

This document has been prepared as part of the implementation project of Legal Pathways to Deep Decarbonization (Michael B. Gerrard and John C. Dernbach, eds. Environmental Law Institute [2019]) (LPDD). For background information on the project, see <https://lpdd.org>

Model Federal Legislation Creating New Categories of Tax-Exempt Private Activity Bonds for Certain Decarbonizing Projects and Activities

Introduction:

Generally, public entities may only issue tax-exempt bonds for governmental purposes. The Internal Revenue Code specifies certain limited categories of tax-exempt bonds that may be issued for private activities that Congress expressly determined over the years to have a significant public purpose (even with private involvement).¹ With a couple of limited exceptions², these categories of tax-exempt private activity bonds do not currently apply to decarbonizing activities and projects. This draft legislation proposes an expansion in the scope of tax-exempt private activity bonds to include a wide variety of decarbonizing activities and projects.

*Because interest rates for tax-exempt financing are lower than interest rates for non-tax-exempt financing, tax-exempt private activity bonds can be used to finance projects at lower cost.³ The typical structure for a tax-exempt private activity bond financing involves a public agency that acts as the issuer of the bonds, a trustee that manages and administers the loan, and an underwriter that markets the bonds to potential investors. The issuer's role is to act as a conduit for the tax-exempt status of the bonds, and following issuance and delivery of the bond proceeds to the borrower, its role is minimal. Although the loan agreement is between the issuer and the borrower, the trustee, usually a commercial bank, takes over administration of the loan agreement and collateral and handles interactions with the bondholders. The borrower is typically the entity that owns the project. This legislation expanding eligibility for tax-exempt private activity bonds to decarbonizing projects and activities has been adapted from legislation that was originally proposed by Senator Dianne Feinstein in 2010 as S.3336 (111th Congress) ("S.3336"). The scope of eligible activities and projects has been expanded beyond renewable generation projects to include carbon capture and sequestration projects, energy storage projects, and advanced biofuels facilities. In addition, the scope of renewable energy projects covered has been expanded to include any source that does not emit greenhouse gases, which would include nuclear energy. These changes in scope are intended to align with and enable the deep decarbonization pathways described in Chapter 1 of *Legal Pathways for Deep Decarbonization in the United States* ("LPDD").⁴*

Tax-exempt private activity bonds are typically subject to a state volume cap and the alternative minimum tax (AMT). This draft legislation includes several options for addressing the state volume cap as well as language that would exempt issuances from application of the AMT.

¹ See 26 U.S.C. §142 for the list of "qualified private activities" eligible for tax-exempt treatment. Public entities may issue bonds on behalf of for-profit entities or for non-public purposes, but only bonds in the categories in 26 U.S.C. §142 are tax-exempt. The term "private activity bond" is defined in 26 U.S.C. §141 and refers to any bond issued by a public entity that meets the private purpose and beneficiary tests set forth in 26 U.S.C. §141.

² For example, certain waste-to-energy renewable energy projects may qualify under 26 U.S.C. § 142(a)(6) and certain green building and sustainable design projects may qualify under 26 U.S.C. § 142(a)(14).

³ See Steven Maguire and Joseph S. Hughes, *Private Activity Bonds: An Introduction*, Congressional Research Service, July 13, 2018 (pp. 3-6) for a comparison of tax-exempt and non-tax-exempt bond yields.

⁴ Gerrard, M.B. & Dernbach, J.C. (eds.), *Legal Pathways for Deep Decarbonization in the United States*, Environmental Law Institute (2019).

[S.]/[H.R.] []

IN THE [SENATE]/[HOUSE OF REPRESENTATIVES] OF THE UNITED STATES

[], 20 []

[] introduced the following bill; which was read twice and referred to []

A BILL

To amend the Internal Revenue Code of 1986 to provide for the treatment of bonds issued to finance renewable energy resource facilities, conservation and efficiency facilities, carbon dioxide capture facilities, and energy storage facilities.

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 “Green Private Activity Bonds Act”.

SEC. 2. TREATMENT OF BONDS ISSUED TO FINANCE RENEWABLE ENERGY RESOURCE FACILITIES, CONSERVATION AND EFFICIENCY FACILITIES, CARBON DIOXIDE CAPTURE FACILITIES, AND ENERGY STORAGE FACILITIES.

