



February 21, 2019

Chair Norman Needleman

Chair David Arconti

Senator Paul Formica

Representative Charles Ferraro

Energy and Technology Committee:

I am here in **support of H.B. 5380**, AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM.

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

A report, required by the Agricultural Act of 2014 that was submitted to Congress in 2015, determined that ultra low sulfur heating oil blended with as little as 1.7% biodiesel is cleaner than natural gas. This fuel is known as BioHeat®. Connecticut reduced the sulfur content of home heating oil on July 1, 2018 from 500ppm to 15ppm a 95% reduction making it virtually sulfur free! On the other hand, natural gas has a 50ppm sulfur content and is primarily made up of methane which is 86 times more potent than CO2. The difference between natural gas and home heating oil is – oil can get cleaner and natural gas cannot. Our association has invested hundreds of thousands in research and development and consumer education to bring it to Connecticut and H.B. 5380 takes the next step to increase how much is consumed in our state.

This bill seeks to create a thermal renewable energy credit (or TREC) program to encourage the use of biodiesel in Connecticut. TREC's work through supply and demand forcers to help spur the use of renewable energy. TREC's are created at the point that the blended renewable fuel is delivered to consumers. TREC's allow wide participation by encouraging individuals to use biodiesel. The credit allows economic incentive for companies to buy the product, to create storage, and ultimately sell it to end users.

With nearly half of the home in Connecticut using home heating oil, there is no better or faster way to lower emissions than passing H.B. 5380 into law. In fact, once biodiesel blends reach between 79% and 82%, home heating oil/BioHeat® becomes carbon neutral.

Other states like Massachusetts have already adopted TREC programs and have made biodiesel a part of their state renewable portfolio standard (RPS). It is Connecticut turn to do the same.

We strongly encourage the committee to approve this bill so that we can work with the Public Utilities Regulatory Authority, biodiesel producers and other stakeholders to adopt regulations so that Connecticut and the 500 million gallons of heating oil that is consumed here can benefit from this clean renewable fuel that is locally produced.

Please **support of H.B. 5380, AN ACT REDEFINING "CLASS I RENEWABLE ENERGY SOURCE" TO INCLUDE CERTAIN USEFUL THERMAL ENERGY GENERATED FROM BIODIESEL AND CREATING A HOMEOWNER-GENERATED USEFUL THERMAL ENERGY PROGRAM.**

Respectfully,

Christian A. Herb

President

Your Home Heating Oil Just Got Better



Bioheat® ULSHO Sets the National Standard for Clean Home Heating

What is Bioheat ULSHO?

**July 1
2018**

As of July 1, 2018, all home heating oil sold in Connecticut is now Bioheat ULSHO (ultra-low sulfur heating oil).



Connecticut's Bioheat ULSHO contains approximately 7% biodiesel and just 15 parts-per-million (ppm) sulfur, making it much cleaner and better for both the environment and your home heating system.

How Much Better Is It?

Using Bioheat ULSHO significantly reduces greenhouse gas emissions, including sulfur dioxide (SO₂), particulate matter (PM), nitrous oxide (NO) and carbon dioxide (CO₂).



How Does It Help the Planet?

581,382
Homes Using Bioheat®

514,925,000
Gallons Delivered

366,231 MT
Emissions Reduced

78,422
Cars Off the Road

Connecticut's independent, primarily family-run fuel businesses serve over 580,000 homes and deliver more than 514 million gallons of Bioheat ULSHO per year.



In just one year, they help homeowners like you reduce the state's carbon emissions by over 365,000 metric tons.

That's like removing nearly 80,000 cars from the road!

How Does It Help YOU?



Bioheat ULSHO improves heating system performance and efficiency, reduces the need for service calls, and prolongs the life of your heating equipment. All that means big savings for you and your family.

Additionally, since 2016 Connecticut's Bioheat ULSHO dealers have helped nearly 900 homeowners like you replace their old boilers, furnaces, and oil storage tanks, increase their heating system efficiency by 13% and save over \$300,000 through the Upgrade & Save Energy Efficiency & Safety Rebate Program.



How Can You Find Out - and Save - More?

Go to BioheatNow.com, UpgradeandSaveCT.com, or call your local Bioheat ULSHO Dealer.



Brought to you by the:
Connecticut Energy Marketers Association



with the help of the:
National Oilheat Research Alliance

Connecticut T-REC Explainer

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What are RECs?

Traditionally, RECs are renewable energy certificates that represent a megawatt-hour (MWh) of electricity produced from renewable energy. There are currently three classes of renewable energy sources, "Class I," "Class II," or "Class III", each of which generates a corresponding class of REC.

RECs are tradable credits that allow the environmental attribute of the renewable energy to be bought and sold separately from the energy itself. A generator of renewable energy will either sell its energy "bundled" with the accompanying environmental attribute directly to an electricity provider, or it can "unbundle" the environmental attribute, via the REC, and the energy, and sell them separately in the market to electric providers.

What is the proposed Connecticut T-REC?

The proposed Connecticut T-REC program would allow Class I RECs be generated on the basis of useful thermal energy generated from biodiesel delivered in Connecticut to an end user and used for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements for which fuel or electricity would otherwise be consumed, including blending of biodiesel into home heating oil.

How is the Connecticut T-REC different from traditional RECs?

Since traditional RECs are generated on the basis of renewable energy used for the production of electricity, the energy is normally "metered" which allows the electric provider to precisely measure each megawatt-hour of energy produced by the renewable energy. T-RECs are generated on the basis of useful thermal heat generated at the homeowner level, i.e. for home heating. Metering for useful thermal heat in each home would be impractical. Thus, HB 5348 requires a formula be established to calculate the conversion of thermal energy output produced by homeowner generated thermal energy to megawatt hours—consistent with how similar programs work in Massachusetts and New Hampshire.

How would a Connecticut T-REC be generated?

To simplify the generation of Connecticut T-RECs, **home heating oil dealers** would be permitted to aggregate the thermal energy produced by the biodiesel they delivery directly to homeowners for the purpose of generating T-RECs. Once the applicable state agency approved the records provide by the home heating oil dealer, New England Generation Information System certificates would be generated and distributed to home heating oil dealers for sale in the REC marketplace.

Who would have to buy Connecticut T-RECs?

Connecticut T-RECs would be part of the pool of Class I RECs that electric providers have to buy to comply with the Connecticut RPS requirements. By adding T-RECs into this pool of credits, electricity providers will have greater flexibility in meeting their renewable energy requirements.