



## American Power Act: A Step Forward with Daunting Prospects

*Trevor Houser analyzes the climate-change legislation of Senators Kerry and Lieberman as a step in the right direction that could help the United States meet its goals of reducing pollution and climate-changing emissions.*

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Steve Weisman: This is Steve Weisman at the Peterson Institute for International Economics with Trevor Houser, visiting fellow at the Institute, to talk about the latest developments on climate change and, in particular, the new legislation put forward by Senators Kerry and Lieberman. Thank you for joining me.

Trevor Houser: My pleasure, Steve.

Steve Weisman: The Kerry-Lieberman bill has recently been introduced in the Senate to address climate change. First, what are its prospects?

Trevor Houser: I'd say that handicapping in this town right now is pretty low. Senator [Lindsey] Graham [R-SC] had worked closely with Senators [Joseph] Lieberman [D-CT] and [John] Kerry [D-MA] in drafting the bill and so it was a tripartisan effort in its creation. Shortly before the bill was supposed to be released at the end of April, Senator Graham dropped off as a cosponsor due to a number of concerns about the calendar and the legislative priorities on the Democratic side. The bill was then introduced by Senators Kerry and Lieberman. Given the kind of composition of the Senate right now, you need a Republican on board to pass a bill and so Senators Kerry and Lieberman are in search of that Republican.

Steve Weisman: What are the main things the bill would do?

Trevor Houser: The bill has four significant titles in it. The first has a wide array of incentives for the deployment of clean energy—ranging from loan guarantees to nuclear power to funds for carbon capture and sequestration demonstration projects, to building codes, to renewable energy incentives.

Then there's the title that establishes pollution reduction targets for the US economy, 17 percent reductions below 2005 levels by 2020 and an 83 percent reduction below 2005 levels by 2050. And it sets an economywide price on carbon but regulations that are different for each sector: for the transportation sector, for the industrial sector, and for the electric power sector.

Then there's the section on consumer protection. Putting a price on carbon will raise electricity prices and energy prices, so the legislation tries to offset those price increases by rebating some of the revenue that the government collects through the auction of pollution permits to consumers.

There's also a provision on job growth and job protection that includes competitiveness provisions that help offset the impact, particularly to energy-intensive industries, and

would impose a border tariff on imports from countries that haven't taken comparable policy after 2026.

Finally, the bill instructs EPA [Environmental Protection Agency] to continue to increase fuel economy standards after 2016, which is when the current round of fuel economy standards ends, and [to] include some incentives for natural gas, for the transport sector, for vehicles to switch from oil to gas.

Steve Weisman: Let's talk first about the potential benefits of this legislation. You've done some computer runs. What impact would you see if this legislation were passed?

Trevor Houser: The authors of the bill are looking for the legislation to achieve a number of goals. They wanted to reduce CO<sub>2</sub> emissions to address climate change. They wanted to reduce US oil imports to address energy security concerns. They wanted to create jobs, and they wanted to have a minimal impact on consumers. So we assessed its effectiveness in achieving all four of those goals.

The primary change we see is in the power sector. Putting a price on carbon coupled with some of the incentives for nuclear power and CCS means a switch—

Steve Weisman: CCS?

Trevor Houser: Carbon capture and sequestration, where you take the CO<sub>2</sub> emissions from a coal-fired power plant, you'd bury them in the ground. We see a change in the US power sector from coal to either coal with CCS or nuclear power or renewable energy. Right now 84 percent of US energy is from fossil fuels. Under the bill by 2030 only 70 percent would be from fossil fuels. Nuclear power would grow from 8 percent to 14 percent. Renewable energy would grow from 8 percent to 16 percent of total energy consumption in the US.

There's a significant investment increase in the power sector as a result of the policy. Right now, we're operating coal-fired power plants in this country, 95 percent of which were built before 1980, a number of which were built before World War II. What this bill would do is incentivize the shutdown of a lot of these plants, replacing them with newer types of power generation, newer and cleaner types of power generation. So we'd see an increase, an average annual increase of \$22 billion in investments in the power sector over the next two decades.

Steve Weisman: You mentioned the cost to consumers, and the bill is attempting to make sure that there is also not another cost on jobs. What's your assessment in those areas?

Trevor Houser: Sure. On the consumer side, we see an average annual increase between \$100 and \$200 per household between 2011 and 2030 relative to what households would see without the policy. Households now spend about \$5,000 on energy each year and so the increase in percentage terms is fairly low.

Steve Weisman: That's for both fuel for cars and for heating and cooling, mainly those items?