(a) IN GENERAL.—Section 142(a) of the Internal Revenue Code of 1986 is amended by striking “or” at the end of paragraph (14), by striking the period at the end of paragraph (15) and inserting a comma, and by inserting after paragraph (15) the following new paragraphs:

“(16) renewable energy resource facilities,

“(17) conservation and efficiency facilities and projects,

“(18) carbon dioxide capture facilities,

“(19) zero-emission vehicle infrastructure, [or]

[“(20) energy storage facilities and projects.”.]

[Renewable Energy Resource Facilities]

(b) RENEWABLE ENERGY RESOURCE FACILITY.—Section 142 of the Internal Revenue Code of 1986 is amended by adding at the end the following new subsection:

“(n) RENEWABLE ENERGY RESOURCE FACILITIES.—For purposes of subsection (a)(16)—

“(1) IN GENERAL.—The term ‘renewable energy resource facility’ means—

“(A) any newly constructed, improved or expanded facility the principal purpose of which is to produce electric or thermal energy (including a distributed generation facility) from—

“(i) solar, wind, or geothermal energy,

“(ii) marine and hydrokinetic energy,

“(iii) hydropower,

“(iv) biogas and solids produced in the solid waste and wastewater treatment process, or

“(v) any other source that does not emit greenhouse gases in the production of electric or thermal energy.

[“(B)” any energy storage facility the principal purpose of which is to store energy produced by facilities referred to in subparagraph (A)]

“[(C)] any other facility the principal purpose of which is to produce biogas or advanced biofuels, or

“[(D)] any facility or project the principal purpose of which is the manufacture of equipment used in the facilities referred to in subparagraph (A), [(B) or (C)].

Comment:

The most common categories of renewable energy technology are included in subsections (n)(1)(A)(i) through (iv). To avoid excluding any new or less common technologies, subsection (n)(1)(A)(v) is included to generically cover any technology that produces electric or thermal energy without emitting greenhouse gases. Although nuclear energy is not identified in the categories listed in subsections (n)(1)(A)(i) through (iv) and was not included in S.3336, nuclear energy would be covered by the catchall in subsection (n)(1)(A)(v). Increased deployment of nuclear energy is an essential component of two of the four deep decarbonization scenarios in LPDD—the mixed scenario and high nuclear scenario (see LPDD p. 26 and Ch. 21). S.3336 also included biomass as a category of renewable energy eligible for tax-exempt treatment; however, the LPDD considers the better use of biomass to be as a feedstock for substitutes to diesel and natural gas rather than as a fuel source for the generation of electricity (see LPDD p. 33).

Comment:

“Energy storage facility” in the above subsection (B) is bracketed because an alternative preferred and significantly broader option is included in Section 142(r) below. As included here, the electricity used to charge the energy storage facility must be from a renewable energy resource facility described in part (A). This would tightly limit options for deployment of energy storage. Any energy storage facility charging from grid power, which includes electricity from both renewable and non-renewable sources, would not satisfy this requirement. In addition, because any energy storage facility satisfying this requirement would likely need to charge directly from the renewable energy resources facility, the energy storage facility would need to be co-located with the renewable energy resource facility. This would favor energy storage technologies that are relatively mobile, such as battery energy storage and flywheels, over those that are not, such as pumped hydro and compressed air energy storage.

Note that if the alternative preferred option reflected in Section 142(r) is used, removal here would also result in removal from subsection (D) above, which makes manufacturing facilities for qualifying energy storage systems also eligible for tax-exempt private activity bonds. However, inclusion of manufacturing facilities for energy storage equipment could be added to Section 142(r).

“(2) SPECIAL REQUIREMENTS FOR FACILITIES PRODUCING BIOGAS.—

“(A) IN GENERAL.—A facility the principal purpose of which is to produce biogas shall not be treated as described in paragraph (1)[(C)], unless the biogas produced—

“(i) is of pipeline quality and distributed into a vehicle for transportation or into an intrastate, interstate, or LDC pipeline system, or

“(ii) is used to produce onsite electricity or hydrogen fuel for use in vehicular or stationary fuel cell applications and has a British thermal unit content of at least 500 per cubic foot.

“(B) PIPELINE QUALITY.—For purposes of subparagraph (A)(i), with respect to biogas, the term ‘pipeline quality’ means biogas with a British thermal unit content of at least 930 per cubic foot.

“(3) DEFINITIONS.—For purposes of this subsection—

“(A) GEOTHERMAL ENERGY.—The term ‘geothermal energy’ means energy derived from a geothermal deposit (within the meaning of section 613(e)(2)) or from geothermal heat pumps.

