To amend the Internal Revenue Code of 1986 to improve, expand, and extend the credit for carbon dioxide sequestration.

IN THE SENATE OF THE UNITED STATES

JULY 12, 2017

Ms. HEITKAMP (for herself, Mrs. CAPITO, Mr. WHITEHOUSE, Mr. BARRASSO, Mr. KAINE, Mr. GRAHAM, Mr. SCHATZ, Mr. BLUNT, Mr. BOOKER, Mr. PORTMAN, Mr. TESTER, Mr. COCHRAN, Mr. CASEY, Ms. KLOBUCHAR, Mr. DURBIN, Mr. FRANKEN, Mr. BROWN, Mr. WARNER, Mr. DONNELLY, Mr. MANCHIN, Ms. DUCKWORTH, Mr. PETERS, Mr. COONS, Mr. BENNET, and Mr. KING) introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To amend the Internal Revenue Code of 1986 to improve, expand, and extend the credit for carbon dioxide sequestration.

1  Be it enacted by the Senate and House of Representa-
2  tives of the United States of America in Congress assembled,

3  SECTION 1. SHORT TITLE.

4  This Act may be cited as the “Furthering carbon cap-
5  ture, Utilization, Technology, Underground storage, and
6  Reduced Emissions Act” or the “FUTURE Act”.
SEC. 2. ENHANCEMENT OF CARBON DIOXIDE SEQUESTRATION CREDIT.

(a) IN GENERAL.—Section 45Q of the Internal Revenue Code of 1986 is amended to read as follows:

“SEC. 45Q. CREDIT FOR CARBON OXIDE SEQUESTRATION.

“(a) GENERAL RULE.—For purposes of section 38, the carbon oxide sequestration credit for any taxable year is an amount equal to the sum of—

“(1) $20 per metric ton of qualified carbon oxide which is—

“(A) captured by the taxpayer using carbon capture equipment which is originally placed in service at a qualified facility before the date of the enactment of the FUTURE Act, and

“(B) disposed of by the taxpayer in secure geological storage and not used by the taxpayer as described in paragraph (2)(B),

“(2) $10 per metric ton of qualified carbon oxide which is—

“(A) captured by the taxpayer using carbon capture equipment which is originally placed in service at a qualified facility before the date of the enactment of the FUTURE Act, and
“(B)(i) used by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project and disposed of by the taxpayer in secure geological storage, or

“(ii) utilized by the taxpayer in a manner described in subsection (f)(5),

“(3) the applicable dollar amount (as determined under subsection (b)(1)) per metric ton of qualified carbon oxide which is—

“(A) captured by the taxpayer using carbon capture equipment which is originally placed in service at a qualified facility on or after the date of the enactment of the FUTURE Act, during the 12-year period beginning on the date the equipment was originally placed in service, and

“(B) disposed of by the taxpayer in secure geological storage and not used by the taxpayer as described in paragraph (4)(B), and

“(4) the applicable dollar amount (as determined under subsection (b)(1)) per metric ton of qualified carbon oxide which is—

“(A) captured by the taxpayer using carbon capture equipment which is originally placed in service at a qualified facility on or
after the date of the enactment of the FUTURE Act, during the 12-year period beginning on the date the equipment was originally placed in service, and

“(B)(i) used by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project and disposed of by the taxpayer in secure geological storage, or

“(ii) utilized by the taxpayer in a manner described in subsection (f)(5).

“(b) APPLICABLE DOLLAR AMOUNT; ADDITIONAL EQUIPMENT; ELECTION.—

“(1) APPLICABLE DOLLAR AMOUNT.—

“(A) IN GENERAL.—The applicable dollar amount shall be an amount equal to—

“(i) for any taxable year beginning in a calendar year after 2016 and ending before 2027—

“(I) for purposes of paragraph (3) of subsection (a), the dollar amount established by linear interpolation between $22.66 and $50 for each calendar year during such period, and
“(II) for purposes of paragraph (4) of such subsection, the dollar amount established by linear interpolation between $12.83 and $35 for each calendar year during such period, and

“(ii) for any taxable year beginning in a calendar year after 2026—

“(I) for purposes of paragraph (3) of subsection (a), an amount equal to the product of $50 and the inflation adjustment factor for such calendar year determined under section 43(b)(3)(B) for such calendar year, determined by substituting ‘2025’ for ‘1990’, and

“(II) for purposes of paragraph (4) of such subsection, an amount equal to the product of $35 and the inflation adjustment factor for such calendar year determined under section 43(b)(3)(B) for such calendar year, determined by substituting ‘2025’ for ‘1990’.
“(B) Rounding.—The applicable dollar amount determined under subparagraph (A) shall be rounded to the nearest cent.

