

Sean Casten reports how the recently-scuppered Climate Bill would – or would not – have encouraged the development of distributed energy in the US. It is particularly important that the DE lobby is active in shaping any new GHG policy approach to come from the House.

After Lieberman-Warner

what the failed US Climate Bill would have done for distributed energy and what the future may bring

The first serious legislative effort by the United States to control greenhouse gas (GHG) emissions has now died. After months of debate, the Senate abandoned the Lieberman-Warner bill, and the general expectation is that this particular approach got about as far as it could. As such, while there will be subsequent bills – and a much higher likelihood of passage after the 2008 elections – they will likely start from scratch rather than simply try to modify Lieberman-Warner's rougher edges.

Counter-intuitively, that makes it a good time to take a closer look at what Lieberman-Warner was trying to do. GHG policy formulation is a big, complicated process. In the early stages of such efforts, there is time to evaluate big picture details and establish the roadmap for future action. But as the policy debate progresses and key details are cemented into place, the policy debate necessarily comes to focus on the minutiae of execution.

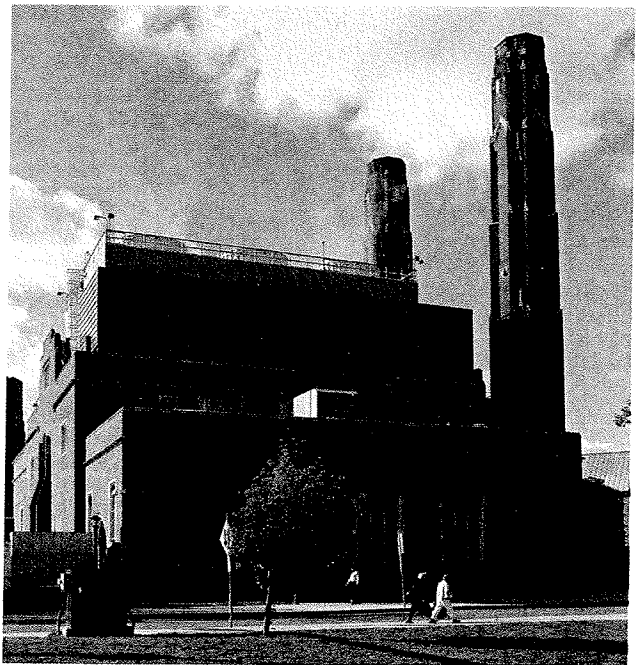
Make no mistake – Lieberman-Warner had deep, structural flaws. But so long as it was still a viable policy option, the political efforts of all who sought GHG reduction were focused on how to make it work in spite of those limitations. Now that it has died, we can focus more constructively on getting the underlying structure of the next effort right.

In order to do so, let's take a closer look at those structural details that Lieberman-Warner got wrong.

LIEBERMAN-WARNER STRUCTURE

Like all GHG cap and trade bills, Lieberman-Warner started by putting a hard cap on emissions and then

gradually ratcheting the cap down over time. In the environmental community, much of the critical evaluation of Lieberman-Warner was focused upon the pace and depth of these cuts.



Efficient on-site power, such as at Yale University, has a huge potential to cut GHG emissions.

PHOTO: MICHAEL MARSLAND / YALE UNIVERSITY

That is clearly an appropriate metric for evaluation – but Lieberman-Warner was not only about goals. Indeed, much of the legislative detail of the bill was focused on the paths to that goal, and how they would be incentivized. And as anyone who's ever been re-routed through strange airports can attest, sometimes the path chosen interferes with the goal.

The incentive to reduce GHG emissions would have existed only to the degree that the carbon cost on the fuel importer was transferred in the variable price of the fuel

Setting aside any discussion of the sufficiency of Lieberman-Warner's environmental goals, the paths it stipulated made it harder for the bill to achieve any of its environmental goals, regardless of their ambition.

The structural failings of Lieberman-Warner fall into three broad categories:

1. Point of regulation

Let's imagine that you have a mean older brother who has been throwing rocks at your head for the past 12 hours. What is the best way to put a stop to this? (a) force your brother to stop;

(b) put a tax on rocks, making it economically painful for your brother to keep refreshing his supply, or (c) subsidize your next helmet purchase.

