Climate Policy Memo #7

A Comparison of the Clean Energy Jobs and American Power Act (CEJAP Act) and the Carbon Limits and Energy for America's Renewal Act (CLEAR Act)

This brief compares key elements of two bills currently under consideration in Congress. The Senate Environment and Public Works Committee passed the Clean Energy Jobs and American Power Act (CEJAP Act) on November 5, 2009. It provides a comprehensive, economy-wide approach to achieving reductions in greenhouse gas emissions by capping emissions, using a combination of auctions and free allocations for distributing allowances, and allowing firms to trade and purchase offsets to reduce compliance costs. It also includes a range of complementary measures aimed at spurring technology development and reducing emissions outside the cap.

The second bill, introduced by Sen. Cantwell and Sen. Collins, is the Carbon Limits and Energy for America's Renewal Act (CLEAR Act). Like the CEJAP Act, the CLEAR Act caps greenhouse gas emissions, but the approaches used in these bills differ significantly. The CLEAR Act puts limits on carbon emissions. It auctions all of the allowances with most of the revenue returned to individuals and the remainder allocated to a fund that could be used to support technology, reduce emissions from sources outside the cap, and assist workers, communities or sectors adversely impacted, among other purposes. This brief describes the key features of each bill and Table 1 at the end of the brief contains a side-by-side comparison of the bills.

Emission Targets: Coverage and Reduction Schedules

Both bills set the same economy-wide goals for reducing total greenhouse gas emissions—a 20 percent reduction from 2005 baseline levels by 2020, gradually increasing to an 83 percent reduction from 2005 levels by 2050. There are, however, significant differences in the specific measures used to achieve these goals.

The CEJAP Act sets a cap on all major greenhouse gas emissions (except HFCs which are capped separately) and includes emissions from sources above specified size thresholds. Once fully phased in, it covers an estimated 85 percent of total emissions. The cap directly impacts sources with emissions of greater than 25,000 tons per year. The CEJAP Act is quite specific and targeted regarding the point of regulation. It covers some sources downstream at the point of emission (e.g., power plants and manufacturing facilities), but also some sources further (but not all the way) upstream (e.g., refineries and importers of oil). It covers large emitters for coal; refiners and importers for oil; and a combination of large emitters and local distribution companies for natural gas. Emissions covered under the cap are reduced by 20 percent from 2005 levels in 2020, by 42 percent in 2030, and by 82 percent in 2050. Uncapped sources are subject to performance standards for new and existing sources to be set by the U.S. EPA with a delay for those source categories that could be used as offsets.

The CLEAR Act cap covers only carbon dioxide emissions and does so upstream at the point where fossil fuels are produced or imported. It is difficult to compare the two bills in terms of the number of entities and sources that they would cover and the implications for administrative complexity. First, the CLEAR Act leaves more of the details of the point of regulation to the Executive Branch. Second, while there are hundreds of natural gas and oil producers that account for most domestic oil and gas production, there are thousands of smaller producers, so any determination of thresholds for coverage under the CLEAR Act's upstream cap would be important for determining how many entities are covered. Moreover, there are hundreds of thousands of individual oil and gas wells.

The CLEAR Act cap covers roughly 82 percent of total emissions and sets up a fund (using auction revenue, see below) that could be used to support reductions in emissions of other greenhouse gases not covered under the cap. It provides for fewer reductions in the early years, but a steeper drop in emissions over time with the goal of reaching an 80 percent reduction by 2050 based on 2012 levels.

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Allowance Value and Distribution

The CEJAP Act sets out detailed specifics on who gets allowances and the method by which they are distributed. It uses both free allocation and auctions with an increasing share of allowances auctioned over time. It provides allowance value for a range of uses including, but not limited to: support for all purchasers of electricity and natural gas through their local distribution companies; direct payments to low-income households; support for carbon capture and sequestration; support to energy-intensive, trade-exposed manufacturing companies; funding for reductions from forestry and agriculture; support for domestic and international adaptation programs; and creating a climate change rebate for all households.

The CLEAR Act auctions 100 percent of its allowances to "first sellers" of carbon—those entities that produce or import fossil fuels and who have compliance obligations under the Act. Auction revenue is divided up with 75 percent returned to individuals on a per capita basis through a Carbon Refund Trust Fund. The remaining 25 percent is used to establish a Clean Energy Reinvestment Trust (CERT) under which Congress can appropriate funds for designated purposes including, for example, support for technology programs, aid to energy-intensive, trade-exposed manufacturing sectors, worker and community assistance, achievement of reductions from uncapped sources, and climate change adaptation.

Both bills use allowance value to mitigate impacts on households. The CLEAR Act does this through a dividend (using auction revenue) that is the same for all consumers. The CEJAP Act provides a dividend directly to low-income households, while also providing relief to all electricity and natural gas consumers through their state-regulated public utilities and to all households through a rebate beginning in 2026.

Cost Containment: Trading, Offsets, Banking, and Price Limits

Both bills provide mechanisms to achieve cost-effective reductions and to reduce volatility in allowance prices. However, the approaches taken by the bills differ significantly. The CEJAP Act allows for a much broader market with many more buyers and sellers. It also permits extensive use of domestic and international offsets, allowing a total of 2 billion tons per year. It does not restrict who can hold or trade allowances, and puts no restrictions on banking reductions for future use.

The CLEAR Act does not allow offsets, limits purchase and trading to only those entities with compliance obligations (first sellers), and limits banking to ten years. CERT Funds, if appropriated for this purpose, could be used to achieve reductions from sectors outside the cap. Carbon shares in excess of the cap are provided to operators of carbon capture and storage facilities, operators of oil and gas carbon dioxide reinjection projects, and any manufacturer that embeds fossil carbon in products. These shares can be sold on the public carbon share exchange.

