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Senate Finance Committee
The Honorable Max Baucus, Chairman
United States Senate
219 Dirksen Senate Office Building
Washington, D.C. 20510

To the members of the Senate Finance Committee:

Thank you for initiating discussion of strategies for using tax policy to address climate change and for inviting comments on the merits of tax credits versus pollution taxes as well as how a pollution tax policy might be designed to minimize harm to trade-exposed industries, energy-intensive industries, and low income households.

The Citizens Climate Lobby (CCL) Boston Chapter is pleased to submit the following comments on these topics.

## The overall merits of approaching energy policy through a subsidy for clean technologies

At Boston CCL we do not believe that the use of subsidies or tax credits will materially affect the market dynamics of fossil fuels versus clean energy alternatives. These two industries face substantially different challenges. The fossil fuel industry is a mature industry, very well capitalized, and able to pursue additional build out and exploration based on revenue from sales. The clean energy industry is nascent, not well capitalized, and in need of significant investment to support R&D and buildup to scales that will permit it to challenge the fossil fuel incumbents.

We believe that private investment is the most important ingredient required for clean energy to grow and prosper at the rates needed to address the climate crisis. In order to attract private investment, clean energy entrepreneurs and innovators need to present business plans that promise big rewards later for high risk investments now. Unfortunately, the existence of tax credits or subsidies that affect company cost structures at the margin will not lead to this result. The financial advantages will be too small to make a difference to the big league investors who need to be attracted to the industry for it to be successful.

# The overall merits of approaching energy policy through a tax or fee on heavy polluting technologies or air pollution

Subsidies and tax credits will not stimulate the private investment in clean energy that we need to address the climate crisis. Will a tax on pollution? At Boston CCL we believe the answer is yes.

If there is one thing we can all agree on, it is that as prices rise businesses and consumers seek less expensive alternatives. Entrepreneurs and innovators are motivated to start new ventures to capitalize on changing market dynamics. Investors jump in because of the possibility of outsized gains realized by discovering and backing "the next big thing." As a simple example, we know that consumers and businesses across the board changed how they operated when gasoline went to four dollars a gallon.

The record of clean energy investment in the US is one of boom and bust based on the prospective price of fossil fuels: When oil prices rise, clean energy investment rises; when oil or natural gas prices fall, so does investment in clean energy. The conclusion is that if a tax or fee were used to cause prices for fossil fuels and fossil fuel derived electricity to increase, such price increases would stimulate private investment in conservation, efficiency, and clean energy. Not only will private investment increase, but businesses and consumers will adopt a myriad of strategies to insulate their budgets from the increases. The clean energy revolution would finally begin for real.

## How to design a pollution tax or fee

At Boston CCL we subscribe to the policy proposal of our national organization. This policy is commonly referred to as "carbon fee and dividend." The design of Carbon Fee and Dividend is as follows:

- 1. A fee is assessed proportional to the carbon content of fossil fuels and collected at the point of entry into the economy—at the wellhead, mine, or port.
- 2. The fee starts small and increases gradually. CCL proposes starting the fee at \$15 for every ton of CO2 the fuel will emit when burned. The fee would be legislated to increase at \$10 per ton every year until CO2 emissions reach 20% of 1990 amounts, the level deemed safe by science.
- 3. 100% of proceeds from the fee are returned to individuals holding Social Security or Tax Identification Numbers (SSNs or TINs) periodically (but no less than annually) in equal amount dividend checks.

## How to design a pollution tax or fee so that it would not harm trade-exposed industries

The CCL policy proposal clearly treats all industries operating solely within the domestic economy equally. All industries experience the same energy price inflation and all are free to innovate and economize to minimize the extent to which prices for their goods are affected by the resulting energy price inflation.

On the other hand, domestic industries will be at a price disadvantage relative to imports from countries that do not have similar pollution taxation. In this case, the World Trade Organization sanctions the use of tariffs to level the playing field. The US would obviously want to take advantage of this option.

While the task of determining the amount of embedded carbon in imports and setting tariffs appropriately may appear daunting, there is no need for such assessments to have pinpoint accuracy. It would be sufficient to determine tariff levels based on the average energy intensity of broad product categories. The simple imposition of tariffs at reasonably accurate levels will be enough for foreign governments to realize that it would be better to impose their own carbon tax regimes and keep carbon assessments at home rather than allow the US government to collect them.

