

United States Senate Committee on Energy & Natural Resources

Chairman Jeff Bingaman

Democrat - New Mexico

THE CLEAN ENERGY STANDARD ACT OF 2012

Objectives

- 1. To promote a diverse set of sources of low- and zero-carbon electricity generation in the U.S.,
- 2. To drive clean energy innovation and American ingenuity, and
- 3. To do so simply, transparently, predictably, and cost-effectively with a long-term market signal.

How the Clean Energy Standard (CES) Works

To accomplish these goals, the CES employs a straightforward, market-based approach that encourages a wide variety of electricity-generating technologies. Beginning in 2015, the CES would set a standard for clean energy on the largest utilities. These utilities would need to sell a percentage of their electricity from clean energy sources, and each year would need to sell a slightly greater amount of clean energy.

How Clean Energy Is Measured

All generators of clean energy would be given credits based upon their carbon emissions. Greater numbers of credits would be awarded to generators with lower emissions per unit of electricity. This flexible framework naturally allows a wide variety of sources (solar, wind, nuclear, natural gas, coal with carbon capture and storage, etc.) to be used to meet the standard; allows market forces to determine what the optimal mix of technologies and fuels should be; and makes it easy for new technologies to be incorporated.

Who's Included, Who's Exempt

The CES only applies to utilities that are selling electricity to retail consumers, and exempts small utilities. In 2015, only 8% of all utilities would need to meet the standard, and in 2025 only 13% of all utilities would need to meet it. The vast majority of municipal and cooperative utilities will never need to meet the minimum standard. All retail utilities, however, may participate in the clean energy market and receive financial benefits for generating clean energy.

Pricing Safeguards

The CES sets an upper limit on the value of clean energy credits to guard against price volatility or unexpectedly high costs.

No Cost to or Money Raised by the Government

The CES does not cost the federal government money, nor does it raise money for the Federal Treasury. Any transactions for clean energy credits occur between utilities and generators on an open market. If any payments are made to the Federal Treasury as a result of the CES, the funds from those payments are directed back to the State from which they originated to fund State energy efficiency programs.

Industrial Efficiency Incentives

Combined Heat and Power (CHP) units generate electricity and also use the heat generated for various purposes. The efficiency of these units is incentivized under the CES by crediting them as a clean resource.

Substantial Deployment of Clean Energy

U.S. Energy Information Administration (EIA) analyses suggest that this plan will drive a substantial increase in clean energy generation from a wide variety of clean sources. Early in the program, much of the clean generation is projected to come from existing natural gas plants running at higher capacity and from renewables (primarily wind and biomass). Later in the program, new clean generation comes primarily from renewables, nuclear, and coal and gas with carbon capture and storage. EIA is currently updating its modeling to reflect the introduced legislation.

Reduced Emissions from the Electricity Sector

Previous EIA modeling efforts show that the CES could reduce emissions in the power sector by nearly 20 percent compared to a business-as-usual scenario in 2025 and by 40 percent in 2035.

Electricity Rates

Estimates based on previous EIA modeling indicate that the policy will have little to no effect on nationally averaged electricity rates over the first decade of the program.

Legislative History

Over the past decade, Congress has debated proposals to promote renewable electricity generation from sources like solar, wind, geothermal or hydropower. Many of these proposals sought to implement a national Renewable Electricity Standard (RES) that would set a standard for large utilities to provide a percentage of their electricity from renewable sources. More than half of all states have implemented some form of an RES, but no federal standard has been enacted.

In the current Congress, attention has focused on a CES rather than a policy focused solely on renewable energy. A CES is similar in structure to a renewable standard, but incorporates a broader range of qualified energy sources. In the past, such an approach has had bipartisan support, with Senators Lindsey Graham (R-SC) and Dick Lugar (R-IN) having each proposed their own versions of a CES in the previous Congress. In his State of the Union address in 2011, President Obama called for a CES that included renewables, nuclear power, coal with carbon capture and storage, and efficient natural gas, and set a goal to double the amount of electricity generated from clean energy by 2035.

Though CES proposals have been suggested in the past, the concept of a CES has not been seriously considered or analyzed until this Congress. In April 2011, the Senate Energy and Natural Resources Committee posted a white paper requesting public input on the design of a CES. Over 250 detailed responses were received from industry groups, environmental organizations, bipartisan think-tanks, private citizens, and other stakeholders. Input from those responses, along with official analysis of different CES policy options by the EIA has informed the development of the CES that Senator Bingaman and 9 cosponsors have introduced.

Contact

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