H.R. 5523

To amend the Internal Revenue Code of 1986 to provide investment and production tax credits for emerging energy technologies, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

December 19, 2019

Mr. Reed (for himself, Mr. Panetta, Mr. LaHood, Mr. Suozzi, Mr. Gottheimer, and Mr. Schweikert) introduced the following bill; which was referred to the Committee on Ways and Means

A BILL

To amend the Internal Revenue Code of 1986 to provide investment and production tax credits for emerging energy technologies, and for other purposes.

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

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Energy Sector Innovation Credit Act of 2019”.

5 SEC. 2. PURPOSES.

6 The energy sector innovation credit is a technology-neutral approach that would leverage new private investment in nascent clean technologies, help cutting-edge tech-
Technologies break into the market, and then naturally phasedown as each technology proves commercial viability. It could bring about the new technologies needed to quickly and cheaply reduce global emissions. The innovation ESIC incentivizes is key to a strong energy supply plus will help address the climate and environmental challenge of this generation. The United States must lead on clean energy technology development.

Sec. 3. Investment Credit for Emerging Energy Technology.

(a) In General.—Subpart E of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by inserting after section 48C the following new section:

“Sec. 48D. Emerging Energy Technology Credit.

“(a) In General.—For purposes of section 46, the emerging energy technology credit for any taxable year is an amount equal to 30 percent of the basis of any qualified emerging energy property placed in service by the taxpayer during such taxable year.

“(b) Certain Qualified Progress Expenditure Rules Made Applicable.—Rules similar to the rules of subsections (c)(4) and (d) of section 46 (as in effect on the day before the enactment of the Revenue Reconciliation Act of 1990) shall apply for purposes of this section.
“(c) Qualified Emerging Energy Property.—

For purposes of this section—

“(1) In general.—The term ‘qualified emerging energy property’ means property which is constructed, reconstructed, erected, or acquired by the taxpayer, and the original use of which commences with the taxpayer, which is—

“(A) a qualified production facility (as defined in section 45T(d), determined without regard to paragraph (2) thereof) which is a tier 1 facility (as defined in section 45T(e)(1)), or

“(B) property which is placed in service at and used in connection with an existing electric generating facility which is a point source of air pollutants and which, with respect to such facility—

“(i) contains equipment which can separate and sequester—

“(I) not less than 60 percent of such facility’s maximum hourly carbon oxide emission rate, and

“(II) not less than 100,000 metric tons of qualified carbon oxide (as defined in section 45Q(c)) annually, and
“(ii) places such carbon oxide in secure geological storage (as determined under section 45Q(f)(2)).

“(2) DENIAL OF DOUBLE BENEFIT.—Such term shall not include—

“(A) any property which,

“(B) property any portion of which, or

“(C) property placed in service at and used in connection with a facility which, has been treated as a qualified facility for purposes of section 45(d), as an advanced nuclear power facility for purposes of section 45J, as a qualified facility for purposes of section 45Q, as a qualified production facility for purposes of section 45T, as energy property for purposes of section 48, or as a qualified investment for purposes of section 48A, 48B, or 48C, for any taxable year.

“(3) POINT SOURCE.—For purposes of paragraph (1)(B), the term ‘point source’ means a megawatt-scale, stationary and non-mobile, identifiable source of emissions that releases pollutants into the atmosphere.

“(d) FIRST OF ITS KIND TECHNOLOGY.—

“(1) IN GENERAL.—In the case of any qualified emerging energy property which is the first of its
kind, subsection (a) shall be applied by substituting ‘40’ for ‘30’.

“(2) **First of its kind.**—Property shall be treated as the first of its kind if such property is of the first 3 original demonstrations in the United States of a megawatt-scale electric power generation facility which generates revenue from sales of electric power to an unrelated person (within the meaning of section 45(e)(4)).

“(3) **Determination.**—

“(A) **In general.**—The Secretary, in consultation with the Secretary of Energy, shall develop a process to determine whether qualified emerging energy property is first of its kind. Such process shall include a certification, at the request of the taxpayer before the commencement of construction, that the property will be treated as first of its kind.

