Massachusetts School Building Authority and Climate Goals

Aligning MSBA funding requirements with the Commonwealth's Climate goals of reducing Greenhouse Gas emissions to 50% of 1990 emissions by 2030 and carbon neutrality by 2050 is a cost-effective means of leveraging state funds.

Currently

"The MSBA's Green Schools Program provides incentives to a district to increase the energy efficiency and sustainability for new construction and major renovation/addition projects, by exceeding Massachusetts Energy base code by 20% for 2 additional reimbursement points. All projects are required to register for the most recent version of LEED-S or NE-CHPS and exceed Massachusetts Energy base code by 10%."

This does not adequately advance the Commonwealth's aforementioned goals. LEED-S, is a rating system² not a prescriptive code for energy efficiency.

The current Massachusetts commercial building code enacted February 7, 2020 section C407 has two Building Performance Certification Methods. LEED is not among them. Passive House (or Passive Building) a perscriptive energy efficiency code is. ³

August 1, 2020 the MassSave and Cape light Compact introduced new incentives for commercial buildings like the schools that would reimburse 75% of a project's cost-benefit analysis providing the project commits to Zero Net Energy as a goal. ⁴ Passive House w/ renewable energy can satisfy ZNE and code goals.

MA DOER in

Our suggestions:

- 1) Align the MSBA Climate goals and state goals
- 2) A moratorium on schools in the MSBA design phase until those goals are aligned and the following instituted ⁵
 - 3) A subsidized ZNE cost-benefit analysis/feasibility study as a Green schools requirement in the design phase of all projects. Said study could quantify payback and long term savings in mantainence and operating costs
 - 4) Green Schools Funding could be based on the percentage of ZNE or EUI (Low Energy usage) achieved by a project's design up to 4% of a project's cost, to help defray initial cost. Base code compliance is no longer acceptable.
 - 5) Funding option 1- larger share of sales tax revenue⁶
 - 6) Funding option 2- Small means tested tax on propane and heating oil which will also quantify the amounts of these fuel sources used for more easily calculated Greenhouse Gas Inventories
 - 7) Funding option 3- a share of the TCI or RGGI proceeds
 - 8) Funding option 4- Small Carbon tax such as former bill H.2810 7

Thank You for your Consideration

Footnotes:

- 1) https://www.massschoolbuildings.org/programs/green schools
- 2) https://www.usgbc.org/articles/green-building-101-what-leed

"By promoting a whole-building approach to sustainability, LEED recognizes performance in location and planning, sustainable site development, water savings, energy efficiency, materials selection, waste reduction, indoor environmental quality, innovative strategies and attention to priority regional issues.

The LEED rating systems are made up of <u>prerequisites and credits</u>. Prerequisites are required elements or green building strategies that must be included in any LEED-certified project. Credits are optional elements that projects can pursue to gain points toward LEED certification

- 3) https://www.mass.gov/doc/780-cmr-ninth-edition-chapter-13-energy-efficiency-amendments-as-of-272020/download?_ga=2.183168098.570137241.1597683031-1563865372.1597683031
- 4) https://www.masssave.com/en/saving/business-rebates/new-buildings-and-major-renovations/zero-net-energy-deep-energy-savings

"Partner with the Sponsors of Mass Save for help reaching your team's zero net energy (ZNE) goals while getting the project on a path to minimize future overall energy use. If you are planning a ZNE commercial or industrial building project, receive the highest level of incentives to offset project costs, as well as resources and tools to help you achieve a very low energy use intensity (EUI) and ultimately, zero-net energy success."

5) The moratorium could take the form of an executive order related to an energy emergency or a fast track bill in the Legislature Chapter 639, Acts of 1950 - "Civil Defense Act"

Referenced in bill \$2028

6) https://www.massschoolbuildings.org/about

The MSBA, which has a dedicated revenue stream of one penny of the state's 6.25-percent sales tax, is collaborating with municipalities to equitably invest in finding the right-sized, most fiscally responsible and educationally appropriate solutions to create safe, sound, and sustainable learning environments.

7) H.2810 https://malegislature.gov/Bills/191/H2810

Beginning of the End For Greenhouse Gas Emissions on Outer Cape?

Governor Baker has set specific goals for achieving net zero greenhouse gas emissions. There's a lot the Outer Cape can do now to reach the state-mandated benchmarks of 50% by 2030, 75% by 2040 and 100% by 2050.

In fact, a perfect opportunity has fallen into our lap: the yet-to-be built new Nauset Regional High School will last well beyond 2050. It will be one of the largest buildings on the Outer Cape. For a modest price, we can outfit the school with ground source heat pumps powered by renewable electricity. With this single action, we can have a building that runs on zero fossil fuel.

To date, the Nauset Regional High School Building Committee has not explored this option, claiming it's too expensive. While it's true that the Building Committee has taken measures to conserve energy, the bigger goal ought to be the complete elimination of all greenhouse gas emissions. Why not leap at the chance now?

We're hopeful that the Building Committee will study the data again and explore grants and other funding sources. We're also concerned that what **WILL** prove expensive is having to pay out a huge amount to retrofit a large building in a few years because we failed to do it now when it's less costly.

This is an opportunity to show our youth that we mean business when it comes to climate change. As we all know, today's young people have a dog in this fight. It's their future. This is their building. They're watching us.

If you're a parent or student, please reach out to your town's energy and/or climate action committee. The demand for progress ultimately has to come from you.

To all citizens concerned about this, we urge you to speak up at select board meetings in Orleans, Eastham, Wellfleet, Truro and Provincetown.

In addition, there are other steps you can take to make your environment energy efficient and fossil fuel free:

- Put solar panels on your roof. It's cheaper than fossil fuel and makes homes more energy efficient. For the best price, get multiple bids on the project.
- Switch over to Cape Light Compact for your energy needs. Cape Light supplies green energy and matches customers' annual usage with renewable energy certificates, thus helping to strengthen New England green energy resources.
- Heat and cool your home with mini splits. These units use electricity instead of fuel and are designed to adapt to room temperature in order not to overheat or underheat.
- Invest in an electric car. Not only will you be saving on gas costs, you'll be free of maintenance issues such as clogged filters, oil leaks, radiator, ignition and transmission problems.

As members of the Outer Cape community, we implore you: let's start with a new regional high school building designed to be truly net zero greenhouse gas emissions.

Wellfleet Energy & Climate Action Committee Orleans Renewable Energy/Wind Committee Truro Energy Committee