Allowance Allocations to States: Comparison between Waxman-Markey (HR.2454) and Kerry-Boxer (S.1733) Bills

By Gabe Pacyniak and Kate Zyla
Georgetown Climate Center

GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Bills Reviewed

- S.1733 (Kerry-Boxer), as reported out of Senate Energy and Public Works Committee on Nov. 5, 2009
- HR.2454 (Waxman-Markey), as passed by the House of Representatives on June 26, 2009.

Overview of Cap-and-Trade Bills

- HR.2454 and S.1733 limit total greenhouse gas (GHG) emissions across several sectors of the economy. They both require regulated entities that emit such gases to hold allowances (permits). Each allowance permits the holder to emit one metric ton of GHGs. Allowances have value and can be sold or traded.
- Both bills distribute some allowances for free and auction others.
  - The majority are distributed for free to state and federal agencies and other entities with conditions on their use; a smaller, declining portion of allowances is distributed without restrictions to emitters and energy-intensive businesses.
  - The amount of allowances distributed to various purposes changes over time as the cap is reduced and as distribution formulas change.
- Both bills provide allowances to states directly for several purposes, such as investments in energy efficiency and adaptation to climate change impacts. In some cases, provision of allowances is contingent on state action.
- Both bills also provide allowances for other purposes, such as to benefit energy consumers and low- and moderate-income residents, that are not provided directly to states but will benefit state residents.
  - These purposes are not treated in this analysis.

Comparison of Allocation Structures and Levels

- Kerry-Boxer's allocation structure is very similar to Waxman-Markey.
  - Provides allocations for many of the same purposes.
- Although percentages of allowances in text are similar, actual number of allowances is generally less than in Waxman-Markey.
  - Different rules in the Senate require legislation to be budget-neutral for the life of legislation.
  - Accordingly, Kerry-Boxer reserves a much higher number of allowances each year to pay for the administrative costs of the legislation.
    - Referred to as the "Initial Reservation."
  - For some purposes, including some allocations to states, Kerry-Boxer restores some of the difference (in comparison to Waxman-Markey) by allocating an additional portion of allowances for that purpose in the initial reservation.
- Kerry-Boxer includes a tighter cap on emissions than Waxman-Markey.
  - Slightly fewer total allowances are available in years 2016-2030.
  - The smaller supply during these years would be expected to cause a higher market value for each allowance.

