RESPONSES TO QUESTIONS FROM COMMITTEE MEMBERS: SELECT COMMITTEE ON ENERGY INDEPENDENCE AND GLOBAL WARMING

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1. *What is the single most productive action that Congress can do to stimulate the economy?*

By “productive action,” I will assume you mean what can do the most to bring the economy out of recession, while also helping to create, in the long-term, more economic opportunity, higher productivity, greater stability, and a low-carbon environment. There is no single action that, in itself, best promotes all of these ends. That is why I support a stimulus that includes a large share of green investments but also expanded spending in other areas—including revenue sharing for state and local governments, which then end up supporting education, health care, child and elder care, and public safety. I am sending as an attaching an article I published in the current issue of *The Nation* that covers these issues. But I would also add now that green investments, especially in areas that will increase energy efficiency, offer a unique combination of benefits: 1) relative to other spending areas, this generates a large number of jobs per dollar of spending; 2) some green investments will also promote productivity, such as mass transit and a “smart grid” electrical transmission system; 3) they also will play an important role in fighting global warming.

2. *Do you support including additional spending for the nuclear industry as part of a carbon-free portfolio?*

I do not support additional spending for the nuclear industry. Nuclear power has major drawbacks. The waste storage issues haven’t been adequately resolved, and may never be. There are also unavoidable dangers associated with nuclear energy, even after we allow for the effective implementation of all available safety precautions. Building a new generation of plants would be hugely expensive, draining funds that could otherwise be available to promote renewable energy. The investment projects would be highly capital intensive, generating less than 25 percent the number of jobs per dollar of spending as investments in energy efficiency. And finally, if we are going to provide large-scale investment funds to promote new energy sources, why shouldn’t we use the funds to advance the best long-term solutions to our energy problems, which are energy efficiency and renewables?
3. Many studies show that imposing limits on carbon emissions will slow U.S. economic and job growth. How can imposing a cap and trade system to reduce GHG emissions which would tend to cause households and businesses to substitute more expensive renewable energy for lower cost fossil fuels have a positive impact on the economy?

As I discussed in my testimony before your committee on September 18, the negative effects on GDP of cap-and-trade measures, as predicted by well-known computable general equilibrium models, such as those generated by the American Council on Capital Formation, are actually quite negligible. Moreover the negative effects they do show are not net of any benefits to the economy obtained through reducing GHG emissions. The ACCF model also does not take any account of the increases in labor intensity and domestic content of investments that would occur through green investments, as opposed to fossil fuel spending. These factors will mean more jobs per dollar of expenditure on energy.

4. Did your model include the lost revenue and consumer spending that would result from higher energy prices? When households spend more money on renewable energy, how is other consumer spending influenced?

As I discussed in my 9/18/08 testimony, 70 percent of the new investment spending I propose would be focused on increasing energy efficiency. These investments will produce lower levels of energy expenditure, and thus increased opportunities for consumer spending in non-energy areas. Investments in renewable energy should be focused on making these energy sources cost competitive with fossil fuels. Dramatic strides have already been made toward that end—some renewable sources, such as wind, are starting to achieve competitiveness with traditional coal, natural gas and oil. Moreover, one must always keep in mind that in comparing energy prices, the prices of fossil-fuel energy sources do not, to date, take account of the environmental costs of emitting GHG into the atmosphere.

5. You note the loss in construction jobs due to the housing downturn. How would a policy to stabilize the housing market decrease the need for additional government spending?

A policy to stabilize the housing market would generate important benefits: 1) As noted above, it would counteract the losses of construction-industry jobs that have been experienced over the past two years; 2) It would stabilize the value of the most important single asset for most homeowners; and 3) It would counteract the losses to families, communities and financial institutions of people being forced from their homes. At the same time, the financial market crisis and recession have now moved well beyond the housing industry alone. A much broader set of initiatives is needed to reduce the severity of the recession.

6. In your testimony you commented that using the same model, you could compare job creation in alternative areas of spending, such as the oil industry or on household consumption. Did you look at other sectors in which to spend the money? Would the money be better directed towards shoring up the housing industry?

The expenditures we include on home retrofitting do include spending within the construction industry. In my model, I do look at other spending targets as well, including the military budget, education, and health care. In my article for The Nation, I summarize some of these findings. I also am attaching another, related article, “The U.S. Employment Effects of Military and Domestic Spending Priorities,” which covers in some detail education, health care, and military spending as well as mass transit and home weatherization/infrastructure. Returning to the issue of the housing industry, as I mentioned above, there are certainly actions that could be taken to limit
the threat of foreclosures for many homeowners. But these are not a substitute for a broad program to create jobs in an efficient way, and also take seriously the need to begin reducing GHG emissions.

7. **If the return on efficiency already exists for home upgrades, why should the government pay for the upgrades? Shouldn’t the market set the return and drive money into the efficiency sector?**

Investments in home retrofits will have significant social benefits, beyond the benefits to the individual homeowners themselves. That is, raising energy efficiency will reduce GHG emissions and will be a major source of new job creation. These social benefits—which cannot be captured by individual homeowners themselves—justify government subsidies to encourage a higher rate of overall spending in these areas. That said, it is also true that in the longer run—after the recession has been passed—it is likely that high levels of spending on retrofits can be achieved through relatively low levels of government subsidy. We discuss this issue in some depth in an appendix to Green Recovery.

