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Lieberman, Warner Welcome EPA Finding that Climate Bill Achieves Strong Results With Manageable Costs

WASHINGTON – Senators Joseph Lieberman (ID-CT) and John Warner (R-VA) today thanked the U.S. Environmental Protection Agency for completing the analysis that they had requested of their Climate Security Act (S. 2191) last November. (The slides presenting the results of EPA's analysis are available at <u>www.epa.gov/climatechange/economics/economicanalyses.html</u>) The Senate Environment and Public Works Committee favorably reported the bill on December 5, 2007. The full Senate is expected to consider the measure this June.

"EPA's detailed analysis indicates that the US can curb global warming without sacrificing economic prosperity," Lieberman said. "We will examine the results closely for improvements that they might suggest for the bill."

Warner said, "I am satisfied that EPA's analysis demonstrates what we have long known: You can control greenhouse gas emissions in a manner that leaves the economy whole and is not burdensome on consumers."

The ADAGE (Applied Dynamic Analysis of the Global Economy) computer model used by EPA projects the economic impacts of government policies that are designed to speed advanced energy technologies to market. The Climate Security Act is such a policy. ADAGE contains detailed treatment of new technology deployment in the power sector and explicitly models the global economy.

EPA has not yet updated the ADAGE model to reflect the provisions of the energy bill enacted last year. In order to approximate the underlying impact of those provisions, however, EPA selected a "high technology reference scenario" when running the Climate Security Act through the ADAGE model. That modeling run found:

- The Climate Security Act's cut in cumulative US greenhouse-gas emissions is deeper than one found earlier by EPA to be consistent with keeping global CO₂ concentrations below 500 parts per million in 2100. [Slide 141] The finding assumes that other developed countries reduce their emissions by less than the US, and that the developing countries do not start making similar reductions until 2025. According to the Intergovernmental Panel on Climate Change, keeping the global concentration below 500 ppm greatly decreases the risk of severe global warming impacts in the US and elsewhere.
- Under the conservative assumptions described above concerning action by other nations, the Climate Security Act does not shift US greenhouse-gas emissions abroad. In EPA's words, "no international emissions leakage occurs." [Slide 5]
- Under the same conservative assumptions, the Climate Security Act causes US exports of energy-intensive products (e.g., steel, cement) to developing nations to <u>increase</u> and causes US imports of energy-intensive products from developing nations to <u>decrease</u>. [Slide 83]

- Under the Climate Security Act, US gross domestic product grows by 80% from 2010 to 2030. That is just one percentage point less than the growth in the absence of the bill. [Slide 61]
- ➤ Under the Climate Security Act, average annual per-household consumption in the US grows by 81% from 2010 to 2030. That is just two percentage points less than the growth in the absence of the bill. [Slide 65]
- EPA notes, "The economic benefits of reducing emissions were not determined for this analysis," [Slide 3] and "While the models do not represent benefits, it can be said that as the abatement of GHG emissions increases over time, so do the benefits of the abatement." [Slide 108]
- The Climate Security Act's allowance price and financial support for carbon capture and sequestration (CCS) make that technology a commercial reality in the US by 2015 – several years earlier than in the absence of the bill. [Slide 4]
- One of the effects of the accelerated CCS deployment is to drive natural gas out of the electricity sector, to the benefit of manufacturers who use natural gas. [Slide 57]
- Under the Climate Security Act, the price of an emission allowance is \$22 in 2015 and \$46 in 2030. [Slide 24] That is significantly lower than allowance price predictions made by models that ignore the recent energy bill, artificially limit technology deployment, and ignore technology incentives and cost-saving provisions of the bill.
- Under the Climate Security Act, increases in average US electricity prices materialize slowly and gradually. Even forty years after enactment, those prices reach a level only 18% higher than the 2005 level. [Slide 55] Over that period, the bill directs more than \$1 trillion to lowering and offsetting US consumers' actual energy costs.

The analysis also includes, at the request of critics of climate legislation, other modeled scenarios that make highly pessimistic assumptions about constraints on technology deployment, the formation of natural gas cartels, and the like. In responding to the same request last October, the Energy Information Administration concluded that an analysis would be realistic without those pessimistic assumptions.

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