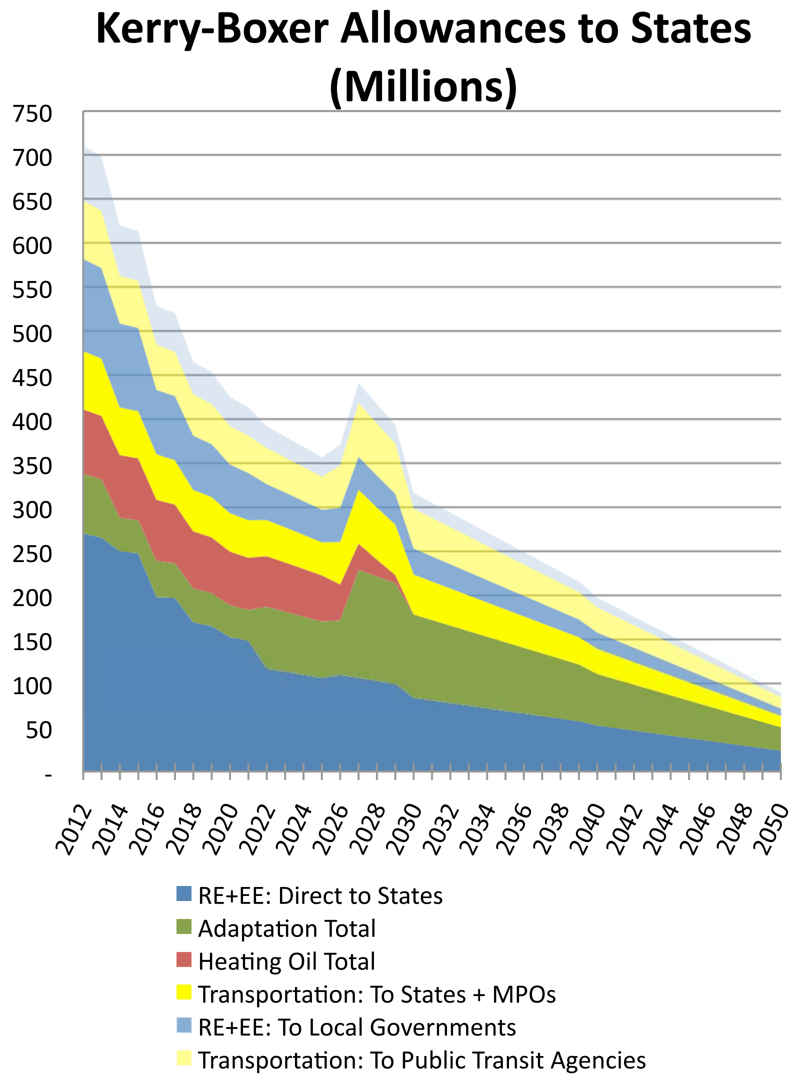
Allocation to States: Waxman-Markey

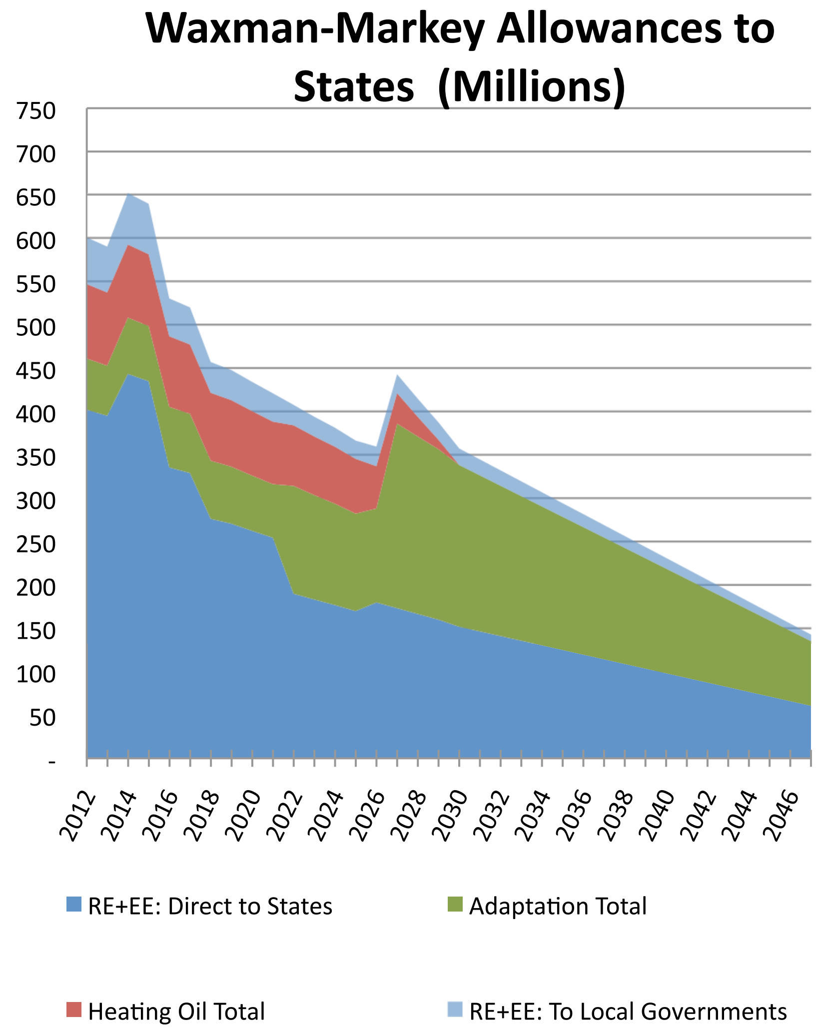
- Waxman-Markey includes both automatic allocations to states and allocations conditioned on state action.
- Automatic, unconditioned allocations:
  - **State Energy and Environment Development (SEED) Fund:** Funds energy efficiency programs and investments in renewable energy technologies (Sec. 132).
  - **Heating Oil and Propane:** To be used solely for the benefit of heating oil and propane consumers. At least one half of proceeds are to be used for cost-effective energy efficiency programs; remaining revenues may only be used for energy efficiency or direct financial assistance to customers (Sec. 785).
- Conditioned allocations:
  - **Energy-efficient building codes:** Allocation to states that adopt, implement and enforce high efficiency building codes (Sec. 201).
  - **Energy efficient building retrofits:** Allocation to states and local governments that adopt standards for energy efficient building retrofits (Sec. 132).
  - **Domestic adaptation:** Allocation to states to be used for programs that build resilience against anticipated climate change impacts; must develop adaptation plans and report on progress (Sec. 453).
  - **Wildlife and natural resources adaptation:** Allocation to state agencies to be used for programs that protect wildlife and natural resources from climate change impacts; must develop adaptation plans and report on progress (Sec. 480).

