# Bingaman-Specter "Low Carbon Economy Act" of 2007

The "Low Carbon Economy Act" sets forth a strong and credible approach to reduce U.S. greenhouse gas (GHG) emissions while protecting the U.S. economy and engaging key developing countries. The Act reflects revisions to the Bingaman-Specter Discussion Draft, which was the basis for hearings, analysis, and extensive input from Congressional staff and interested stakeholders.

The Act creates a cap-and-trade program for U.S. GHG emissions that is modeled on the successful Acid Rain Program. By setting an annual target and allowing firms to buy, sell, and trade credits to achieve the target, the program is designed to elicit the most cost-effective reductions across the economy. The target is set to avoid harm to the economy and promote a gradual but decisive transition to new, lower-carbon technologies.

The environmental targets of the Act are: reducing U.S. GHG emissions to 2006 levels by 2020 and 1990 levels by 2030. To limit economic uncertainty and price volatility, the government would allow firms to make a payment at a fixed price in lieu of submitting allowances. This "Technology Accelerator Payment" (TAP) price starts at $12 per metric ton of $CO_2$-equivalent in the first year of the program and rises steadily each year thereafter at 5% above the rate of inflation. If technology improves rapidly and if additional policies such as fuel efficiency standards and renewable portfolio standards are adopted, the TAP option will never be engaged. Conversely, if technology improves less rapidly than expected and program costs exceed predictions, companies could make a payment into the "Energy Technology Deployment Fund" at the TAP price, to cover a portion or all of their allowance submission requirement.

Under the Act, carbon dioxide ($CO_2$) emissions from petroleum and natural gas are regulated "upstream"—that is, at or close to the point of fuel production. For these fuels, regulated entities are required to submit tradable allowances equal to the carbon content of fuels produced or processed at their facilities. GHG emissions from coal are regulated "downstream" at the point of fuel consumption. Regulated entities that must submit allowances include: petroleum refineries, natural gas processing facilities, fossil fuel importers, large coal-consuming facilities, and producers/importers of non-$CO_2$ GHGs.

The proposal sets out a detailed methodology for distributing tradable emission allowances. At the beginning of the program, a majority of allowances are given out for free to the private sector. This amount is gradually reduced each year after the first five years of the program. In addition, 8% of allowances will be set aside annually to create incentives for carbon capture and storage to jump-start these critical technologies; 24% of total allowances will be auctioned by the government to generate much-needed revenue for the research, development, and deployment of low- and no-carbon technologies, to provide for climate change adaptation measures, and to provide assistance to low-income households; 5% of allowances are reserved to promote agricultural sequestration; and 1% of the allowances will reward companies that have undertaken "early actions" to reduce emissions before program implementation. Another 9% of the allowances are to be distributed directly to States which can use associated revenues at their discretion to address regional impacts, promote technology or energy efficiency, and enhance energy security.

To effectively engage developing countries, the Act would fund joint research and development partnerships and technology transfer programs similar to the Asia Pacific Partnership. The bill also calls for a Five-Year Review Process that requires a reassessment of domestic action in light of efforts by our major trade partners (and relevant scientific and technological developments). If there is sufficient international progress in reducing global greenhouse gas emissions, the President could recommend changes in the U.S. program designed to achieve further reductions that are at least 60% below current levels by 2050. If other countries are deemed to be making inadequate efforts, starting in 2020 the President could require importers from such countries to submit special emission allowances (from a separate reserve pool) to cover the carbon content of certain products.

# Key Points of the "Low Carbon Economy Act" of 2007

**Strategic Greenhouse Gas Emissions Reduction Targets**

- The bill calls for reducing U.S. emissions to 2006 levels by 2020 and 1990 levels by 2030

**Hybrid Economy-wide Cap-and-Trade with Cost Certainty**

- Regulated entities include: petroleum refineries, natural gas processing plants and LNG facilities, importers of liquid fossil fuels and non-$CO_2$ GHGs, and large coal-consuming facilities
- Technology Accelerator Payment (TAP) mechanism generates additional funds to hasten the pace of technological development if compliance costs exceed expectations while limiting allowance costs to a known level that starts at $12/ton of $CO_2$-equivalent in 2012 and rises 5% per year above the rate inflation thereafter

**Allowance Allocation Encourages Technology Investment and Protects U.S. Consumers and Jobs**

- Allowances allocated to energy-intensive industries based on workforce employed in the United States
- Pool of allowances for new entrants that adopt clean and efficient technology
- Initially 24% of allowances are auctioned; this percentage increases to 53% by 2030, and thereafter increases 2% per year

**Major Incentives for Carbon Capture and Storage**

- Facilities that capture and store carbon automatically receive a credit for every ton of $CO_2$ sequestered
- Facilities built or retrofitted by 2030 receive bonus allowances for each ton of $CO_2$ sequestered during first 10 years of operation
- At $35 billion by 2020, the value of bonus allowance set-aside is adequate to support up to 150 GW of new capacity with carbon capture and storage through 2030

**Technology, Adaptation, and Low Income Assistance**

- Up to $25 billion a year to support technology development and adaptation
- 20% of technology fund supports dual goals of export promotion and GHG reduction in key developing countries
- Additional auction revenues for assistance to-low income households

**International Linkage**

- Review of developing country action by Congress and the President every five years
- Specific measures are triggered if the review finds trade partners' actions to be inadequate