Similarly, US exports will be disadvantaged when competing in the home markets of foreign companies not assessed a carbon tax. In this case the US could use revenues from the tariffs collected to subsidize domestic industries sending products abroad.

## How to design a pollution tax or fee so that it would not harm energy-intensive industries

As mentioned, carbon fee and dividend provides a level playing field for industries competing in domestic markets. The addition of tariffs on imports and subsidies for exports provides level playing fields for industries encountering foreign competition in domestic markets or attempting to compete abroad. The question then is: On what grounds is it justified to offer energy-intensive industries protection against the energy price inflation being experienced by all other businesses and households?

We believe that there are no grounds for offering such protection. Surely the concern behind this question is that energy-intensive industries will be forced out of business by rising energy costs. But this

can only be the case if society does not need the products or services provided by such firms or there are less energy-intensive alternatives to these. In these cases, in a free-market economy, government should not be interfering to remove economic motivation for such firms to shift their focus or move to more energy efficient means of operating.

If there are no alternatives and no more energy efficient processes than those already in use, then these industries will have no choice but to raise their prices along with the rise in the carbon fee. In this case, where these products and services are deemed necessities by segments of the market, we can expect consumers to use larger fractions of the proceeds from their dividend checks to pay the higher costs (whether direct to these industries or indirectly to firms that use the higher cost outputs) in order to maintain their lifestyles and meet their needs. Over the next few decades it is likely that these industries would continue to use fossil fuels assuming no technological or process breakthroughs. Indeed, fossil fuel use would probably become concentrated in these industries while the rest of the economy took advantage of lower hanging fruit to decarbonize.

The purpose of carbon fee and dividend is to reduce emissions to a sustainable level, not necessarily eliminate use altogether. If left to its own devices, the free market will determine where it is most economical to use the quantities of fossil fuels that can be safely burned without further disrupting the climate. Energy-intensive industries producing critical products and services may very well be where this fuel use becomes concentrated simply because breakthroughs needed to move them to more efficient or clean alternatives never occur. A free-market operating without distortions or special protections will lead us to that answer.

## How to design a pollution tax or fee so that it would not disproportionately harm low-income households

The carbon fee and dividend policy espoused by Citizens Climate Lobby does not disproportionately harm low-income households.

As mentioned, the tax on carbon is applied at the point of extraction. Extraction industries pay the tax and build the cost of the tax into their sales prices. From there the price increase is built into the value chain of downstream industries that ultimately bring goods and services to market.

All households, regardless of demographic or income, experience this broad-based energy price inflation. However, because energy use correlates heavily with income, upper and lower income households will experience the resulting energy price inflation in different ways. Upper income households will pay more in absolute terms and less in relative terms (compared to total households income) while lower income households will pay less in absolute terms and more in relative terms.

The impacts of carbon fee and dividend are reversed, however, when it comes to dividend check amounts. Because all revenues are divided equally among recipients, upper income households will receive less in absolute terms relative to their contributions into the fund, and lower income households will receive more. It has been estimated that for the lower 60% of households dividend payments will equal or exceed the energy price inflation they experience. The funds that enable this are from the monies collected due to the higher aggregate energy price inflation experienced by upper income households.

### Conclusion

### To summarize:

- Boston CCL does not believe that the use of subsidies or tax credits will materially affect the
  market dynamics of fossil fuels versus clean energy alternatives to the extent needed in order to
  avoid a climate crisis
- 2. There is substantial merit in pursuing the use of fees or taxes on emissions that cause climate change
- 3. Trade-exposed industries can be protected from the impacts of a pollution tax using tariffs sanctioned by the World Trade Organization
- 4. A pollution tax will not expose energy-intensive industries to any more competition or harm than is natural within a well-functioning free market system, and
- 5. Low-income households can be helped, not harmed, by a carbon fee and dividend policy that accumulates revenue based solely on the amount of energy used and distributes revenue equally to all households regardless of demographic factors.

We once again thank you for initiating this conversation and asking the American people for input on this critical issue. We look forward to continuing the dialog as the work of the Committee proceeds.

Sincerely,

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