

**GROWING RENEWABLE ENERGY AND EFFICIENCY NOW (“GREEN”) ACT  
DISCUSSION DRAFT -- SECTION BY SECTION DESCRIPTION  
November 19, 2019**

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## TITLE I – RENEWABLE ELECTRICITY AND REDUCING CARBON EMISSIONS

### **Sec. 101. Extension of credit for electricity produced from certain renewable resources (§§ 45 and 48(a)(5)).**

The provision extends the production tax credit (PTC), which allows energy producers to claim a credit based on electricity produced from renewable energy resources. In most cases, including producers electing into the § 48 investment tax credit, these credits are extended for facilities for which construction begins by the end of 2024.

**Most facilities:** The PTC for the following facilities is revived and extended through the end of 2024:

- closed loop biomass,
- open loop biomass,
- landfill gas (municipal solid waste),
- trash (municipal solid waste),
- qualified hydropower, and
- marine and hydrokinetic renewable energy facilities.

**Geothermal:** The PTC for geothermal energy is revived and extended through the end of 2019. Separately, geothermal is made eligible for a higher investment tax credit under § 48 starting in 2020. *See* sec. 102 of the discussion draft.

**Wind:** The PTC for wind energy is preserved at the current phaseout levels for 2018 and 2019 (60% and 40%, respectively), and then is extended at 60% through the end of 2024.

### **Sec. 102. Extension and modification of energy credit (§ 48).**

The provision extends the investment tax credit (ITC), which allows taxpayers to claim a credit for up to 30% of the cost of qualified energy property. In most cases, the provision extends the credit at full value for property for which construction begins by the end of 2024, and then phases down over two years.

**Solar:** The ITC for solar energy property is extended at 30% through the end of 2024. The ITC then phases down to 26% in 2025, 22% in 2026, and 10% thereafter.

**Geothermal:** The ITC for geothermal energy property is modified to match the credit timeline for solar energy property. Therefore, the ITC for geothermal energy property is 30% through the end of 2024. The ITC then phases down to 26% in 2025, 22% in 2026, and 10% thereafter. Geothermal will not be eligible for the PTC after 2019. *See* § 101 of this discussion draft.

***Other currently eligible property:*** The ITC for fiber-optic solar equipment, fuel cell property, microturbine property, combined heat and power property, and small wind energy property is extended at 30% through the end of 2024. The ITC then phases down to 26% in 2025 and 22% in 2026.

***Newly eligible property:*** The ITC is expanded to include energy storage technology, waste energy recovery property, qualified biogas property, and linear generators. These technologies are eligible for the 30% ITC through the end of 2024. The ITC then phases down to 26% in 2025 and 22% in 2026. These technologies are briefly described as follows:

- Energy storage technology uses batteries and other such technology to store energy for conversion to electricity and has a minimum capacity of 20 kWh, or to store energy to heat or cool a structure.
- Waste energy recovery property generates electricity solely from heat (such as exhaust heat) from buildings or equipment the primary purpose of which is not the generation of electricity and has a maximum capacity of 50 MW. If property would qualify as both waste energy recovery property and combined heat and power property, the taxpayer elects between the two.
- Biogas property converts biomass into a gas (which is at least 52% methane) for productive use, such as generating electricity. Electricity produced from property receiving an ITC under this provision is not also eligible for benefit under the PTC.
- Linear generators convert fuel into electricity through electromechanical means using a linear generator assembly without the use of rotating parts. The credit for linear generators is limited to systems with a nameplate capacity of at least 200 kW.

### **Sec. 103. Extension of credit for carbon oxide sequestration (§ 45Q).**

The provision extends the credit for carbon oxide sequestration facilities that begin construction before the end of 2024, a one-year extension.

### **Sec. 104. Elective payment for energy property and electricity produced from certain renewable resources, etc. (§ 6431).**

The provision allows taxpayers to elect to be treated as having made a payment of tax equal to 85% of the value of the credit they would otherwise be eligible for under the ITC or the PTC. Rather than opting to carry forward credits to years when their credits exceed their tax liability, taxpayers can take a reduced credit and request a refund of any resulting overpayment of tax. This allows entities with little or no tax liability to accelerate utilization of these credits.

