

May 20, 2022

Chair Jeffrey Roy Massachusetts State House 24 Beacon St Boston, MA 02133

Dear Chair Roy:

The **Good Wood Coalition** is a group of businesses, farms, nonprofit organizations, renewable energy groups, and forest products companies who support the high-efficiency thermal use of wood (which is itself strongly supported by science as an effective decarbonization measure). As discussions to reconcile H.4515 and S.2842 begin, our coalition is urging you to reconsider the portion of S.2842 that deals with modern wood heat and **reach a compromise that aligns with climate science and results in reductions of carbon emissions**.

We heard in public comments from senators that the biomass portions of the bill were needed to prevent the proposed Springfield biomass power plant from being built. In fact, the Springfield plant is dead, its permits were rescinded, and the RPS regulations (both current <u>and</u> proposed) do <u>not</u> permit new biomass power plants to become eligible for the RPS – in Springfield or anywhere else in Massachusetts.

Our coalition does <u>not</u> object to codifying the current regulatory prohibition on biomass power plants. But the bill goes well beyond that, removing wood heat from MassCEC's oversight and removing wood from the Alternative Portfolio Standard, the Commonwealth's renewable heating program. These choices are <u>not</u> supported by climate science, and they will make reaching the Commonwealth's climate change goals much harder. At a time when we're desperately trying to reduce carbon emissions, we should take an "all of the above" approach to achieving these difficult goals, and not remove any arrows from our quiver.

The fact that modern wood heat is a significant decarbonizer is conclusively proven, both in the Commonwealth's commissioned <u>Manomet</u> study and in follow-on <u>peer-reviewed research</u> published in prestigious scientific journals. The evidence is so strong that the leading anti-wood energy group in Massachusetts will not mention or discuss the carbon impact of modern wood heat – because **their own carbon modeling** tells them that it is a significant decarbonizer. MassCEC's *GoClean* residential heating website shows that <u>modern wood heating actually emits</u> <u>less net carbon than air-source heat pumps using today's grid electricity</u>, which is created using mostly fossil fuels.

Modern wood heat is also attacked on air pollution grounds – particularly, fine particulate matter (PM 2.5). Opponents will cite studies including hundreds of thousands of fireplaces and old wood stoves to attack the small number of ultra-clean modern wood heating appliances eligible in the APS. These pellet and chip boilers are extremely efficient and emit 99% less particulate matter

than an older wood stove per unit of heat generated. A UMass Amherst study found that pellet boilers generally had better emissions than the oil boilers they replaced, and their emissions were less toxic to human health.

Adding an emissions control device such as an electrostatic precipitator (ESP) can remove 98-99% of the remaining particulate matter, making them super-clean. ESPs can add 10% or more to the cost of the system, however. We have called for incentivizing the installation of these devices and are proposing such an incentive in our proposed compromise, as you'll see.

As for forest effects, virtually all the fuel used in APS systems today comes from sawmill residues or non-forest-derived residues, such as utility corridor trimming. As a result, there is virtually no forest impact, and in fact the carbon profile of sawmill residues – wood cut for another purpose, with residues destined to rot and release their carbon anyway – is so good that even anti-wood energy groups do not oppose their use.

Switching everyone over to electric heat and electric transportation will require massive grid upgrades, particularly in rural areas, where three-phase power is rare. Upgrading from single-phase to three-phase power can cost **\$1 million per mile**. Utilities are happy to make these upgrades, since they are guaranteed a profit margin on the installation, and can charge it all off to ratepayers, driving the price of electricity ever higher. If we instead can rely on modern wood heating in rural areas, some of these upgrades may not be necessary, keeping the cost of electricity down.

At a time of all-time record fossil fuel prices (including home heating oil), **modern wood heating systems offer extremely inexpensive fuel.** This helps residents and businesses, particularly those in rural areas, save significant money while <u>also</u> reducing their carbon emissions. Since the fuel is locally produced, all funds spent on pellets or chips stays in the local economy, helping support jobs in rural Massachusetts and encouraging forest landowners to keep their forest as forest instead of selling for development. Our own economic analysis shows nearly \$15 million dollars in added economic value in rural Massachusetts each year from the modern wood heating industry, despite there being less than 100 systems currently in the APS. With outrageously high fossil fuel prices, modern wood heating is poised for growth in rural areas where oil and propane can be the only options – if the financial benefits from the APS program continue.

We've seen farms increasingly using modern wood heat to expand their shoulder season growing in greenhouses and high tunnels. Removing wood from the APS would hurt farms looking to make this switch. Their other options are generally propane or oil, both of which are now hugely expensive. The likely end result is less locally-grown healthy food.

One large facility using modern wood heat needs to replace its boiler, and if wood is removed from the APS, they may choose to go back to oil instead – an outcome that no one worried about climate change would support.

Modern wood heating systems are extremely sophisticated – only the best state-of-the-art systems are permitted in the APS. If they are removed from the APS, people will continue to burn wood, as it is the cheapest heating fuel, but they will do it in much less efficient cheaper wood systems. Modern wood heat reduces carbon emissions, is super-clean, and very efficient. It's wood heat done right, which is exactly why we should be incentivizing it.

As you can see, the negative effects of removing wood from the APS are substantial and most likely would result in **increased** carbon emissions as people go back to fossil fuels for the 20- or 30-year life of their new heating system or switch to cheaper, less-efficient wood systems.

