118TH CONGRESS
2D SESSION

# H. R. 4824

# AN ACT

To amend the Energy Policy Act of 2005 to require the Secretary of Energy to carry out terrestrial carbon sequestration research and development activities, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE.**

This Act may be cited as the ''Carbon Sequestration Collaboration Act''.

**SEC. 2. CARBON SEQUESTRATION RESEARCH INITIATIVE.**

Section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293) is amended—

(1) in subsection (a)—

(A) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively;

(B) by inserting before paragraph (2), as so redesignated, the following new paragraph:

''(1) CARBON SEQUESTRATION IN GEOLOGIC FORMATIONS.—The term 'carbon sequestration in geologic formations' means carbon sequestration methods or technologies utilizing existing permeable or porous formations in geologic settings, such as basins or aquifers.''; and

(C) by adding at the end the following new paragraph:

''(4) TERRESTRIAL CARBON SEQUESTRATION.—The term 'terrestrial carbon sequestration' means carbon sequestration methods or technologies engineered by humans and targeted at rangelands, agricultural lands, fallow lands, or forest stands to increase soil organic carbon levels or sequester carbon through transport processes via plant and root bio-

mass, including through soil additives, geochemical approaches, and other engineered solutions that can increase the storage of produced carbon in inorganic or mineral forms, such as biochar and carbon mineralization utilizing mine tailings.''; and

(2) in subsection (b)—

(A) in paragraph (1)—

(i) by striking ''shall establish'' and inserting '', in coordination with the heads of relevant Federal agencies, carry out''; and

(ii) by inserting '', including through terrestrial carbon sequestration and carbon sequestration in geologic formations'' before the period;

(B) in paragraph (2)—

(i) in subparagraph (A)—

(I) by striking ''in coordination with relevant Federal agencies,''; and

(II) by striking ''assess the capacity of geologic storage formation'' and inserting ''evaluate terrestrial carbon sequestration and carbon sequestration in geologic formations'';

(ii) in subparagraph (B)—

(I) in the matter preceding clause (i), by inserting ''and terrestrial carbon storage sites'' after ''geologic formations''; and

(II) in clause (ii), by striking ''geologic storage'' and inserting ''across a variety of ecosystems'';

(iii) in subparagraph (D)—

(I) by striking ''formation''; and

(II) by inserting '', and determining the fate of carbon dioxide concurrent with and after injection into geologic formations'' before the semicolon;

(iv) in subparagraph (E), by striking ''geologic sequestration of carbon dioxide'' and inserting ''terrestrial carbon sequestration and carbon sequestration in geologic formations'';

(v) by striking subparagraphs (F) and (G);

(vi) by redesignating subparagraphs (H) and (I) as subparagraphs (F) and (G), respectively;

(vii) in subparagraph (F), as so redesignated, by striking ''and'' after the semicolon;

(viii) in subparagraph (G), as so redesignated, by striking the period and inserting a semicolon; and

(ix) by adding at the end the following new subparagraphs:

''(H) enhancing the scientific understanding of, and reducing uncertainties associated with, the cycling of carbon in agriculture lands, forests, and geologic formations, including long- and short-term behavior and potential environmental effects of sequestered carbon;

''(I) identifying scientific barriers and pursuing research solutions to challenges preventing terrestrial carbon sequestration and carbon sequestration in geologic formations, including supporting cost and business model assessments to examine the economic viability of technologies and systems developed under the program;

''(J) collecting, identifying, standardizing, and utilizing data and data sharing practices needed to—

''(i) increase the understanding of terrestrial carbon sequestration, in particular carbon sequestered through agricultural practices and conservation agriculture, such as rangeland and grazing management, soil cover, and crop rotations; and

''(ii) support the development and demonstration of new carbon sequestration tools and technologies; and

''(K) coordinating across Federal agencies research efforts regarding terrestrial carbon sequestration and carbon sequestration in geologic formations.'';

(C) by redesignating paragraph (3) as paragraph (5);

(D) by inserting after paragraph (2) the following new paragraphs:

''(3) LEVERAGING.—In carrying out activities under the program, the Secretary shall leverage for the advancement of monitoring, reporting, and verification, including tools, modeling, and analysis, the collective body of knowledge and data, including experience and resources from existing carbon utilization and sequestration research, entities, and demonstrations, from the following:

''(A) The United States Geological Survey, the Agricultural Research Service, and the national Carbon Utilization Research Center.

''(B) The Department of Energy, including the Office of Science, the Office of Fossil Energy and Carbon Management, and the Office of Clean Energy Demonstrations.

''(C) Interagency research and development initiatives and data collection activities.

''(D) Other Federal agencies, research communities, and users of the data referred to in subparagraph (J) of paragraph (2), including the Farm Service Agency, the National Institute of Food and Agriculture, the Forest Service, and the Natural Resources Conservation Service.

''(4) COORDINATION.—The Secretary of Energy shall carry out the program in coordination with, and avoid unnecessary duplication of, the following:

''(A) Other research entities of the Department of Energy, including the National Laboratories and the Advanced Research Projects Agency–Energy.

''(B) Research entities, services, and partnerships of the Department of Agriculture, in-

cluding the Agricultural Research Service, the Natural Resources Conservation Service, the Farm Service Agency, and the Forest Service.

''(C) Research entities of the Department of the Interior.

''(D) Other entities within Federal agencies that conduct research, development, or demonstration on terrestrial carbon sequestration and carbon sequestration in geologic formations.''; and

(E) by adding at the end the following new paragraph:

''(6) RESEARCH PLAN.—Not later than two years after the date of the enactment of this paragraph and annually thereafter, the Secretary shall submit to the Committee on Science, Space, and Technology, the Committee on Natural Resources, and the Committee on Agriculture of the House of Representatives and the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry of the Senate the long-term strategic and prioritized research agenda to identify and address scientific challenges for widespread adoption of terrestrial carbon sequestration and carbon sequestration in geological formations,

including in shallow formations and sites not used for enhanced oil recovery.''.

Passed the House of Representatives April 30, 2024.

Attest:

*Clerk.*

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