



1Sky Analysis of S. 1733, The Kerry-Boxer “Clean Energy Jobs and American Power Act”

Updated: 11/9/2009¹

The introduction of the “Clean Energy Jobs & American Power Act” by Senators Kerry and Boxer began the race in the U.S. Senate to put America on the road to a clean energy economy and tackle global warming. We applaud their leadership, and are pleased that the latest iteration of their bill includes some key improvements that the grassroots have been calling for since the House of Representatives passed H.R. 2454, the Waxman-Markey “American Clean Energy and Security Act” this June.

The version of S.1733 recently passed out of the Senate Environment and Public Works Committee builds on these improvements and protects crucial provisions that will speed our transition to a clean energy economy and bring us closer to protecting the planet from catastrophic climate change. We must, however, push hard to preserve these victories and ensure the strongest possible bill in the months ahead. While we are making steady progress in the right direction, it is clear that the U.S. Congress has not yet summoned the political will to pass a bill bold enough to meet the challenge of our current planetary emergency. 1Sky’s nationwide campaign is in full gear, pushing senators to deliver strong legislation now. Our progress is being fought every step of the way by Big Oil and Dirty Coal, who prioritize their own profits over our economic recovery, our health, our national security, and our planet. We do not have a moment to lose.

1Sky urges senators to support provisions in the Kerry-Boxer Bill that:

- 1. Transition us away from dirty fossil fuels of the past and toward the clean energy of the future:** The Clean Energy Jobs & American Power Act leaves key Clean Air Act provisions intact, thus maintaining existing mechanisms to regulate dirty coal technology. These provisions are crucial for ending the construction of new dirty coal plants that use outdated technology and ensuring that the oldest, dirtiest coal plants reduce their global warming pollution.
- 2. Take serious steps to cut global warming pollution as soon as possible:** Cut carbon pollution from fossil fuels *at least* 20% by 2020: Scientists say we must do much more. Targets for cutting carbon from fossil fuels in Kerry-Boxer are 3% stronger than the House bill, but rollbacks in regulation of methane and other greenhouse gasses make the bill only 1% stronger on net.
- 3. Create millions of clean energy jobs by investing in a clean energy future:** The current Senate bill includes many key job-creating and job-training programs necessary to jumpstart America's transition to a clean energy economy. We encourage senators to increase investment in programs that will create new jobs by investing in a clean energy future rather than investing in dirty coal plants and oil companies who have been reaping record profits for years. This includes bolstering support for a global climate deal by investing in climate adaptation, avoided deforestation, and exporting clean energy technology.

1Sky is a collaborative national campaign for strong federal action to tackle global climate change and invest in building the clean energy economy of the future. As one of the largest national campaigns in the country, 1Sky combines the force of 500 allied organizations, 2,300 volunteer Climate Precinct Captains in every state nationwide, and 40 full-time organizers in 31 states working to mobilize grassroots support for strong federal climate and energy legislation.

¹ This 1Sky analysis covers S.1733, the Kerry-Boxer “Clean Energy Jobs and American Power Act” as passed out of the Senate Environment and Public Works Committee on Thursday, November 5, 2009. This analysis does not include energy provisions from S. 1462, the “American Clean Energy Leadership Act,” which was passed out of the Senate Committee on Energy and Natural Resources in June. This document is available online at www.1sky.org/s1733. For questions or more information, contact 1Sky Policy Coordinator, Jason Kowalski, jason@1sky.org or 301.270.4550 ext. 233.

By maintaining its strengthened provisions, and maximizing investments in a clean energy future S.1733, the Kerry-Boxer “Clean Energy Jobs and American Power Act,” has the potential to:

- **Usher in a powerful clean energy economy strong enough to create millions of career-track green-collar jobs for American workers.**
 - Making polluters like Big Oil and Dirty Coal pay for their carbon pollution allows for massive public and private investments in cleaner and more efficient energy infrastructure – up to \$150 billion per year, enough to create 1.7 million new clean energy jobs on net according to the Political Economy Research Institute (PERI).²
 - Provisions in the bill ensure equitable treatment of low-income consumers and marginalized communities through targeted rebates, worker training funds, energy efficiency programs, and community development assistance.
- **Save hundreds of billions of dollars in energy costs, cutting energy waste** for consumers and businesses across the economy by encouraging investment in efficient buildings, appliances, vehicles, and industrial processes.
 - The American Council for and Energy Efficient Economy (ACEEE) projects that the energy efficiency investments and standards alone in this bill will result in net consumer savings of over \$350 billion over the next two decades , and potentially over \$450 billion in savings if the bill is strengthened.³
 - Clean energy investments and direct rebates to consumers will allow the overwhelming majority of Americans to achieve net energy cost savings while reducing reliance on dirty fuels nationwide. The Natural Resources Defense Council (NRDC) projects that this legislation will allow the average household to save \$6 per month on electric bills, and \$14 per month on gasoline over the next decade.⁴
- **Reduce our dangerous dependence on foreign oil** and help make our country energy independent through energy efficiency and renewable energy.
 - According to recent analysis by the U.S. Energy Information Administration (EIA), clean energy and climate legislation will reduce oil imports by 590,000 barrels per day by 2020 - as much oil as we currently import from Iraq. That will save \$650 billion from being spent on foreign oil over the next 20 years.⁵
 - Among many oil-saving measures, the Clean Energy Jobs and American Power Act includes a strong investment in battery technologies, efficiency standards, and a smarter grid that can help get renewable energy sources like solar and wind to our homes to charge our automobiles with electricity.
- **Limit global warming pollution** by providing incentives for clean energy to thrive, and investing in emissions reductions worldwide.
 - Analysis from the World Resources Institute shows that the Kerry-Boxer bill, in its current form, achieves reductions in global warming pollution of at least 29% below U.S. 2005 levels by 2020 (17% below 1990 levels) via the combined effect of a cap on carbon and complementary policies.⁶
 - Achieving these targets will be far easier than initially expected. The most recent Department of Energy forecast for U.S. emissions in the absence of climate legislation shows that energy-related emissions in 2020 will be 1% lower than 2005 levels, in sharp contrast to the 17% increase forecast just two years ago. That analysis also predicts a 10.7% decline in energy-related emissions between 2005 and 2009.

