Reducing Greenhouse Gas Emissions

Using carbon pricing to protect the environment

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The Commonwealth of Massachusetts is expected to experience warmer temperatures, increased frequency and intensity of storms, public water supply shortages, rising sea levels, and increased erosion that will threaten our coastal areas. The Global Warming Solutions Act of 2008 requires the Secretary of Energy and Environmental Affairs to establish a statewide limit on greenhouse gas (GHG) emissions of between 10 percent and 25 percent below 1990 levels for 2020. This bill amends the Global Warming Solution Act and aims to reduce greenhouse gasses not only for the environment but also additionally as a way to strengthen the Massachusetts economy.

The Bill
S.1747: An Act combating climate change

Elevator Speech

Good morning, my name is Judy Nam and this is my good friend Dora Chi. As seniors at Brandeis University studying economics and environmental studies, we are concerned about planning for the future. Because we are also registered voters in Massachusetts, we would like to make sure the legislature is doing its part to contribute to the future of the Commonwealth. The Boston Globe has reported that climate change is causing sea levels to rise and flood the coast, threatening over 34,000 homes along the Commonwealth’s shoreline. Carbon emissions have also led to incidences like the winter storms of 2014, which cost $40 million alone in direct costs — the total impact to taxpayers due to MBTA delays and the slowing of business activities is likely much higher. Massachusetts has been rated #1 in energy efficiency, and as national leaders of good environmental policy, we need to reduce emissions now to maintain this status. Since transportation and residential utilities make up 80% of the Commonwealth’s pollution, the fastest way to do so is to reduce our use of carbon-based fuels. Senator Barrett’s bill S.1747, “An Act combating climate change,” uses a policy of carbon pricing to regulate carbon emissions through market forces and consumer choice. This bill would add a small fee to carbon-based fuels, which...
encourage residents and businesses to become mindful of their carbon footprint every time they use fossil fuels. The fee is then returned to citizens through a per capita rebate in order to help them transition to cleaner energy without hurting their wallets. Prominent legislators, scientific experts, and even leaders in the faith community support S.1747 for its economically and ethically sound strategy for environmental responsibility. We urge you to join them in co-sponsoring the bill, and to tell your fellow legislators to favorably report S.1747 out of the Joint Committee on Telecommunications, Utilities and Energy. Together, we can ensure a vibrant future for Massachusetts, both environmentally and economically.

### House Ways and Means Script

We’re honored to be able to speak with you about an issue felt both globally and locally. It’s no surprise that youth, particularly students like us who are about to enter the workforce, are concerned about job security and the economy. What may be surprising, however, is our genuine concern for the environment. Climate change is hitting MA hard and fast: The Boston Globe reports that rising sea levels are flooding the coast, destroying infrastructure at the cost of taxpayer dollars. As a leader in environmental policy, MA needs to reduce emissions now, and the fastest way to do so is to reduce our use of carbon-based fuels. Sen. Barrett’s bill S.1747, “An Act combating climate change,” enacts carbon pricing to regulate emissions through consumer choices. This bill adds a small fee to carbon emissions to encourage residents and businesses to be mindful of their carbon footprint, and then rebates this fee to help them transition to cleaner energy.

First, why a carbon fee? Sen. Barrett will introduce the social cost of carbon-emitting fuels over the course of seven years, starting at $10 per ton of CO2e [carbon dioxide equivalent] and gradually increasing to $40 per ton. This figure corresponds with the social cost of pollution calculated by prominent organizations like the World Bank. S.1747 recognizes the importance of market liberty by putting decision-making in the hands of consumers. The cheapest way to inform the public of the cost of negative behaviors is prices – a well-known example is the heavy MA tax on cigarettes. Thus the carbon fee redresses the failure of the existing market to recognize the costs associated with the negative consequences of using fossil fuels, such as worsening air quality and damaged infrastructure from climate change-influenced weather incidents.

Second, how does the rebate work? The rebate is pro rata, meaning that each resident receives the same amount – on average, this will amount to about $275 per capita. Businesses will be rebated in a similar manner, receiving funds proportionate to the number of employees they have. The bill also includes a special provision for rural residents and carbon-intensive sectors to receive an extra rebate to compensate for their larger fuel use. Existing tax agencies such as the Department of Revenue will handle the schedule of rebates, which means that administrative costs will be minimal. The rebate thus allows the Commonwealth to work towards reducing carbon use without hurting the welfare of its citizens.

Third, what are the economic benefits? MA has the burden of finding cheap, clean energy due to its reliance on imported fossil fuels and its small manufacturing sector. This allows it to benefit from the bill: higher carbon costs would stimulate the clean energy industry and any job losses in the fossil fuel industry would not hurt the Commonwealth since this sector is located outside the state. Thus, S.1747 is job-positive and would keep money within MA, with the added benefit of attracting young workers interested in these growing industries. Additionally, MA economists have calculated that the bottom 60% of households can come out ahead by increasing energy efficiency and therefore cutting down energy costs.

Fourth, what is the existing support for this bill? Environmentalism is a common cause that can create unity across many sectors. Contrary to expectations, some businesses have already begun transitioning to clean energy. For example, Biogen, a large MA biotechnology firm, achieved carbon neutrality in 2014 by internalizing carbon pricing. Gentle Giant – a Somerville moving company likely to have high fuel costs – joined the Climate Action Business Association (CABA), a coalition founded for carbon pricing advocacy. Carbon pricing was monumentally successful in the Canadian province of British Columbia (BC), which enacted a revenue-neutral carbon pricing policy in 2008. The Canadian Globe reported that fuel use in BC dropped 16% while rates in the rest of Canada had risen 3%. In 2013, the independent organization Navius Research found that the average BC household would be better off by $121 per year in 2020 than if the tax had not been implemented. With this strong showing of economic growth and green policy, it’s no wonder that BC residents later voted to increase the fee amount.

