

**Background timeline of Medfield Energy Committee's (MEC) recent interests in Medfield State Hospital (MSH) vis-a-vis the Selectmen, including information that was very recently sent to Board of Selectmen.**

1. Dec 2019 **MEC Resolution on MSH**: requests that BoS include net-zero language in the RFP. <https://www.town.medfield.net/1927/Medfield-State-Hospital>
2. 2020: **A year of effort year ensued, to draft appropriate energy language**, including engaging Eversource and New Ecology professionals (not recapped here).
3. Jan 2021. **MEC/MEA HANDOUT -- with educational PSA videos and other resources** -- distributed to BoS and other decision-makers; available at: <https://www.town.medfield.net/1816/Energy-Committee-Documents>
4. 1/5/21 MEC remarks to BoS. Climate emergency requires an all-of-government response (at the time, we put off discussion of the brand-new 2030/2050 documents put out by the state). Jim and I lay out the **importance of net-zero in new construction at MSH**. You can review the discussion on video here, the MSH discussion particularly is at: 26:00 to 45:00: <https://www.youtube.com/watch?v=i9XSv5SoxU4&feature=youtu.be>
5. 2/9/21 note to Board of Selectmen: from Fred Davis, Medfield Energy Committee Chair, and Hilli Passas (below) outlines the **brand-new Massachusetts 2030/2050 plans**; they form the grounding for *everything* related to energy and carbon. Contained therein: to achieve mandated state-wide carbon neutrality by 2050 means no fossil-fueled construction being built now. This is a big concept demanding a quick shift in attitudes across all levels of government.

*On 2/9/21 10:59 AM, Fred Davis wrote:  
To: Medfield Board of Selectmen  
From: Medfield Energy Committee  
February 9th, 2021*

*Medfield Energy Committee seeks the Selectmen's support and approval of a Warrant Article relating to Climate Goals. In preparation, we offer this outline reviewing substantial brand-new resources put forward by the Commonwealth. We hope to present a brief summary in person, but in case you want to review any of these -- 2050 Roadmap, webinar, CECP 2030 -- in advance:*

*Background: In the Commonwealth of Massachusetts, the Global Warming Solutions Act (GWSA) of 2008 requires a 25% reduction in greenhouse gas (GHG) emissions from all sectors of the economy below the 1990 baseline emission level in 2020 and at least an 80% reduction in 2050. In April of 2020, the Baker administration issued its formal determination letter establishing net-zero greenhouse gas (GHG) emissions as the Commonwealth's new legal emissions limit for 2050 (85% reduction over 1990 emissions with the remainder offset).*

*2050 Roadmap: The Massachusetts Executive Office of Energy and Environmental Affairs (EEA) commissioned a report, released in December 2020, to identify cost-effective and equitable strategies to ensure Massachusetts achieves net-zero greenhouse gas emissions by 2050. The final report, the "Massachusetts 2050 Decarbonization Roadmap" ("2050 Roadmap"), outlines the mission, approach, strategies, and implications for policy and action of the State's plan to reach the net-zero 2050 goal.*

*Webinar: We highly recommend watching this excellent webinar on the final 2050 Roadmap on YouTube. If you wish to go even deeper, sector-specific technical reports are available [here](#).*

*CECP 2030: Also issued at the end of December, the Interim Clean Energy and Climate Plan for*

2030 ([CECP 2030](#)) sets a target of 45% GHG reduction from 1990 levels by 2030, which constitutes a straight-line reduction from 2020 levels (25% below 1990) to the net-zero in 2050 (85% below 1990 level).

*Summary:* Amid the climate emergency, we must cut GHG emissions to net-zero by 2050 at the latest, as Massachusetts law requires. The Commonwealth reached the 25% reduction in GHG in 2020 primarily by dramatically reducing GHG emissions of power plants. Future reductions in GHG emissions require commitment, planning, and massive, equitable and immediate action at all levels of government and by all stakeholders. Municipalities, businesses and private citizens must all work to cut GHG footprints, in line with State law and plans.

We expect that the 2050 Roadmap, the webinar and the CECP 2030 provide helpful background related to energy policy in Medfield. Thank you for your attention to these resources. Please feel free to reach out with any questions.

For Medfield Energy Committee,

Fred Davis, Chair

Hildrun Passas, Climate Goals Workgroup Leader

6. Dec 2020: **Net zero construction today is critical for 2050** . The following note demonstrates the huge effect resulting determined by when building codes change, either 2023 or 2030. However in any particular building of course "bringing it up to code" *after* construction is likely enormously expensive. ( p. 40 of Buildings Sector Report: A Technical Report of the Massachusetts 2050 Decarbonization Roadmap Study):

"Assuming a continued, historical pace of advancement of the building code to 2050 without the implementation of a zero-site emissions policy earlier, emissions from new buildings are anticipated to grow to nearly 1.5 MMT CO<sub>2</sub> by 2050 (Figure 14). The adoption of a high-performance (the equivalent of Net Zero or Passive House examined here) new construction code would reduce annual 2050 emissions from residential and commercial new construction by 0.8 MMT CO<sub>2</sub> (54% reduction) if implemented in 2030 and by 1.30 MMT CO<sub>2</sub> (87% reduction) if implemented in 2023. Total emissions saved over 30 years reach 22 MMT CO<sub>2</sub> by 2050 if this code is implemented in 2023 and 10 MMT CO<sub>2</sub> if implemented in 2030. The additional 12 MMT CO<sub>2</sub> in cumulative savings resulting from advancing the code seven years highlights the impact of immediate action in avoiding the lock-in of fossil fuel technologies."

Bottom line: these considerations will soon become standard; they already are expected in large developments.

Compiled by Fred Davis, Medfield Energy Committee Chair  
February 19, 2020