² http://www.americanprogress.org/issues/2009/06/clean_energy.html

³ <http://www.aceee.org/press/e098pr.htm>

⁴ http://switchboard.nrdc.org/blogs/astevenson/10_reasons_to_vote_to_pass_the.html

⁵ <http://www.eia.doe.gov/oiaf/servicerpt/hr2454/pdf/sroiaf%282009%2905.pdf>

⁶ <http://www.wri.org/publication/usclimatetargets>

Major Regulatory Provisions of S. 1733, the Kerry-Boxer “Clean Energy Jobs and American Power Act”

Key Items	Selected Provisions	1Sky Goals
Targets & Offsets	<p>2020 Near-term Targets</p> <ul style="list-style-type: none"> ✓ At least 29% below 2005 levels (17% below 1990 levels), from a combination of the cap and complementary policies. This represents a 1% improvement from the House-passed bill. ✓ 17% of these total reductions below 2005 levels are from the cap (20% below 2005 levels over 85% of the economy), and the rest are required from domestic emissions cuts outside the cap (2%), avoided tropical deforestation (10%), and potentially more cuts via offset substitution requirements (0-5%) and Clean Air Act performance standards for uncapped emissions. ✓ Targets for cutting carbon in the Senate bill are 3% stronger than the House-passed bill, but new rollbacks in regulations for methane and industrial processes are equivalent to setting these targets back 2.5%, thereby gutting most of what was achieved by strengthening them. The Senate bill includes a strengthened strategic reserve, and increased investments in sustainable agriculture and forestry practices, which contribute another 0.5% to the strength of the overall target, for a net strengthening of 1%. <p>2050 Long-term Targets</p> <ul style="list-style-type: none"> ✓ At least 73% below 2005 levels total via the cap and complementary policies (68% below 1990 levels). These targets are weaker than the House-passed bill due to eliminations in coverage for methane. <p>International Offsets</p> <ul style="list-style-type: none"> ✓ High levels of international carbon offsets may be purchased in place of domestic emissions reductions – up to 1.25 billion tons annually, 0.25 billion fewer than the maximum allowed in the House-passed bill. These offsets are paired with stringent quality standards and regulatory requirements, including an offset substitution requirement starting in 2018, in which companies need to buy 1.25 offsets for every 1 ton of carbon pollution they choose to offset. <p>Domestic Offsets</p> <ul style="list-style-type: none"> ✓ High levels of domestic carbon offsets – up to 1.5 billion tons annually – may also be purchased in place of domestic emissions reductions: 0.5 billion more than the House-passed bill allowed. The Kerry-Boxer bill gives the President the authority to choose which agencies oversee the domestic offset program, while the House-passed bill gives that authority to the USDA. <p>Biomass Emissions</p> <ul style="list-style-type: none"> ✓ Carbon emissions associated with biomass energy production are not accounted for in the bill. This omission could reduce the potential emissions reductions achieved by as much as 6%. ✓ The Senate bill restores a provision in existing law which was stripped in the House and mandates full lifecycle emissions accounting for biofuels when determining if they meet eligibility for the renewable fuel standard (RFS). 	<p>2020 Near-term Targets</p> <p>Cut carbon emissions by at least 35% below 2005 levels by 2020 (equivalent to at least 25% below 1990 levels), in line with the latest Intergovernmental Panel on Climate Change (IPCC) analysis. Achieving these targets will be far easier than initially expected; the most recent Department of Energy forecast for U.S. emissions in the absence of climate legislation shows that energy-related emissions in 2020 will be 1% <i>lower</i> than 2005 levels, in sharp contrast to the 17% increase forecast just two years ago. That analysis also predicts a 10.7% decline in energy-related emissions between 2005 and 2009.</p> <p>2050 Long-term Targets</p> <p>1Sky supports carbon cuts of at least 80% by 2050, in line with the latest IPCC analysis.</p> <p>Offsets</p> <p>1Sky is concerned that the Kerry-Boxer bill, like the House bill, continues to allow very high levels of carbon offsets. 1Sky advocates direct investments in emissions reductions rather than offsets which can be substituted for necessary domestic reductions in fossil fuel consumption. If offsets are allowed, they must comply with strict quality and additionality criteria, especially offset credits for land use changes. 1Sky also believes that the EPA is best-equipped to oversee a domestic offsets program.</p> <p>Biomass Emissions</p> <p>Biomass emissions should be accounted for on a full lifecycle basis to ensure both potential benefits and potential carbon debts are recognized. The “biomass emissions loophole” in both the House and Senate bills will encourage the use of inefficient, higher impact forms of biomass while punishing efficient, more environmentally sound biomass. 1Sky supports the strengthened accounting methods for international indirect land use impacts in the Senate bill.</p>