Tribal governments are treated as making a payment equal to the full value of the credit, instead of 85%.

**Sec. 105. Extension of energy credit for offshore wind facilities (§ 48(a)(5)).**

The provision exempts offshore wind facilities that elect into the ITC (rather than the PTC) from reductions in the credit from the onshore wind facility phaseout. The credit expires for facilities that begin construction after the later of 1) the end of 2024 *or* 2) the end of the year that national offshore wind capacity is 3,000 MW above the capacity at the start of 2020. The provision directs the Secretary of the Treasury to issue an annual report starting in January 2024 of the status of the increase in offshore wind capacity.

**Sec. 106. Green energy publicly traded partnerships (§ 7704).**

The provision would expand the definition of qualified income for publicly traded partnerships from certain income derived from minerals and natural resources to include income derived from green and renewable energy. These additions include income from certain activities related to energy production eligible for the PTC, property eligible for the ITC, renewable fuels, and energy and fuel from certain carbon sequestration or gasification projects eligible for credits under §§ 48B or 45Q.

**TITLE II – RENEWABLE FUELS**

**Sec. 201. Biodiesel and renewable diesel (§§ 40A, 6426, and 6427).**

The provision extends the income and excise tax credits for biodiesel and biodiesel mixtures at \$1.00 per gallon through 2021 and phases the credit down to \$0.75 in 2022, \$0.50 in 2023, and \$0.33 in 2024. The credit expires at the end of 2024.

The provision also extends the \$0.10-per-gallon small agri-biodiesel producer credit through the end of 2024. The provision provides a retroactive extension of these credits for qualified sales occurring between January 1, 2018, and the date of enactment of the provision, and requires the Secretary of the Treasury to issue guidance to provide for a one-time submission of claims related to these credits.

## **Sec. 202. Extension of excise tax credits relating to alternative fuels (§§ 6426 and 6427).**

The provision extends the excise tax credits for alternative fuels and alternative fuel mixtures at the pre-expiration level of \$0.50 per gallon through 2021 and phases the credit down to \$0.38 in 2022, \$0.25 in 2023, and \$0.17 in 2024. The credit expires at the end of 2024.

The provision clarifies that for purposes of the alternative fuel mixtures credit, an alternative fuel mixture does not include a mixture that includes liquefied petroleum gas, p-series fuels, compressed or liquefied natural gas, liquefied hydrogen, fuel derived from coal gasification and sequestration, and biomass fuel. The provision provides a retroactive extension of these credits for qualified sales occurring between January 1, 2018, and the date of enactment of the provision, and requires the Secretary of the Treasury to issue guidance to provide for a one-time submission of claims related to these credits.

## **Sec. 203. Extension of second generation biofuel incentives (§ 40).**

The provision extends the second generation biofuel income tax credit through 2024. It also extends the 50% special allowance for depreciation of second generation biofuel plant property placed in service by the end of 2024.

## **TITLE III – GREEN ENERGY AND EFFICIENCY INCENTIVES FOR INDIVIDUALS**

### **Sec. 301. Extension, increase, and modifications of nonbusiness energy property credit (§ 25C).**

The provision extends the § 25C nonbusiness energy property credit to property placed in service by the end of 2024. For expenditures and property placed in service starting in 2020, the provision modifies and expands the credit, including by:

- increasing the percentage of the credit for installing qualified energy efficiency improvements from 10% of the cost to 15%,
- increasing the lifetime cap on credits allowed under this section from \$500 to \$1,200 and restarting the lifetime limit beginning in 2020,
- updating various standards and associated limits to reflect advances in energy efficiency and removing eligibility of roofs and advanced main air circulating fans, and
- expanding the credit to cover the costs of home energy audits, allowing a credit of 30% of such costs up to a maximum credit of \$150.