“(B) **Effective period of certification.**—Except as provided by the Secretary, a certification granted under subparagraph (A) with respect to any property shall be in effect for the period, not to exceed 5 years, beginning on the date of the certification and ending on the date construction commences with respect
to the property. If construction does not commence within the 5-year period beginning on the date of the certification, the property shall not be treated as first of its kind unless the certification is renewed.

“(e) Transfer of Credit by Certain Public Entities.—

“(1) In General.—If, with respect to a credit under subsection (a) for any taxable year—

“(A) a qualified public entity would be the taxpayer (but for this paragraph), and

“(B) such entity elects the application of this paragraph for such taxable year with respect to all (or any portion specified in such election) of such credit, the eligible project partner specified in such election, and not the qualified public entity, shall be treated as the taxpayer for purposes of this title with respect to such credit (or such portion thereof).

“(2) Definitions.—For purposes of this subsection—

“(A) Qualified Public Entity.—The term ‘qualified public entity’ means—
“(i) a Federal, State, or local government entity, or any political subdivision, agency, or instrumentality thereof,

“(ii) a mutual or cooperative electric company described in section 501(c)(12) or 1381(a)(2), or

“(iii) a not-for-profit electric utility which had or has received a loan or loan guarantee under the Rural Electrification Act of 1936.

“(B) Eligible project partner.—The term ‘eligible project partner’ means any person who—

“(i) is responsible for, or participates in, the design or construction of the qualified emerging energy property to which the credit under subsection (a) relates,

“(ii) is a financial institution providing financing for the construction or operation of such property (other than financing provided in connection with becoming eligible for the credit under this section by reason of this subsection), or

“(iii) has an ownership interest in such property.
“(3) Special rules.—

“(A) Application to partnerships.—In the case of a credit under subsection (a) which is determined at the partnership level—

“(i) for purposes of paragraph (1)(A), a qualified public entity shall be treated as the taxpayer with respect to such entity’s distributive share of such credit, and

“(ii) the term ‘eligible project partner’ shall include any partner of the partnership.

“(B) Taxable year in which credit taken into account.—In the case of any credit (or portion thereof) with respect to which an election is made under paragraph (1), such credit shall be taken into account in the first taxable year of the eligible project partner ending with, or after, the qualified public entity’s taxable year with respect to which the credit was determined.

“(C) Treatment of transfer under private use rules.—For purposes of section 141(b)(1), any benefit derived by an eligible project partner in connection with an election
under this subsection shall not be taken into account as a private business use.

“(f) Certain Rules Not Applicable.—Paragraphs (3) and (4) of section 50(d) shall not apply for purposes of this section.”.

(b) Special Rule for Proceeds of Transfers for Mutual or Cooperative Electric Companies.—Section 501(c)(12)(I) of such Code is amended by inserting “or 48D(e)” after “section 45J(e)(1)”.

(c) Conforming Amendments.—

(1) Section 46 of such Code is amended by striking “and” at the end of paragraph (5), by striking the period at the end of paragraph (6) and inserting “, and”, and by adding at the end the following new paragraph:

“(7) the emerging energy technology credit.”.

(2) Section 49(a)(1)(C) of such Code is amended by striking “and” at the end of clause (iv), by striking the period at the end of clause (v) and inserting “, and”, and by adding at the end the following new clause:

“(vi) the basis of any qualified emerging energy property (as defined in section 48D(c)(1)).”.
(3) The table of sections for subpart E of part IV of subchapter A of chapter 1 of such Code is amended by inserting after the item relating to section 48C the following new item:

“Sec. 48D. Emerging energy technology credit.”.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service in taxable years beginning after the date of the enactment of this Act, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

SEC. 4. PRODUCTION CREDIT FOR EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by adding at the end the following new section:

“SEC. 45T. ELECTRICITY PRODUCED FROM EMERGING ENERGY TECHNOLOGY.