<p>Coal</p>	<p>Clean Air Act Performance Standards for Coal Plants</p> <ul style="list-style-type: none"> ✓ In contrast to the House-passed bill, the Senate bill maintains the ability to regulate dirty coal plants through Clean Air Act performance standards. In the Senate bill, New Source Review (NSR) and New Source Performance Standards (NSPS) can be used to ensure that we get real pollution reductions from old dirty coal plants, and end investment in outdated coal technology for new and expanded coal plants. <p>Other Clean Air Act Regulations</p> <ul style="list-style-type: none"> ✓ Unlike the introduced Senate bill, the updated Chairman's Mark eliminates some Clean Air Act regulatory measures, just like the House bill did. ✓ Eliminated Regulations like National Ambient Air Quality Standards (NAAQS) are helpful backstops the in absence of climate legislation, but these authorities are less necessary if we have a strong cap on carbon. ✓ Like the House bill, the administration and states can continue to set efficiency standards for vehicles. <p>Performance Standards for New Coal Plants</p> <ul style="list-style-type: none"> ✓ Any new coal plant permitted after 2009 is required to reduce 50% of their global warming pollution sometime between 2013 and 2022 – sooner if widespread carbon capture and storage (CCS) technology comes online by 2020. The backstop in the House-passed bill was later, 2025. These performance standards do not apply to the expansion of existing coal plants, or older dirtier “clunker” plants. ✓ Starting in 2020, performance standards require that new coal plants reduce global warming pollution at least 65%. ✓ Performance standards may be met through biomass co-firing, natural gas retrofits, efficiency gains, or carbon capture and storage when available at the required scale. <p>Ratepayer Surcharges to Fund New Coal Plants with CCS</p> <ul style="list-style-type: none"> ✓ Adds a fee to electricity bills that will help utilities pay for new coal plants with CCS. Ratepayer surcharges amount to approximately \$1 billion per year. 	<p>Clean Air Act Performance Standards</p> <p>Maintaining Clean Air Act performance standards for coal in the Senate bill ensures a necessary mechanism to regulate dirty coal plants which contribute heavily to our global warming pollution. Without this complement to the cap, new clean energy deployment will be at risk. Due to new energy efficiency policies, electricity demand is predicted to flatten out in coming years and our existing fleet of old dirty coal plants is not forecasted to modernize for another 15 years or more. If left in operation, these 60-80-year old “clunker” coal plants will potentially “crowd out” new renewable energy deployment, resulting in fewer new clean energy jobs.</p> <p>The House-passed bill stripped the Clean Air Act of its responsibility to set technology standards for dirty coal plants. This rollback created a loophole that would allow coal plants to expand existing capacity without meeting current performance standards.</p> <p>Modifications to existing coal plants resulting in a significant increase in carbon emissions must be subject to the same performance standards as new plants. We must also ensure that the oldest, dirtiest coal plants meet current performance standards once they reach the end of their intended lifespan in order to maximize clean energy deployment.</p> <p>Ratepayer Funding For New Coal Plants:</p> <p>Instead of charging ratepayers or using public funds to underwrite coal plant modernization, public investment should support proven renewable energy and efficiency projects that are already commercialized, create more jobs, and save consumers more money than coal-generated power.</p>
<p>Clean Energy & Energy Efficiency</p>	<p>Efficiency Standards</p> <ul style="list-style-type: none"> ✓ The House bill set building efficiency standards at 30% by 2010, and 50% by 2016. The Senate bill requires the EPA to set national standards for energy efficiency in buildings each year from 2014-2030, but does not contain explicit standards. ✓ The Senate bill establishes a building retrofits program (also in the House bill) directing the EPA and Department of Energy (DOE) to work with states and local governments to improve the energy efficiency of existing buildings (known as REEP, Retrofits for Energy and Environmental Performance). ✓ Additional programs, like the Efficient Buildings Program, invest in efficiency work, building off of the successful state and local block grant program (known as EECBG) funded by the Recovery Act. ✓ Creates a new program that provides grants to replace wood stoves that don't meet current performance standards. 	<p>Efficiency Standards</p> <p>1Sky supports strong and explicit energy efficiency standards and investments. Strong efficiency standards have the potential to save our economy billions of dollars that would have been spent on fossil fuels, while also encouraging innovation and creating new jobs.</p> <p>Clean Energy Deployment</p> <p>Rapid deployment of renewable energy technology will be necessary to ensure a low-carbon future. Renewable energy is one of the fastest growing sectors of the economy, and offers the potential to create millions of new jobs and revitalize our economy.</p>

	<p>Opportunities for Low-Income Communities and Displaced Workers</p> <ul style="list-style-type: none"> ✓ Creates targeted worker-training programs that give low-income communities access to green construction and community development jobs. Examples include the establishment of the Green Construction Careers Demonstration Project and funding for the Green Jobs Act. ✓ Authorizes funding to improve the energy efficiency of public and assisted housing while ensuring stable electricity rates for low-income families. ✓ Includes a strong safety net for workers dislocated from fossil fuel industries. <p>Transportation and Planning</p> <ul style="list-style-type: none"> ✓ Requires states to use a certain percentage of carbon funds for public transportation and planning programs, whereas the House bill gave states the option of investing in public transportation or clean energy. ✓ Transit grants are authorized to help states and metropolitan planning organizations meet new national standards for cutting transport-based emissions. ✓ Directs the EPA to set efficiency standards for new non-road vehicles and engines such as marine vessels and locomotives. Allows states to set higher fuel-economy rules for taxis. <p>Recycling and Reuse</p> <ul style="list-style-type: none"> ✓ Creates a program that provides funding to state, county, and municipal recycling programs that reduce emissions by significantly increasing recycling, reuse, and waste recovery. <p>Renewable Energy and Efficiency Standards Not Addressed in this Bill</p> <ul style="list-style-type: none"> ✓ A Renewable Electricity Standard (RES), an Energy Efficiency Resource Standard (EERS), additional energy efficiency standards, and smart grid planning are being dealt with in other bills, and will likely be considered further on the Senate floor. 	<p>Opportunities for Low-Income Communities and Displaced Workers</p> <p>1Sky is very supportive of provisions that help build a more inclusive clean energy economy. These elements have the potential to build green pathways out of poverty, giving well-paid career-track jobs to communities most in need of these new opportunities.</p> <p>Transportation and Planning</p> <p>1Sky is supportive of extensive investments in public and carbon-free transportation options and common-sense planning initiatives that encourage smart growth, and allow local economies to thrive.</p> <p>Recycling and Reuse</p> <p>1Sky supports funding for smart ways to reduce waste and reuse resources improving the overall efficiency of our economy, and reducing global warming pollution.</p> <p>Renewable Electricity and Efficiency Standards</p> <p>1Sky calls for a Renewable Electricity Standard (RES) of at least 25% by 2025 and stand-alone Energy Efficiency Resource Standard (EERS) of at least 10% by 2020. These standards would ensure extensive renewable energy deployment, and energy savings that will take full advantage of available efficiency resources. 1Sky is also supports additional energy efficiency standards for appliances and industrial processes.</p>
<p>Market Oversight and Price Control</p>	<p>Carbon Market Regulation</p> <ul style="list-style-type: none"> ✓ Includes placeholder language that will eventually lead to streamlined carbon market oversight under the Commodities Future Trading Commission (CFTC), whereas the House-passed bill has multiple regulators. <p>Price Collar</p> <ul style="list-style-type: none"> ✓ The Senate Bill creates a carbon price ceiling and floor (i.e. a “collar”) that allows for more price certainty and less potential for speculation than in the House-passed bill. Both the House and Senate bills set price ceilings at \$28 and floors starting at \$10, both rising over time. ✓ Each bill uses an allowance “reserve” to ensure price certainty without “busting” the cap, but the Senate bill includes greater price certainty. 	<p>Carbon Market Regulation</p> <p>1Sky supports strong market oversight that cuts down on speculation, market manipulation, and price volatility. An effective, high-integrity program is necessary to encourage investment in clean energy and transition us away from dirty fossil fuels.</p> <p>Price Collar</p> <p>The reserve in the Senate bill allows for effective volatility controls while maximizing emissions reductions. The price floor provides necessary certainty for clean energy investors.</p>
<p>Nuclear Power</p>	<ul style="list-style-type: none"> ✓ Includes supportive placeholder language promoting nuclear power as a future energy source. ✓ Authorizes funding for nuclear safety research grants, and funds worker-training programs specifically for nuclear power workers. 	<p>1Sky does not support public investment in nuclear power. Public monies should support renewable energy and efficiency projects that create more jobs and save consumers more money than investments in nuclear power would.</p>