“(2) Installation of Additional Carbon Capture Equipment on Existing Qualified Facility.—In the case of a qualified facility placed in service before the date of the enactment of the FUTURE Act, for which additional carbon capture equipment is placed in service on or after the date of the enactment of such Act, the amount of qualified carbon oxide which is captured by the taxpayer shall be equal to—

“(A) for purposes of paragraphs (1)(A) and (2)(A) of subsection (a), the lesser of—

“(i) the total amount of qualified carbon oxide captured at such facility for the taxable year, or

“(ii) the total amount of the carbon dioxide capture capacity of the carbon capture equipment in service at such facility on the day before the date of the enactment of the FUTURE Act, and

“(B) for purposes of paragraphs (3)(A) and (4)(A) of such subsection, an amount (not less than zero) equal to the excess of—
“(i) the amount described in clause (i) of subparagraph (A), over
“(ii) the amount described in clause (ii) of such subparagraph.
“(3) ELECTION.—For purposes of determining the carbon oxide sequestration credit under this section, a taxpayer may elect to have the dollar amounts applicable under paragraph (1) or (2) of subsection (a) apply in lieu of the dollar amounts applicable under paragraph (3) or (4) of such subsection for each metric ton of qualified carbon oxide which is captured by the taxpayer using carbon capture equipment which is originally placed in service at a qualified facility on or after the date of the enactment of the FUTURE Act.
“(c) QUALIFIED CARBON OXIDE.—For purposes of this section—
“(1) IN GENERAL.—The term ‘qualified carbon oxide’ means—
“(A) any carbon dioxide which—
“(i) is captured from an industrial source by carbon capture equipment which is originally placed in service before the date of the enactment of the FUTURE Act,
“(ii) would otherwise be released into
the atmosphere as industrial emission of
greenhouse gas or lead to such release, and
“(iii) is measured at the source of
capture and verified at the point of dis-
posal, injection, or utilization,
“(B) any carbon dioxide or other carbon
oxide which—
“(i) is captured from an industrial
source by carbon capture equipment which
is originally placed in service on or after
the date of the enactment of the FUTURE
Act,
“(ii) would otherwise be released into
the atmosphere as industrial emission of
greenhouse gas or lead to such release, and
“(iii) is measured at the source of
capture and verified at the point of dis-
posal, injection, or utilization, or
“(C) in the case of a direct air capture fa-
cility, any carbon dioxide which—
“(i) is captured directly from the am-
bient air, and
“(ii) is measured at the source of capture and verified at the point of disposal, injection, or utilization.

“(2) RECYCLED CARBON OXIDE.—The term ‘qualified carbon oxide’ includes the initial deposit of captured carbon oxide used as a tertiary injectant. Such term does not include carbon oxide that is re-captured, recycled, and re-injected as part of the enhanced oil and natural gas recovery process.

“(d) QUALIFIED FACILITY.—For purposes of this section, the term ‘qualified facility’ means any industrial facility or direct air capture facility—

“(1) the construction of which begins before January 1, 2024, and—

“(A) construction of carbon capture equipment begins before such date, or

“(B) the original planning and design for such facility includes installation of carbon capture equipment, and

“(2) which captures—

“(A) in the case of a facility which emits not more than 500,000 metric tons of carbon oxide into the atmosphere during the taxable year, not less than 25,000 metric tons of qualified carbon oxide during the taxable year which
is utilized in a manner described in subsection (f)(5),

“(B) in the case of an electricity generating facility which is not described in subparagraph (A), not less than 500,000 metric tons of qualified carbon oxide during the taxable year, or

“(C) in the case of a direct air capture facility or any facility not described in subparagraph (A) or (B), not less than 100,000 metric tons of qualified carbon oxide during the taxable year.

“(e) Definitions.—For purposes of this section—

“(1) Direct air capture facility.—

“(A) In general.—Subject to subparagraph (B), the term ‘direct air capture facility’ means any facility which uses carbon capture equipment to capture carbon dioxide directly from the ambient air.

“(B) Exception.—The term ‘direct air capture facility’ shall not include any facility which captures carbon dioxide—

“(i) which is deliberately released from naturally occurring subsurface springs, or
“(ii) using natural photosynthesis.

“(2) Qualified enhanced oil or natural gas recovery project.—The term ‘qualified enhanced oil or natural gas recovery project’ has the meaning given the term ‘qualified enhanced oil recovery project’ by section 43(c)(2), by substituting ‘crude oil or natural gas’ for ‘crude oil’ in subparagraph (A)(i) thereof.

“(3) Tertiary injectant.—The term ‘tertiary injectant’ has the same meaning as when used within section 193(b)(1).

“(f) Special Rules.—

“(1) Only qualified carbon oxide captured and disposed of or used within the United States taken into account.—The credit under this section shall apply only with respect to qualified carbon oxide the capture and disposal, use, or utilization of which is within—

“(A) the United States (within the meaning of section 638(1)), or

“(B) a possession of the United States (within the meaning of section 638(2)).

“(2) Secure geological storage.—The Secretary, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of
Energy, and the Secretary of the Interior, shall establish regulations for determining adequate security measures for the geological storage of qualified carbon oxide under subsection (a) such that the qualified carbon oxide does not escape into the atmosphere. Such term shall include storage at deep saline formations, oil and gas reservoirs, and unminable coal seams under such conditions as the Secretary may determine under such regulations.