The Senate bill also removes wood heat from MassCEC's oversight. Besides ending any installation rebates for modern wood heating systems, this change would also permanently kill the wood stove changeout program run by MassCEC in partnership with DEP, which reduces air pollution with modern clean-burning stoves, and also reduces wood use because they are 30% more efficient – reducing overall carbon emissions and saving users 30% on their winter heating bills. With special incentives, low-income residents can get a free new stove and save 30% on heating costs, making this an extremely effective anti-poverty program for rural Massachusetts. This program should be resurrected and expanded because it is such a win on many levels for the Commonwealth. If the Senate bill passes as is, this program would not be possible.

As indicated earlier, our coalition proposes a compromise –removing wood from the RPS (which essentially just codifies the existing regulatory ban on biomass power plants), with the exception of wood systems that do <u>not</u> combust wood, such as biochar pyrolysis or gasification systems. This would permanently remove biomass power plants from eligibility for the RPS, and thus prevent any construction of any new plants anywhere in the Commonwealth (and prevent out-of-state plants from qualifying for RECs). Our compromise would retain modern wood heat in the APS because the science strongly supports it, and there would be a small incentive to install ESPs or other emissions control devices on APS systems, which should result in new and existing APS systems installing them. Wood heat would also remain part of MassCEC's mission, allowing wood stove changeout programs to continue.

We have proposed some amending language to the Senate bill reflecting this compromise. It is attached with this letter, and we urge you to adopt it.

Should you have any questions, please contact lobbyist Dan Bosley at 413-884-4100 or <u>dan.bosley@danbosley.com</u>, or Chris Egan, Executive Director of the Massachusetts Forest Alliance at 617-645-1191 or <u>cegan@massforestalliance.org</u>.

Thank you for your consideration.

Sincerely,









New England Forestry Foundation Littleton, MA



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ANDERSON TIMBER HARVESTING Anderson Timber Harvesting	T Jepson & Son T. Jepson & Son Spencer, MA	GROSSI GROSSI Grossi Forest Products Fiskdale, MA
Westminster, MA		
BERKSHIRE EAST MOUNTAIN RESORT	CATAMOUNT	Western Earthworks
Berkshire East Mountain Resort Charlemont, MA	Catamount Mountain Resort Egremont, MA	Western Earthworks Florence, MA
BARRY	LAND STEWARDSHIP, INC.	Atlantic
EQUIPMENT Barry Equipment Webster, MA	Land Stewardship, Inc. Turners Falls, MA	<i>Our Roots Run Deep</i> Atlantic Golf & Turf Turners Falls, MA
REAL MASTREE	SAINT BENEDICT CENTER	USING LESS ENERGY. BY DESIGN.
Brewmasters Brewing Services Williamsburg, MA	Saint Benedict Center Harvard, MA	Elevated Design Inc. Quincy, MA
LASHWAY FOREST PRODUCTS Lashway Forest Products Williamsburg, MA	Sandri ENERGY Sandri Energy Greenfield, MA	ECOEarth Recycling Winchendon, MA
HOLIDAY BROOK FARM Holiday Brook Farm	Simple Gifts Farm	FLAT ROCK FARA
Dalton, MA	Amherst, MA	Chesterfield, MA
Berniche Family Farm Berniche Family Farm	red shirt FARM	ACAD BERRY. MARINE
Chesterfield, MA	Red Shirt Farm Lanesborough, MA	Hunt Road Berry Farm W. Brookfield, MA
Ledgeline Farm Goshen, MA	Stone Bridge Farm Chesterfield, MA	Dexter Farm Hubbardston, MA
Winter Rock Farm Chesterfield, MA	Handy Lane Farm Colrain, MA	Bofat Hill Farm Chesterfield, MA

Crabapple Farm Chesterfield, MA	Dead Branch Farms Chesterfield, MA	Crystal Rock Farm Oakham, MA
Apple Meadow Farm Ashby, MA	Morning Dew Farm Worthington, MA	Kendrick Logging Greenfield, MA
John H. Conkey & Sons Logging Belchertown, MA	Dylan Field Logging Northfield, MA	Wood Energy Recyclers Princeton, MA
Wagner Wood	Hardwick Kilns	Renewable Heating Solutions
Amherst, MA	Hardwick, MA	Chesterfield, MA
Quercus Consulting West Haven, MA	Strate Landscaping Williamsburg, MA	Massachusetts Energy Systems N. Oxford, MA
Berkshire Ed. & Correction Svcs	Farm Family Insurance	
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AMERICAN WOOD COUNCIL American Wood Council Leesburg, VA	American Forest Foundation American Forest Foundation Washington, DC	BIOMASS THERMAL ENERGY COUNCIL Biomass Thermal Energy Council Washington, DC
MAINE ENERGY SYSTEMS	ALLIANCE FOR GREEN HEAT low carbon, renewable and local	Lignetics \sharp°
Maine Energy Systems Bethel, ME	Alliance for Green Heat Takoma Park, MD	Lignetics Louisville, CO
Pellet Fuels Institute [®] Pellet Fuels Institute Seattle, WA	Maine Pellet Fuels Association Maine Pellet Fuels Association Portland, ME	LYME GREEN HEAT Lyme Green Heat Lyme, NH
FROLING ENERGY BIOMASS BOILERS.SERVICE.FUEL Froling Energy Keene, NH	TARM BIOMASS	Renewable Energy Vermont Renewable Energy Vermont Montpelier, VT
WISEWOOD ENERGY WISEWOOD ENERGY Wisewood Energy Portland, OR	Aroostook Partnership Caribou, ME	Terry Tree Service Henrietta, NY

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