Some people are wary of the bill because carbon pricing is often associated with the word “tax.” However, legally the fees proposed in the bill aren’t taxes, as the bill is revenue-neutral: the money goes into a fund that is then rebated back to MA residents, and collection and distribution can be done through existing MA executive agencies. Others may wonder why we need to enact this policy if businesses have already taken the initiative for clean energy. However, this is only the case for large firms with available capital; smaller companies can’t overcome costly barriers to investment without the push and incentive provided by the fee and rebate system. Skeptics
have also claimed that that residents could drive to states with cheaper gas to avoid carbon pricing, and that the rebate would simply allow residents to pay for more gas, defeating the purpose of the bill. However, behavioral economics tells us that consumers are unwilling to part with money they’ve received; when they do spend it, purchases largely consist of basic goods. This means that local consumption and investment will go up, stimulating the MA economy further. Also, as the carbon fee is relatively small, “leakage” will only occur in border towns at a very minimal cost to the overall program.

The market-based rather than regulatory nature of the bill allows everyone to pay their fair share by making us all responsible for our impact on the environment. Prominent legislators, scientific experts, and even leaders in the faith community support carbon pricing. Rep. Dempsey, as the chair of the House Ways and Means Committee, you can play a vital role in making climate change a priority in the General Court by voting S.1747 favorably out of committee. Together, we can make a healthy economy and environment in MA a reality.

Letter to the Legislator

My name is Dora Chi, and my colleague Judy Nam and I are writing to you as Brandeis University seniors studying economics and environmental studies and as the next generation of voters on the cusp of entering the workforce. We would like to do what we can to ensure a vibrant future for Massachusetts that balances economic needs with environmental realities.

As residents of Waltham, we are already experiencing the consequences of climate change. How strange was it being pummeled with record-setting snowstorms last winter, then wearing shorts on a balmy 2016 New Year’s Day? Did you see the recent Boston Globe article reporting that sea levels are rising faster than ever, especially along the MA coastline, where 23,000 households are at risk of losing their homes. Even as we have earned the title of #1 in energy efficiency in nation, we are not on track to reach our 2050 greenhouse gas emissions target.

Still, we can take action now and lay the groundwork for a better future. A whopping 80% of Massachusetts’s greenhouse gas emissions are attributable to the use of fossil fuels to power our cars and heat our homes. Therefore, the most effective way to put us back on track to reach our 2050 greenhouse gas emissions target is to reduce our fossil fuel consumption.

By supporting Senator Barrett’s bill, S.1747: An Act combating climate change, we provide financial incentives to reduce pollution without impairing economic growth. The bill establishes a carbon fee of up to $0.36/gal of gas, which the state collects into a fund to be rebated in full back to residents and employers. This revenue-neutral carbon pricing system will protect our wallets as we reduce our dependency on fossil fuels, invest and nurture the alternative energy industry and create new jobs within. A Department of Energy Resources analysis estimates this system will create 2,000-4,000 jobs by 2020.

I am proud that my home state has historically been a leader in implementing critical programs and policies related to sustainability through energy efficiency. Experts agree that carbon pricing is a mechanism that works, but it is not yet enacted in the U.S. Elsewhere, it has proven its effectiveness in reducing emissions while fostering economic development even beyond expectations. Carbon pricing was enacted in the Canadian province of British Columbia in 2008, and the New York Times recently reported on the region’s success in both cutting emissions and growing economically at a level faster than its surrounding provinces (March 3, 2016).

Representative Stanley, Judy and I urge you to ask your fellow representatives to vote it favorably out of the Joint Committee on Telecommunications, Utilities and Energy. You will be joining a vast and growing network of support from scientific experts, economists including Harvard Business School’s Joe Lassiter, business coalitions and hundreds of diverse business groups including biopharmaceutical giant Biogen, faith leaders statewide including Rev. Fred Small and Rabbi Katy Allen, and last but not least, your local residents. By supporting S.1747, you will show your constituents that you care about the long-term well-being of MA residents, the statewide economy and our global environment.

Excerpts from Campaign Journals

Dora

Overall, lobbying on behalf of our bill was a productive learning experience. I’m glad we were able to hear about both large and small business perspectives on carbon pricing and to meet other supporters. It was encouraging to know that so many local business-oriented people are embracing sustainability alongside business goals. I believe their voices are particularly powerful to local legislators, as I imagine one of their initial concerns about carbon pricing is how it would impact the local businesses and economy.

Judy

Dora and I, accompanied by Andy, had our first State House meeting with Alex, an aide to Representative Thomas Golden. Representative Golden is the House Chair of the Joint Committee on Telecommunications, Utilities and Energy.
(TUE). Because our Senate bill was in the TUE committee, it was vital to gauge support in the House. We didn’t know quite what to expect yet from these meetings so we were a bit nervous despite our extensive preparations (we had a packet of handouts with statistics printed out for everyone). Unfortunately, the meeting did not go too smoothly – Alex believed that carbon pricing would be an additional burden on MA on top of existing sustainability programs like PACE and Mass Save. Later, we found out that these programs were opt-in and small-scale, and were poor arguments against carbon pricing. From this experience, Dora and I came away prepared to face opposition and with more research on existing programs.

■ Update
On March 16, 2016, both the House and Senate concurred to extend the reporting date to July 1, 2016.

For more information
View the Bill: malegislature.gov/Bills/189/Senate/S1747

Climate Xchange: climate-xchange.org