This silly question highlights the core problem with Lieberman-Warner. In our example, it's quite clear that controlling your brother is the cheapest and most expedient solution. So now let's apply this silly example to the more serious question of GHG mitigation. Should we focus our regulatory efforts upon those who emit GHGs, upon those who sell fuel to GHG-emitters or upon those who will be affected by a warmer climate?

Just as in our silly example, there is maximum flexibility at the point of GHG release. One can envision a set of carrots and sticks to encourage good behaviours (efficiency, fuel switching, conservation, and the like) and penalize bad ones. Lieberman-Warner, however, chose to focus almost exclusively on the latter two options, placing carbon pricing at the point of fuel import, extraction and/or refining and then expending significant efforts to ameliorate the impacts of climate change (wetlands restoration, coastal flooding, etc.) and climate change policy (low-income energy support, job re-training, etc.).

As a result, the incentive for GHG-emitters to reduce their emissions under Lieberman-Warner would have existed only to the degree that the carbon cost on the fuel importer was perfectly transferred through in the variable price of the fuel. As is clear to anyone who has tried to figure out why airlines

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cut back on peanuts when fuel costs go up, linkages are often far from precise – but it is the framework upon which Lieberman-Warner's ability to actually reduce GHG emissions was built.

This created a massive inefficiency in Lieberman-Warner – not to mention no clear incentive to those who might otherwise invest in GHG-reducing technologies such as CHP. Oddly, it received very little attention during the Lieberman-Warner debate, and is worth watching closely in future iterations of US GHG policy.

2. Allocations versus auctions

There is an on-going debate within GHG policy circles between those who favour auctioning emission credits and those in favour of allocation. The pro-auction camp argues that unless existing polluters pay for their pollution, they will not have any fiscal incentive to change their behaviour (and worse, they will find themselves able to sell at a discount relative to new sources that do have to pay for their pollution). By auctioning off all pollution permits as soon as the GHG policy is implemented, this economic inefficiency is avoided and the market can instantly allocate capital in a manner that is fully cognizant of the CO₂ price.

On the other side, the pro-allocation camp argues that the 100% auction approach is politically impossible, since it immediately imposes costs on powerful vested interests. This argument is typically framed as a 'don't let the perfect be the enemy of the good' situation. Use allocations to ensure that

the vested interests don't oppose a GHG bill, but compel new sources to pay.

Lieberman-Warner sought to split the difference, and took an approach that is broadly similar to that of the Kyoto Protocol: namely, starting with a system that is heavily biased in favour of free allocations, and then gradually ratcheting up the fraction of the permits that are paid for through an auction.

The process very quickly made the bill as much about non-GHG social programmes as it was about GHG reduction

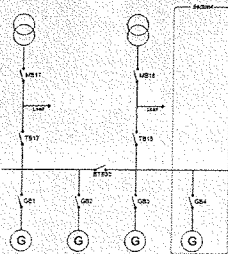
Two particular points bear noting with respect to the way Lieberman-Warner was framed – and how such framing will likely be built into future bills.

Lieberman-Warner would have 'capped' out at 69.5% auctions in 2031. Thus, in all cases the bill would have given away more than 30% of the pollution permits. It is of course possible that this was a political requirement, but it clearly dulls the effectiveness of the bill.

Like most GHG bills, Lieberman-Warner implicitly assumes that the only alternative to an allocation is an auction. Bilateral contracts, spots, strips, futures, puts and any other feature of a viable long-term market for GHG emissions were



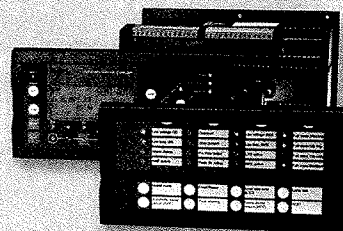
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not contemplated (although, to be fair, they weren't forbidden either.) As a practical matter, this means that the immediate result of Lieberman-Warner would have been to create a small, immature and probably illiquid market for GHG credits, thus delaying the advent of the financial vehicles necessary to have a meaningful effect on capital allocation in the energy sector.

3. Distribution of proceeds

Having imposed costs on carbon sources, Lieberman-Warner then brought all of these proceeds back into Washington for distribution. From a political perspective, this immediately shifted the conversation from 'how will we reduce GHG emissions?' to 'how much of the cash will get back to my district?' Indeed, as debate proceeded and amendments were added, one could see a rather transparent political effort to get to the 60 votes necessary to break a filibuster by steadily buying off various districts.

