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

Mr. REED introduced the following bill; which was referred to the Committee

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 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 “Energy Sector Innovation Credit Act of 2018”.

(Original Signature of Member)
SEC. 2. 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) 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, the original use of which commences with the taxpayer, and 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(b)(2)(A)), 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 to retrofit such facility and which, with respect to such facility—

“(i) improves conversion efficiency (as defined in section 45T(e)(2)) or energy efficiency (as defined in section 45T(e)(3)) by at least 50 percent,

“(ii) decreases water consumption, in the case of a type of facility which has significant water consumption, by at least 75 percent, or

“(iii) as recognized by the Environmental Protection Agency pursuant to its enforcement of the Clean Air Act (42 U.S.C. 7401 et seq.) or by administrative action, reduces, sequesters, or controls by at least 50 percent the emission of air pollutants which can be reasonably anticipated to endanger public health or welfare.

“(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 large, stationary and non-mobile, identifiable source of emissions that releases pollutants into the atmosphere.

“(c) 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 percent’ for ‘30 percent’.

“(2) FIRST OF ITS KIND.—Property shall be treated as the first of its kind if such property is 1 of the first 3 original demonstrations in the United States of an engineering design for megawatt-scale electric power generation which generates revenue from sales of electric power.

“(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. Such process shall be designed to make a determination not later than 90 days after the submission of an application for determination.

“(B) TERMINATION IF CONSTRUCTION DOES NOT PROCEED.—Except as otherwise provided by the Secretary, a certification of any qualified emerging energy property under subparagraph (A) shall cease to have any force or effect if construction of such property does not begin before the date which is 5 years after the date of such certification or if the Secretary makes a determination that such construction has been suspended indefinitely.

“(d) 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.

“(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(e)(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 quali-
fied emerging energy property to which the
credit under subsection (a) relates,
“(ii) is a financial institution pro-
viding financing for the construction or op-
eration of such property, 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 end-
ing 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 ac-
count as a private business use.”.

(b) Credit Made Part of Investment Credit.—
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.”.

(e) Conforming Amendments.—

(1) 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(b)).”.

(2) 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 48D 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. 3. 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. EMERGING ENERGY TECHNOLOGY PRODUCTION CREDIT.

“(a) In General.—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 during such taxable year, or