“(B) MARINE AND HYDROKINETIC RENEWABLE ENERGY.—The term ‘marine and hydrokinetic renewable energy’ has the meaning given such term in section 45(c)(10).

“(C) HYDROPOWER.—The term ‘hydropower’ means energy generated from new hydropower facilities and additional energy generated as a result of efficiency improvements or capacity additions to existing hydropower facilities made on or after the date of enactment of this subsection.

“(D) BIOGAS.—The term ‘biogas’ means a gaseous fuel derived from landfill, municipal solid waste, food waste, wastewater or biosolids, or biomass (as defined in section 203(b)(1) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)) as of the date of the initial public authorization of the project).

“(E) ADVANCED BIOFUEL.— The term ‘advanced biofuel’ has the meaning given such term in section 211(o)(1)(B) of the Clean Air Act (42 U.S.C. 7545(o)(1)(B)) as of the date of the initial public authorization of the project.

[“(F)” ENERGY STORAGE FACILITY.—The term ‘energy storage facility’ means any facility the principal purpose of which is to store electricity or to store energy for later production of electricity.]

Comment:

Both new and incremental hydropower are included in subsection (C) above. While S.3336 did not include new hydropower, presumably due to the environmental impacts commonly associated with new hydropower, it is included here in order to be available for new hydropower projects for non-powered dams and for new hydropower projects that satisfy applicable environmental and regulatory requirements (see related discussion in LPDD pp. 572-73, 576-77).

Comment:

“Advanced biofuel” facilities were not included in S.3336. It is included here in support of the LPDD target of 60 billion gallons of biofuels annually by 2050 (see LPDD p. 694) and widespread use as an aviation fuel (see LPDD p. 430). As defined in subsection (E) above, “advanced biofuel” is defined by reference to the term created in connection with the expansion of the Renewable Fuel Standard under the Energy Independence and Security Act (Pub. L. No. 110-140, 121 Stat. 1492 (2007); see discussion in LPDD pp. 695-97). The term excludes corn-based ethanol, which is disfavored by the LPDD (see LPDD p. 694), and incorporates the concept of life-cycle GHG emissions and minimum standards for life-cycle emissions.

[Conservation and Efficiency Facilities and Projects]

(c) CONSERVATION AND EFFICIENCY FACILITY OR PROJECT.—Section 142 of the Internal Revenue Code of 1986, as amended by subsection (b), is amended by adding at the end the following new subsection:

“(o) CONSERVATION AND EFFICIENCY FACILITIES AND PROJECTS.—

“(1) IN GENERAL.—For purposes of subsection (a)(17), the term ‘conservation and efficiency facility or project’ means—

“(A) any facility or project the principal purpose of which is the conservation or the efficient use of energy, including energy efficient retrofitting of existing buildings and transportation facilities, or for the efficient storage, transmission, or distribution of energy, including any facility or project designed to implement smart grid technologies (as described as of the date of the initial public authorization of the project or plan of financing in Title XIII of the Energy Independence and Security Act of 2007, or individual components of such technologies as listed in section 1301 of such Act (42 U.S.C. 17381)),

“(B) any facility or project the principal purpose of which is the conservation of or the efficient use of water, including—

“(i) any facility or project designed to achieve one or more of the following principal purposes—

“(I) reducing the demand for water,

“(II) improving efficiency in use and reduce losses and waste of water, including water reuse and the treatment of wastewater and water runoff for reuse as potable water, and

“(III) improving land management practices to conserve water, or

“(ii) any individual component of a facility or project referred to in clause (i), or

“(C) any facility or project the principal purpose of which is the manufacture of facilities referred to in subparagraphs (A) and (B).

For purposes of subparagraph (B)(i), facility or project does not include any facility or project that stores water other than as described in clause (B)(i)(II).

[Carbon Dioxide Capture Facilities and Projects]

(d) QUALIFIED CARBON DIOXIDE CAPTURE FACILITY.—Section 142 of the Internal Revenue Code of 1986, as amended by subsections (b) and (c), is amended by adding at the end the following new subsection:

“(p) QUALIFIED CARBON DIOXIDE CAPTURE FACILITIES.—

“(1) IN GENERAL.—For purposes of subsection (a)(18), the term ‘qualified carbon dioxide capture facility’ means the eligible components of an industrial carbon dioxide facility.”.