Allocations to States: Key Differences

- **Kerry-Boxer includes allocations for many of the same purposes that were previously provided to states:**
  - Energy Efficiency and Renewable Energy Investments, Adaptation Programs, and for the benefit of Heating Fuel customers.
- **In general, however, Kerry-Boxer provides fewer allowances directly to states for these purposes,**
  - Largely because of the higher set-aside for administrative costs.
  - For Energy Efficiency and Renewable Energy purposes, Kerry-Boxer provides a portion of allowances directly to non-state entities, such as local governments and renewable energy producers, which Waxman-Markey did not do.
- **Kerry-Boxer provides a new allocation for transportation efficiency, not included in Waxman-Markey.**
- Kerry-Boxer eliminates the SEED accounts that would be created by Waxman-Markey to receive allowances provided to states.
- Kerry-Boxer specifies that some programs are to be funded by an allocation of allowances, and others by an allocation of revenue from the federal auction of allowances. Waxman-Markey does not provide auction revenue (as opposed to allowances) to non-government entities.

Allocations to States Compared





Note: light blue and yellow portions in K-B are not given to states, but are given to other entities for similar purposes.

GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Energy Efficiency and Renewable Energy: Kerry-Boxer

State and local investment in energy efficiency and renewable energy (Div B. Sec. 202):

- Receives both:
  - 1) a percentage of allocated allowances, beginning at 10.35% of post-reservation allowances in 2012, declining through 2026 to 4.05%, and remaining constant at 4.05% from 2026-2050;
  - 2) an annual initial reservation of 0.5% of total allowances.
- Distribution:
  - 1-3% for Indian Tribes.
  - 60% of remaining allowances to states. Formula: 30% divided equally among states, 30% based on population, 30% based on energy consumption, and 10% based on an energy-efficiency formula developed by the EPA. **Energy-efficiency element is new, not in Waxman-Markey.**
  - 25% directly to local governments. **Waxman-Markey's allowances for local governments (12.5%) are passed through states.**
  - 15% will be provided directly to renewable energy generating companies. **Not included in Waxman-Markey.**
- Permitted Uses (of 60% provided to states):
  - States must use at least 40% for designated energy efficiency purposes, including implementation and enforcement of building codes and building retrofits. Of this 40%, at least 10% must go to thermal efficiency programs, at least 5% to the building retrofit program , at least 35% to benefit low-income individuals, and at least 20% to benefit government-subsidized housing through green investments and building retrofits.
    - Waxman-Markey only requires states to use 1% of SEED funding for programs benefitting low-income communities, and does not require states to spend a percentage of their funds to benefit government subsidized housing.
  - States may also use these allowances for renewable energy programs, transmission infrastructure programs, end-use consumer programs, and smart grid programs.

GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Energy Efficiency and Renewable Energy: Kerry-Boxer (cont.)

Implement and enforce energy-efficient building codes (Div. B. Sec. 203):

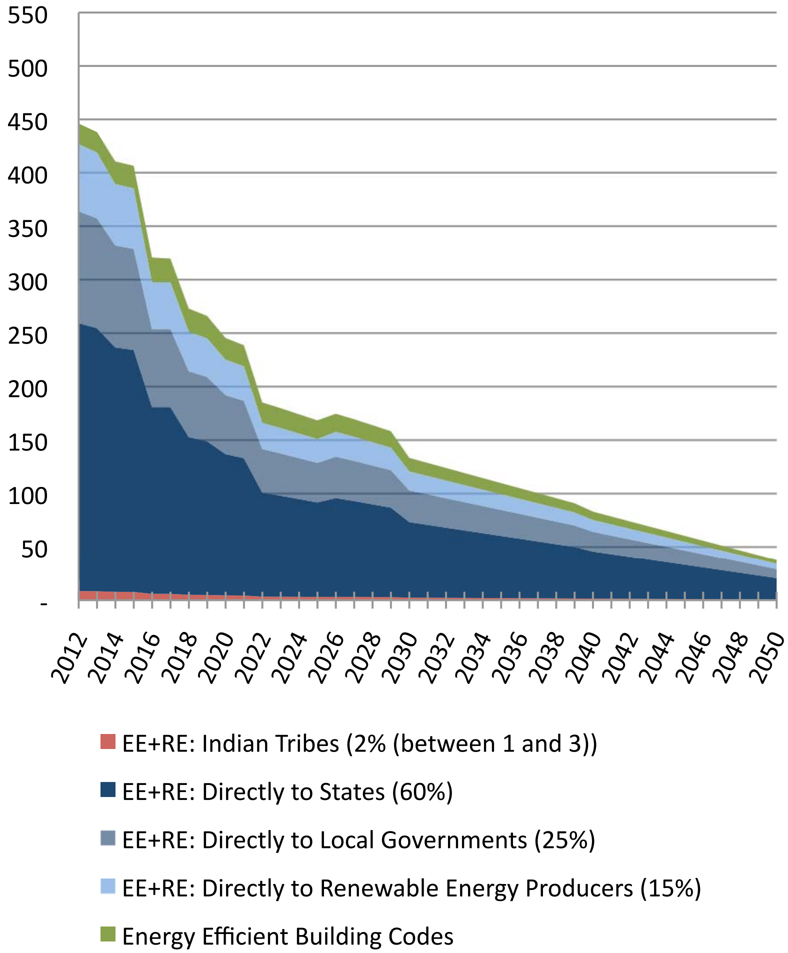
- Receives 0.5% of post-reservation allowances annually from 2012 to 2050.
- Distribution: same as Energy Efficiency and Renewable Energy allocation to states.
- Permitted Uses: Implementing energy efficient building codes, pursuant to Div. A. Sec. 163.
- Unlike Waxman-Markey, Kerry-Boxer does not expressly make the receipt of funds for the purpose of implementing energy efficient building codes conditional on state adoption or enforcement of building codes meeting national standards.

Unlike Waxman-Markey, no separate allocation for energy-efficient building retrofits.