“(3) CREDIT ATTRIBUTABLE TO TAXPAYER.—

“(A) IN GENERAL.—Except as provided in subparagraph (B) or in any regulations prescribed by the Secretary, any credit under this section shall be attributable to—

“(i) in the case of qualified carbon oxide captured using carbon capture equipment which is originally placed in service at a qualified facility before the date of the enactment of the FUTURE Act, the person that captures and physically or contractually ensures the disposal, utilization, or use as a tertiary injectant of such qualified carbon oxide, and

“(ii) in the case of qualified carbon oxide captured using carbon capture equip-
ment which is originally placed in service at a qualified facility on or after the date of the enactment of the FUTURE Act, the person that owns the carbon capture equipment and physically or contractually ensures the capture and disposal, utilization, or use as a tertiary injectant of such qualified carbon oxide.

“(B) Election.—If the person described in subparagraph (A) makes an election under this subparagraph in such time and manner as the Secretary may prescribe by regulations, the credit under this section—

“(i) shall be allowable to the person that disposes of the qualified carbon oxide, utilizes the qualified carbon oxide, or uses the qualified carbon oxide as a tertiary injectant, and

“(ii) shall not be allowable to the person described in subparagraph (A).

“(4) Recapture.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any qualified carbon oxide which ceases to be captured, disposed of, or used as a tertiary injectant in
a manner consistent with the requirements of this section.

“(5) Utilization of qualified carbon oxide.—

“(A) In general.—For purposes of this section, utilization of qualified carbon oxide means—

“(i) the fixation of such qualified carbon oxide through photosynthesis or chemosynthesis, such as through the growing of algae or bacteria,

“(ii) the chemical conversion of such qualified carbon oxide to a material or chemical compound in which such qualified carbon oxide is securely stored, or

“(iii) the use of such qualified carbon oxide for any other purpose for which a commercial market exists (with the exception of use as a tertiary injectant in a qualified enhanced oil or natural gas recovery project), as determined by the Secretary.

“(B) Measurement.—

“(i) In general.—For purposes of determining the amount of qualified carbon
oxide utilized by the taxpayer under paragraph (2)(B)(ii) or (4)(B)(ii) of subsection (a), such amount shall be equal to the metric tons of qualified carbon oxide which the taxpayer demonstrates, based upon an analysis of lifecycle greenhouse gas emissions and subject to such requirements as the Secretary, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, determines appropriate, were—

“(I) captured and permanently isolated from the atmosphere, or

“(II) displaced from being emitted into the atmosphere,

through use of a process described in subparagraph (A).

“(ii) LIFECYCLE GREENHOUSE GAS EMISSIONS.—For purposes of clause (i), the term ‘lifecycle greenhouse gas emissions’ has the same meaning given such term under subparagraph (H) of section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)), as in effect on the date of the enactment of the FUTURE Act, except
that ‘product’ shall be substituted for ‘fuel’ each place it appears in such subpara-

graph.

“(6) Election for Applicable Facilities.—

“(A) In general.—For purposes of this section, in the case of an applicable facility, for any taxable year in which such facility captures not less than 500,000 metric tons of qualified carbon oxide during the taxable year, the person described in paragraph (3)(A)(ii) may elect to have such facility, and any carbon capture equipment placed in service at such facility, deemed as having been placed in service on the date of the enactment of the FUTURE Act.

“(B) Applicable Facility.—For purposes of this paragraph, the term ‘applicable facility’ means a qualified facility—

“(i) which was placed in service before the date of the enactment of the FUTURE Act, and

“(ii) for which no taxpayer claimed a credit under this section in regards to such facility for any taxable year ending before the date of the enactment of such Act.
“(7) Inflation Adjustment.—In the case of any taxable year beginning in a calendar year after 2009, there shall be substituted for each dollar amount contained in paragraphs (1) and (2) of subsection (a) an amount equal to the product of—

(A) such dollar amount, multiplied by

(B) the inflation adjustment factor for such calendar year determined under section 43(b)(3)(B) for such calendar year, determined by substituting ‘2008’ for ‘1990’.

“(g) Application of Section for Certain Carbon Capture Equipment.—In the case of any carbon capture equipment placed in service before the date of the enactment of the FUTURE Act, the credit under this section shall apply with respect to qualified carbon oxide captured using such equipment before the end of the calendar year in which the Secretary, in consultation with the Administrator of the Environmental Protection Agency, certifies that, during the period beginning after October 3, 2008, a total of 75,000,000 metric tons of qualified carbon oxide have been taken into account in accordance with—

(1) subsection (a) of this section, as in effect on the day before the date of the enactment of the FUTURE Act, and
“(2) paragraphs (1) and (2) of subsection (a) of this section.

“(h) REGULATIONS.—The Secretary may prescribe such regulations and other guidance as may be necessary or appropriate to carry out this section, including regulations or other guidance to—

“(1) ensure proper allocation under subsection (a) for qualified carbon oxide captured by a taxpayer during the taxable year ending after the date of the enactment of the FUTURE Act, and

“(2) determine whether a facility satisfies the requirements under subsection (d)(1) during such taxable year.”.

(b) EFFECTIVE DATE.—The amendments made by this section shall take effect on the date of the enactment of this Act.