

NI Summary of the Carbon Limits and Energy for America's Renewal Act (CLEAR)

Joshua Schneck*

Overview

On December 11, 2009, Senators Maria Cantwell (D-WA) and Susan Collins (R-ME) introduced the 'Carbon Limits and Energy for America's Renewal Act (CLEAR). Some have described the bill, which aims to reduce overall U.S. greenhouse gas (GHG) emissions through creation of an upstream cap-and-trade program, as a politically viable approach to passing comprehensive climate change legislation in the Senate. This primer provides a detailed overview of the bill, including concerns about the extent of GHG reductions achieved under the bill, and political considerations.

Emission Reduction Targets

CLEAR sets economy-wide GHG emission reduction goals, however they are disassociated from the bill's cap on emissions, and not mandatory. GHG emissions reduction targets are:

- 20% below 2005 baseline in 2020
- 30% below 2005 baseline in 2025
- 42% below 2005 baseline in 2030
- 83% below 2005 baseline in 2050

'Upstream Cap-and-Trade Program

Unlike the House-passed American Clean Energy and Security Act (ACES) and its Senate counterpart, the Clean Energy Jobs (CEJ) - both of which cap emissions on selected 'downstream' industries and sectors that use fossil fuels - CLEAR only regulates 'upstream' producers and importers of fossil carbon. These include

coal, natural gas and crude oil companies, along with importers of refined fuel products such as gasoline, diesel and

jet fuel. While smaller in scope than ACES or CEJ, which directly cover some 87 percent of emissions and considerably more through regulatory and offset programs,¹ CLEAR still manages to cover an estimated 82 percent of U.S. GHG emissions.² Moreover, regulatory compliance is limited to only around 3,000 firms compared with more than 6,100 power and manufacturing facilities regulated under ACES³—considerably reducing administrative complexity.

The cap is set by the President based upon the amount of fossil carbon likely to be required by the economy in 2012, the year legislation takes effect. The carbon cap is held constant for the first two years of the policy, whereafter it begins to decline in 2015 at an accelerating rate that increases by 0.25 percent every year.

¹ Economic Impacts of S. 1733: The Clean Energy Jobs and American Power Act of 2009. EPA analysis, October 2009. Available online at: http://www.epa.gov/climatechange/economics/pdfs/EPA_S1733_Analysis.pdf.

² Detailed CLEAR Act Q&A's, Senator Maria Cantwell's office, online at: [http://cantwell.senate.gov/issues/CLEAR Act Detailed QA.pdf](http://cantwell.senate.gov/issues/CLEAR%20Act%20Detailed%20QA.pdf).

³ Size Thresholds for Greenhouse Gas Regulation, Who Would Be Affected by a 25,000-ton CO₂ Emissions Rule? Nicholas Institute Policy Brief, August 2009. Available online at: <http://www.nicholas.duke.edu/institute/25Kton.pdf>.

Author Affiliations

* Nicholas Institute for Environmental Policy Solutions, Duke University

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Table 1. Fossil carbon reductions in selected years, occurring from regulated entities under CLEAR’s cap-and-trade program, assuming the cap is not breeched.

Year	Fossil Carbon Reductions Below 2012 Baseline
2015	0.25%
2020	5.14%
2030	29.16%
2040	59.24%
2050	82.06%

Looking at Table 1, note that CLEAR’s overall emission reductions targets are substantially greater than those achieved via cap-and-trade, particularly in early years. For example, the overall 2020 reduction target is 20 percent, while reductions resulting from the bill’s cap-and-trade program are only 5 percent in 2020. The 15 percent shortfall is expected to be addressed through investments made under the bill’s CERT Fund (see below)—an uncertain outcome given the lack of specificity on CERT investments, which must pass through the Congressional appropriations process. This further assumes that the baseline year for the emissions cap (2012) will not be higher than 2005 emissions, and that the cap is not breached by excess allowances purchased at the price ceiling.