“(a) GENERAL RULE.—For purposes of section 38, the emerging energy technology production credit determined under this section for any taxable year beginning in the credit period with respect to a qualified production facility of the taxpayer is an amount equal to the applicable percentage of the lesser of—
“(1) the annual gross receipts of the taxpayer from the sale of electricity generated at the qualified production facility to an unrelated person (within the meaning of section 45(e)(4)) during such taxable year, or

“(2) the product of—

“(A) the national average wholesale price of a kilowatt hour of electricity in the preceding taxable year, as determined by the Secretary in consultation with the Administrator of the Energy Information Administration, and

“(B) the number of kilowatt hours of electricity produced at the qualified production facility and sold to an unrelated person (within the meaning of section 45(e)(4)) during the taxable year.

“(b) APPLICABLE PERCENTAGE.—For purposes of subsection (a), the applicable percentage is—

“(1) in the case of a tier 1 facility, 60 percent,

“(2) in the case of a tier 2 facility, 45 percent,

“(3) in the case of a tier 3 facility, 30 percent,

and

“(4) in the case of any other facility, zero percent.
“(c) **Credit Period.**—For purposes of this section, the credit period with respect to any qualified production facility is the 10-year period beginning with the date the facility was originally placed in service.

“(d) **Qualified Production Facility.**—For purposes of this section—

“(1) **In general.**—The term ‘qualified production facility’ means any electric generating facility which is certified by the Secretary, which is located in the United States or a possession of the United States (as such terms are used in section 638), and which utilizes—

“(A) any power conversion fuel-based technology which captures and sequesters at least 60 percent of the produced carbon oxide,

“(B) any reactor design licensed by the Nuclear Regulatory Commission which produces electricity through nuclear fission or a fusion chain reaction and which—

“(i) reduces the high-level radioactive waste or spent nuclear fuel per unit of energy yield,

“(ii) improves fuel utilization by not less than 20 percent,
“(iii) decreases core damage frequency or large early release frequency by at least a factor of 10, or

“(iv) increases thermal efficiency by not less than 20 percent, as compared to existing nuclear commercial technologies,

“(C) any new technology or new improvement to technology which generates electricity from renewable energy, as defined in section 203(b)(2) of the Energy Policy Act of 2005, and which generates at least a 20-percent increase in the conversion efficiency or a 20-percent increase in the capacity factor of the facility as compared with the commercial technology of the same type as such technology which is considered to be the best of its type in commercial use,

“(D) technology which the Secretary, in consultation with the Secretary of Energy, determines would increase the technical resource potential for renewable energy development in the United States by at least 500 terawatt hours per year, or

“(E) technology which the Secretary, in consultation with the Secretary of Energy, de-
terminates could produce electricity with an emissions rate less than 150g Co2-e per kWh with a 75-percent capacity factor.

“(2) Denial of Double Benefit.—Such term shall not include any facility which has been treated as a qualified facility for purposes of section 45(d), as an advanced nuclear power facility for purposes of section 45J, as a qualified facility for purposes of section 45Q, as energy property for purposes of section 48, as a qualified investment for purposes of section 48A, 48B, or 48C, or as qualified emerging energy property for purposes of section 48D, for any taxable year.

“(3) Co2-e.—The term ‘Co2-e’ means the quantity of a greenhouse gas that has a global warming potential equivalent to 1 metric ton of carbon dioxide, as determined under table A–1 of subpart A of part 98 of title 40, Code of Federal Regulations, as in effect on the date of enactment of this section.

“(4) Conversion Efficiency.—The term ‘conversion efficiency’ means the fraction—

“(A) the numerator of which is the total useful electrical or thermal power produced by an electric generating facility at normal oper-
ating rates, and expected to be consumed in its
normal application, and

“(B) the denominator of which is the inci-
dent energy, whether mechanical, radiation, or
thermal energy, which is measurable at the
input of the electric generating facility.

