

SUMMARY OF THE CLEAN ENERGY STANDARD ACT



March 1, 2012

This document summarizes the Clean Energy Standard Act of 2012 of the 112th Congress, as introduced by Senator Jeff Bingaman (D-NM) on March 1, 2012.

SEC. 1. SHORT TITLE.

This Act may be cited as the “Clean Energy Standard Act of 2012.”

SEC. 2. CLEAN ENERGY STANDARD.

This section adds a new section at the [end of Title IV](#) of the Public Utility Regulatory Policies Act of 1978:

“SEC. 610. FEDERAL CLEAN ENERGY STANDARD.

This section creates a federal clean energy standard through regulations promulgated within 1 year of enactment.

Definitions

Clean energy is defined to mean electricity generated:

- At a facility placed in service after December 31, 1991 using –
 - **renewable energy** (solar, wind, ocean, current, wave, tidal, or geothermal);
 - **qualified renewable biomass** produced in an ecologically sustainable manner;
 - **natural gas** (includes coal mine methane), hydropower;
 - **nuclear power;**
 - **qualified waste-to-energy** (energy produced from the combustion of post-recycled municipal solid waste, biogas, landfill methane, animal waste or animal byproducts, or other biomass that has been diverted from or separated from other waste out of a municipal waste stream);

- At a facility placed in service after enactment of this section using –
 - **qualified combined heat and power (CHP)** that uses the same energy source for the simultaneous or sequential generation for electricity energy and thermal energy; and generates at least 20 percent of its useful energy as electricity and 20 percent of its useful energy as heat. The energy efficiency of a combined heat and power system shall be determined in accordance with [Sec. 48\(c\)\(3\)\(C\)\(i\) of the Internal Revenue Code of 1986](#);
 - **a source of energy, other than biomass, with lower annual carbon intensity than 0.82 metric tons of carbon dioxide (CO₂) equivalent per megawatt-hour (MWh)**;
- Qualified efficiency improvements or quality additions means efficiency improvements or capacity additions made *after* December 31, 1991 to a nuclear or hydropower facility placed in service *before* December 31, 1991. The efficiency and capacity additions for hydropower shall be measured on the basis of the same water flow information that is used to determine the historic average annual generation and certified by the Secretary or the Commission.
- At a facility that captures and prevents the release of CO₂ into the atmosphere.

Clean Energy Requirements

Starting in 2015, each electric utility that sells electricity to consumers will be required to obtain a minimum percentage of the electricity they sell to consumers in a calendar year from clean energy, as specified below

CALENDAR YEAR	MINIMUM ANNUAL PERCENTAGE
2015	24%
2016	27%
2017	30%
2018	33%

2019	36%
2020	39%
2021	42%
2022	45%
2023	48%
2024	51%
2025	54%
2026	57%
2027	60%
2028	63%
2029	66%
2030	69%
2031	72%
2032	75%
2033	78%
2034	81%
2035	84%

An electric utility may deduct the amount of electricity sold from nuclear or hydropower facilities placed in service on or before December 31, 1991, from their overall sales amount before calculating the percentage of clean energy needed for that year.

Means of Compliance

To comply with the standard, utilities are required to submit clean energy credits (CECs) to the Secretary of Energy, make an alternative compliance payment of 3.0 cents per kilowatt-hour in 2015, or some combination of the two to ensure compliance.

Federal Clean Energy Trading Program

Within 180 days after enactment of this section, the Secretary is directed to establish a Federal clean energy trading program by which electric utilities may submit clean energy credits to demonstrate compliance under this section.

CECs can only be used once for the purposes of compliance, but can be sold, transferred, or traded. CECs may be banked indefinitely.

The Secretary may delegate to one or more appropriate market-making entities the creation and

administration of a transparent, national credit market. Appropriate entities may also be delegated the tracking of dispatch of renewable generation.

Determination of quantity of credit

The quantity of CECs issued to each electric utility generating electricity in the United States from clean energy is equal to the product of:

For each generator owned by a utility, the number of MWhs of electricity sold from that generator by the utility; and the difference between 1.0 and the quotient obtained by dividing the annual carbon intensity of the generator, expressed in metric tons per megawatt-hour by 0.82

The carbon intensity of the generator is measured in terms of metric tons of CO₂ per MWh of electricity generated.

In general, no generator is issued negative CECs.

The quantity of CECs issued to an owner of a qualified combined heat and power system in the United States is equal to the difference between:

The product obtained from multiplying the number of MWhs of electricity generated by the system, and the difference between 1.0 and the quotient obtained by dividing the annual carbon intensity of the generator by 0.82; and the product obtained by multiplying the number of MWhs of electricity generated by the system that are consumed onsite by the facility and the annual clean energy requirement for the calendar year.