Natural Gas	<ul style="list-style-type: none"> ✓ Authorizes a new program that would reward electric utilities for reducing emissions by switching from coal and oil to natural gas. ✓ Makes new natural gas plants eligible for their own pot of CCS money, similar to the funds available to coal. 	<p>1Sky does not support public investment in new fossil fuel infrastructure. Natural gas is a stepping stone that will help turn the economy away from dirty coal, but public investment in natural gas infrastructure must not come at the expense of more necessary investments in renewable energy or energy efficiency.</p>
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Allocation Provisions of S. 1733, The Kerry-Boxer “Clean Energy Jobs and American Power Act” (2020 snapshot)

Under S. 1733, carbon pollution permits decline in quantity but increase in value starting in 2012. Each year polluters will need to purchase one permit for every ton of pollution they emit. As in the House-passed bill, the Kerry-Boxer bill allocates these valuable pollution permits, or “allowances,” to states, administrative entities, federal programs, and the private sector. The majority of these allowances will be sold to polluters in return for revenue for the purposes identified below. The total value of the allocation pool is approximately \$79 billion in 2020.

Expansion of the deficit reduction fund is the most substantive change between House and Senate allocations:

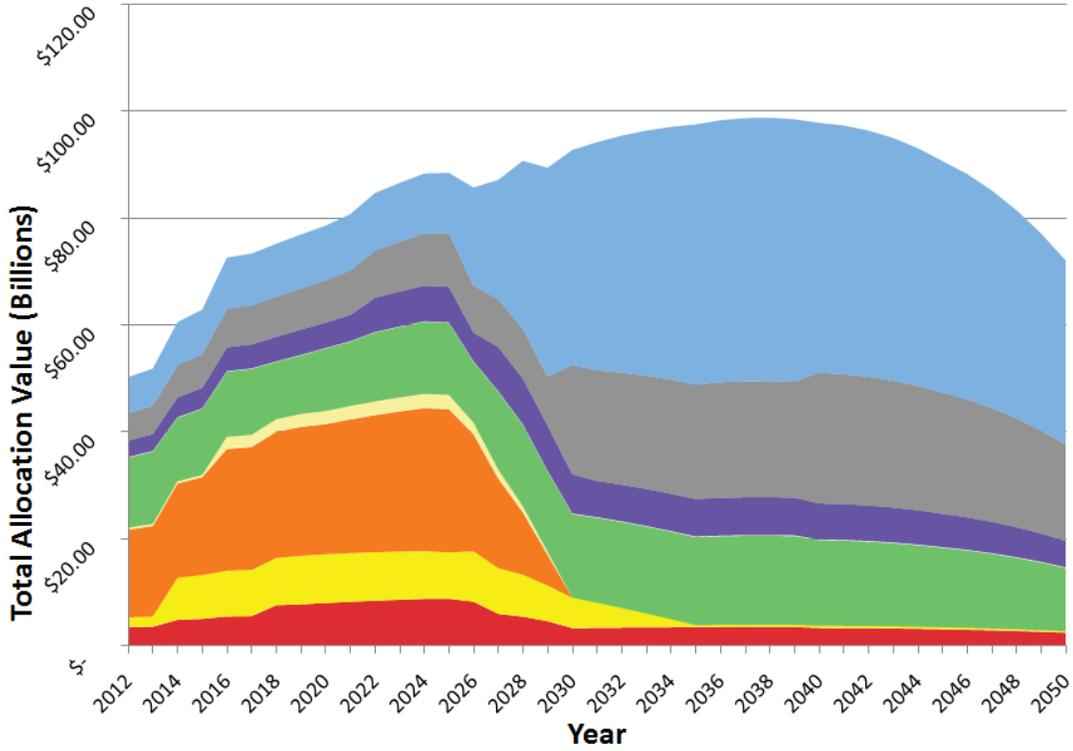
- The major difference between the Senate bill and the House bill is the Senate bill’s large short-term investment in deficit reduction. With the exception of that major change, the general priority given to each allocation pool only changed slightly, with the largest shift coming from new and expanded climate and clean energy programs in the Senate bill.

