# Low Carbon Economy Act Bingaman-Specter

Scope/Point of Regulation	Economy-wide; hybrid point of regulation Market-based & flexible
Target	Starting in 2012 – 2006 levels by 2020 1990 levels by 2030 ≥60% below current levels by 2050 (contingent on science, technology development, and international effort)
Technology Accelerator Payment Mechanism	Set at \$12/ton of CO <sub>2</sub> e, rising 5% above inflation each year
Allocation of Allowances	Allocation approach designed to spur technology innovation while protecting U.S. competitiveness and consumers
Carbon Capture and Storage	Massive push to develop carbon capture and storage Bonus allowances equivalent to \$35 billion by 2020 Incentives to support the development of up to 150 GW of advanced coal with carbon capture and storage by 2030
Technology/Adaptation/ Low Income Assistance	Up to \$25 billion per year RD&D program and adaptation assistance; up to \$6 billion per year assistance to low- income households funded by allowance auction revenues
International	Incentives for technology transfer and trade protection if that fails. Five-year review to assess international cooperation and actuate countervailing measures as necessary.

### **Greenhouse Gas Emissions Target**



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## Hybrid Economy-Wide Cap with Technology Accelerator

- Regulated entities:
  - petroleum refineries
  - natural gas processing plants and LNG facilities
  - importers of liquid fossil fuels and non-CO<sub>2</sub> GHGs
  - coal-consuming facilities
- Regulated entities submit allowances for CO<sub>2</sub> content of fuels produced or processed or GHG emissions
- Technology accelerator payment (TAP) option provides extra funding for technology development and limits cost of allowances: \$12/ton in 2012 rising 5% above the rate of inflation annually



#### Allowance Prices and TAP Prices



### Allowance Allocation in 2012



#### Allowance Allocation Protects U.S. Jobs and Competitiveness

- Pool of allowances for new entrants that employ clean and efficient technology
- Allowances allocated to energy-intensive industries based on workforce in the United States
- Credits and bonus allowances to encourage carbon capture and storage

### **Auction Revenue**

#### Supports Technology, Adaptation, and Low Income Assistance

- Up to \$25 billion a year to support technology development and adaptation assistance. Significant funding for assistance to low-income households as well.
- Energy Technology Deployment Fund
  - Zero or low-carbon energy technology
  - Advanced coal and cellulosic biomass deployment
  - Advanced technology vehicles
- Climate Adaptation Fund
  - Provides adaptation assistance to coastal and high-latitude regions as well as other needed areas of the United States
  - Protects wildlife conservation and natural resources that are impacted by climate change
- Energy Assistance Fund
  - Provides assistance to low income households

#### "Bonus Allowances" for Carbon Capture and Storage

- Facilities built or retrofitted by 2030 receive bonus allowances for each ton of CO<sub>2</sub> sequestered during the first 10 years of operation.
- \$35 billion (cumulative) by 2020 for carbon capture and storage.
- Set-aside can support the development of up to 150 GW of CCS through 2030

#### **Credits for Agricultural Sequestration**

- 5% of total allowances set aside exclusively for agricultural sequestration projects
- Allowance set-aside equal to over \$1 billion in 2012, rising to \$2.5 billion by 2020 and nearly \$5 billion by 2030
- Total (cumulative) value of allowance set-aside from 2012 through 2030 equal to \$54 billion

### **Strong International Provisions**

#### Carrots –

- 20% of the Technology Fund supports dual goals of export promotion and GHG reduction
- International cost-sharing for demonstration projects and joint research and development initiatives
- Sticks -
  - Executive and Congressional review of developing country action every five years
  - Imported products from countries required to purchase allowances from a separate pool if the review finds trade partners' actions to be inadequate