conduct research and development (R&D) on geothermal energy. In addition to reauthorizing and amending existing programs, the bill would direct DOE to establish new R&D projects to expand and promote the use of geothermal energy.

In 2020, DOE allocated \$110 million for activities related to geothermal technologies. Based on historical spending patterns for similar programs, and assuming appropriation of the specified amounts, CBO estimates that implementing H.R. 5374 would cost \$451 million over the 2020-2025 period and \$250 million after 2025. The costs of the legislation, detailed in Table 1, fall within budget function 270 (energy).

Table 1.
Estimated Increases in Spending Subject to Appropriation Under H.R. 5374

	By Fiscal Year, Millions of Dollars						2020-2025
	2020	2021	2022	2023	2024	2025	
Authorization	0	121	133	144	151	152	701
Estimated Outlays	0	24	63	99	125	140	451



On March 2, 2020, CBO transmitted a [cost estimate for S. 2657](#), the AGILE Act of 2019, as reported by the Senate Committee on Energy and Natural Resources on December 17, 2019. The two pieces of legislation are similar but would authorize the appropriation of different amounts over different time periods for geothermal energy R&D. Additionally, S. 2657 contains other provisions that are not in H.R. 5374. CBO's cost estimates reflect those differences in the legislative language.

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