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CONNECTICUT ENERGY MARKETERS ASSOCIATION

March 14, 2018

Co-Chair Mike Demicco
Co-Chair Ted Kennedy
Co-Chair Craig Miner
Representative Stephen G. Harding

Environment Committee:

We are submitting testimony in **opposition to H.B. 5363**,
AN ACT ESTABLISHING A CARBON PRICE FOR FOSSIL FUELS SOLD IN CONNECTICUT.

The Connecticut Energy Marketers Association (CEMA) represents 576 energy marketers primarily engaged in the sale and distribution of home heating oil, propane, diesel and gasoline in Connecticut. CEMA members employ over 13,000 people in our state and sell nearly 500 million gallons of heating fuel annually.

Our industry has been a leader in reducing the consumption of fuel. We have seen a reduction in the number of gallons it takes to heat a home from 1,200 gallons per year to nearly 700 gallons over the past four decades. Today's oilheat is a low sulfur fuel with renewable biodiesel blended into it. All that has happened without any taxes or government mandates! When biodiesel is blended with ultra low sulfur heating oil (15ppm sulfur or less) at 69% it becomes carbon neutral.

Taxing carbon does several things – it increases the cost of fuel (heating oil, gasoline, propane, diesel, natural gas, electricity, etc.), makes Connecticut businesses less competitive by increasing their energy costs, encourages homeowners to seek residence in lower cost states, allows the legislature to raid the funds to balance the budget, disproportionately harms people on a fixed income and those who live in poverty and virtually increases the cost of every product and service that is produced and transported in our state.

The one thing that the tax does NOT do is help the environment! Presumably, the purpose of this tax is to change consumption behavior in Connecticut. But we've seen huge variations in energy commodity prices that haven't affected consumption. The Energy Information Agency (EIA), for example, shows that gasoline consumption in Connecticut in 2015 was the same as in 2011, despite prices being more than $1/gallon less. Energy consumption is fairly inelastic when it comes to driving your kids to school, driving yourself to work, and heating your home.

Even if this tax resulted in changes in consumption behavior in Connecticut, such changes will have no impact on climate change. As reported in U.S. News & World Report, the Intergovernmental Panel on Climate Change (IPCC)

Assessment Report claims that even if the U.S. as a whole stopped emitting all carbon dioxide emissions immediately, the ultimate impact on projected global temperature rise would be a reduction of only about 0.08°C by the year 2050. China and India will dominate global carbon emissions for the next century, and there's little the U.S., let alone Connecticut can do, to affect this. A Princeton University study likewise predicted that even if all countries stopped emitting CO2 entirely, the Earth would continue to gradually warm, before cooling off.

Costs by Fuel

- **Gasoline**

Gasoline emits about 19.6 lbs of CO2 per gallon according to EIA, which is 102 gallons per ton of CO2. Since the carbon tax in its first year is $15 per ton of CO2, that means the tax per gallon of gasoline is $0.147 in its first year. Since the average driver buys 656 gallons of gasoline, your annual cost will be $96.43 in the first year of the tax, and since over 1.5 billion gallons of gasoline are sold in the state every year, the total cost of this tax on gasoline for the state will be $235 million. We project these number below for years 1, 5 and 10 of the tax, but remember the tax increases forever, so eventually your cost will be thousands of dollars a year, and the cost of the tax on gasoline for society will be billions per year.

	Gas tax/gall.	Cost per driver	Tax on CT
2019	$0.1470	$96.43	$235 million
2023	$0.3430	$225.01	$548 million
2028	$0.5180	$385.73	$939 million

- **Heating Oil/Bioheat®**

Like we calculated for gasoline above, heating oil produces about 22.4 lbs of CO2 per gallon according to EIA, which is 89.29 gallons per ton of CO2. Since the carbon tax in its first year is $15 per ton of CO2, that means the tax per gallon of gasoline is $0.168 in its first year. About half the homes in CT use heating oil to keep warm, consuming about 438 million gallons, which would incur a total tax in CT of over $73 million. We project taxes through years 1, 5 and 10 below.

	HO tax/gall.	Cost/home	Tax on CT
2019	$0.1680	$134.40	$73 million
2023	$0.3920	$313.60	$172 million
2028	$0.6720	$537.60	$294 million

Bioheat: This heating fuel is a blend of regular heating oil and vegetable oils (e.g. soy oil or rendered vegetable oil from restaurants). It's being used now, in blends from 2 - 20%, in heating oil. Biofuels are exempt from the carbon tax, and we believe that your tax will be reduced proportionately according to the percentage of biofuel content in it. To learn more about Biofuels, please visit www.bioheatnow.com.