Auctioning and Price-Collars

In contrast to ACES and CEJ, which both freely allocate a large share of emission allowances to a mixture of public and private purposes,⁴ all of the allowances established under CLEAR’s cap will be auctioned. Allowance prices are regulated by a price floor and price ceiling. The price floor for allowances is initially set at \$7 in 2012, and rises at the real rate of 6.5 percent annually. The price ceiling (referred to as the ‘safety valve’ price) is set at \$21 in 2012, and rises at the real rate of 5.5 percent annually. In the event the price ceiling is reached, the government will sell allowances in excess of the cap at the ceiling price. The bill attempts to account for the attendant rise in emissions by directing all revenue from sales

in excess of the cap towards emissions reduction investments under its CERT Fund (see below).

Dividends and the ‘Clean Energy Reinvestment Trust Fund’ (CERT Fund)

Three quarters of all revenue raised from the sale of carbon allowances is rebated equally and directly to all U.S. residents in monthly, non-taxable payments. Because refund payments are decoupled from individual consumer expenditures on energy and energy-intensive goods and services (whose prices would rise under CERT), consumers would see an incentive to become more energy efficient, in order to keep a larger share of their monthly dividend payment.⁵ The remaining quarter of auction revenue is directed to a dedicated trust, the Clean Energy Reinvestment Trust (CERT) Fund. CERT expenditures are expected to fund a variety of yet to be specified investments in climate mitigation, clean energy and efficiency, and transition assistance programs. CERT expenditures will be allocated annually through the Congressional budget and appropriations process.

Distributional Impacts

Preliminary analysis, based on work done by Resources for the Future looking at household income effects of a similar tax-and-dividend climate policy, suggest that half of all households would be better off financially with the program

⁴ A World Resources Institute analysis of ACES finds that, for the period 2012-2050, private regulated industry receives 12 percent of the value of all allowances with no restrictions on use. WRI Brief Assessment of Allowance distribution under H.R. 2454. WRI, June 2009. Available online at: http://pdf.wri.org/usclimatetargets_allowance_distribution_2009-06-25.pdf.

⁵ Contrast this with the approach taken under ACES, whereby electricity prices are prevented from rising significantly until later years (2030 and on) by the allocation of allowances to local distribution companies. In the absence of a clear price signal driving consumer spending, ACES includes a number of energy efficiency provisions that effectively lower household energy expenditures. *Ibid.* 1

than without, including all low income households.⁶ U.S. States vary with respect to the carbon intensity of the fuel mix used to generate electricity, and we would therefore expect to see some ‘winners and losers’ in any policy which puts a uniform price on carbon. CLEAR anticipates that expenditures from the CERT Fund will help mitigate regional variation in policy impacts as the economy transitions to low-carbon energy sources. A study by the Brookings Institution, again looking at the effects of a similar tax-and-dividend climate policy, found per capita lump sum rebates, as in CLEAR, effective in limiting distributional impacts.⁷

Concerns About Environmental Efficacy

There is considerable uncertainty about the level of emissions reductions that would be realized under CLEAR. Uncertainty stems principally from:

1. the degree, particularly in early years, to which CLEAR relies upon CERT expenditures to realize emissions reductions.
2. The safety valve mechanism allowing for the release of excess allowances outside the cap in the event allowance prices reach the price ceiling.

As noted previously, CERT expenditures are dependent upon additional action by Congress through subsequent appropriations and not upon the Act itself. This is significant, as CERT expenditures are expected to result in some 75% of targeted emissions reductions by 2020. Furthermore, the Act, as currently written, lacks clear standards to ensure that GHG emissions occurring via CERT expenditures are additional, verifiable, and real.

CERT expenditures become an additional concern in the event that excess allowances are sold at the price ceiling, as the bill attempts to account for the attendant rise in emissions by directing all revenue from sales outside the cap towards emissions reduction investments under CERT.

A December 2009 analysis⁸ by the World Resources Institute finds economy-wide GHG emissions reductions under

CLEAR amount to just 1 percent relative to 2005 levels by 2020, and 63 percent relative to 2005 by 2050. This analysis does not include potential increases in emissions resulting from the sale of excess allowances if the safety valve is triggered, but also, significantly, leaves out any emissions reductions that may come from CERT expenditures.

Money for International Adaptation?

