

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

July 13, 2018

S. 2602 USE IT Act

As reported by the Senate Committee on Environment and Public Works on May, 24, 2018

SUMMARY

S. 2602 would authorize appropriations for the Environmental Protection Agency (EPA) to support the research and development of advanced technologies to capture carbon dioxide (CO₂) from the atmosphere so that it may be permanently stored or used within commercial products or processes. Under the bill, infrastructure projects that capture CO_2 would qualify for certain expedited review and permitting procedures. Finally, the bill would require the Council on Environmental Quality (CEQ) to facilitate the expansion of CO_2 storage projects and infrastructure.

Using information from EPA and CEQ, CBO estimates that implementing S. 2602 would cost \$73 million over the next five years, assuming appropriation of the authorized and necessary amounts.

Enacting S. 2602 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

CBO estimates that enacting S. 2602 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

S. 2602 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary effect of S. 2602 is shown in the following table. The costs of the legislation fall within budget function 300 (natural resources and environment).

	By Fiscal Year, in Millions of Dollars						
	2018	2019	2020	2021	2022	2023	2019- 2023
INCREASES IN	SPENDING	G SUBJEC	Т ТО АРР	ROPRIA	ΓΙΟΝ		
CO ₂ Direct Air Capture Program and							
Advisory Board							
Authorization Level	0	25	0	0	0	0	25
Estimated Outlays	0	1	1	6	7	7	22
CO ₂ Utilization Research Program							
Authorization Level	0	50	0	0	0	0	50
Estimated Outlays	0	*	1	6	16	21	44
Other Costs							
Estimated Authorization Level	0	2	1	1	1	2	7
Estimated Outlays	0	2	1	1	1	2	7
Total Costs							
Estimated Authorization Level	0	77	1	1	1	2	82
Estimated Outlays	0	3	3	13	24	30	73

* = between zero and 500,000; CO₂ = carbon dioxide.

BASIS OF ESTIMATE

For this estimate, CBO assumes that S. 2602 will be enacted near the end of 2018 and that the authorized and necessary amounts will be appropriated for each fiscal year beginning in 2019. CBO estimates that implementing S. 2602 would cost \$73 million over the 2019-2023 period.

S. 2602 would authorize appropriations for EPA to carry out two programs to support the research and development of advanced technologies to capture CO_2 from the atmosphere.

CO₂ Direct Air Capture Program and Advisory Board

The bill would authorize the appropriation of \$25 million for EPA to provide competitive financial awards to creators of technologies capable of economically capturing large amounts of CO₂ directly from the air—known as direct air capture. The bill would establish a technology board, comprising nine members, to advise EPA on the terms of financial awards, program requirements, and the agency's procedures for monitoring and verifying the activities of entities that have received awards.

Using information from EPA, CBO estimates that implementing the direct air capture program would cost about \$21 million over the 2019-2023 period. Of that amount, CBO estimates that \$4 million would be required to cover the costs of the board and program staff and that \$17 million would be awarded to projects that capture CO₂. CBO expects that the first awards would be made in 2021 and would range in size from \$1 million to \$2 million.

CO₂ Utilization Research Program

The bill also would authorize the appropriation of \$50 million for EPA to provide grants and technical assistance to support the research and development of technologies that can use captured CO₂ for commercial products or purposes. Using information from EPA, CBO estimates that implementing that CO₂ research program would cost about \$45 million over the 2019-2023 period. Of that amount, CBO estimates that about \$5 million would be required to cover the costs of program staff providing technical assistance and that \$40 million would be provided as grants to CO₂ utilization projects. CBO expects that the first grants would be made in 2021.

Other Costs

In addition to the amounts specified above, CBO estimates that federal agencies would spend an additional \$7 million over the 2019-2023 period to implement other requirements in the legislation; such spending would be subject to appropriation of the necessary amounts.

Under S. 2602 infrastructure projects that capture, store, transport, or use CO_2 would qualify for expedited federal review and permitting procedures. Using information from EPA, CBO expects that the expedited procedures, combined with financial assistance for projects authorized by the bill, would likely increase the number of projects that apply for permits for the underground storage of CO_2 . To meet the increase in demand, CBO estimates that EPA's Office of Water would need to gradually hire five additional employees (at a cost of about \$150,000 a year for each) to review permits for underground CO_2 injection and to perform other regulatory duties related to protecting drinking water quality by 2023 at a cost of \$2.5 million over the five year period.

The bill also would require EPA to produce a report every two years evaluating the CO_2 capture technologies supported by the agency's research programs, and would require the agency to produce a report on how to reduce the risks of CO_2 storage in deep saline formations. Using information from the agency, CBO estimates that EPA would spend \$2 million to produce those reports over the next five years.

Finally, the bill would require CEQ to establish two task forces to facilitate the expansion of CO₂ storage projects and infrastructure by streamlining regulatory approaches and providing technical assistance to states. Under the bill, CBO expects that each task force would consist of 10 members, that they would meet several times per year beginning in 2020, and that they would terminate after 2023. Using information from CEQ, CBO estimates that the agency would require three additional employees to provide administrative support to the task forces and to produce guidance and biennial reports required by the bill. CBO estimates that those operating costs would total \$2.5 million over the 2019-2023 period.

PAY-AS-YOU-GO CONSIDERATIONS: None.

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting S. 2602 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

MANDATES

S. 2602 contains no intergovernmental or private-sector mandates as defined in UMRA.

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