

EEAC 2019-2021 Three Year Plan Revision 9/14/2018 Comments
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Comments by Michael Duclos

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Thank you for the opportunity to comment on the 9/14/2018 revision of the three year plan.

I am encouraged to see general articulation of support for undertaking the task of learning and properly applying Passive House technology to the multiple challenges we face.

However, I think we need to go beyond articulating strategies and should numerically quantify this support in dollars, as well as the goals to be achieved, to better understand the impacts.

Tuesday night I attended a local Net Zero Energy forum with 60 attending held by a group of MA environmental non-profits.

I was surprised by both the number and intensity of participants giving voice to their concerns that greenhouse gas emissions are **not** 'under control' and that the government is **not** taking sufficiently aggressive action before positive feedback causes the climate to spiral out of our control – perhaps decades before 2050.

In the break out groups, I saw participants attempting to organize 'grass roots' initiatives targeting GHG reductions in their neighborhoods, towns and, municipal electric companies. Some are adopting the state's long term goal of 80% GHG reduction, but are planning intermediate steps. so progress can be measured and corrective action taken as needed.

Passive House multi-family buildings in other states have demonstrated dramatic energy use reductions, and so GHG emissions.

DOE / EIA. and electricity industry data illustrate a rapid increase in weather related grid outages.

The thoughtful and clever design of Passive House thermal enclosures facilitates 'passive survivability' – the ability of occupants to 'shelter in place' in the event of extended power outages in severe winter and summer weather.

Given the expected course of a changing climate, it seems prudent to provide strong support for this capability. PHIUS is developing a 'passive survivability' metric to be used to improve designs, and evaluate this capability.

Indoor Air Quality is a key attribute of healthy housing, and PHIUS addresses this directly by requiring designed and commissioned ventilation systems, and indirectly by educating practitioners in the selection of low emissions, environmentally compatible building materials, finishes and furnishings. Additionally, high quality filtration can be easily added to address the health risks of PM 2.5.

Passive House buildings can provide a light 'grid touch' by minimizing both annual and peak energy demand in their design and operation. PHI has two PH certification standard grades specifically addressing light grid touch.

I see an opportunity to realize a dramatic shift in how buildings are designed, commissioned and operated to maximize energy efficiency, resilience and indoor air quality.

IMHO, we should seize this opportunity now, with substantial and clearly quantified support and goals to implement Passive House technology and thinking.

Because there is so much to do, and so little time, I think it is critical the resources directed to EEAC programs be focused on specific deliverables of the Global Warming Solutions Act.

In attending the Comprehensive Energy Plan Stakeholders Meeting in Westboro in July, I saw some very aggressive proposals for future measures to reduce GHG emissions. In my opinion, all the state agencies having a significant impact on energy use in the commonwealth, especially the EEAC, should be responsible for similarly aggressive action and measureable results, if we are serious about meeting the GWSA goals to which the state is legally obligated.

Thank you for the opportunity to provide comment, please do not hesitate to contact me if there are any questions.

Best Regards, Michael Duclos

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