To limit price volatility, the CEJAP Act sets a minimum auction price of $10 ton, and establishes a market stability reserve and auction if prices exceed a specified level (e.g., set at $28 ton in 2012 and increasing to the previous year's auction price plus 5-7 percent, depending on the year, above inflation). The market stability reserve is made up of allowances allocated to it from under the cap and from offsets. As a result, the use of allowances from the reserve would not result in emissions exceeding the cap. The CLEAR Act has a price collar, with a minimum price set at $7/ton and a maximum price set at $21/ton in 2012. The minimum and maximum prices escalate annually at the rate of inflation plus 5.5 percent or 6.5 percent, respectively. If the maximum price is reached, additional allowances are auctioned to avoid increases beyond the price cap. Auction revenues from the sales of additional allowances would be used to purchase compensating allowances from uncapped sources but, unlike the CEJAP Act, there is no guarantee that the cap would not be exceeded.

Energy-Intensive, Trade-Exposed Industries and Competitiveness

The CEJAP Act provides free allowances (phased out in 2035) for industrial sectors that qualify as energy-intensive and trade exposed. It also establishes requirements for allowances for imported goods (sometimes referred to as border adjustments) to level the playing field for imports coming from countries without equivalent greenhouse gas reduction programs. The CLEAR Act provides for CERT funds for use by entities that are placed at an unfair competitive disadvantage

due to differences among national policies. In addition, it sets up border tax adjustments for imports from countries without equivalent programs.

Summary

The CEJAP Act and the CLEAR Act seek to address the same environmental objectives, but utilize different approaches to reach those goals. The CEJAP Act relies heavily on achieving cost-effective reductions through unlimited trading and extensive availability of offsets. In contrast, the CLEAR Act limits trading to compliance entities and prohibits offsets. CEJAPA has broader coverage under the cap and trade program, but the CLEAR Act seeks to achieve equivalent reductions through a combination of a cap on carbon and reduction programs for other non-capped entities supported through its CERT Fund. The CEJAP Act seeks to limit price volatility through market stability reserve auctions (borrowing future allowances so that the cumulative cap will still be met) while the CLEAR Act auctions off additional allowances (that do not have to be paid back so the cumulative cap could be breached) if a maximum price is exceeded.

Table 1: Comparison of the CEJAP Act (Kerry-Boxer) and the CLEAR Act (Cantwell-Collins)

	CEJAP Act (Kerry-Boxer)	CLEAR Act (Cantwell-Collins)
Basic description	Comprehensive cap and trade	Cap and refund for carbon
GHGs included	All GHGs	CO_2 only
Economy-wide reduction goals	20% below 2005 in 2020 42% below 2005 in 2030 83% below 2005 in 2050	20% below 2005 in 2020 42% below 2005 in 2030 83% below 2005 in 2050
Targets for capped sources	20% reduction in 2020 below 2005 42% reduction in 2030 below 2005 83% reduction in 2050 below 2005	For capped CO2 sources, freeze at 2012 levels in 2012-14; 0.25% reduction each year thereafter reaching an 81-83% reduction in 2050 from baseline levels in 2012
Point of regulation	Hybrid approach: Large emitters for coal; refiners and importers for oil; large emitters and local distribution companies for natural gas. Threshold of 25,000 tons per year	First sellers of carbon-based fuels
Scope of capped emissions	85% of total emissions	Covers all carbon in fossil fuels; 82% of total GHG emissions
Allowance distribution	Combination of free allocation to specified sources and auctions with greater percentage auctioned over time	100% auctions open only to those with compliance obligations (fossil fuel producers or importers--"first sellers")
Use of allowance value	Detailed distribution to consumers through state-regulated electricity and natural gas local distribution companies; low-income households, technology bonuses, workers, states, adaptation, etc.	75% refunded equally to each citizen 25% used for CERT authorized projects determined through Congressional appropriations
Treatment of uncapped sources	Allows for performance standards for new and existing sources (delayed until 2020 for source categories that could supply offsets)	Eligible for CERT funded reduction programs
Offsets	2 billion per year; split between domestic (1.5 billion) and international (0.5 billion) unless domestic supply is inadequate.	Offsets not allowed. CERT funds could be appropriated to fund reductions from uncapped sources (domestically and internationally)
Trading	Unrestricted trading with a provision recognizing the need for a carbon market oversight program	Limited to "first sellers"-- firms who import or produce carbon-based fossil fuels and have compliance obligations. First sellers are prohibited from participating in a derivatives market
Price controls	Minimum auction price of $10/ton in 2012. Creation and auction of market stability reserve allowances if maximum price exceeded (initially set at $28/ton in 2012)	Allowance price collar: floor set at $7/ton in 2012 increasing by 6.5%/yr plus inflation. Ceiling set at $21/ton in 2012 increasing by 5.5%/yr plus inflation.
Banking	Unrestricted	Limited to 10 years
Carbon capture and sequestration (CCS)	Wires charge (10 years) with funds used for CCS demonstration projects and allowance value to support CCS deployment; phase in of new source performance standards requiring CCS for new coal-fired power plants	CERT funds could be used to support CCS
Energy Efficiency and Renewables	Allowance value designated to energy efficiency and renewable programs at the state and federal level	CERT funds could be used for efficiency and renewable programs
EITEs and competitiveness	Free allowances to qualifying EITEs (phased out by 2035); border adjustment allowance requirements for certain imported goods	Border adjustment fees for imports and possible use of CERT funds for exporters

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