8. **How would you allocate the $46 billion in direct government spending? What sort of formulas would you utilize to ensure the funding reached the areas that demonstrated the most need for the funds?**

The formula we used in Green Recovery was to allocate the funds equitably across all states of the U.S. The spending allocation per state is weighted according to two equal criteria: the relative populations of each state; and the relative share of total U.S. GDP generated by each state. This formula takes account of two basic considerations—equal shares of government support for all people; and recognition of different levels of economic development and activity within different states. There may be some justification for some states to receive funds based on additional considerations. However, in my view, to the extent possible, I believe a simple and equitable allocation approach is likely to yield the most fair results.

9. **You state the case for investment in renewable energy and efficiencies to be a part of a stimulus, yet you also say, “over time, these expenditures would be covered primarily by the implementation of a carbon cap-and-trade program.” Is it your intention to make these programs permanent or are they temporary programs to reinvigorate the economy?**

I believe these measures should represent major long-term initiatives to promote the transition of the U.S. into a clean energy economy. These programs therefore have both short- and long-term justifications.

10. **Since about 30 percent of U.S. households don’t pay federal income tax because their taxable income is below the threshold in the current tax code, how much spending on retrofitting houses would a new tax credit generate?**

I haven’t yet worked through the details of how best to structure a combination of loan guarantees and tax credits to generate the desired effects on individual family homes. We do consider in the study ways to create incentives for utilities and other potential intermediaries to undertake home retrofits on a basis that would be profitable for them. Another issue to consider is how to encourage landlords to undertake retrofits and share the energy savings they receive from government incentive programs with their tenants. Still, these initiatives are not likely to yield immediate action, as is needed to fight the recession now. That is why, within the short-term horizon, our proposal focused more on retrofitting public buildings, where action could be taken.
immediately through the allocation of public funds. As we report in Green Recovery, we estimate that there is about $26 billion in retrofits that could be done now on government buildings, schools and hospitals.

11. US DOE EIA data show that the subsidies provided to the oil industry in 2007 was $2.1 billion, not $9 billion as stated in your testimony. Renewables received $4.9 billion in subsidies in 2007. Where did the $9 billion come from?

The relevant passage in Green Recovery reads as follows: “Over the longer term, the government could generate in the range of another $6.6 billion annually by eliminating domestic subsidies that are now funneled to the oil and gas industries,” (p. 16). My 9/18/08 testimony includes this sentence: “An important additional source of funds would come through eliminating the nearly $9 billion in federal subsidies and incentives now provided annually to the oil industry,” (p. 9). The difference between these two figures is in my 9/18/08 testimony, I included $2 billion in estimated subsidies for foreign operations in addition to the roughly $6.6 billion in domestic subsidies.

Why the much larger discrepancy between the EIA estimate and the ones I reported? There are a number of difficult accounting issues involved in generating an accurate figure for total subsidies to the oil and gas industry. Here is a summary analysis of the main factors:

The 2007 Center for American Progress study by Podesta, Stern, and Batten Capturing the Energy Future estimates that eliminating subsidies for oil and gas would generate “more than $6 billion annually over 10 years,” (2007, p. 36). This figure is about three times larger than the $2 billion per year estimate reported by the U.S. Energy Information Administration (EIA), working from U.S. Treasury estimates of existing tax benefits. A wider range of organizations and researchers have also examined the question. Most of them have concluded that the total value of government subsidies for fossil fuel producers is even larger than that suggested by Podesta et al.

The Podesta et al. estimate is basically in line with the figure generated by the Joint Congressional Committee on Taxation, in their estimate of the total value of federal tax expenditures. A study by Friends of the Earth (FOE) has generated a similar figure for total subsidies. The FOE figure takes account of tax expenditures along with other forms of subsidies, including royalty relief, research and development subsidies, and accounting gimmicks. According to the FOE, total oil and gas subsidies for 2006 – 2010 are scheduled to be around $32.5 billion (in 2007 dollars). This amounts to an average of $6.5 billion per year.

Why are the differences so large between the EIA/Treasury and those figures derived from the Joint Taxation Committee, including Podesta, Stern and Batten, and the FOE? To summarize, considering both sets of figures for the five-year period 2006-10, the differences amount to five basic factors:

i. Divergent estimates of identical tax expenditures—$3.2 billion difference. Both the EIA and FOE provide estimates of six different categories of tax expenditures. The FOE figures, drawn from the Joint Committee on Taxation’s estimating model, are consistently higher than the estimates coming from the U.S. Treasury, and included in the EIA estimates. For these six tax expenditure categories, the EIA estimate is $9.2 billion for 2006-10, while the FOE estimate is $12.4 billion.

ii. Differences in Tax Expenditures included—$3 billion difference. There is one category of tax expenditures included in the EIA estimate, valued at $819 million over
2006-10 that is not included in the FOE estimate. The FOE estimate includes four categories of tax expenditures, valued at $3.8 billion, which are not covered by the EIA.

**iii. Royalty relief--$9 billion difference.** The EIA estimate includes no provisions for royalty relief. By contrast, the FOE estimate includes $9.8 billion for 2006-10 for deep water royalty relief. Additional royalty relief is included in the Energy Policy Act of 2005 (EPACT), but neither the EIA or FOE studies estimate the likely size of these subsidies.

**iv. R&D Subsidies--$1.9 billion difference.** The EIA estimate does not include any figures for R&D subsidies, while the FOE figure totals to $1.9 billion over the five-year period.

**v. Accounting gimmicks--$4.4 billion difference.** The EIA estimate doesn’t address this, while the FOE estimates that the oil and gas companies receive $4.4 billion in benefits over 2006-10 because they are able to use Last-In/First-Out (LIFO) accounting to reduce their reported taxable profits.