

# Clean Energy for America Act

## Section by Section Summary

### Clean Electricity Production & Investment Credits

**Current Law:** There are several different incentives for the production of clean electricity, including the section 45 production tax credit and section 48 investment tax credit, along with provisions for accelerated depreciation, tax-favored bonds, and allocated credits. This patchwork of incentives features several temporary provisions with differing rules and expirations, provides different incentive levels for technologies with similar emission profiles, and omits several new and emerging technologies.

**Proposal:** The bill creates a performance-based incentive that would be neutral and flexible between clean electricity technologies. Taxpayers are able to choose between a production tax credit (PTC) and an investment tax credit (ITC), which are scaled based on the carbon emissions of the electricity generated – measured as grams of carbon dioxide equivalents (CO<sub>2e</sub>) emitted per kilowatt hour (KWh) generated. Power plants that emit at least 35 percent less carbon than the current nationwide average begin qualifying for a small incentive, which increases for power plants that are progressively cleaner. Zero emission facilities qualify for the maximum credits – a 2.3 cents per KWh hour PTC or a 30 percent ITC. The PTC is available for the 10 years after a facility is placed in service.

For combined heat and power systems (CHP), the emissions rate is calculated using both electrical and useful thermal energy. Under the proposal, the British thermal units (BTUs) of useful thermal energy in a CHP system are converted to kilowatt hours using the facility's heat rate (the number of BTUs required to generate 1 KWh). These converted KWhs are also accounted for as production for purposes of the PTC.

Power plants placed in service before January 1, 2019 that add energy storage technology or carbon capture equipment are able to claim the maximum 30 percent ITC for those investments, which can enhance grid stability and reduce the emissions of current fossil fuel power plants. Storage technologies include hydroelectric pumped storage, thermal energy storage, fuel cells, and batteries, among others.

Homeowners wishing to install onsite generation – including rooftop solar or small wind turbines – are eligible for an investment tax credit under the proposal. This credit is calculated in the same manner as the ITC for business taxpayers, up to a maximum of 30 percent of the installation cost for zero emission distributed generation. Labor and other installation costs are included for purposes of the credit for homeowners.

Carbon emission rates are determined by the Treasury Department and Environmental Protection Agency (EPA), which are directed to create safe harbor emission rates for similar technologies. The legislation simplifies the task for these agencies by allowing similar

technologies (no more than 10% emissions profile difference) to be grouped together for purposes of calculating credit rates. The credits are set to phase out when emission targets are achieved: when EPA and the Department of Energy (DOE) certify that the electric power sector emits 35 percent less carbon than 2017 levels, the incentives will be phased out over five years. Facilities will be able to claim a credit at 75 percent value in the first year, then 50 percent, then 25 percent, and then 0 percent.

### **Temporary Extensions of Current Law**

To provide transition relief and time for administrative coordination between the Treasury Department, Environmental Protection Agency, and Department of Energy, the proposal provides an extension, through December 31, 2018, of current expired and expiring clean energy provisions. The current phase outs for wind and solar incentives would be repealed. These extensions also include a reauthorization of the section 48C advanced energy manufacturing credit, providing an additional \$5 billion in available tax credits.

### **Clean Fuel Production Credit**

**Current Law:** Under current law, there are numerous incentives for various alternative fuels and fuel mixtures, including income and excise tax credits ranging from \$0.50 to \$1.01. These credits are for a few specified types of fuels, including natural gas and propane, hydrogen, cellulosic biofuels, and biodiesel. These incentives are largely temporary and expired on December 31, 2016.

**Proposal:** The bill creates a technology-neutral incentive for the domestic production of renewable transportation fuels. The level of the incentive depends on the lifecycle carbon emissions of a given fuel. Lifecycle emissions take into account the “well to wheel” emissions profile, from production of the feedstock for the fuel through to its use in a vehicle. Fuels begin receiving incentives if their lifecycle emissions are at least 25 percent less than the U.S. nationwide average in 2015. Zero and net-negative emission fuels qualify for the maximum incentive of \$1.00 per gallon. Qualifying production is restricted to production in the United States of fuel that is used or sold.

The bill provides a 10 year production credit for facilities that are placed in service on or after January 1, 2019. Facilities placed in service prior to January 1, 2018 would be able to qualify for a 10 year credit stream beginning on January 1, 2019.

The Treasury Department and the EPA are required to establish safe harbors for fuels that are produced using similar feedstocks and production pathways. The legislation simplifies the task for these agencies by allowing similar technologies (no more than 10% emissions profile difference) to be grouped together for purposes of calculating credit rates. For emerging fuels that are produced using feedstocks or pathways that have not been previously reviewed, Treasury and EPA are directed to offer provisional guidance for credit rates no later than one year

after a taxpayer requests approval of the pathway. Final guidance is required no later than two years after request.