“(2) DEFINITIONS.—In this subsection:

“(A) ELIGIBLE COMPONENT.—

“The term ‘eligible component’ means any equipment installed in an industrial carbon dioxide facility that satisfies the requirements under paragraph (3) and is—

“(I) used for the purpose of capture, treatment and purification, compression, transportation, or on-site storage of

carbon dioxide produced by the industrial carbon dioxide facility,
or

“(II) integral or functionally related and subordinate to a process described in section 48B(c)(2), determined by substituting ‘carbon dioxide’ for ‘carbon monoxide’ in such section.

“(B) INDUSTRIAL CARBON DIOXIDE FACILITY.—

“(i) IN GENERAL.—Except as provided in clause (ii), the term ‘industrial carbon dioxide facility’ means a facility that emits carbon dioxide (including from any fugitive emissions source) that is created as a result of any of the following processes:

“(I) Fuel combustion.

“(II) Gasification.

“(III) Bioindustrial.

“(IV) Fermentation.

“(V) Any manufacturing industry described in section 48B(c)(7) as of the date of enactment.

“(ii) EXCEPTIONS.—For purposes of clause (i), an industrial carbon dioxide facility shall not include—

“(I) any geological gas facility (as defined in clause (iii)), or

“(II) any air separation unit that—

“(aa) does not qualify as gasification equipment, or

“(bb) is not a necessary component of an oxy-fuel combustion process.

“(iii) GEOLOGICAL GAS FACILITY.—The term ‘geological gas facility’ means a facility that—

“(I) produces a raw product consisting of gas or mixed gas and liquid from a geological formation (other than a geological storage facility described in subclause (3)(C)(i)(I)),

“(II) transports or removes impurities from such raw product,
or

“(III) separates such raw product into its constituent parts.

“(3) CAPTURE AND STORAGE REQUIREMENT.—

“(A) IN GENERAL.—Subject to subparagraph (B), the eligible components of an industrial carbon dioxide facility shall have a capture and storage percentage (as determined under subparagraph (C)) that is equal to or greater than 65 percent.

“(B) EXCEPTION.—In the case of an industrial carbon dioxide facility with a capture and storage percentage that is less than 65 percent, the percentage of the cost of the eligible components installed in such facility that may be financed with tax-exempt bonds may not be greater than the capture and storage percentage.

“(C) CAPTURE AND STORAGE PERCENTAGE.—

“(i) IN GENERAL.—Subject to clause (ii), the capture and storage percentage shall be an amount, expressed as a percentage, equal to the quotient of—

“(I) the total metric tons of carbon dioxide annually captured, transported, and injected into—

“(aa) a facility for geological storage, or

“(bb) an enhanced oil or gas recovery well followed by geologic storage, divided by

“(II) the total metric tons of carbon dioxide which would otherwise be released into the atmosphere each year as industrial emission of greenhouse gas if the eligible components were not installed in the industrial carbon dioxide facility.

“(ii) LIMITED APPLICATION OF ELIGIBLE COMPONENTS.—In the case of eligible components that are designed to capture carbon dioxide solely from specific sources of emissions or portions thereof within an industrial carbon dioxide facility, the capture and storage percentage under this subparagraph shall be determined based only on such specific sources of emissions or portions thereof.”.

Comment:

This subsection (d) addressing carbon dioxide capture facilities and projects is based on the Carbon Capture Improvement Act (116th Congress) introduced by Senator Michael Bennet in the Senate as S.1763 and by Representative Tim Burchett in the House of Representatives as H.R.3861. Notably, this subsection (d) is drafted to apply only to carbon capture facilities associated with specific carbon emissions sources and would not cover direct air capture projects or negative emissions technologies more generally (see Chapter 29 of the LPDD (Negative Emissions Technologies and Direct Air Capture)). Chapter 28 of the LPDD (Carbon Capture and Sequestration) includes a recommendation for the use of Private Activity Bonds, but Chapter 29 of the LPDD (Negative Emissions Technologies and Direct Air Capture) does not include such a recommendation. Negative emissions technologies encompass any technology or approach to the removal of atmospheric carbon dioxide, including direct air capture and untested approaches such as ocean iron fertilization as well as more traditional approaches such as the use of biofuels and biogas (see generally part II of Chapter 29 of the LPDD; pp. 752-58). Direct air capture of atmospheric carbon dioxide is a relatively nascent technology (see pp. 753-54 of the LPDD for a discussion of challenges), and most efforts to capture carbon dioxide have focused on capture from concentrated point source emissions. Accordingly, projects and facilities employing negative emissions technologies are not eligible for tax-exempt private activity bonds in this draft legislation given their generally unproven nature and that certain other more traditional negative emissions technologies, such as advanced biofuels and biogas (see subsection (b) above), would otherwise be eligible for tax-exempt private activity bonds under this draft legislation.