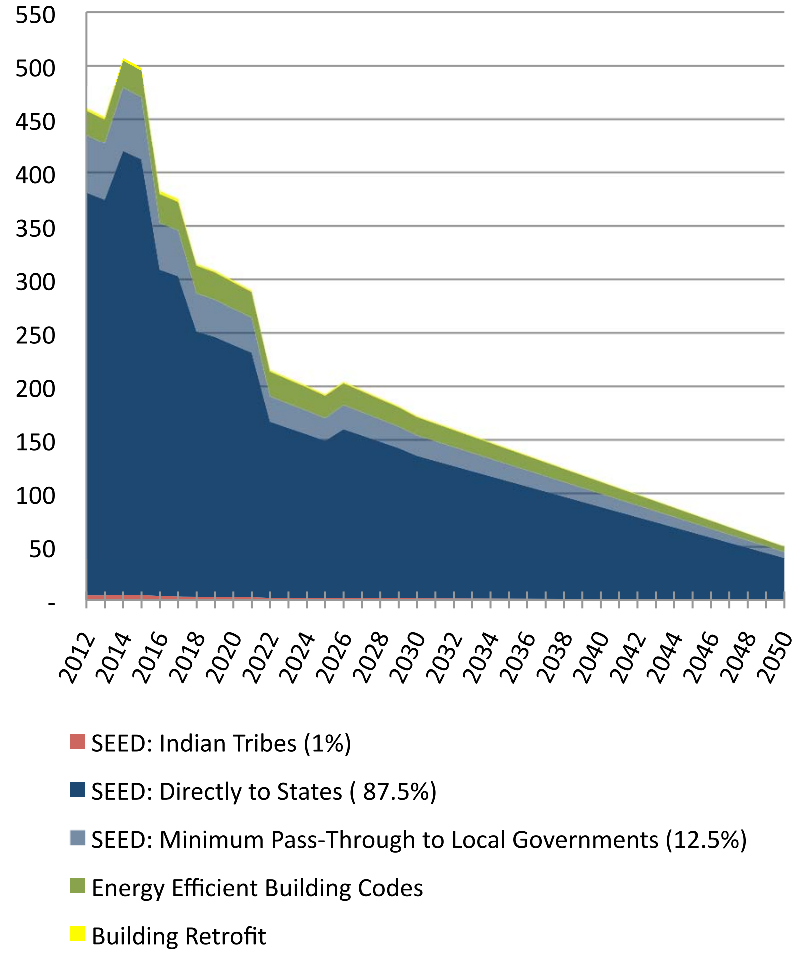
- At least 5% of allocation to states under Energy Efficiency and Renewable Energy allocation must be used for this purpose, however.

Renewables and Efficiency Allocations Compared

Kerry-Boxer RE+EE Allowances (Millions)



Waxman-Markey RE+EE Allowances (Millions)



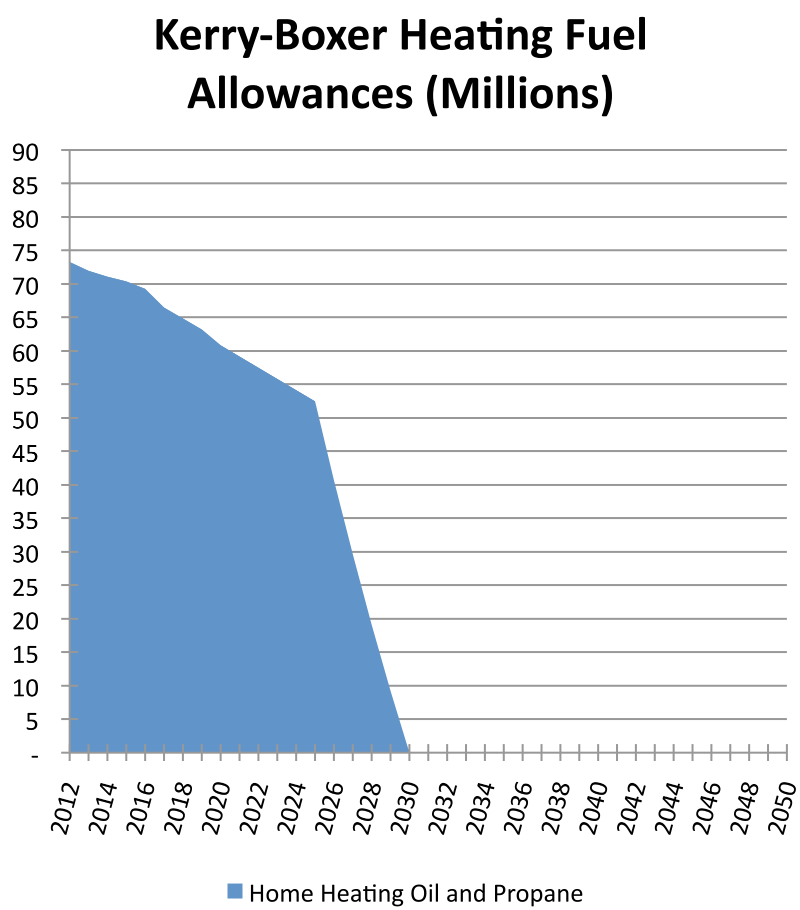
Kerry-Boxer provides fewer allowances directly to states, does not pass allowances given to local governments through states, and may provide a higher percentage to Indian Tribes.