In addition, qualified combined heat and power systems are awarded additional credits for (GHG) emissions avoided as a result of using a qualified combined heat and power system, rather than a separate thermal source, to meet onsite thermal needs.

Qualified waste-to-energy facilities are awarded 1.0 CEC per MWh of electricity generated by the facility and sold by the utility.

Determination of annual carbon intensity of generating facilities

The Secretary determines the annual carbon intensity of generating facilities by dividing the net annual CO₂-equivalent emissions of the generator by the annual quantity of electricity generated by the generator.

Within 180 days after enactment of this section, the Secretary, in consultation with the Administrator of the

Environmental Protection Agency, shall issue interim regulations for determining the carbon intensity of each significant source of qualified renewable biomass.

The Secretary shall also commission the National Academy of Science to evaluate and report on the net GHG emissions associated with generating electricity from each significant source of qualified renewable biomass, including evaluation of additional sequestration or emissions associated with changes in land use by the protection of biomass, and provide recommendations for determining the carbon intensity of electricity generated from qualified biomass.

This study is to be completed within one year. The Secretary shall take the findings into account, and consult the Administrator of the EPA, Secretary of Agriculture, and Secretary of Interior, to issue final regulations determining the carbon intensity for qualified biomass within 180 days after the publication of the study.

Civil Penalties

An electric utility that fails to meet its annual clean energy requirements is subject to a civil penalty of 200 percent of the alternative compliance payment for each kilowatt-hour sold to consumers in violation of the requirement.

The Secretary may mitigate or waive the civil penalty if the electric utility failure to comply is determined to be out of reasonable control of the utility. The Secretary shall reduce the amount of the penalty by the amount paid by the electric utility to a State for failure to comply with a State renewable energy program, if the State requirement is more stringent than the federal clean energy standard.

The Secretary may assess a civil penalty in accordance with Sec. 333(d) of the Energy Policy and Conservation Act ([42 U.S.C. 6303\(d\)](#)).

Alternative Compliance Payment

An electricity utility may satisfy its requirement, in whole or in part, by submitting in lieu of a CEC, a payment at the level of that year's alternative compliance payment.

State Energy Efficiency Funding Program

The Secretary shall establish a State energy efficiency funding program no later than December 31, 2015. All funds collected as alternative compliance payments or

civil penalties shall be used solely to carry out this program.

In general, seventy-five percent of the funds in the State energy efficiency program shall be used by the Secretary, without further appropriations or fiscal year limitations, to provide funds to States to implement their energy efficiency plans under Sec. 362 of the Energy Policy and Conservation Act ([42 U.S.C. 6322](#)), in accordance with the proportion of those amounts collected by the Secretary from each State.

A State that receives funds under this program shall maintain records and evidence of compliance as required by the Secretary. The Secretary may, as determined to be appropriate, issue additional guidelines and criteria under this program.

Exemptions

In 2015, electric utilities that sold less than 2 million MWh in the previous calendar year are exempted from compliance under this section. The sales threshold for exemptions decreases by 100,000 MWh per year until it reaches 1 million MWh in 2025. The threshold remains 1 million MWh after 2025.

For the purpose of calculating electricity sold in determining exemption, the quantity of electricity sold by an affiliate of the electric utility or an associate company (as defined in Sec. 1262 of the Energy Policy Act of 2005 ([42 U.S.C. 16451](#))) shall be treated as sold by the electric utility.

State Programs

The establishment of a federal CES does not affect the authority of a State to regulate electric utilities or implement other clean or renewable energy laws or regulations. The Secretary shall coordinate between the federal CES and relevant state programs.

Adjustment of Alternative Compliance Payments

Starting annually no later than December 31, 2016, the Secretary shall increase by five percent the rate of the alternative compliance payment, and as the Secretary determines necessary, adjust that for the rate of inflation.

Report on Clean Energy Resources That Do Not Generate Electric Energy

The Secretary is to submit a report to Congress within three years on mechanisms to supplement this section by examining the benefits and challenges of integrating clean energy resources that do not generate electricity as credited resources but may substantially reduce energy loads (including energy efficiency, biomass converted to thermal energy, geothermal energy collected using heat pumps, thermal energy delivered through district heating systems, and waste heated used as industrial process heat), or through the implementation of complementary policies.

The report may provide legislative recommendations for changes to the federal CES established under this section or new complementary policies that would provide effective incentives for using additional clean energy resources.

Exclusions

This section does not apply to electric utilities located in Alaska or Hawaii.

“SEC. 611. REPORT ON NATURAL GAS CONSERVATION.

This section requires that within two years after the date of enactment, the Secretary must submit to Congress a report quantifying the losses of natural gas during its production and transportation, and make appropriate recommendations for programs and policies to achieve conservation of natural gas for beneficial use.



The Center for Climate and Energy Solutions (C2ES) is an independent nonprofit organization working to promote practical, effective policies and actions to address the twin challenges of energy and climate change.