



**Save the Sound**<sup>®</sup>

Action for our region's environment.

**Testimony of Save the Sound  
Before the Energy & Technology Committee**

***In support of S.B. No. 882 AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY, with Amendments.***

***In support of S.B. No. 952 AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS, with Clarifying Language.***

***In support of H.B. No. 6523 AN ACT CONCERNING VIRTUAL NET METERING CREDITS FOR MANUFACTURERS IN DISTRESSED MUNICIPALITIES, with Clarifying Language.***

**Submitted by Charles J. Rothenberger**

**Climate & Energy Attorney**

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*Save the Sound is a nonprofit organization representing over 4,200 member households and 10,000 activists statewide. Our mission is to protect and improve the land, air, and water of Connecticut and the entire Long Island Sound region. We use legal and scientific expertise and bring citizens together to achieve results that benefit our environment for current and future generations.*

Co-Chairs Needleman and Arconti, Vice-Chairs Winfield and Allie-Brennan, Ranking Members Formica and Ferraro, and members of the Energy & Technology Committee:

**I. Save the Sound supports S.B. No. 882 AN ACT CONCERNING CLIMATE CHANGE MITIGATION AND HOME ENERGY AFFORDABILITY, but recommends that the bill be amended to further improve it.**

This bill (1) codifies into statute the goal of a zero-carbon electric supply for Connecticut by 2040, as set out in Gov. Lamont's Executive Order No. 3 and included as a recommendation in the Draft Integrated Resource Plan, (a) authorizes DEEP to procure up to 300,000 MWh of electricity from demand response and energy efficiency measures (3) requires property owners listing homes for sale or lease to provide prospective buyers and tenants with either a Home Energy Label – a number generated during a home energy audit that summarizes the property's energy efficiency – or the last twelve months of energy bills.

**Zero-Carbon Electricity (section1):**

While we support the elements of the bill as far as they go, additional language should be added to:

(1) ensure that in-state generation resources are required to meet the same zero-carbon emissions standard as any out-of-state supply that Connecticut might procure,

(2) establish clear accountability for state agencies decision-making that supports the states' greenhouse gas reduction obligations under the Global Warming Solutions Act (GWSA) and

(3) provide for citizen enforcement of the GWSA pursuant to the Connecticut Environmental Protection Act.

As Connecticut moves to implement a carbon-free electricity sector, we need to ensure that the co-benefits of cleaning up our shared regional grid are realized by Connecticut communities, particularly those that have historically suffered from the highest pollution burdens. We must take a long-term and system-wide view of the problems and the solutions. The state's zero-carbon electricity goals must be pursued in such a way that maximizes the public health, as well as the climate, economic, and other benefits of expanded clean energy deployment.

Any 100% carbon-free goal must recognize the need to eliminate fossil-fuel and other combustion technologies within the state's borders. Connecticut cannot substitute renewable energy credits for the need to eliminate combustion-fired generation within our communities. Changes in the way electricity is generated outside of Connecticut will not produce the same localized societal benefits of changes made within the state. In other words, the cheapest solution is not going to be the least costly or highest-value solution over anything but the shortest time frame.

Accordingly, the state's 100% zero-carbon goal must prioritize the need to retire current fossil and other combustion-fired generation units located in Connecticut and replace them with a diverse portfolio of clean energy technologies sited and operating within the state.

The sooner that these clean energy resources are procured, the greater the overall lifetime value of those resources become as they displace alternative fossil fuel generating resources, providing additional cumulative public health benefits, enhancing the development of renewable technologies and generating additional private sector investment in these technologies. This approach will also increase the likelihood that we can avoid the worst impacts of climate change.