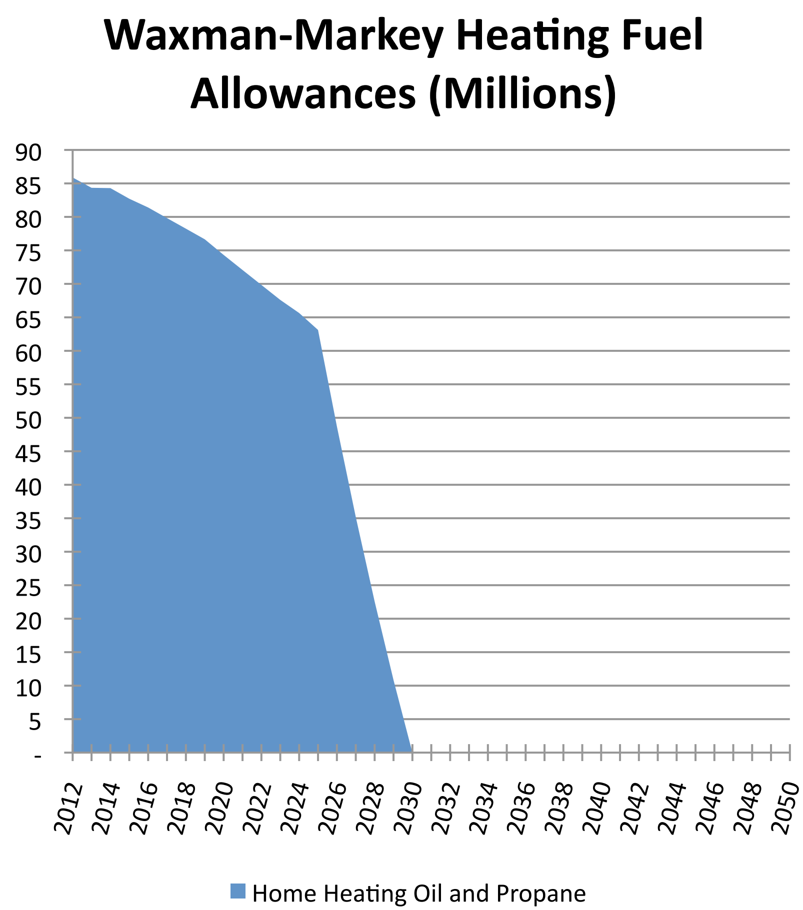
GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Heating Oil and Propane: Kerry-Boxer