Trevor Houser: Exactly. The bill would then try to offset that through a rebate to consumers. Now, in the early years, the legislation tries to protect consumers by providing free pollution permits

to local distribution companies, to your area utility, and the utility is instructed then to use those permits for your benefit to pass the value on to the consumer. There are a lot of questions about whether or not that will actually happen or whether the utilities will use those permits to increase profits.

Steve Weisman: I bought a washing machine recently and they offered me a discount, which they said was being supplied by the utility in my area. So that's already happening in some ways, isn't it?

Trevor Houser: There are utility incentive programs, and I think the hope is that this would provide much more of an incentive for utilities to do the things like washing machine incentives. And a lot of that actually makes economic sense for utilities. Adding new capacity to meet an increase in electricity demand is very expensive. If the utilities can go from a business model where they're paid for the actual electricity they supply, to a model where they're paid for the energy services they supply, if they can deliver you the same number of cycles of a washing machine with less electricity, they get the same amount of revenue. That's a business model that makes sense for utilities, and many of them are pursuing it.

Steve Weisman: Trevor, is this the basic model that you would expect Congress to consider eventually? Is this a good bill?

Trevor Houser: This is the type of bill you would expect to come out of the US Senate—

Steve Weisman: I don't know whether that's good.

Trevor Houser: This is the type of bill that stands a good chance of getting 60 votes, which means that there are goodies for different industries and different constituencies that are required to get to 60 votes. So there are strong incentives for nuclear power, for the nuclear industry. There are strong incentives for carbon capture and sequestration, for the coal industry. There are strong incentives for the agricultural industry.

From an economist's standpoint, there are a couple of improvements that I certainly would like to see in the bill. The allowances that are passed for free to local distribution companies. The downside of that is by preventing price increases from going to consumers, consumers have less incentive to improve efficiency. And in an economywide basis that ends up increasing the cost of the policy because some of our best opportunities to reduce emissions are in energy efficiency.

I would rather see that money returned to households in another way, primarily—given current concerns about employment—through reduction in the payroll tax. I think if we use that revenue to reduce the payroll tax instead of providing it for free to electric utilities, we would see an increase in employment and a lowering of the overall cost of the program on the economy.

Steve Weisman: And then maybe that could fit in to Social Security reform.

Trevor Houser: Right. The handicapping right now, I would say, is that this bill stands 25 percent to 30 percent chance of passing this year.

Steve Weisman: But it sounds like you think it's at least a step in the right direction.

Trevor Houser: It's certainly a step in the right direction. I mean it would do a couple of things that are critical. It would put a price on carbon, economywide, right? It would generate resources for research and development on types of technologies that we're going to need to meet this challenge long term, and it would provide protections for consumers and businesses. Now, I think that they could do all of those pieces better than they're currently doing.

Steve Weisman: Sure.

Trevor Houser: But those core elements that you need in an economywide policy are in place.

Steve Weisman: Final question, about the international negotiations under the United Nations that now follow the Copenhagen meeting at the end of last year. Does this allow the United States to meet its commitments under a possible international accord under that format?

Trevor Houser: We had our commitments in Copenhagen fall into two categories. We had commitments on how much we would reduce emissions and we had commitments on the provision of financial support to the developing countries. The Kerry-Lieberman bill would meet our commitments in the first category clearly. We would reduce emissions 17 percent by 2020 levels and we would reduce emissions 83 percent by 2050 levels.

Steve Weisman: Well, the financing issue is likely to be separate from this kind of legislation, isn't it?

Trevor Houser: There actually, in the past, has been an expectation that the bill that reduces emissions would also provide financial support and it would do so in a couple of ways. Some of those pollution permits, the revenue raised would be used to fund emissions reductions internationally. In addition, companies would have the option to either reduce emissions in the United States or if there were cheaper opportunities for them to reduce emissions in other countries, they could do that and get a credit tradable on the home market.

Steve Weisman: But that's not part of this legislation?

Trevor Houser: It is part of this. That is part of this legislation. There is less in terms of direct financing through the sale of permits and the use of that revenue for developing countries than there was, for example, in the Waxman-Markey bill that passed the House of Representatives last year. But there are still offsets, international offsets, the ability for companies to reduce emissions through projects in developing countries in addition to projects here in the United States.

Steve Weisman: Okay, Trevor. We'll watch the progress of this and you have more writing of your own to do to analyze all of these so we'll look forward to that. Thanks.

Trevor Houser: Terrific. Thanks, Steve.