“(5) ENERGY EFFICIENCY.—The efficiency of
an electric generating facility is the fraction—

“(A) the numerator of which is the total
useful electrical, thermal, and mechanical power
which is produced by the facility at normal op-
erating rates and expected to be consumed in
its normal operation, and

“(B) the denominator of which is the lower
heating value of the energy sources for the fa-
cility.

“(6) PERFORMANCE BASELINE.—Not less fre-
quently than every 10 years, the Secretary, in con-
sultation with the Secretary of Energy, shall estab-
lish baseline levels with respect to the types of elec-
tric generating facilities and the measures of per-
formance described in paragraph (1) which a facility
must exceed in order to meet the requirements of
such paragraph.
“(7) Commercial technology.—The term ‘commercial technology’ means a design that has been installed in and is being used in 3 or more projects in the United States marketplace in the same general application as in the electric generating facility, and has been in such use in at least 1 of such projects for a period of at least 5 years.

“(8) Core damage frequency.—The term ‘core damage frequency’ means the likelihood that, given the way a reactor is designed and operated, an accident could cause the fuel in the reactor to be damaged.

“(9) Large early release frequency.—The term ‘large early release frequency’ means the likelihood of a release into the environment of a sufficiently large quantity of fission products in an early enough time frame to have the potential for a prompt fatality.

“(10) Gross recoverable resource potential.—The term ‘gross recoverable resource potential’ means the subset of total resource potential for any given renewable energy resource within the boundaries of the United States economic exclusion zone that can be considered theoretically recoverable without allowing for common technological con-
straints that exist as of the most recent date on
which the Secretary has established baseline levels
described in paragraph (6).

“(11) TECHNICAL RESOURCE POTENTIAL. — The
term ‘technical resource potential’ means the subset
of gross recoverable resource potential for any given
renewable energy resource that can be considered re-
coverable under available technological performance
conditions as of the date of the enactment of this
section while considering land-use and environmental
siting constraints.

“(e) FACILITY TIERS.—

“(1) TIER 1 FACILITY. — The term ‘tier 1 facility’ means an electric generating facility using a
type of technology which accounts for less than 1
percent of annual domestic electricity production in
the preceding taxable year, as determined by the
Secretary on the basis of data reported by the Energy Information Administration.

“(2) TIER 2 FACILITY. — The term ‘tier 2 facility’ means an electric generating facility using a
type of technology which accounts for at least 1 per-
cent but less than 2 percent of annual domestic electric-
ity production in the preceding taxable year, as
determined by the Secretary on the basis of data reported by the Energy Information Administration.

“(3) Tier 3 facility.—The term ‘tier 3 facility’ means an electric generating facility using a type of technology which accounts for at least 2 percent but less than 3 percent of annual domestic electricity production in the preceding taxable year, as determined by the Secretary on the basis of data reported by the Energy Information Administration.

“(f) Transfer of credit by certain public entities.—Rules similar to the rules of subsection (e) of section 48D shall apply for purposes of this section.

“(g) Regulations.—

“(1) In general.—Not later than 1 year after the date of the enactment of this section, the Secretary shall prescribe such regulations as may be necessary or appropriate to carry out the purposes of this section. Such regulations shall include a process for making eligibility certifications described in subsection (d)(1)(E).

“(2) Certification.—The regulations developed under paragraph (1) shall include a certification process under which the Secretary, in consultation with the Secretary of Energy, determines
the eligibility of facilities for purposes of subsection (d)(1).”.

(b) Credit Allowed as Part of General Business Credit.—Section 38(b) of the Internal Revenue Code of 1986 is amended by striking “plus” at the end of paragraph (31), by striking the period at the end of paragraph (32) and inserting “, plus”, and by adding at the end the following new paragraph:

“(33) the emerging energy technology production credit determined under section 45T(a).”.

(c) Special Rule for Proceeds of Transfers for Mutual or Cooperative Electric Companies.—Section 501(c)(12)(I) of such Code, as amended by the preceding provisions of this Act, is amended by striking “or 48D(e)” and inserting “, 45T(f), or 48D(e)”.