- **Heating Oil and Propane (Div. B. Sec. 774):** Allocation to states to be used solely for the benefit of heating oil and propane consumers.
  - Receives declining percentage of post-reservation allowances, 2012-2029.
    - Same percentages as in Waxman-Markey, but lower overall quantity of allowances because of higher initial reservation.
  - Distribution: proportionally based on carbon content of propane and heating oil sold in the state.
  - Permitted Uses: ½ to be used for cost-effective energy efficiency programs; remaining revenues may only be used for energy efficiency or direct financial assistance to customers.
- **Nearly identical in purpose, distribution to Waxman-Markey.**

Heating Oil and Propane Allocations Compared





GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Adaptation: Kerry-Boxer

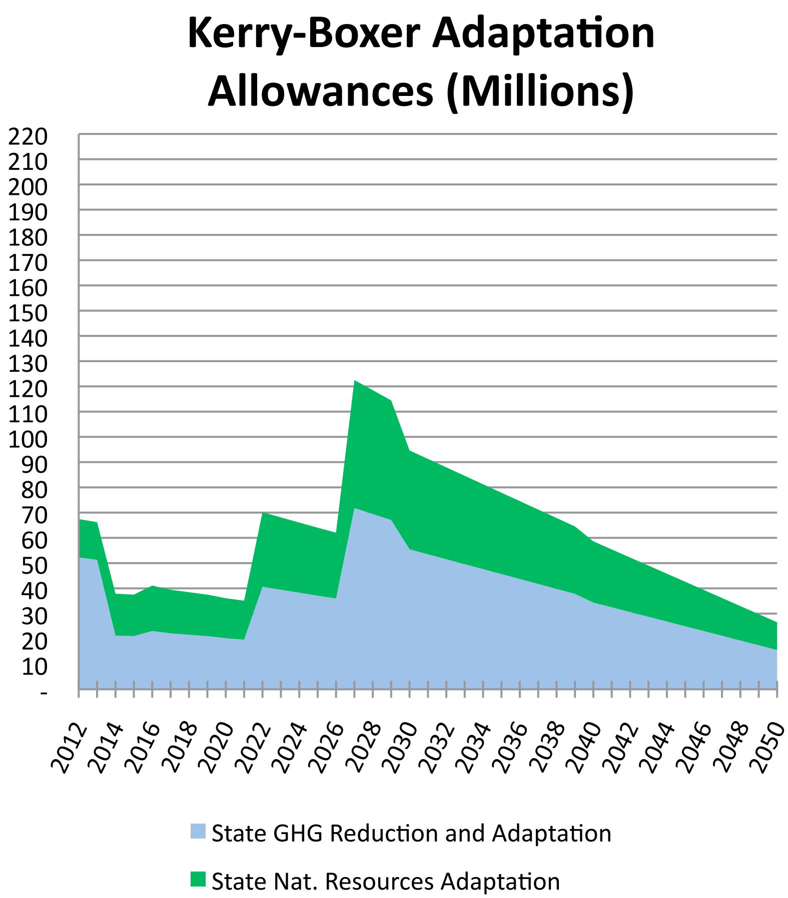
Programs for GHG reduction and climate change adaptation (Div. B Sec. 210):