Although this draft legislation is based on bills introduced in both houses of Congress, it is not clear how thoroughly those bills have been reviewed from a technical perspective. Accordingly, before a legislator considers adopting this subsection (d), the subsection should be carefully reviewed by technical experts to ensure it accurately includes (and excludes) the precise technology the legislator intends. Such a review should include, but not be limited to: (1) subpart (p)(2)(A)(i)(II) regarding changes to “gasification technology” as defined in 48B(c)(2), including the makeup of the gas that should be covered; and (2) whether the reference in (p)(2)(B)(i)(V) to the eligible industrial uses of gasification product described in 48B(c)(7) should instead be expanded either by adopting a general definition of manufacturing industries or, alternatively, basing it on the term “carbon capture capability” in 48B(c)(5). A legislator contemplating adoption of this subsection (d) may also wish to consider: (1) the scope of the geological gas facility exclusion in subpart (p)(2)(B)(iii); and (2) whether the timing and basis of the calculation of “capture and storage percentage” in subpart (p)(3)(C) should be more precisely defined to make clear whether the percentage should be based on designed capability

or instead measured periodically following construction -- and, if the latter, the consequences of falling below 65%.

[Zero-Emission Vehicle Infrastructure]

(e) ZERO-EMISSION VEHICLE INFRASTRUCTURE.—Section 142 of the Internal Revenue Code of 1986, as amended by subsections (b), (c), and (d), is amended by adding at the end the following new subsection:

“(q) ZERO-EMISSION VEHICLE INFRASTRUCTURE.—

“(1) IN GENERAL.—For purposes of subsection (a)(19), the term ‘zero-emission vehicle infrastructure’ means any property (not including a building and its structural components) if such property is—

“(A) made available for use by members of the general public, and

“(B) used to charge or fuel zero-emissions vehicles, but only if the property is located at the point where the vehicles are charged or fueled.

“(2) INCLUSION OF UTILITY SERVICE CONNECTIONS.—The term ‘zero-emission vehicle infrastructure’ shall include any utility service connections, utility panel upgrades, or contributions in aid of construction (as described in section 118) which are required for the charging or fueling of zero-emissions vehicles.

“(3) ZERO-EMISSIONS VEHICLE.—The term ‘zero-emission vehicle’ means—

“(A) a zero-emission vehicle as defined in section 88.102-94 of title 40, Code of Federal Regulations as of the date of enactment, or

“(B) a vehicle that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes and conditions.

“(4) ZERO-EMISSIONS VEHICLE INFRASTRUCTURE LOCATED WITHIN OTHER FACILITIES OR PROJECTS.—For purposes of subsection (a), and zero-emissions vehicle infrastructure located within—

“(A) a facility or project described in subsection (a), or

“(B) an area adjacent to a facility or project described in subsection (a) that primarily serves vehicles traveling to or from such facility or project,

shall be treated as described in the paragraph in which such facility or project is described.”

Comment:

This subsection (e) regarding zero-emissions vehicle infrastructure is based on the Greener Transportation for Communities Act (116th Congress) introduced by Senator Catherine Cortez Masto in the Senate as S.2039. Similar provisions were included in Sec. 90107 of the Renewable Energy, Efficiency and Infrastructure Tax Act of 2020 (H.R.2 Moving Forward Act (Rules Committee Print 116-54, p.2130-2132)), which should also be considered by reviewing parties.

[Energy Storage Facilities and Projects]

[(f)] ENERGY STORAGE FACILITY OR PROJECT.—Section 142 of the Internal Revenue Code of 1986, as amended by subsections (b), (c), (d) and (e), is amended by adding at the end the following new subsection:

“(r) ENERGY STORAGE FACILITIES AND PROJECTS.—

“(1) IN GENERAL.—For purposes of subsection (a)(20), the term ‘energy storage facility or project’ means any facility or project the principal purpose of which is to store energy.”.]

Comment:

This language is offered as an alternative to Section 142(n)(1)(B) and would not limit energy storage projects based on whether their charging energy is renewable energy. However, if desired in order to promote coordination of energy storage with renewable generation sources, this language could be edited to require that a minimum percentage of charging energy come from renewable sources.

In addition, as noted above, this Section 142(r) could be expanded to include manufacturing facilities for energy storage equipment, similar to that provided for renewable energy resource facilities in Section 142(n)(1)(D) above.