Moreover, as we strengthen the substantive elements of the GWSA, it is critical to ensure that the state's progress towards meeting its greenhouse gas reduction and clean energy goals is not hindered or undone by the individual decisions made by various state agencies. We must ensure that all arms of the government are supporting our climate goals. As noted in the Final Report of the Mitigation Strategies Working Group of the Governor's Council on Climate Change:

While Connecticut appears to be on track to meet its 2020 GHG reduction target, much steeper emission reductions will be needed to keep us on track to reach our 2030 and 2050 targets. To ensure that we continue to make the necessary progress, the state must have a disciplined and consistent approach to prioritizing mitigation policies and evaluating the climate impact of proposed actions. . . .

National and subnational actors are adopting increasingly comprehensive approaches to ensure that they remain on track to fulfill their GHG emissions-reduction obligations. While adoption of comprehensive GHG reduction and reporting requirements is critical to addressing needed emissions reductions, governments are recognizing that comprehensive compliance frameworks also are essential to ensure that discrete actions by agencies do not inadvertently cause states to diverge from the path toward to their formal reduction targets.<sup>1</sup>

In light of these concerns and trends, the Mitigation Strategies Working Group recommended statutory requirements substantially similar to those proposed in this testimony.<sup>2</sup>

### **Procurement of demand response and energy efficiency measures (section 2):**

Save the Sound supports additional procurement of Demand Response and Energy Efficiency resources. These resources are proven to save customers money and provide stability and reliability to the electric grid. This will play an important role and as we increase the deployment of critical renewable energy generation resources such as wind and solar.

### **Home Energy Labeling (section 3):**

Save the Sound supports, the home energy disclosure requirements contained in section. Disclosure policies are an important element in encouraging the valuation of energy efficiency in real estate transactions. Measurement and disclosure policies can play a critical role in moving the real estate market to recognize and value the energy efficiency of buildings. Disclosing energy efficiency and usage information (1) provides an incentive to a seller to invest in prudent

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<sup>1</sup> Final Report, Progress on Mitigation Strategies Working Group, Governor's Council on Climate Change at 14 (November 2020).

<sup>2</sup> See id., at 15.

improvements to enhance the marketability of the property and (2) provides the information necessary for a purchaser to make cost-effective energy improvements at the most convenient time – before they are settled. Performance data from efficiency financing programs is showing that significant improvements can be done at relatively little cost and that these improvements more than pay for themselves in terms of energy savings.

Connecticut has a significant amount of older housing stock that falls well below modern standards for energy efficiency, resulting in homes that are more expensive than necessary to heat in the winter and cool in the summer. Frequently, building envelopes are not insulated, windows provide little thermal benefit and heating and cooling systems do not perform optimally. These factors can significantly increase the operating expenses of a property, as well as contributing to impaired air quality and increased emissions of global warming pollutants as a result of increased combustion of fossil fuels.

Accordingly, the residential sector presents a significant opportunity to improve energy efficiency and reduce greenhouse gas emissions. Much of the state's building stock was built prior to the adoption of any building energy code. 84 percent of the state's housing stock was built before 1980 and 45 percent was built before 1960. Homes built prior to the adoption of energy codes use approximately 23 percent more energy per square foot than homes built after 1990.<sup>3</sup> The Pew Center for Global Climate Change estimates that only 40 percent of U.S. homes are well insulated.<sup>4</sup> Given that these residential buildings alone account for more than 16 percent of the state's greenhouse gas emissions, we must improve their energy performance if we wish to reduce emissions from the building sector in a meaningful way.

A 2010 study of the Dutch housing market (where residential energy certification has been in place since 2008), indicates that sellers view the energy certification as an opportunity to differentiate their property, particularly in those areas where the market conditions are toughest.<sup>5</sup> The study also found that energy efficient homes received a price premium along the spectrum of results, with the most efficient homes receiving a premium of 12.1 percent over the least efficient homes and homes receiving the second lowest rating commanding a 1.8 percent premium over the lowest rated homes.<sup>6</sup>

A 2009 study of the housing market in Portland, Oregon and Seattle, Washington, found an average sales price premium of 3 percent to 5 percent (Portland) and 9.9 percent (Seattle) for energy certified homes.<sup>7</sup> Moreover, the homes in Portland sold an average of 18 days faster than non-certified homes.<sup>8</sup>