### **Temporary Extensions of Current Law**

To provide transition relief and time for administrative coordination between the Treasury Department, Environmental Protection Agency, and Department of Energy, the bill provides extensions of current expired and expiring clean energy provisions. In addition, the per-manufacturer cap of 200,000 vehicles under the sec. 30D electric vehicle credit is repealed.

### **Energy Efficient Homes**

**Current Law:** Under current law there are three major incentives for residential energy efficiency. One provides incentives to contractors for new homes that are at least 50 percent more efficient than 2003 International Energy Conservation Code standards, and two others provide incentives to homeowners for various improvements to their homes. These provisions provide incentives for specific types of improvement, using standards that are largely out of date. All of these provisions are also temporary and expired on December 31, 2016.

**Proposal:** The bill creates performance-based incentives for new and existing homes. The credits are based on the level of whole-home energy reduction. For new residences, buildings that are at least 25 percent more efficient than the 2015 International Energy Conservation Code baseline receive a \$1,500 tax credit. More efficient homes receive a larger credit, up to a maximum of \$3,000. The credit is provided to the contractor who builds and sells the residence.

Homeowners looking to pursue deep energy retrofits can qualify for a \$1,750 credit if they achieve a 20 percent energy reduction. Greater efficiency gains receive larger credit amounts, up to a maximum of \$6,500. The energy reduction is verified by third-party modelers who are certified by the Treasury Department and the Department of Energy. The reduction is based on the energy use of the residence prior the retrofits as compared to the energy use modeled after the retrofits are placed in service.

The bill also provides a smaller incentive for homeowners replacing major heating or cooling components in their homes. The replacement credit provides homeowners with a tax credit equal to the lesser of 50 percent of the replacement or \$500 per appliance, with an overall annual limit of \$1,500. The credit is available for Energy Star-rated furnaces, boilers, water heaters, heat pumps, or central-air conditioning. Any reduction in energy consumption from an appliance receiving a replacement credit is disregarded for purposes of calculating the retrofit credit.

### **Energy Efficient Commercial Buildings**

**Current Law:** Under current law, there is one major incentive for energy efficiency in commercial buildings, the section 179D energy efficient commercial buildings deduction, which provides a

per square foot tax deduction for certain energy efficient building components. There is no incentive for commercial building retrofits. This provision expired on December 31, 2016.

**Proposal:** The bill creates a performance-based incentive for increased energy conservation in new commercial buildings and for retrofits of commercial buildings. Buildings reaching minimum conservation thresholds receive a small deduction, which increases for more efficient buildings. Non-taxed entities, including federal, state, local, and tribal governments, and non-profits, are allowed to allocate deductions to the taxpayer primarily responsible for designing the efficiency improvements.

New commercial buildings that are at least 25 percent more efficient than ASHRAE 90.1-2016 standards can receive a \$1.00 per square foot tax deduction, which increases with larger efficiency gains, up to a maximum of \$4.75 per square foot. Retrofitted commercial buildings can qualify for a \$1.25 per square foot deduction for a 20 percent reduction in energy use – greater energy reductions qualify for larger incentives, up to a maximum of \$9.25 per square foot.

The energy reduction from retrofits is verified by third-party modelers who are certified by the Treasury Department and the Department of Energy. The reduction is based on the energy use prior to the retrofits as compared to the energy use modeled after the retrofits are placed in service. Energy reduction from plug loads is disregarded for purposes of the credit calculation.

### **Clean Energy Bonds**

**Current Law:** Under current law, certain clean and renewable energy facilities and conservation improvements can qualify for tax-preferred debt instruments. These instruments include Qualified Energy Conservation Bonds, Clean Renewable Energy Bonds, tax exempt bonds for public power providers, and tax exempt private activity bonds for certain green buildings, among others.

**Proposal:** Building on current law, the bill creates a tax credit bond for facilities producing clean electricity or clean transportation fuels. As with the clean electricity and clean fuel credits, facilities begin qualifying if they are at least 35 or 25 percent cleaner, respectively, than the current average for electricity or fuel. The maximum credit is 70 percent of the interest on the bond, for zero emission electricity or fuel. The instrument is available to state, local, and tribal governments, in addition to public power providers and electric cooperatives. These entities have the option of offering the bond as a tax credit bond, or of electing a direct pay bond, where the Treasury Department reimburses the bond issuer at a rate of up to 70 percent of the interest cost.

The bonds are available for clean electricity or fuel facilities that would qualify under the electricity or transportation fuel credits. Clean Energy Bonds are subject to the same issuance and arbitrage rules as tax credit bonds under current law.