[Issuer Designation of Applicable Green Bond Category]

[(g)] ISSUER DESIGNATION OF GREEN BONDS.—Section 142 of the Internal Revenue Code of 1986, as amended by subsections (b), (c), (d), (e) and [(f)], is amended by adding at the end the following new subsection:

“(s) ISSUER DESIGNATION OF GREEN BONDS.—A bond, or portion of the proceeds of a bond, may only be used to provide facilities described in subsections (16), (17), (18), [(19) or (20)] of subsection (a) if, and to the extent that, the issuer makes an irrevocable election prior to the issuance of the bonds that such subsection shall apply to such bonds or proceeds.”.

Comment:

If a project could qualify under more than one of the green bond categories, issuers may desire to designate the project, or a portion of the project, as qualifying under a specific green bond category. The designation option allows issuers to avoid having to meet the requirements of a green bond category they did not expect to apply upon issuance and adds clarity around the application of the green bond categories if more than one such category applies to a project.

[Annual volume cap on issuance of private activity bonds]

[Option 1]

[(f)] EXEMPTION FROM VOLUME CAP 146(g)(3).—Section 146(g)(3) of the Internal Revenue Code of 1986 is amended by striking “or (15)” and inserting “(15), (16), (17), (18), [(19), or (20)]”.

[Options 2(a) and (b)]

[(f)] NATIONAL LIMITATION ON AMOUNT OF GREEN BONDS.—Section 142 of the Internal Revenue Code of 1986, as amended by subsections (b), (c), (d), [(e), and (f)] is amended by adding at the end the following new subsection:

“[(r)] NATIONAL LIMITATION ON AMOUNT OF GREEN BONDS.—

“(1) IN GENERAL.—An issue shall not be treated as an issue described in paragraph (16), (17), (18), [(19), or (20)] of subsection (a) if the aggregate face amount of bonds issued by the State pursuant thereto (when added to the aggregate face amount of bonds previously so issued during the calendar year pursuant to any such section) exceeds the amount allocated to the State by the Secretary under paragraph (2) for such calendar year.

[Option 2(a)]

[“(2) ALLOCATION RULES.—

“(A) ALLOCATION AMONG STATES BY POPULATION.—The Secretary shall allocate authority to issue bonds described in paragraph

(16), (17), (18), [(19), or (20)] of subsection (a) to each State by population for each calendar year in an aggregate amount to all States not to exceed \$[_____]. For purposes of this section, determinations of the population of any State (or issuing authority) shall be made with respect to any calendar year on the basis of the most recent census estimate of the resident population of such State (or issuing authority) released by the Bureau of Census before the beginning of such calendar year.

“(B) STATE ALLOCATION.—The State may allocate the amount allocated to the State under subparagraph (A) for any calendar year among governmental units (or other authorities) in such state having authority to issue private activity bonds in such manner as the State determines appropriate.]

[Option 2(b)]

[“(2) ALLOCATION RULES.—

“(A) ALLOCATION AMONG STATES BY POPULATION.—The Secretary shall allocate authority to issue bonds described in paragraph (16), (17), (18), [(19) or (20)] of subsection (a) to each State equal to [__] percent of the State ceiling under section 146(d). For purposes of this section, determinations of the population of any State (or issuing authority) shall be made with respect to any calendar year on the basis of the most recent census estimate of the resident population of such State (or issuing authority) released by the Bureau of Census before the beginning of such calendar year.

“(B) STATE ALLOCATION.— The State may allocate the amount allocated to the State under subparagraph (A) for any calendar year among governmental units (or other authorities) in such state having authority to issue private activity bonds in such manner as the State determines appropriate.]

“(C) UNUSED GREEN BOND CARRYOVER TO BE ALLOCATED AMONG QUALIFIED STATES.—

“(i) IN GENERAL.—Any unused bond allocation for any State for any calendar year under subparagraph (A) and this subparagraph (C) shall carry over to the succeeding calendar year and be assigned to

the Secretary for allocation among qualified States for the succeeding calendar year.

“(ii) UNUSED BOND ALLOCATION CARRYOVER.—For purposes of this subparagraph, unused bond allocations are bond allocations described in subparagraph (A) and this subparagraph (C) of any State which remain unused by January 1 of the succeeding calendar year.