Finally, a 2008 study by the Australian government of home sales in 2006 found that homes sold for a 1.9 percent premium for each point on the ten-point Australian Energy Efficiency Rating system.<sup>9</sup>

These findings support the results of a consumer survey conducted by the U.S. Green Building Council and McGraw Hill Construction. Among the results of that 2008 survey were that 70 percent of homebuyers are more inclined to buy a

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<sup>3</sup> "Residential Energy Efficiency and the American Clean Energy and Security Act", David Hoppock and Jonas Monast (Duke University July 2009).

<sup>4</sup> "Residential Energy Efficiency and the American Clean Energy and Security Act", David Hoppock and Jonas Monast (Duke University July 2009).

<sup>5</sup> RICS Research, "On the Economics of EU Energy Labels in the Housing Market," June 2010, p. 17.

<sup>6</sup> RICS Research, "On the Economics of EU Energy Labels in the Housing Market," June 2010, p. 21

<sup>7</sup> Lawrence Berkeley National Laboratory, "The Value of Energy Performance and Green Attributes in Buildings: A Review of Existing Literature and Recommendations for Future Research." September 7, 2011.

<sup>8</sup> Lawrence Berkeley National Laboratory, "The Value of Energy Performance and Green Attributes in Buildings: A Review of Existing Literature and Recommendations for Future Research." September 7, 2011. The certified homes in Seattle sold slightly more slowly than comparable non-certified homes, but they did command a substantial price premium.

<sup>9</sup> Lawrence Berkeley National Laboratory, "The Value of Energy Performance and Green Attributes in Buildings: A Review of Existing Literature and Recommendations for Future Research." September 7, 2011.

green home over a conventional home in a down market and that improving the energy and environmental performance of their home was the leading reason that homeowners invested in home improvements.<sup>10</sup>

Including the disclosure of energy efficiency in real estate transactions makes sense for consumers, for the market and for Connecticut's economy and environment moving forward.

**II. Save the Sound supports S.B. No. 952 AN ACT CONCERNING CERTAIN SOLAR ENERGY PROJECTS, but recommends that the bill be amended to clarify improve certain provisions.**

Among the provisions of SB 952, it (1) creates solar energy storage goals, (2) increases the virtual net metering cap, and (3) requires municipal utilities to report on their progress in achieving quantifiable carbon emission reductions and to participate in the state's system benefits charge to fund energy efficiency and clean energy programs.

**Energy Storage Goals (sections 1-3):**

- Establishes energy storage goals of 300 MW by 2024, 750 MW by 2027, and 1,000 MW by 2030.

Save the Sound strongly supports establishing energy storage goals. Energy storage will play a critical role in the transition to a zero carbon economy. Storage plays an important role in ameliorating the intermittency of solar and wind energy sources, in lowering energy demand on the distribution grid during peak times, and providing for a more resilient energy system. We appreciate the requirement that consistency with the state's greenhouse gas emissions reduction obligations be a factor in energy storage project solicitations.

We should note that PURA is currently exploring these issues as part of its battery storage Grid Modernization Docket, and recently issued a Straw Electric Storage Program Design proposal for public comment.<sup>11</sup> That docket and the work that flows from it will play an important role in the expansion of battery storage as contemplated by this bill and, together, provide a framework for appropriately scaling energy storage solutions in Connecticut.

**Virtual Net Metering (section 4):**

- Increases the Virtual Net Metering cap from \$20 million to \$30 million, and dedicates \$5 million to municipalities in Alliance School Districts.

Save the Sound supports the increase in the Virtual Net Metering funding, a program that has been very successful and for which demand has consistently exceeded the available funding (especially in the municipal program). However, it is not clear what relevance the Alliance School District designation has with respect to the siting of renewable energy generating facilities. Alliance Districts are defined with respect to metrics of student and school performance.<sup>12</sup> We recommend that the language be modified to reference siting within an Environmental Justice Community, rather than (or in addition to) an Alliance School District. If the Alliance District language is retained, there should be a requirement that schools within such Alliance School District are designated as beneficial accounts.

