

**EEAC 2019-2021 Three Year Plan Revision 9/14/2018 Comments**  
9/27/2018

Comments by Michael Duclos

Certified Passive House Consultant, PHIUS Plus Rater, HERS Rater with the MA New Construction Program since 2009, a founder of Passive House Massachusetts, and the DEAP Energy Group. I've designed, verified, certified and monitored multiple Passive House buildings with both PHIUS and PHI.

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

I would like to thank the EEAC and the PAs for the support for training of certified Passive House professionals including Certified Passive House Consultant/Designer, Builder/Tradesperson, Rater/Verifier. IMHO, training architects as Certified Passive House Consultant/Designers will help inform their many design decisions with the unusual constraints of this design discipline.

This because design of a certified Passive House is a major paradigm shift from 'business as usual' with a focus on the clever design of the building as a system to deliver extraordinary comfort and indoor air quality combined with extraordinary reductions in space heating and cooling demand and peak loads, as well as optimizations of other systems like hot water and lighting. The devil - and the value - is in the extraordinary level of detail that is considered.

To realize this value at modest additional first cost, all the project participants must have a shared understanding of how this is different from a conventional, project, and how their decisions can have an enormous impact on other team members, and delivered performance.

My recent experience with the Gilford Village Knowles Multifamily PH project in NH underlines the importance of this shared understanding, where 'business as usual' deviations from the plan created some challenging new problems to solve.

Subsidized training is a critical part of educating those who will devote many additional hours beyond the classroom time to learning, developing and refining their new capabilities.

After my 2009 CPHC training, it was approximately one year of 'spare time' learning on my part before I felt ready to submit my first design for pre-certification review – because the training is only a start. This because we had no **experienced** PH professionals to assist, we were all new to the discipline.

PH Mass members have a history dating back to the first PHs certified in the state, have taken and delivered a large number of trainings, attended numerous conferences throughout the US and in Europe, and also have a great deal of local, first person experience, so I feel we are ideally positioned to assist with these trainings, and we are ready to help.

I see the \$1M training investment as critical to insuring the investment in other PH incentives deliver the expected results – realized deep energy savings and quality buildings.

I'd like to again thank the EEAC and PAs for training support and the opportunity to provide comment, I'm happy to answer any questions, now or later.

Best Regards, Michael Duclos

3 Birch Hill Road  
Stow, MA 01775  
[mduclos@deapgroup.com](mailto:mduclos@deapgroup.com)  
978-793-3189