(d) Clerical Amendment.—The table of sections for subpart D of part IV of subchapter A of chapter 1 of the Internal Revenue Code of 1986 is amended by adding at the end the following new item:

“Sec. 45T. Electricity produced from emerging energy technology.”.

(e) Effective Date.—The amendments made by this section shall apply to electricity produced and sold in taxable years beginning after the date of the enactment of this Act, at facilities placed in service after such date of enactment.
SEC. 5. ENERGY CREDIT FOR ENERGY STORAGE TECHNOLOGIES.

(a) In General.—Section 48(a)(2)(A)(i) of the Internal Revenue Code of 1986 is amended by striking “and” at the end of subclause (III) and by inserting after subclause (IV) the following new subclause:

“(V) energy property described in paragraph (3)(A)(viii), and”.

(b) Energy Storage Technologies.—Section 48(a)(3)(A) of such Code is amended by striking “or” at the end of clause (vi), by adding “or” at the end of clause (vii), and by adding at the end the following new clause:

“(viii) equipment which receives, stores, and delivers energy using batteries, compressed air, pumped hydropower, hydrogen storage (including hydrolysis), thermal energy storage, regenerative fuel cells, flywheels, capacitors, superconducting magnets, or other technologies identified by the Secretary, in consultation with the Secretary of Energy,”.

(c) National Limitation Relating to Energy Storage Property.—Section 48(a)(5) of such Code is amended by adding at the end the following new subparagraph:
“(F) National limitation relating to energy storage property.—

“(i) In general.—The amount of credit which (but for this subsection) would be allowed with respect to all equipment described in subsection (a)(3)(A)(viii) for any taxable year shall not exceed the national megawatt capacity limitation for energy storage property allocated to the project of which such equipment is a part.

“(ii) Amount of national credit limitation.—

“(I) In general.—The aggregate amount of national megawatt capacity limitation allocated to projects under clause (i) shall not exceed 20,000 megawatts.

“(II) Limitation on lithium ion electric storage batteries.—The Secretary shall ensure that not more than 15,000 megawatts of the national megawatt capacity limitation are allocated to projects for lithium ion electric storage batteries, in an effort to facilitate the deployment—
ment of a diverse suite of technological designs.

“(iii) ALLOCATION.—

“(I) ESTABLISHMENT OF PROGRAM.—Not later than 180 days after the date of enactment of this subparagraph, the Secretary, in consultation with the Secretary of Energy, shall develop a process to allocate national megawatt capacity limitation under this subparagraph.

“(II) APPLICATIONS.—Each applicant for allocations under this subparagraph shall submit an application to the Secretary. The Secretary shall issue a determination as whether an applicant has been allocated national megawatt capacity limitation not later than 60 days after the date of the submission of a completed application under this subclause.

“(III) TIME LIMIT ON BEGINNING AND COMPLETING CONSTRUCTION.—An allocation of national megawatt capacity limitation under
this clause shall be void unless the taxpayer begins construction of the project not later than the date which is 1 year after the date on which such allocation is made and completes construction of such project not later than the date which 5 years after the date on which such construction begins.

“(IV) Reallocation of unused limitation.—The Secretary shall reallocate national megawatt capacity limitation (and such reallocation shall not be taken into account in applying the limitation of clause (ii)(I)) to the extent that any allocation is void under subclause (III) or to the extent that the credit attributable to such allocation is recaptured under section 50(a).”

(d) Transfer of Energy Storage Property Credit by Certain Public Entities.—Section 48 of such Code is amended by adding at the end the following new subsection:
“(e) Transfer of Energy Storage Property Credit by Certain Public Entities.—In the case of any property described in subsection (a)(3)(A)(viii), rules similar to the rules of subsection (e) of section 48D shall apply for purposes of this section.”.

(e) Effective Date.—The amendments made by this section shall apply to property placed in service in taxable years beginning after the date of the enactment of this Act, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).