“(2) the product of—

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

“(B) the number of kilowatt hours of electricity produced at the qualified production facility and sold to an unrelated person during the taxable year.
```
“(b) Applicable Percentage.—For purposes of
this section—

“(1) In general.—The applicable percentage
is—

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

“(B) in the case of a tier 2 facility, 45 per-
cent,

“(C) in the case of a tier 3 facility, 30 per-
cent,

“(D) in the case of a tier 4 facility, 15 per-
cent, and

“(E) in the case of any other facility, zero
percent.

“(2) Facility tiers.—

“(A) Tier 1 facility.—The term ‘tier 1
facility’ means, with respect to any taxable
year, an electric generating facility using a type
of technology which accounts for less than .5
percent of annual domestic electricity produc-
tion in the preceding taxable year, as deter-
mined by the Secretary on the basis of data re-
ported by the Energy Information Administra-


“(B) TIER 2 FACILITY.—The term ‘tier 2 facility’ means, with respect to any taxable year, an electric generating facility using a type of technology which accounts for at least .5 percent but 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.

“(C) TIER 3 FACILITY.—The term ‘tier 3 facility’ means, with respect to any taxable year, an electric generating facility using a type of technology which accounts for at least 1 percent but less than 1.5 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.

“(D) TIER 4 FACILITY.—The term ‘tier 4 facility’ means, with respect to any taxable year, an electric generating facility using a type of technology which accounts for at least 1.5 percent but less than 2 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.

“(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 facility which—

“(A) was originally placed in service after the date of the enactment of this Act,

“(B) generates electricity,

“(C) is located in the United States or a possession of the United States (as such terms are used in section 638),

“(D) utilizes emerging technology, and

“(E) is certified by the Secretary, after consultation with the Secretary of Energy, as a qualified production facility for purposes of this section.

“(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 pur-
poses 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.

“(e) EMERGING TECHNOLOGY.—For purposes of this section—

“(1) IN GENERAL.—The term ‘emerging technology’ means—

“(A) any new or improved power conversion fuel-based technology—

“(i) which—

“(I) reduces emission of air pollutants that can be reasonably anticipated to endanger public health or welfare to below the volume or rate required by the Clean Air Act, in the case of a type of facility which has significant emission of air pollutants, or

“(II) yields at least a 50 percent improvement in energy efficiency, as compared to existing fuel-based elec-
tric generating commercial technology,

and

“(ii) which operates with a capacity

factor of at least 50 percent,

“(B) any new or improved reactor design

licensed by the Nuclear Regulatory Commission

which produces electricity through nuclear fis-
sion or a fusion chain reaction and which (when

compared to existing nuclear commercial tech-
nologies)—

“(i) reduces the high-level radioactive

waste or spent nuclear fuel per unit of en-
ergy yield,

“(ii) improves fuel utilization,

“(iii) decreases core damage frequency

or large early release frequency by at least

a factor of 10, or

“(iv) increases thermal efficiency,

“(C) any new technology or new improve-
ment to technology which generates electricity

from renewable energy (as defined in section


and which generates at least a 25 percent in-
crease in the conversion efficiency 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, or

“(D) technology which the Secretary, in consultation with the Secretary of Energy, determines would improve energy efficiency or conversion efficiency of electric generating commercial technology by not less than 15 percent.

“(2) 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 operating rates, and expected to be consumed in its normal application, and

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

“(3) ENERGY EFFICIENCY.—The term ‘energy efficiency’ means 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.

“(4) Efficiency 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 effi-
ciency described in paragraph (1) which a facility
must exceed in order to meet the requirements of
such paragraph.

“(5) 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 gener-
ating facility, and has been in such use in at least
1 of such projects for a period of at least 5 years.

“(6) 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.
“(7) 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.

“(f) 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 production facility to which the credit under subsection (a) relates,

“(ii) is a financial institution providing financing for the construction or operation of such facility, or

“(iii) has an ownership interest in such facility.

“(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.
“(g) Regulations.—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).”.

(b) Credit Allowed as Part of General Business Credit.—Section 38(b) of such Code 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) Clerical Amendment.—The table of sections for subpart D of part IV of subchapter A of chapter 1 of such Code is amended by adding at the end the following new item:

“Sec. 45T. Emerging energy technology production credit.”.

(d) Effective Date.—The amendments made by this section shall apply to electricity produced and sold after the date of the enactment of this Act.

SEC. 4. MODIFICATION OF ENERGY CREDIT.

(a) Energy Credit for Energy Storage Technologies.—
(1) IN GENERAL.—Section 48(a)(3)(A) of the Internal Revenue Code of 1986 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—

“(I) 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,

“(II) has a capacity of not less than 5 kilowatt hours, and

“(III) receives an allocation of national megawatt capacity from the Secretary under paragraph (8) equal to the capacity of such equipment.”.

(2) 30 PERCENT CREDIT.—Section 48(a)(2)(A)(i)(II) of such Code is amended by striking “paragraph (3)(A)(i)” and inserting “clause (i) or (viii) of paragraph (3)(A)”.

(3) NATIONAL LIMITATION RELATING TO ENERGY STORAGE PROPERTY.—Section 48(a) of such Code is amended by adding at the end the following new paragraph:

“(8) NATIONAL LIMITATION RELATING TO ENERGY STORAGE PROPERTY.—

“(A) IN GENERAL.—The aggregate amount of national megawatt capacity limitation allocated by the Secretary to equipment described in paragraph (3)(A)(viii) shall not exceed 10,000 megawatts.

“(B) ALLOCATION OF LIMITATION.—The Secretary shall allocate the national megawatt capacity limitation in such manner as the Secretary may prescribe, with a focus on diversity of technological design.

“(C) REGULATIONS.—Not later than 6 months after the date of the enactment of this paragraph, the Secretary shall prescribe such regulations as may be necessary or appropriate to carry out the purposes of this paragraph. Such regulations shall provide a process under which the Secretary, after consultation with the Secretary of Energy, shall allocate the national megawatt capacity limitation.”.
(b) TRANSFER OF ENERGY CREDIT BY CERTAIN PUBLIC ENTITIES.—Section 48 of such Code is amended by adding at the end the following new subsection:

“(f) 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(e)(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 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, 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 partner-
ship.

“(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 end-
ing 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 ac-
count as a private business use.”.

(c) Effective Date.—

(1) In general.—Except as otherwise pro-
vided in this subsection, the amendments made by
this section shall apply to periods after the date of
the enactment of this Act, in taxable years ending
after such date, 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).

(2) TRANSFER OF ENERGY CREDIT BY CERTAIN PUBLIC ENTITIES.—The amendment made by subsection (b) shall apply to credits arising in taxable years ending after the date of the enactment of this Act.