“(iii) FORMULA FOR ALLOCATION OF UNUSED BOND ALLOCATION CARRYOVERS AMONG QUALIFIED STATES.—The amount allocated under this subparagraph to a qualified State for any calendar year shall be determined in the same manner as allocations under subparagraph (A) and shall be based upon the most recent census estimates described in subparagraph (A) at the time of allocation under this subparagraph; provided, however, that: (I) States that are not qualified States shall be excluded from consideration for purposes of allocation under this subparagraph; (II) the amount so allocated to a State shall not exceed the amount requested by such State; and (III) amounts that would have been so allocated to any State but for its request having been fully met without such amount being so allocated shall be allocated among the remaining qualified States with unmet requests in the same manner until the unallocated amount shall be no greater than \$_____.

“(iv) TIMING OF ALLOCATION.—The Secretary shall allocate the unused bond allocation carried over from the preceding year among qualified States not later than April 1 of the succeeding year.

“(v) QUALIFIED STATE.—For purposes of this subparagraph, the term ‘qualified State’ means, with respect to a calendar year, any State—

“(I) which allocated its entire bond allocation under subparagraph (A) for the preceding calendar year, and

“(II) for which a request is made (not later than February 1 of the succeeding calendar year) to receive an allocation under clause (iii) and which specifies the amount of such request.

“(vi) REPORTING.—States shall report annually to the Secretary on their use of bonds described in paragraph (16), (17), (18) [(19), or (20)] of subsection (a), including the total amount of unused bonds. Such reporting shall be submitted not later than January 15 of any succeeding year.”.

[(h)] COORDINATION WITH SECTION 146(g)(3).—Section 146(g)(3) of the Internal Revenue Code of 1986 is amended by striking “or (15)” and inserting “(15), (16), (17), (18), [(19), or (20)]”.

[Option 3]

[(f)] VOLUME CAP RATIO.—Section 146(g) of the Internal Revenue Code is amended by striking “and” at the end of paragraph (3), by striking the period and flush sentence at the end of paragraph (4) and inserting “, and”, and by inserting after paragraph (4) the following new paragraph and flush sentence:

“(5) [] percent of any exempt facility bond issued as part of an issue described in paragraphs (16), (17), (18), [(19), and (20)] of section 142(a).

Paragraph (4) shall be applied without regard to “75 percent of” and Paragraph (5) shall be applied without regard to “[] percent of”, if all of the property to be financed by the net proceeds of the issue is to be owned by a governmental unit (within the meaning of section 142(b)(1)).”

[End of Option 3]

Comment:

The volume of tax-exempt private activity bonds that can be issued by public agencies within a given state is typically capped based on the greater of (1) a specified value that increases annually with inflation (\$311 million in 2018) or (2) the product of \$105 (in 2018 and increased annually with inflation) and the population of the state (see 26 U.S.C. § 146). Included below are several options for addressing the volume cap.

Option 1 is the most aggressive option and would exempt the covered categories of tax-exempt private activity bonds from application of the volume cap entirely. However, no other categories of tax-exempt private activity bonds are entirely exempt from any form of volume cap, and there may be political resistance to doing so for these new categories (e.g., the revenue score that the Joint Committee on Taxation might assign to a new uncapped category of tax-exempt private activity bond might be prohibitively high).

Options 2(a) and 2(b) are grouped together because they use the same mechanism to allocate carryovers of any unused volume from prior years. Option 2(a) is adapted from S.3336 and creates a standalone volume cap for the categories of tax-exempt private activity bonds in this legislation. The volume cap is initially allocated to the states in proportion to their population. In following years, any allocated but unused allocation will be carried over as an additional allocation to states that both request the additional allocation and used their full allocation in the previous year. If this option is preferred, consideration should be given to whether to permit states to retain or accumulate volume cap over multiple years to the extent earmarked for specific projects.

The volume cap figure for Option 2(a) is blank in the text below. S.3336 specified a volume cap of \$2.5 billion. Since S.3336 was proposed in 2010, growth in investment in renewable energy projects has exploded. Over \$356 billion has been invested in renewable energy in the United States since 2010, including \$42.8 billion in 2018 (See UN Environment/BloombergNEF Report). A much higher aggregate volume cap figure is likely appropriate given the current size of the industry and expected demand if the LPDD goals are to be obtained.