- **Propane**

Like we calculated for other fuels above, propane produces about 12.7 lbs of CO2 per gallon according to EIA, which is 157 gallons per ton of CO2. Since the carbon tax in its first year is $15 per ton of CO2, that means the tax per gallon of gasoline is $0.0953 in its first year. If a home consumes 1,000 gallons of propane annually (heating, cooking, fireplace, grill, etc.) this tax will amount to $95.25 in its first year. We calculate from EIA data that some 110 million gallons of LP gas (i.e. propane) are consumed in CT, which would incur a total tax in CT of over $11 million in the first year of the tax. We project taxes through years 1, 5 and 10 below.

	Propane tax/gall.	Cost/home	Tax on CT
2019	$0.0953	$95.25	$11 million
2023	$0.2223	$222.25	$25 million
2028	$0.3810	$381.00	$42 million

- **Electricity**

The carbon tax is also imposed on electricity use, but only that portion that is derived from burning coal, natural gas or diesel. Useful information is provided by ISO New England here. This states that for New England as a whole, 43% of electrical generation was from natural gas, 2% from oil, and 1% from coal. We can assume therefore that most of the CO2 equivalent emissions are from burning natural gas, and that Connecticut's mix of fuels is comparable to the region's average. The EIA report here shows that CO2 emissions from electricity generation amounted to 6.7 million metric tons of CO2e or 7.37 million U.S. tons. Presumably EIA is able to factor in the mix of fuels used by electricity generators to calculate this figure. Therefore we calculate the aggregate tax cost to CT for all electricity users for years 1, 5 and 10 of the tax as follows:

	Total tax on electricity
2019	$111 million
2012	$258 million
2028	$422 million

- **Natural Gas**

Again, per EIA, natural gas when burned produces 117.1 lbs of CO2 per thousand cubic feet of gas. Since gas on your bills is measured in hundreds of cubic feet (ccf), this number converts to 11.71 lbs of CO2/ccf. A typical home burns about 1000 ccf of natural gas annually, and so emits about 11,710 lbs of CO2 or 5.86 tons of CO2. At a tax rate of $15/ton, a natural gas user would incur an annual cost of about $87.90 in the first year of the tax. Almost half of homes in CT use natural gas for heating, and burn some 253 million cu. ft. every year according to EIA. Doing the math, this results in a total first year tax of $223 million. We show these numbers below projected for years 1, 5 and 10 for natural gas.

Natgas tax/ccf	Cost/home	Tax on CT
2019	$0.0878	$87.82	$223 million
2023	$0.2049	$204.92	$519 million
2028	$0.3513	$351.30	$890 million

It's interesting to note that Section 1 (b)(5) of the bill requires the state to "determine the amount of carbon dioxide equivalent that is released in the form of escaped methane due to the extraction, transport or distribution of natural gas before the point of consumption in this state and shall add an additional charge to the carbon price for all natural gas or natural-gas-based electricity." In other words, you'll also be taxed on leaked gas that you don't even consume. This is a serious issue, as recently reported by the Sierra Club here.

Cost of Tax

TOTAL IMPACT OF TAX IN CONNECTICUT

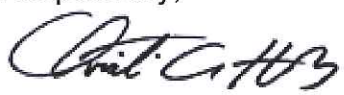
According to the U.S. Energy Information Administration, Connecticut has done a great job already, reducing its carbon dioxide emissions. As can be seen on this EIA chart, Connecticut's CO2 emissions have dropped 18.4% from the year 2000 to 2014 (latest year data available). Assuming our current emissions are holding at 2014 levels, that means the $15/ton carbon tax will be applied to 35.1 million metric tons of CO2 emissions (or their equivalent) which is 38.6 million U.S. tons. After the tax first goes into effect in 2019, it increases $5/ton per year (a so-called arithmetic increase) thereafter, forever. Here's the amount Connecticut citizens and businesses will be paying, in aggregate, shown out to 2050:

2019	$579 million
2020	$772 million
2021	$965 million
2022	$1.16 billion
2023	$1.35 billion
2024	$1.54 billion
2025	$1.74 billion
2030	$2.70 billion
2040	$4.63 billion
2050	$6.56 billion

Although we completely disagree with the concept that a carbon tax would benefit the environment, we would ask those of you who think this is a good thing if you believe that this tax would go solely for its intended purpose? **How many taxes were established with "good intentions", but ended up being raided for budget deficit mitigation purposes, never accomplishing what they were created for?**

CEMA asks that the Environment Committee **oppose to H.B. 5363, AN ACT ESTABLISHING A CARBON PRICE FOR FOSSIL FUELS SOLD IN CONNECTICUT.**

Respectfully,



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