Allowance %	Major Provisions (2020 snapshot)	1Sky Goals
Coal Plants and Oil Refineries 10.3%	<p>1.9% Oil Refineries</p> <ul style="list-style-type: none"> ✓ These allowances are given to the oil industry. Oil companies still feel the market signal of a price on carbon, but they also receive money to help offset the new costs associated with dirty carbon-based fuels. Small business refiners get a larger percentage of these allocations and additional time to comply with the cap. <p>4.2% Coal Plant Operators</p> <ul style="list-style-type: none"> ✓ Allowances given to merchant coal and long-term power purchase agreements according to a formula developed by utilities. Utilities still feel the market signal of a price on carbon, but they also receive money to help offset the full costs associated with burning dirty fossil fuels. <p>4.2% Coal CCS (Carbon Capture and Sequestration)</p> <ul style="list-style-type: none"> ✓ This provision gives public funding to new commercial-scale plants that use CCS technology to capture and sequester at least 50% of their carbon pollution. More funding is distributed to better-performing large-scale plants. Provides funds in advance to implement CCS on new coal-fired plants that will sequester at least 50% of their emissions. ✓ The Senate bill allows for payments to be made to coal plant operators currently using older dirtier technology in advance of CCS technology deployment. The EPA can revoke these “advance payments” if CCS technology is not eventually installed. In the House-passed bill, coal plants do not receive payments for CCS until they can successfully capture and store their carbon emissions. 	<p>Valuable allowances should not be given away to polluters for free. Taxpayer monies should be invested in a clean energy transition not spent cleaning up after polluters.</p> <p>Instead of paying utilities to build new coal plants, these valuable allowances should support renewable energy and efficiency projects that are already commercialized, affordable, create more jobs, and save consumers more money than investments in fossil fuel infrastructure. 1Sky is especially wary of “advance payments” for dirty coal plants that plan on installing CCS in the future.</p>
Trade-Exposed Energy-Intensive Industries 11.7%	<p>11.7% Trade-Exposed Energy-Intensive Industries</p> <ul style="list-style-type: none"> ✓ These allowances are designed to prevent energy-intensive industries from simply moving their emissions abroad. Rebates are proportional to production, which encourages efficiency investments. Allocations start at 15% and decline over time. ✓ Includes placeholder language for future border measures that would incentivize cleaner industrial processes at home and abroad, while protecting American industries from dirtier 	<p>1Sky supports border measures and rebates that reward efficient energy industrial processes while preventing an “export” of our emissions that could potentially result in even more emissions globally. Both output-based rebates and border tax adjustments (carbon tariffs) accomplish these goals. Output-based rebates given to</p>

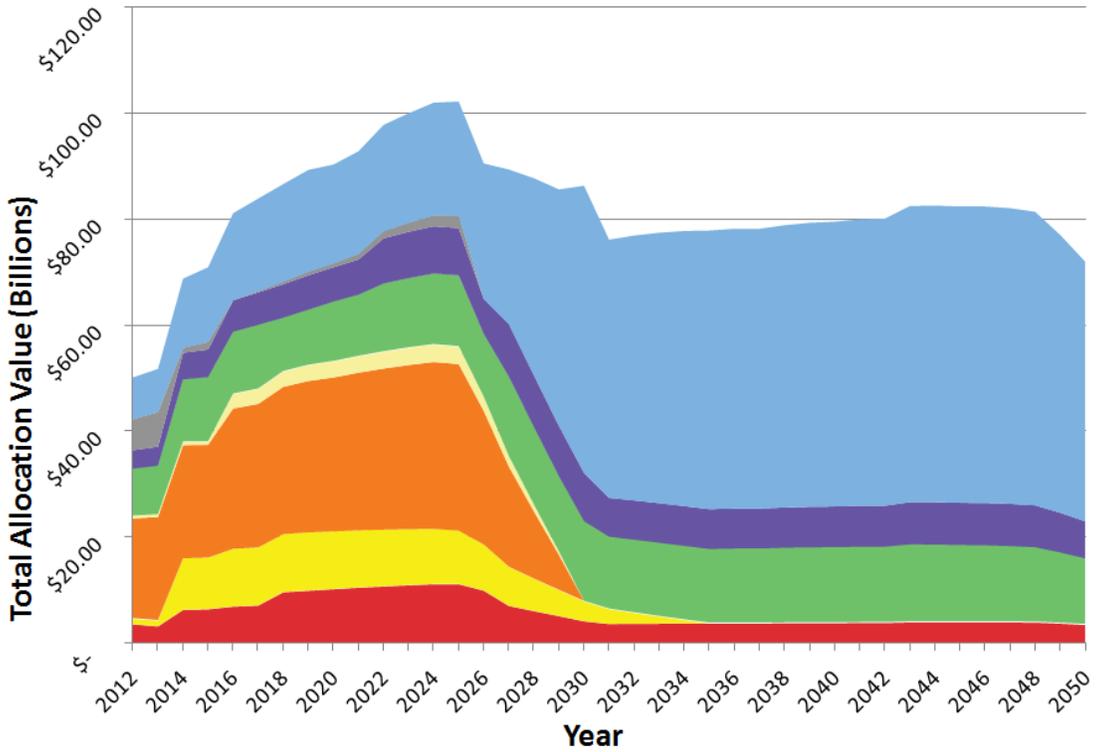
	<p>high-emissions competition from overseas.</p> <ul style="list-style-type: none"> ✓ Trade-Exposed Energy-Intensive Industries include steel, glass, paper, chemicals, concrete, aluminum, and other goods. 	<p>trade-exposed industries should be linked with energy efficiency measures that will make U.S. companies more competitive by cutting energy costs.</p>
<p>Reducing Retail Energy Prices via Local Distribution Companies (LDCs) 30.9%</p>	<p>25.9% Electricity Rate Reductions via LDCs (Local Distribution Companies, or Electric Utilities)</p> <ul style="list-style-type: none"> ✓ The value of these allowances is equivalent to over 75% of the carbon costs for utilities under the cap. With allowance value going to LDCs, power generators still feel the market signal of a price on carbon, but commercial and residential ratepayers are buffered from 75% of the price increase, which reduces the incentive for them to invest in cost-effective energy efficiency measures. The House-passed bill covers 90% of carbon costs for utilities by distributing 30% of the allowances ✓ State-based Public Utility Commissions (PUCs) and the EPA are given the power to revoke allowances from LDCs if they do not pass the full value of these allowances to consumers through reduced electricity bills or energy efficiency. <p>5.0% Natural Gas Rate Reductions via LDCs (Energy Providers)</p> <ul style="list-style-type: none"> ✓ The value of these allowances is equal to over half the increased costs for natural gas companies under a carbon cap. Like the electric utilities, natural gas companies will still feel the market signal of a price on carbon, but commercial and residential ratepayers are buffered from most of the price increase. ✓ State-based public utility commissions and the EPA are given the power to revoke allowances from natural gas companies if they do not pass the full value of these allowances to consumers through natural gas bills and energy efficiency programs. ✓ Unlike electric utilities, natural gas companies are required to dedicate one-third of their allowance value to end-use customer energy efficiency programs (see the next section summary below). 	<p>1Sky strongly advocates requiring that one-third of the allowance value allocated to electric LDCs be invested in energy efficiency, consistent with the energy efficiency requirement for natural gas utilities. Such investments in energy efficiency will save consumers money, reduce the overall cost of the program, and create new jobs.</p> <p>Investing in energy efficiency, clean energy, and direct consumer rebates are all more cost-effective means of reducing energy costs for ratepayers than price manipulation via LDCs.</p> <p>Artificially lowering the cost of energy reduces incentives for private investments in energy efficiency and clean energy. Allowing a carbon price to permeate throughout the economy will produce more jobs, reduce emissions at lower net cost, and would be better on the whole for the economy. In addition, the regulatory integrity of the utility commissions overseeing LDCs varies from state to state.</p>
<p>Efficiency for Energy Consumers 3.1%</p>	<p>3.1% Efficiency for Energy Consumers</p> <ul style="list-style-type: none"> ✓ These allowances help natural gas, heating oil, and propane consumers invest in efficiency measures that reduce energy consumption. These projects will save consumers money by investing in low-cost, common sense energy-saving projects. 	<p>1Sky supports extensive investments in energy efficiency. Efficiency projects reduce carbon and cut costs for consumers more effectively than using valuable allowances for price manipulation via LDCs.</p>
<p>Consumer Rebates 13.5%</p>	<p>12.5% Low- and Moderate-Income Consumer Rebates</p> <ul style="list-style-type: none"> ✓ These allocations are used to send direct lump-sum payments to low- and middle- income consumers, to compensate for incremental price increases under climate policy. Because low-income households spend a higher percentage of their income on energy than other households, it's important to target rebates to this segment of the population. ✓ The House-passed bill included more allocations (15%, or 2.5% percent more than the Senate bill), and targeted funds only to low-income consumers. <p>1% Home Heating Oil Consumer Rebates</p> <ul style="list-style-type: none"> ✓ Distributed through states most impacted by higher heating oil prices. 	<p>1Sky supports consumer rebate programs in place of manipulating energy prices via local distribution companies (LDCs, or utilities). Sending income-based rebates directly to low- and moderate-income consumers can offset utility rate increases, while increasing the incentive to invest in energy efficiency.</p>
<p>Investing in a Clean Energy Future, and Climate</p>	<p>6.4% to Renewable Energy and Energy Efficiency Investments</p> <ul style="list-style-type: none"> ✓ 4.6% for clean tech deployment, via states and local governments. Specific carve-outs distribute funds directly to large-scale renewable energy projects. Funded at 9.2% for 	<p>Clean Energy Investments</p> <p>Instead of funding new coal plants, public monies should support renewable energy and efficiency projects that are already</p>