Not all of these distributions were necessarily bad. Funding went to wildlife conservation, tribal groups, wetlands protection and any number of other socially worthy enterprises. However, the process very quickly made the bill as much about non-GHG social programmes as it was about GHG reduction, complicating and confusing the bill. Indeed, Jeff Bingaman (D-NM) recently noted that one of the key lessons for subsequent GHG bills is that:

'The bill should be focused on cutting greenhouse gases and not be weighed down with proposals aimed at solving

other goals. Climate change legislation shouldn't be overly complex without carve-outs for different states or interests.'¹¹

However, this temptation is probably politically inevitable, so long as the proceeds from an economy-wide cap and trade bill (estimated to be some \$6 trillion under Lieberman-Warner) come back inside the beltway for distribution.

WHAT IT WOULD HAVE DONE FOR DE

Lieberman-Warner is of course not about distributed energy per se. But distributed energy (DE) provides a rather interesting lens through which to view Lieberman-Warner, for the simple reason that efficient on-site power has a massive potential to lower GHG emissions cost-effectively. As those of us in the industry are well aware, the world is awash with opportunities for high-return CHP and opportunity-fuelled projects. Yes, there are regulatory and financial obstacles to installing this potential, but given their economic and environmental benefit, they ought to be a great beneficiary of any GHG policy – especially one with a market-oriented cap and trade structure that nominally will direct resources first towards the lowest-cost means of GHG reduction.

This gives us an interesting test: what would Lieberman-Warner have done to incentivize DE deployment? The answer is not much, for the reasons outlined above.

With the point of regulation largely on upstream fuels, there is no direct means by which an energy user can realize

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economic value by deploying GHG-reducing DE. To the extent that higher fuel costs translate into higher electric rates, the value proposition for DE increases, but this is a tenuous link. As many a CHP developer knows, rising fuel prices can actually work against DE, as the time lag between the rise in fuel costs and the rise in commission-approved electric rates engender tighter spark spreads.

Meanwhile, DE was not – to any significant degree – included in the list of ‘winners’ receiving largesse from the beltway distributions. Yes, there were set-asides for R&D, and there were indirect incentives (such as to states that enact utility decoupling legislation) that might have made things easier for DE. But from the perspective of a specific DE developer trying to build a specific DE project that would lower GHG emissions, there was no direct way that Lieberman-Warner would have provided them with a fiscal incentive to do so.

WHAT COMES NEXT

With the death of Lieberman-Warner, the current betting is that we will see a new GHG policy approach come from the House, and probably after the next presidential election. While the urgency of environmental action grows more pressing by the day, it is probably, on balance, a good thing that Lieberman-Warner did not succeed given its flaws and given the opportunity it presented to think through and

evaluate some of the devilish details innate to any GHG policy. That said, we still have quite a bit to learn. If we repeat these structural failures in the next approach, we will again end up with a bill that provides no economic inducement to deploy capital that will lower GHG emissions.

This would be a great setback to the DE community, but an even bigger one to the environment. It is critical as we move forward that the DE community engages with its legislators on these issues. The upcoming election and collapse of Lieberman-Warner provides us with a window to mobilize – but let us not confuse the relative quiet on GHG policy with a justification for delay.

Now is the time when policymakers are evaluating alternatives. This is the time when we in the DE community must be at the table.

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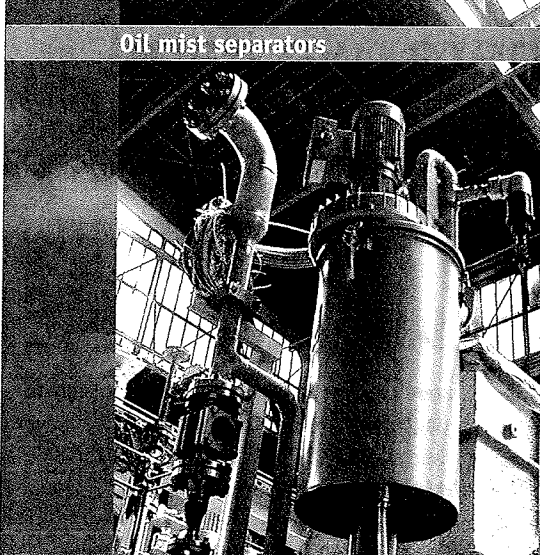
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