**Municipal Utilities (sections 6-7):**

- Requires municipal utilities to report on their progress in achieving quantifiable carbon emission reductions and to participate in the state's system benefits charge to fund energy efficiency and clean energy programs.

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<sup>10</sup> "Home Buyers Increasingly Thinking about Buying Green" (July 24, 2008). 42 percent of respondents cited this as their primary reason, compared to 34 percent who cited improving comfort and 24 percent who cited improving appearance.

<sup>11</sup> PURA Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage.

<sup>12</sup> "Alliance district" means a school district for a town that (A) is among the towns with the thirty lowest accountability index scores Conn. Gen. Stat. § 10-262u. "Accountability index" means "the score resulting from multiple student, school or district-level measures, as weighted by the Department of Education, that (A) shall include the performance index score and high school graduation rates, and (B) may include, but need not be limited to, academic growth over time, attendance and chronic absenteeism, postsecondary education and career readiness, enrollment in and graduation from institutions of higher education and postsecondary education programs, civics and arts education and physical fitness." Conn. Gen. Stat. § 10-223e.

Save the Sound supports including the state’s municipal utilities in our greenhouse gas reduction efforts. Additional reporting on local carbon reduction efforts and achievements will help to ensure that we can maintain steady progress in meeting our statewide obligations. Additionally, the municipal cooperatives should be placed on an equal footing with the state’s other utilities in funding energy efficiency and clean energy programs through the modest system benefits charge. This will enhance the state’s already effective programs, and ensure that every household in the state can realize the benefits of these programs.

**III. Save the Sound supports H.B. No. 6523 AN ACT CONCERNING VIRTUAL NET METERING CREDITS FOR MANUFACTURERS IN DISTRESSED MUNICIPALITIES, but recommends that the bill be amended to clarify certain provisions.**

This bill increases the Virtual Net Metering cap from \$20 million to \$30 million, and dedicates \$10 million to manufacturers in distressed municipalities.

Save the Sound supports the increase in the Virtual Net Metering (VNM) funding, a program that has been very successful and for which demand has consistently exceeded the available funding. While we support establishing some level of dedicated funding for distressed municipalities, it is unclear why the VNM program, specifically, is the appropriate vehicle to expand renewable energy deployment for manufacturers. VNM is designed as a “process of combining the electric meter readings and billings, including any virtual net metering credits, for . . . customer host and a beneficial account *related to such customer host’s account* through an electric distribution company billing process . . . .” (Emphasis added).<sup>13</sup> Currently, the only customer host categories identified in the statute are municipal, state and agricultural customer hosts. The logical connection among these categories is that they all (potentially) have multiple separately metered facilities that are billed to a single payer. It is unclear how a manufacturing facility would fit within the VNM program design.

Additionally, we recommend that the bill language be changed to reference Environmental Justice Communities, as defined in Conn. Gen. Stat. 22a-20a, rather than restricting it only to distressed municipalities. The state’s definition of “environmental justice community” includes *both* “distressed municipalities” *and* discrete census tracts in other municipalities that meet the applicable poverty threshold.<sup>14</sup> We feel that this change, while broadening the definition somewhat, will better meet the goals of the underlying bill.

**CONCLUSION**

The above bills will provide substantial environmental, economic, and health benefits for the citizens of Connecticut, and we urge the Environment Committee to approve them with Save the Sound’s recommended changes.

Thank you for your time and consideration of this testimony.

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<sup>13</sup> Conn. Gen. Stat. § 16-244u.

<sup>14</sup> “Environmental justice community” means (A) a United States census block group, as determined in accordance with the most recent United States census, for which thirty per cent or more of the population consists of low income persons who are not institutionalized and have an income below two hundred per cent of the federal poverty level, or (B) a distressed municipality, as defined in subsection (b) of section 32-9p.