<p>Programs 14.8%</p>	<p>the first two years.</p> <ul style="list-style-type: none"> ✓ 1.4% for clean tech R&D. ✓ 0.4% to enforce new building codes. <p>2.6% Clean Transportation</p> <ul style="list-style-type: none"> ✓ 0.8% for Electric Vehicles, a program to help fund research, development, and implementation for electric vehicles and other advanced automobile technology. Funded at 2.5% for the first six years. ✓ 1.8% for Public Transit and Smart Growth. Grants help finance public transit, support local economies, and low-carbon growth. <p>0.4% Green Jobs and Transition Programs</p> <ul style="list-style-type: none"> ✓ Funding is targeted toward job training in emerging industries via the Green Jobs Act, and creates a strong safety net for workers dislocated from fossil fuel industries. Funded at 1.3% for the first two years. <p>1.3% Domestic Adaptation</p> <ul style="list-style-type: none"> ✓ Funds are targeted to help vulnerable communities and ecosystems adapt to climate change. For wildlife and natural resource protection, and other adaptation purposes, including public health and disaster relief. Funded at 2.1% for the first two years. <p>1.0% Additional Emissions Reductions from Domestic Forestry and Agriculture</p> <ul style="list-style-type: none"> ✓ Unlike domestic offsets, this fund encourages domestic emissions reductions from uncapped sources, thereby resulting in emissions reductions above and beyond those attained by the cap. This program invests in sustainable farming and land-management techniques that lower emissions, and preserve effective natural carbon sinks. ✓ This fund was included in the House bill too, but with just two years of funding. <p>3.0% Market Stability Reserve</p> <ul style="list-style-type: none"> ✓ This fund helps both maintain price certainty, and further reduce carbon emissions. ✓ If the carbon price hits the price ceiling (\$28 in 2012, and rising over time), these “reserve” allowances can be sold to polluters to prevent short-term price spikes. Revenue raised from the sale of these allowances is then invested in carbon reductions, so essentially this fund reduces carbon 3% more than the program would otherwise in 2020. 	<p>commercialized, affordable, and create four times more jobs than fossil fuel infrastructure investments.</p> <p>Transportation and Planning</p> <p>1Sky supports extensive investments in public and carbon-free transportation options and common-sense planning initiatives that encourage smart growth, and allow local economies to thrive.</p> <p>Green Jobs and Transition Programs</p> <p>Training programs are necessary to ensure that new job opportunities created by this legislation are available to all communities in need of good jobs.</p> <p>Domestic Adaptation</p> <p>Funding for adaptation projects is urgent and necessary. Substantial investments are critical to ensuring climate legislation protects communities and natural resources most vulnerable to a warming climate.</p> <p>Additional Emissions Reductions</p> <p>Investing in emissions reductions projects outside capped sectors is crucial to ensuring high-integrity emissions reductions from land management practices that will reduce emissions beyond the levels stipulated by the cap. This is far superior to offsets.</p> <p>Market Stability Reserve</p> <p>1Sky supports allocating allowances toward a reserve because it controls for carbon price volatility while maximizing emissions reductions. 1Sky supports responsible investment of reserve funds for further reductions.</p>
<p>International Investments 6%</p>	<p>1.1% International Adaptation</p> <p>4.2% Reducing Tropical Deforestation</p> <p>0.8% International Clean Technology Partnerships</p> <ul style="list-style-type: none"> ✓ Allocates funds to help vulnerable communities adapt to climate change, protect tropical forests, and export clean energy technology and thus increase our bargaining power at the international climate negotiations this December in Copenhagen. These funds assist vulnerable communities in developing countries as they transition to low-carbon economies and adapt to the changing climate. 	<p>1Sky supports an increase in allocations for international investment purposes, with at least 5% of allowance value for avoided tropical deforestation, 3% for international adaptation, and 2% for international clean energy technology partnerships. Setting aside sufficient allowances for these purposes will improve the prospects for an effective international climate agreement in Copenhagen this December, and beyond.</p>
<p>Deficit Reduction 10.1%</p>	<p>Allowance value is transferred to the U.S. Treasury to allow the bill to be scored as deficit-neutral. The House-passed bill allocated a mere 1% of allowance value to deficit reduction in 2020.</p>	<p>The vast differences in deficit reduction funds are mostly due to differences in Congressional Budget Office (CBO) scoring protocols between the House and Senate.</p>