### **Sec. 302. Residential energy efficient property (§ 25D).**

The provision extends the credit for the cost of qualified residential energy efficient property expenditures, including solar electric, solar water heating, fuel cell, small wind energy, and geothermal heat pumps. The provision extends the full 30% credit for eligible expenditures through the end of 2024. The credit then phases down to 26% in 2025 and 22% in 2026. The credit expires after the end of 2026.

The provision also expands the definition of eligible property to include battery storage technology and energy efficient biomass fuel property. Correspondingly, biomass stoves are removed from § 25C to prevent a double benefit.

### **Sec. 303. Energy efficient commercial buildings deduction (§ 179D).**

The provision extends the 179D energy efficient commercial building deduction through 2024. Starting in 2020, the provision also updates and expands the deduction by increasing the maximum deduction from \$1.80 per square foot to \$3.00 per square foot (with corresponding increases for the partial deduction). It also changes this maximum from a lifetime cap to a three-year cap.

The provision updates the eligibility requirements so that property must reduce associated energy costs by 30% or more in comparison to a building that meets the ASHRAE standards as of two years prior to the date of construction. Under the currently expired provision, property must reduce energy costs by 50% in comparison to the 2007 ASHRAE standard.

In the case of state or local government buildings, this provision removes the ability to allocate the deduction to the designer. Instead, the bill treats the governmental entity as having made a payment of tax equivalent to 10% of the value of the amount otherwise eligible for a deduction.

### **Sec. 304. Extension, increase, and modifications of new energy efficient home credit (§ 45L).**

The provision extends the § 45L new energy efficient home credit through 2024.

Starting in 2020, the provision expands the maximum credit for eligible new energy efficient homes from \$2,000 to \$2,500 and makes eligible units with energy expenditures at least 15% below the expenditures of a comparable unit based on the 2018 International Energy Conservation Code standards. It also replaces the eligibility requirements for units eligible for the \$1,000 credit to correspond with the Energy Star Labeled Homes program.

### **Sec. 305. Modifications to income exclusions for conservation subsidies (§ 136).**

The provision excludes from gross income water conservation and storm water management subsidies provided by public utilities, state or local governments, or storm water management providers. This provision applies to payments received starting in 2020.

## **TITLE IV -- GREENING THE FLEET AND ALTERNATIVE VEHICLES**

### **Sec. 401. Modification of limitations on new qualified plug-in electric drive motor vehicle credit (§ 30D).**

The provision expands the qualified plug-in electric drive motor vehicle credit under § 30D to apply a new transition period for vehicle sales of a manufacturer between 200,000 and 600,000 electric vehicles (EVs), under which the credit is reduced by \$500. The provision replaces the current phaseout period (which begins at 200,000 vehicles) with a phaseout period that instead begins during the second calendar quarter after the 600,000-vehicle threshold is reached. At the start of the new phaseout period, the credit is reduced by 50% for one quarter and terminates thereafter. For manufacturers that pass the 200,000-vehicle threshold before the enactment of this bill, the number of vehicles sold in between 200,000 and those sold on the date of enactment are excluded to determine when the 600,000-vehicle threshold is reached.

The provision extends the 2-wheeled plug-in electric vehicle credit through 2024. Starting in 2020, it also extends the 3-wheeled plug-in electric vehicle credit through 2024.

### **Sec. 402. Credit for previously-owned qualified plug-in electric drive motor vehicles (§ 25E).**

The provision creates a new credit for buyers of used plug-in electric cars from date of enactment through 2024. Buyers can claim a base credit of \$1,250 for the purchase of qualifying used EVs, with additional incentives for battery capacity. The credit is capped at the lesser of \$2,500 credit or 30% of the sale price.

To qualify for this credit, used EVs must generally meet the eligibility requirements in the existing § 30D credit for new EVs, not exceed a sale price of \$25,000, and be a model year that is at least two years earlier than the date of sale.