Option 2(b) would exempt the covered categories of tax-exempt private activity bonds from the applicable overall state volume cap but create a separate volume cap for each state that would be defined as a percentage of the overall state volume cap. Uncapped categories of tax-exempt private activity bonds are unusual, and this option has the benefit of supplying a volume cap that grows with inflation and could be fairly high without specifying a precise figure. For example, a volume cap based on 50% of the overall state volume cap would mean, in 2018, a minimum of \$156 or \$52.50 times the state's population, which for a state with a population of 5 million would mean \$262,500,000 and would equate to a volume cap of over \$15 billion for the country as a whole. This approach was recently employed in the Move America Act of 2019 proposed as S. 146 and H.R. 1508. The percentage of the overall cap has been left blank in the language below.

Options 2(a) and 2(b) could be expanded further by also permitting states to use volume from their general volume cap for the categories of tax-exempt private activity bonds in this legislation. However, such language is not included in this draft.

Option 3 would subject the covered categories of tax-exempt private activity bonds to the applicable state volume cap but exempt a percentage of each dollar of issued bonds from the volume cap. In other words, if the exemption percentage were 75 percent, for each \$100 dollars of bonds issued, only \$25 would count against the applicable volume cap. This approach has been used for other categories of tax-exempt private activity bonds and has the advantage of subjecting the new categories to the existing volume cap framework but permitting a much greater volume than would otherwise be possible. The disadvantage is that fluctuations in the issuance of bonds in other categories would impact the availability of volume for the new categories. However, this risk could be offset with a sufficiently high exemption percentage.

[(g)] COORDINATION WITH SECTION 48.—Subparagraph (A) of section 48(a)(4) of the Internal Revenue Code of 1986 is amended by adding at the end the following flush sentence:

“Clause (ii) shall not apply with respect to any facility described in paragraph (16), (17), (18), [(19), or (20)] of section 142(a).”.

Comment:

The above amendment clarifies that projects and facilities financed with tax-exempt private activity bonds are not penalized in the calculation of any applicable Investment Tax Credit.

[(h)] COORDINATION WITH SECTION 45K.—Subparagraph (A) of section 45K(b)(3) of the Internal Revenue Code of 1986 is amended by adding at the end the following flush sentence:

“Subclause (II) of clause (i) shall not apply with respect to any facility described in paragraph (16) of section 142(a).”.

Comment:

The above amendment clarifies that gas produced from biomass by a facility financed with tax-exempt private activity bonds will not be penalized in the calculation of nonconventional source production tax credits.

[(i)] COORDINATION WITH SECTION 45.—Paragraph (3) of section 45(b) of the Internal Revenue Code of 1986 is amended by adding at the end the following new sentence: “Clause (ii) of subparagraph (A) shall not apply with respect to any facility described in paragraph (16), (17), (18), [(19), or (20)] of section 142(a).”.

Comment:

The above amendment clarifies that qualifying renewable projects financed with tax-exempt private activity bonds will not be penalized in the calculation of any applicable Production Tax Credits.

[(j)] CLARIFICATION OF PRIVATE BUSINESS USE.— Section 141(b)(6) of the Internal Revenue Code of 1986 is amended by adding at the end of the following new subparagraph:

“(C) CLARIFICATION RELATING TO QUALIFIED CARBON DIOXIDE CAPTURE FACILITIES.—For purposes of this subsection, the sale of carbon dioxide produced by a qualified carbon dioxide capture facility (as defined in section 142(n)) which is owned by a governmental unit (within the meaning of section 142(b)(1)) or 501(c)(3) organization shall not constitute private business use.”

Comment:

The above addition clarifies that any facility owned and financed by a public entity with tax-exempt bonds (i.e., not a private activity bond) that includes “qualified carbon dioxide facilities” as defined in subsection (d) above would not be deemed to have a private business use based on such inclusion.

[(k)] TREATMENT UNDER THE ALTERNATIVE MINIMUM TAX.— Subparagraph (C) of section 57(a)(5) of the Internal Revenue Code of 1986 is amended by adding at the end the following new clause:

“(vii) EXCEPTION FOR GREEN PRIVATE ACTIVITY BONDS.— For purposes of clause (i), the term ‘private activity bond’ shall not include private activity bonds described in paragraph (16), (17), (18), [(19) or (20)] of subsection (a) of Section 142.”.

Comment:

Interest on tax-exempt private activity bonds is generally subject to tax for individual tax filers subject to the Alternative Minimum Tax (AMB) (\$500,000 for single filers and \$1,000,000 for couples). The above provision would exempt Green Private Activity Bonds from application of the AMT and thus increase their value and appeal to potential investors.

[(1)] EFFECTIVE DATE.—The amendments made by this section shall apply to obligations issued after the date of the enactment of this Act.