Kerry-Boxer S. 1733 Allocations



Waxman-Markey H.R. 2454 Allocations

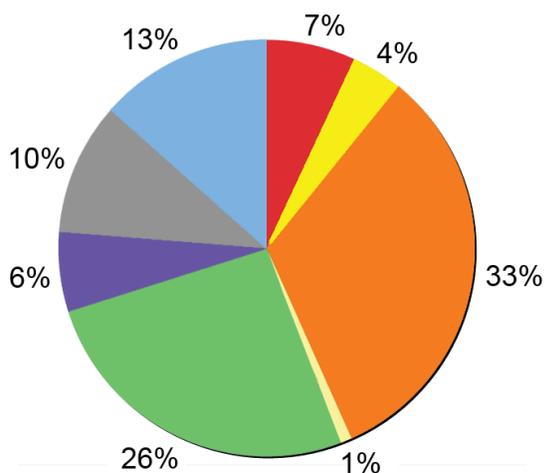


Legend

- Fossil Fuel Power Plants and Oil Refineries
 - Trade-Exposed Industries
 - LDC Rate Reductions
 - Efficiency for Energy Consumers
- Clean Energy and Climate Programs
 - International Adaptation Forest Protection and Clean Tech
 - Deficit Reduction
 - Consumer Rebates

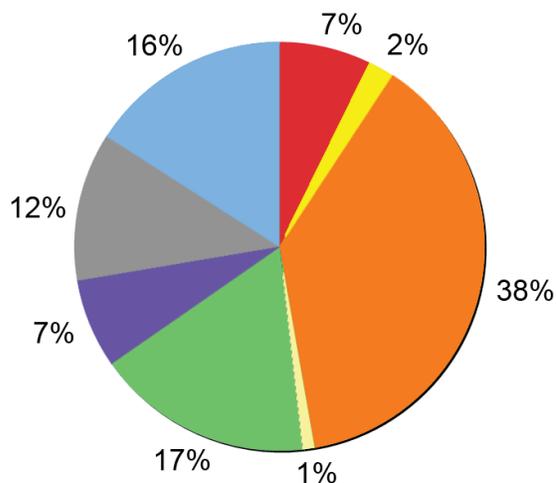
Single-Year Allocations Analysis:

Snapshots for 2012 and 2020, not including release of future allowances



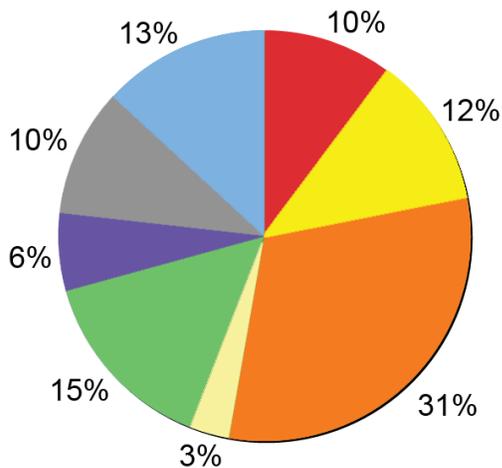
S. 1733 - 2012

Total Allocation Value: \$50.2 Billion



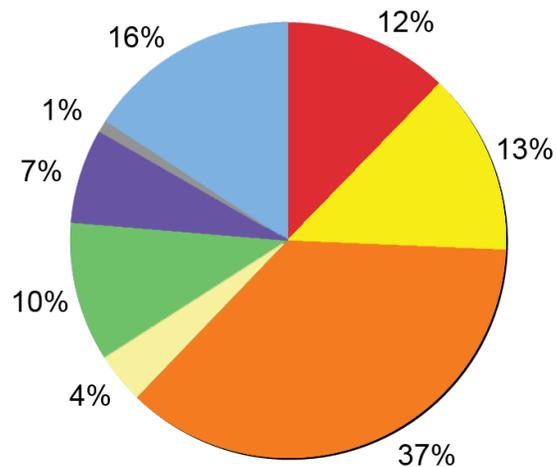
H.R. 2454 - 2012

Total Allocation Value: \$50.2 Billion



S. 1733 - 2020

Total Allocation Value: \$78.6 Billion



H.R. 2454 - 2020

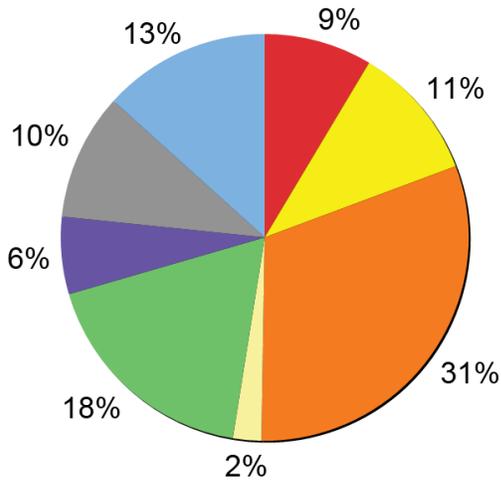
Total Allocation Value: \$81.6 Billion

Legend

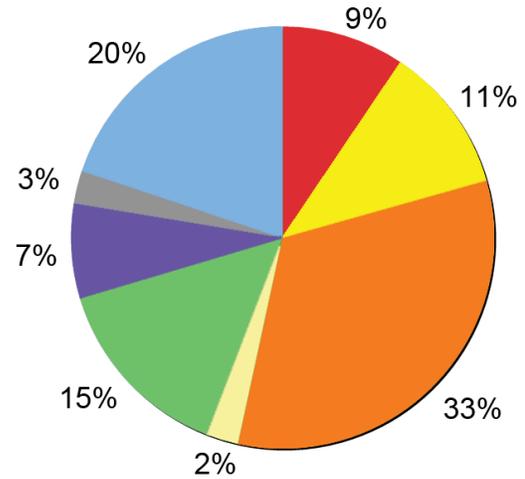
- Fossil Fuel Power Plants and Oil Refineries
 - Trade-Exposed Industries
 - LDC Rate Reductions
 - Efficiency for Energy Consumers
- Clean Energy and Climate Programs
 - International Adaptation Forest Protection and Clean Tech
 - Deficit Reduction
 - Consumer Rebates

Multi-Year Allocations Analysis:

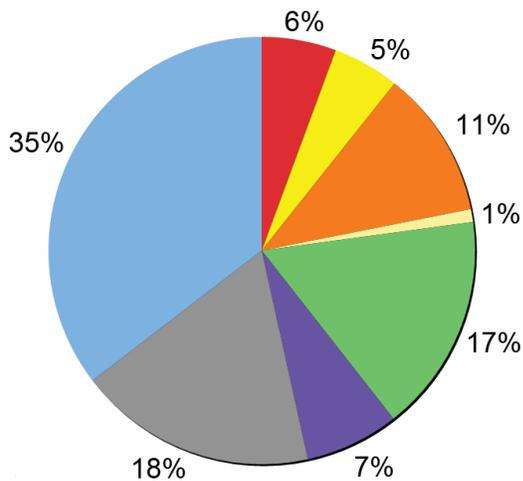
Cumulative allowance value over short- and long-term, including release of future allowances.



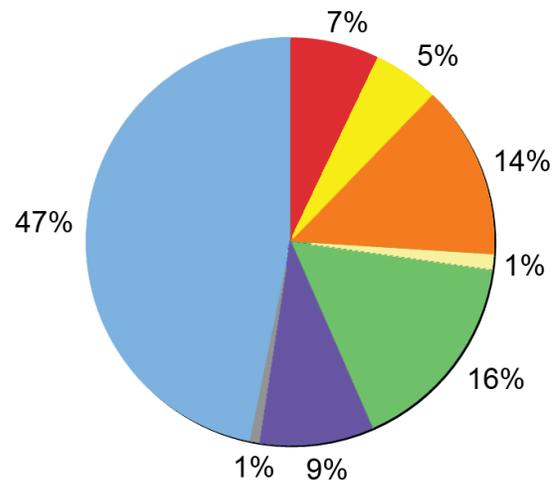
S. 1733 - 2012-2020
Total Allocation Value: \$602 Billion



H.R. 2454 - 2012-2020
Total Allocation Value: \$674 Billion



S. 1733 - 2012-2050
Total Allocation Value: \$3.3 Trillion



H.R. 2454 - 2012-2050
Total Allocation Value: \$3.2 Trillion

Legend

- | | |
|---|---|
| ■ Fossil Fuel Power Plants and Oil Refineries | ■ Clean Energy and Climate Programs |
| ■ Trade-Exposed Industries | ■ International Adaptation Forest Protection and Clean Tech |
| ■ LDC Rate Reductions | ■ Deficit Reduction |
| ■ Efficiency for Energy Consumers | ■ Consumer Rebates |

Notes on Allocation Analysis:

- **Allowance Price Data:** is averaged from the June 2009 EPA analysis of H.R. 2454. Allowance prices are projected to start at around \$11 in 2012, rising to \$16 in 2020, and \$70 in 2050 (2005 dollars). EPA analysis of S. 1733 suggests that Senate bill allowance prices will be approximately equal to those of the House-passed bill due to changes that both increase and decrease projected allowance prices, but for the most part negate each other.⁷
- **Market Stability Reserve:** Each year 1-3% of allowances are placed into a “reserve” rather than being allocated. The allowances placed into the reserve are released only if the allowance price spikes above the price ceiling or volatility buffer. If the reserve trigger price is not reached, allowances in this reserve will not be released, in effect tightening the cap. If the trigger price is reached, avoided deforestation offsets are used to refill the reserve. Average allowance prices modeled by the EPA are not projected to trigger the reserve, but if the reserve were to be triggered, it will not result in borrowing of allowances from the future, and the proceeds of the reserve would be used to further reduce emissions via offsets purchased in addition to those required by the cap.
- **Allocation Value Including Release of Future Allowances:** The two graphs showing total allowance value over time include the value of allowances released from future years, as specified in section 771 (a)(9)(B) of S.1733, and sections 782(g) and 782(p) of HR 2454. The release of future allowances will not impact emissions reductions because the allowances released early cannot be used for compliance immediately upon release. This analysis assumes that all allowances are sold at market price upon release, regardless of vintage year, even though these allowances may only be used for compliance in future years. Releasing valuable future allowances ahead of time helps provide extra resources for programs associated with the allocation priorities of later years, namely consumer rebates, clean energy technology, and adaptation. In S. 1733 some allowances from 2026-2029 are released in the years 2022-2025 per section 771 (a)(9)(B), and in H.R. 2454 some allowances from 2027-2047 are released in the years 2014-2026, per sections 782(g) and 782(p).

*This analysis was completed by the 1Sky policy team: Jason Kowalski, Ben Wessel and Nick Santos.
For more information, contact 1Sky Policy Coordinator, Jason Kowalski: jason@1sky.org or 301.270.4550 ext. 233*

***This document will be updated regularly, and available online at
www.1sky.org/s1733***

⁷ According to EPA analysis of S. 1733 released on October 23 2009, strengthening the 2020 cap targets is projected to increase the allowance price by a mere 1%, eliminating methane from coverage via performance standards reduces the allowance price by 2%, and the Senate bill's slightly larger market stability reserve increases the allowance price by 1.5%. On net, authors of the EPA analysis do not conclude that there is any significant change in allowance price between the House and Senate bills.