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What's Inside the Cap-and-Trade Bill?

By Richard G. Lubinski



The U.S. House of Representatives has passed *H.R. 2454, American Clean Energy and Security Act of 2009*, also known as the cap-and-trade bill. Now making its way through the Senate, the legislation covers more than 1,000 pages. This review can only hit the highlights of the bill, and only as it currently stands.

Under the legislation, EPA would establish two cap-and-trade programs, one covering most emissions of greenhouse gases (GHGs) and one for hydrofluorocarbons (HFCs). Companies regulated by the legislation would receive allowances for permitted emissions. Each allowance would entitle companies to emit the equivalent of 1 metric ton of carbon dioxide equivalent (mtCO_{2e}).



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According to an analysis by the Congressional Budget Office (CBO) on June 5, 2009, the legislation would:

- Cap CO₂ levels in 2012 at the 2005 level.
- Reduce CO₂ levels by 17 percent by 2030, and by 83 percent by 2050.
- Cap certain greenhouse gases (GHGs) from power plants and other industrial facilities from 2012 to 2050.
- Provide energy rebates for low-income families, offsetting the impact of higher energy costs due to cap-and-trade programs.
- Require electric power companies to purchase a percentage of their generation from renewable energy sources.
- Create a new federal agency called the Carbon Storage Research Corporation (CSRC) for research and development.
- Create a new federal agency called the Clean Energy Deployment Administration (CEDA) to provide loans, loan guarantees and letters of credit for clean energy projects.

The CBO and the Joint Committee on Taxation (JCT) estimate that over 2010 to 2019 the legislation will increase federal revenue by \$846 billion, increase direct federal spending by \$821 billion, and reduce budget deficits (or increase future surpluses) by \$24 billion.

According to the CBO, roughly 7,400 facilities would be affected by the cap-and-trade provisions beginning in 2012. Among the details:

- Beginning in 2012 all electricity generators would be regulated.
- Beginning in 2012 any facility that produces or uses imported petroleum- or coal-based liquid, petroleum coke or natural gas will be required to report on allowances for GHG emissions (if more than 25,000 mtCO_{2e} per year).
- Regulated entities would be allocated 4,627 million mtCO_{2e} allowances.
- EPA will be required to create a strategic reserve of 2.7 billion allowances. These could be auctioned if the market price of an allowance rose too high.
- A portion of an entity's compliance obligation could be met by purchasing domestic or

- Auctions would occur four times per year.

Electricity utilities will be required to purchase renewable energy based on the new Renewable Energy Standard (RES). The goal is 6 percent in 2012, increasing to 20 percent by 2020. This can be done by producing renewable energy, buying renewable energy or purchasing Renewable Energy Credits (RECs). If a utility cannot meet its RES requirement, then it can pay the state \$25 per MWH (adjusted for inflation in future years).

The Carbon Storage Research Corporation (CSRC) will assess the electric distribution companies (EDCs) about \$1 billion per year to support R&D related to carbon capture and sequestration. Although the formation of the CSRC is voluntary, once formed the assessment would become compulsory.

Firms and individuals would be eligible to trade GHG and HFC allowances for cash. It is estimated that the value of a mtCO₂e allowance would be \$15 in 2011 and up to \$26 in 2019. Firms or individuals that exceed their emissions goals can bank an unlimited number of allowances. The gross receipts to the federal government from the auction and free allocation of allowances would be \$973 billion over 2010 to 2019. The Commodity Future Trading Commission (CFTC) would be authorized to charge fees for the transactions.

About \$25 billion of the revenue from auctions would fund \$19.3 billion for the Stratospheric Ozone and Climate Protection Fund (SOCPF), \$5.3 billion for the National Climate Change Adaption Fund (NCCAF), and \$900 million for the Climate Change Health Protection and Promotion Fund (CCHPPF).

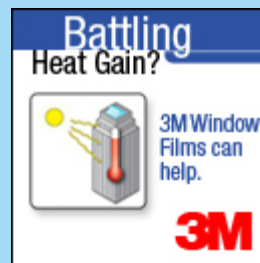
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Penalties for Noncompliance

Civil penalties would be assessed on those owners and operators who fail to meet their compliance obligations on time. The penalty would equal excess emissions times the fair market value of the emissions allowances times 2. Under certain circumstances, anyone who violates any of the rules could be fined up to \$1 million per day.

The cap-and-trade bill would compensate workers who lose their jobs as a result of the legislation, including cash, job training and subsidies for health care. A portion of the revenues from this bill would fund the Climate Change Worker Adjustment Assistance (CCWAA), which will be administered by the Department of Labor. Job loss benefits could extend to 156 weeks (3 years) of cash benefits equal to 70 percent of average weekly wage, job training, job search assistance, and 80 percent of the cost of health insurance. Individuals receiving these job loss benefits would not be eligible to receive unemployment compensation.

Energy Efficiency and Clean Energy Programs

Energy efficiency programs would be funded by an additional \$6.7 billion over 2010 to 2019, including \$3.1 billion for lighting projects, \$2.1 billion for energy efficiency in federal and nonfederal

local governments.

Clean energy programs would be funded with an additional \$2.6 billion over 2010 to 2019, including \$1.5 billion to modernize the national grid, \$870 million for clean energy research and development centers, and \$250 million for the Department of Education to support emerging careers in renewable energy, energy efficiency and climate change mitigation.

The *H.R. 2454* legislation also establishes new energy efficiency standards for lighting and appliances. These standards would apply to:

- Outdoor lighting, portable light fixtures, incandescent reflector lamps.
- Appliances including commercial hot food holding cabinets, water dispensers, portable electric spas and commercial furnaces.

If required by the Federal Trade Commission, Smart Grid capability would be included on Energy Guide labels for appliances.



The cap-and-trade bill currently stands at more than 1,000 pages.

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Richard G. Lubinski is president of Think Energy Management LLC, an energy consulting firm. He is president of the Northern Ohio Chapter of the Association of Energy Engineers and holds national professional certifications including Certified Energy Manager, Certified Energy Auditor, Certified Demand Side Management Professional, Certified Sustainable Development Professional, Certified Energy Management Systems Contractor, Certified Business Energy Professional and Certified U.S. Green Lights Survey Ally. He was named Energy Engineer of the Year 2009 (AEE Region III), Energy Manager of the Year 2006 (AEE Region III) and Energy Engineer of the Year 2008 AEE Northern Chapter.

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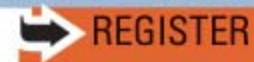


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