

**SB 10 AN ACT CONCERNING CERTAIN RECOMMENDATIONS REGARDING CLIMATE CHANGE
HB 5351 AN ACT CONCERNING CERTAIN PROGRAMS AND TO INCENTIVIZE AND IMPLEMENT ELECTRIC
ENERGY STORAGE RESOURCES
Jennifer Siskind, Glastonbury CT.**

Honored Co-Chairs Sen. Needleman and Rep. Arconti and Distinguished Members of the Energy & Technology Committee,

I support rapidly moving to combine demand response measures and energy storage with wind and solar-powered projects. Below are long-duration storage projects already installed in Massachusetts and in development by Massachusetts-based VionX Energy, from their website: <https://www.vionxenergy.com/>



1Q 2020 INTERCONNECTION

SOLAR INTEGRATION

6 Hours
500kW / 3,000 kWh System

Shirley, MA

- PV Integration (1 MW Solar)
- Voltage Support
- Load Following
- UL 1973 & UL 9540 Certified



OPERATIONAL SINCE 2017

WIND INTEGRATION

6 Hours
500kW / 3,000 kWh System

Worcester, MA

- Wind Integration (600kW Wind)
- Time-of-Use Rate Reduction
- Demand Charge Reduction



It is possible that, as currently written, HB 5351 may only encourage short-duration energy storage of one hour or less. This will help utilities shore-up grid reliability, but won't help extend energy from wind turbines and solar PV when they are not producing power. To encourage renewable energy systems, we need long-duration energy storage. Please also include language in HB 5351 for the **megawatt hours that systems will produce**. An energy-to-power ratio of at least 4 hours will better integrate with wind turbines and solar PV installations.

With regard for improving emission standards, replacing diesel trucks with CNG trucks will not have impact on climate change. We have to consider what happens beyond our state borders and how that impacts heat index, storms, flooding, coastal erosion, water level rise and tidal flooding in the Long Island Sound and Connecticut river systems.

The upstream emissions from producing, processing, fractionating and delivering gas and oil, both burned as a fuel for energy during these stages, and when methane and ethane are leaked as fugitive emissions, negate any climate impacts. Fugitive leaks continue during fueling of CNG vehicles, which also create combustion emissions during operation. Please take the time to read

this 2020 report by Food & Water Watch. It includes an excellent addendum concerning research on fugitive methane emissions:

https://www.foodandwaterwatch.org/news/breaking-report-we-now-have-technology-switch-100-renewable-energy?ms=fwws_fp_01302020_fracking-climate-report-web-piece&oms=fwws_fp_01302020_fracking-climate-report-web-piece

Reducing emissions to zero for electric generation by 2040 is an improvement to our current trajectory. It would help to add target dates between the years 2020 and 2040. It should be noted that scientists recommend moving to zero emissions by 2030. I am unsure how Governor Lamont anticipates achieving zero emissions if DEEP also approves permits for the Killingly power plant, recently approved by the CT Siting Council.

Addressing emissions from the building sector is also necessary, as is restored funding for energy efficiency measures to immediately impact drawdown.

Thank you for your time,

Jen Siskind