Buyers with up to \$30,000 (\$60,000 for married couples filing jointly) in adjusted gross income can claim the full amount of the credit. The credit phases out so that buyers with below \$40,000 (\$70,000 for married couples) in AGI may be eligible for a reduced credit. Buyers must purchase the vehicle from a dealership for personal use and cannot claim the credit more than once every three years. The credit only applies to the first resale of a used EV and includes restrictions on sales between related parties.

### **Sec. 403. Credit for zero-emission commercial vehicles and zero-emission buses (§ 45T).**

The provision creates a manufacturer credit for the sale of heavy, zero-emission vehicles starting after the date of enactment through the end of 2024. Eligible manufacturers may claim a credit of 10% of the sale price of an eligible vehicle, capped at a credit of \$100,000. To be eligible, vehicles must be for domestic use, must weigh no less than 14,000 pounds, must not include an internal combustion engine, and must be propelled solely by an electric motor which draws electricity from a battery or fuel cell.

### **Sec. 404. Qualified fuel cell motor vehicles (§ 30B).**

The provision extends the credit for the purchase of a qualified fuel cell motor vehicle through 2024.

### **Sec. 405. Alternative fuel refueling property credit (§ 30C).**

The provision extends the alternative fuel vehicle refueling property credit through 2024. Starting in 2020, it also expands the credit for electric charging infrastructure by allowing a 20% credit for expenses above \$100,000 (i.e., it allows a credit for expenses beyond the current limit if certain requirements are met). To qualify for this uncapped credit, the property must: 1) be intended for general public use and either accept credit cards as a form of payment or not charge a fee, or 2) be intended for exclusive use by government or commercial vehicle fleets.

## **TITLE V – INVESTMENT IN THE GREEN WORKFORCE**

### **Sec. 501. Extension of the advanced energy project credit (§ 48C).**

The provision revives the § 48C qualified advanced energy property credit, allowing the Secretary to allocate an additional \$2.5 billion in credits for each year from 2020 through and including 2024.

Similar requirements to the original credit apply, with a few notable changes. The Secretary will determine allocations to projects each year with a requirement that property is placed in service within 4 years of the date of the allocation. Projects will be given priority if the manufacturing is not for assembly of parts. The Secretary will provide a progress report to Congress by 2025 on the domestic job creation, and wages associated with such jobs, attributable to these projects.

**Sec. 502. Labor costs of installing mechanical insulation property (§ 45U).**

The provision provides a credit for up to 10% of the labor costs incurred by a taxpayer in installing mechanical insulation property into a mechanical system which was originally placed in service not less than 1 year before the date on which such mechanical insulation property is installed. The credit is available for costs paid starting in 2020 through the end of 2024.

**TITLE VI – ENVIRONMENTAL JUSTICE**

**Sec. 601. Qualified environmental justice program credit (§ 36C).**

The provision creates a capped refundable competitive credit of \$1 billion for each year from 2020 through and including 2024 to institutions of higher education for environmental justice (EJ) programs.

The base credit is 20% of costs to be spent within five years by the receiving institution. Programs with material participation from Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) are eligible for a higher credit of 30%.

Qualifying EJ programs shall be designed to address or improve data about environmental stressors for the primary purpose of improving or facilitating the improvement of health and economic outcomes of individuals residing in low-income areas or areas populated disproportionately by racial or ethnic minorities.

Institutions receiving allocations shall make publicly available the application submitted to the Secretary and submit annual reports describing the amounts paid for and expected impact of the projects. The Secretary shall publicly disclose the identity of the institutions receiving the allocation and the amount of the allocation.

**TITLE VII – TREASURY REPORT ON DATA FROM THE GREENHOUSE GAS REPORTING PROGRAM**

**Sec. 701. Report on greenhouse gas reporting program.**

The provision requires the Secretary of the Treasury to assess and report on the utility of the data from the Environmental Protection Agency’s Greenhouse Gas Reporting Program for determining the amount of greenhouse gases emitted by each taxpayer for the purpose of imposing a fee on such taxpayers with respect to such emissions.

**TITLE VIII – REVENUE RAISERS**

To be provided.