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EPA'S PRELIMINARY ECONOMIC ANALYSIS OF "THE AMERICAN CLEAN ENERGY AND SECURITY ACT OF 2009"

The U.S. Environmental Protection Agency has completed a preliminary analysis of the American Clean Energy and Security Act released by Chairmen Henry A. Waxman and Edward J. Markey. Like all modeling projects, it is an estimate of the likely impacts of the legislation. In some respects, the EPA model is imperfect. It does not take into account the passage of the American Recovery and Reinvestment Act and the billions of dollars that legislation will invest in renewable energy and energy efficiency. It also does not model important provisions of the Waxman-Markey draft, such as the renewable electricity standard and the energy efficiency standards. Nevertheless, it is the most up-to-date and sophisticated modeling currently available.

The preliminary EPA analysis finds: "The Waxman-Markey Discussion Draft transforms the structure of energy production and consumption, moving the U.S. to a clean energy economy." The modeling projects that the economy will grow robustly while America deploys clean energy technology, increases energy efficiency, and cuts global warming pollution.

Deploying Clean Energy Technology. The EPA analysis projects that the discussion draft would substantially accelerate the deployment of clean energy technology that will create new jobs. Under the discussion draft:

- The United States would double the amount of electricity from zero or low carbon sources by 2030, as opposed to the business-as-usual approach.
- Advanced carbon capture and storage (CCS) technology would come online by 2015 to 2020 and lead to 17 gigawatts of new and retrofitted CCS coal-fired generation by 2025, as opposed to zero CCS in the absence of legislation.
- The rate of renewable energy deployment would increase by 150% by 2030. Renewables would deploy even more quickly as a result of the renewable electricity standard.

Protecting Economic Growth. The EPA analysis finds that the economy can grow robustly while cutting pollution. Under the discussion draft:

- The nation's gross domestic product would grow robustly, from \$15 to \$16 trillion in 2015 to \$22 to \$23 trillion in 2030, while deploying clean energy technology and reducing global warming pollution.
- Consumption — an economic measure of a household's purchasing potential — would grow by 9% to 10% from 2010 to 2015, 18% to 19% by 2020, and 36% to 40% percent by 2030.

Low Costs. The EPA analysis finds that the costs of the bill are low. Under the discussion draft:

- The overall impact on the average households would be 27 to 38 cents per day (\$98 to \$140 per year), before cost-saving measures like appliance efficiency and weatherization measures are included.
- The model projects allowances prices of \$13 to \$17 in 2015 and \$17 to \$22 in 2020. Allowance prices would be over 96% higher if the discussion draft did not allow substantial use of cost-saving offsets.

Effective Energy Policy. The EPA analysis projects that the discussion draft would lead to a balanced and diverse mix of energy generation while creating markets that drive emissions reductions. Under the discussion draft:

- Coal would remain a stable source of electricity generation, even as carbon emissions are dramatically reduced and carbon capture and storage technology is deployed.
- A market for domestic offsets is created that will be worth up to \$29 billion annually through 2030.

Details of the Analysis. The analysis primarily captures the costs and effects of programs under Title III of the discussion draft. It does not model cost-saving or technology-driving measures like the Renewable Electricity Standard, the Low Carbon Fuel Standard, the Energy Efficiency Resource Standard, and a wide range of other efficiency provisions or many of the transition provisions in Title IV of the draft. It also does not capture the energy efficiency and clean technology benefits of the American Reinvestment and Recovery Act of 2009. The Energy Information Administration (EIA) estimates that ARRA alone will reduce average household energy costs by up to \$100 per year. The EPA analysis assumed that roughly half of the revenues generated by allowances are recycled to consumers, with an additional 5% of allowances being used for supplemental emissions reductions, 5% to support deployment of carbon capture and storage technology and the remainder used for deficit reduction. Two alternative scenarios were run regarding the use of allowances. One assumed that 12.5% of allowance value would be used for energy efficiency, and the other assumed that allowance value was used to provide rebates under the Insee-Doyle rebate approach for certain industries. In both scenarios, the allowance value provided to consumers was reduced accordingly.