There is currently no dedicated funding for international adaptation in the CLEAR bill. There are two paragraphs that appear to authorize international expenditures –one for REDD-like projects and the other for adaptation projects– though the language on adaptation does not clarify whether international projects are included. Here is the relevant language on CERT expenditures:

- Sec. 6(c)(1)(G) ‘to fund cost-effective domestic and international projects that verifiably reduce, avoid, or sequester greenhouse gas emissions through the modification of agriculture, forestry, or other land use practices’
- Sec. 6(c)(1)(N) ‘to provide funding for climate change or ocean mitigation and adaptation projects, activities, and research to increase the resilience of human populations and communities, fish and wildlife, and managed and unmanaged terrestrial, aquatic, and marine ecosystems in areas at which impacts are likely to be most severe.

Options for raising international adaptation funding through CLEAR include:

- Insertion of language directing a percentage of CERT funds towards international adaptation.
- Allocating a portion of allowances from the total pool of allowances towards international adaptation.

⁶ The Incidence of U.S. Climate Policy, Alternative Uses of Revenues from a Cap-and-Trade Auction. Resources for the Future discussion paper, June 2009. Available online at: <http://www.rff.org/documents/RFF-DP-09-17-REV.pdf>.

⁷ Changes in net disposable income resulting from a carbon tax combined with per capita lump sum rebates were limited in regional variation to less than one percent. A Proposal for a U.S.

Carbon Tax Swap, Brookings Institution, October 2007.

Available online at:

http://www.brookings.edu/~media/Files/rc/papers/2007/10carbontax_metcalf/10_carbontax_metcalf.pdf.

⁸ Emission Reductions Under Cap-And-Trade Proposals in the 111th Congress, WRI policy brief, December 2009. Available online at:

http://pdf.wri.org/usclimatetargets_2009-12-17.pdf.

Political Considerations

Supporters of CLEAR point to the ‘politics of the dividend’ as the key force behind the bill’s political appeal. Monthly dividend payments, they argue, offer a tangible and transparent way for consumers to see both the benefits of the policy, and make better informed decisions about energy use. Given the widespread populist anger over supposed congressional deals with special interests, as witnessed in the ongoing health care debate, the transparent and comparatively simple approach in CLEAR for distributing auction revenue may be well suited to the political climate of the moment.

That said, CLEAR faces a number of substantive hurdles to legislative passage. Chief among them, the bill fails to provide any certain relief to Midwestern states that rely more heavily upon coal. The bill also abandons the ACES and CEJ approach, that was supported by a large coalition of U.S. electric power companies, of giving allowances to local distribution companies. Moreover, the U.S. Climate Action Partnership has yet to come out in support of CLEAR. As mentioned above, there is no guaranteed funding for

international adaptation and mitigation actions in CLEAR – money deemed essential to forging an international climate agreement. Finally, it’s unclear how many environmental NGOs would be willing to get behind a bill that entrusts a large share of environmental performance to the annual Congressional appropriations process.

Nicholas Institute for Environmental Policy Solutions

The Nicholas Institute for Environmental Policy Solutions at Duke University is a nonpartisan institute founded in 2005 to help decision makers in government, the private sector, and the nonprofit community address critical environmental challenges. The Nichols Institute responds to the demand for high-quality and timely data and acts as an “honest broker” in policy debates by convening and fostering open, ongoing dialogue between stakeholders on all sides of the issues and providing policy-relevant analysis based on academic research. The Nicholas Institute’s leadership and staff leverage the broad expertise of Duke University as well as public and private partners worldwide. Since its inception, the Nicholas Institute has earned a distinguished reputation for its innovative approach to developing multilateral, nonpartisan, and economically viable solutions to pressing environmental challenges.

Contact

Nicholas Institute, Duke University
P.O. Box 90335
Durham, North Carolina 27708

1201 New York Avenue NW
Suite 1110
Washington, D.C. 20005

Duke Marine Lab Road
Beaufort, North Carolina 28516

919.613.8709 phone
919.613.8712 fax

nicholasinstitute@duke.edu
www.nicholasinstitute.duke.edu