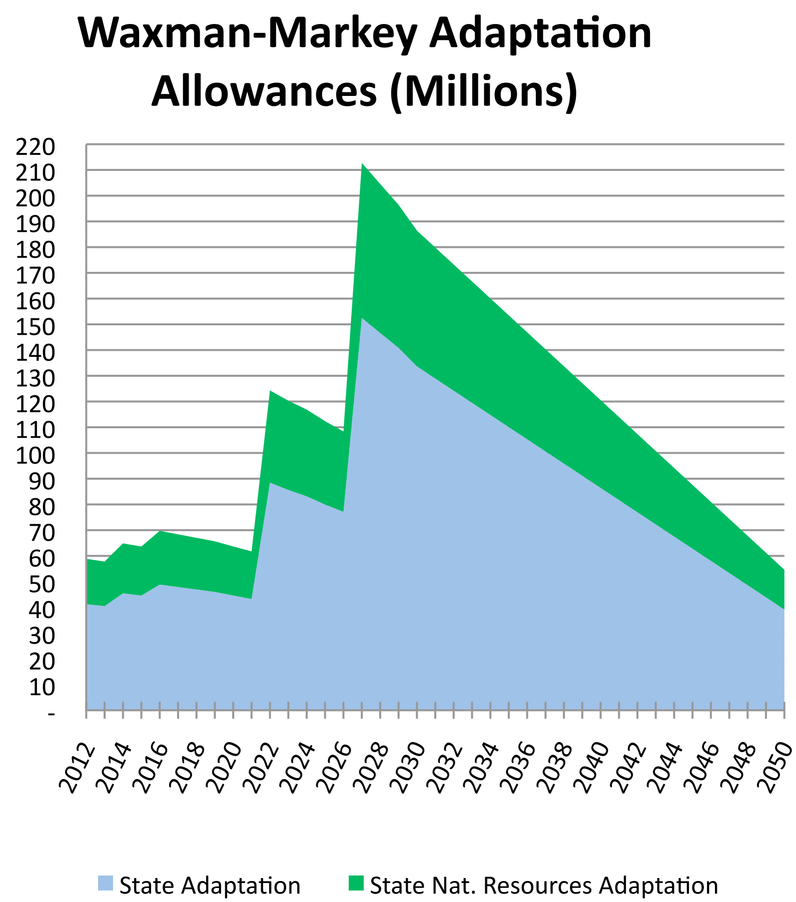
- Receives varying percentage of post-reservation allowances, 2012-2050.
- Distribution:
  - 10% for coastal state protection according to formula (25% shoreline miles, 25% population, 50% equally).
  - 10% for state wildlife programs.
  - At least 1% for Indian tribes.
  - Remaining allowances distributed among states based on population, as modified by a factor from 0.8 to 1.2 derived from state per capita income. **Same formula as Waxman-Markey.**
  - **Waxman-Markey does not include set-asides for coastal state protection, state wildlife programs.**
- Permitted Uses: Allowances provided to states must be used exclusively to reduce emissions or "build resilience" to climate change impacts.
  - May only be used for designated categories of programs, including water system mitigation and adaptation, flood control and prevention, to reduce emissions through recycling , to address risk of wildfires, and others.
  - Not less than 12.5% must be distributed to local governments.
- Contingent on the approval of a state climate change response plan.

Programs for natural resource adaptation (Div. B. 216):

- Receives increasing percentage of post-reservation allowances, 2012-2050.
- Distribution:
  - 84% will be provided to state wildlife agencies, distributed according to the Pittman-Robertson Wildlife Restoration Act apportionment formula.
  - 16% will be provided to state coastal agencies under the Coastal Management Act apportionment formula.
  - Same distribution as Waxman-Markey.
- Contingent upon approval of state plan, and may only be used for activities consistent with state plans. States are eligible to receive funding under this section for up to 3 years after enactment without an approved plan.

Adaptation Allocations Compared





Note: Kerry-Boxer includes more restrictions on permitted uses for State GHG Reduction and Adaptation, as well as a 12.5% local government set aside.

GEORGETOWN CLIMATE CENTER
Georgetown State-Federal Climate Resource Center

Transportation Efficiency: Kerry-Boxer

- **Transportation-related emissions reduction planning and implementation (Div. B. Sec. 215).**
  - Receiving auction revenue (not allowances) from a varying percentage of post-reservation allowances 2012-2050, as well as an annual reservation of 1%.
  - Distribution:
    - 50% to states and MPOs
    - 50% to public transit agencies.
  - Permitted Uses: Planning and implementation of transportation efficiency projects to reduce GHG emissions.
  - Contingent on approval of plans to achieve transportation related emissions targets.
- **No Waxman-Markey Transportation Efficiency Allocation.**