



**Testimony of Roger Smith, Co-Director, Clean Water Action  
Energy and Technology Committee March 7, 2013**

**Regarding Governor's Bill No. 6360 AAC IMPLEMENTATION OF  
CONNECTICUT'S COMPREHENSIVE ENERGY STRATEGY.**

Clean Water Action is a national environmental non-profit with 15,000 Connecticut members and has worked on energy policy in Connecticut since 1997. We have also promoted clean energy and energy efficiency at the town and residential level through the Clean Energy Communities initiative.

We strongly support the aim of the Comprehensive Energy Strategy to craft a long-term strategy to meet state goals regarding environmental protection, cost, security and reliability. This first CES is a positive development in that direction with many laudable recommendations that should be implemented immediately. In particular, Clean Water Action strongly supports this strategy's focus on investing in energy efficiency as the cornerstone of our state's energy policy.

We offer the following comments to improve aspects of HB 6360 which implement the CES, and also to add parts that are referenced in the CES itself but left out of the bill.

**1. Natural Gas**

We caution over-reliance of natural gas for heating, electricity and transportation, as natural gas is a finite fossil fuel and has gone through tremendous price swings in the past decade. Concerns over drinking water contamination are likely to limit the amount of "fracking" that will be done to extract natural gas, and if any export terminals are constructed there could be huge increases in natural gas prices (for example: natural gas sells for \$3.50/MMBtu in CT and close to \$16/MMBtu in Japan.) At a June 2012 presentation to the Council on Foreign Relations, Exxon CEO Rex Tillerson stated "What I can tell you is the cost to supply is not \$2.50. We are all losing our shirts today. You know, we're making no money. It's all in the red."<sup>1</sup>

In addition, we are already seeing a regional collision between the use of natural gas for heating and electricity

*"In New England, a Natural Gas Trap", Matthew Wald, New York Times February 15, 2013.  
"Electricity prices in New England have been four to eight times higher than normal in the last few weeks, as the region's extreme reliance on natural gas for power supplies has collided with a surge in demand for heating."*

We are concerned that the CES starts with the premise that it is advantageous to significantly build out natural gas infrastructure in Connecticut rather than start with the goal to reduce heating costs and to look at natural gas conversions as one tool to achieve that end.

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<sup>1</sup> <http://www.cfr.org/united-states/new-north-american-energy-paradigm-reshaping-future/p28630>

We offer the following **recommendations** to improve this bill:

**a. Direct DEEP and PURA to Create a Portfolio of Heating Solutions**

We agree that Connecticut's continued reliance on heating oil is an economic and environmental challenge for the state. Fortunately there are multiple solutions to help residential and business customers. As the CES indicates that a significant portion of customers in Connecticut would never benefit from natural gas, even with the full pipeline build-out, we need the legislature to direct DEEP to create packages of solutions rather than pick natural gas as a winner.

DEEP should create packages customers can choose from and combine:

- i. Oil efficiency (reductions of 20-50% are entirely feasible for existing structures): insulation, air sealing, high efficiency oil boilers and furnaces, heat pump water heaters, storm windows
- ii. Electric heat pump conversions (to replace oil heat): air source heat pumps, ductless mini-split heat pumps, geothermal heat pumps, heat pump water heaters.
- iii. Renewable energy solutions: solar water heating; combination solar PV and electric heat pump heating systems
- iv. Natural gas conversions: high efficiency natural gas boiler or furnace and water heater.

**b. Direct DEEP and PURA to provide incentives and financing to all solutions**

The CES recommends various ways to finance natural gas expansions, and the governor's budget offers a special tax credit for gas conversions.

We urge the legislature to create a level playing field and provide convenient on-bill repayment of **any** of the above measures, and to **extend the \$500 tax credit to anyone** who takes part in the above measures to reduce heating oil consumption. We should reward everyone who helps achieve the governor's goal of reducing heating oil use.

**c. Require basic building efficiency for gas conversions**

To protect consumers and the environment, the legislature should put basic minimal requirements in place for energy efficiency for anyone using state backed financing or receiving a natural gas hook-up. Financing programs must allow efficiency and conversions to be financed together.

There is no public purpose to taking a building that is wasting oil and spending public dollars to help it waste natural gas. Energy efficiency can avoid pollution and sending millions dollars out of the state economy to buy this fossil fuel. If natural gas is half the cost of heating oil, but then gas prices double over the next decade, a customer struggling to pay bills today will still struggle a few years from now.

- For residential customers, this should mean bringing the home up to the standard of “weatherized,” as DEEP has defined, which mostly means it has a minimal level of insulation. In addition, any new heating equipment installed should meet the US DOE EnergyStar standard.
- For commercial customers, any equipment installed should meet the EnergyStar standard.

**d. Natural gas infrastructure**

We oppose the change in this bill to extend the financing of natural gas infrastructure past 15 years as whether natural gas will be available and at a competitive price is unknowable. Under the CES, consumers could be paying back pipelines in 2044, which is extremely risky. The legislature should set a firm end date by which we will no longer pay back natural gas infrastructure.

## **2. Renewable Energy**

We strongly support policies to diversify our energy supply with clean, renewable energy.

**a. Renewable Portfolio Standard**

We strongly oppose allowing large-scale dam-based Canadian hydro to qualify for incentives by Connecticut ratepayers. It simply sends money from Connecticut out of the country to support environmentally damaging projects that are backed by a foreign government. There are no additional reliability, energy price or environmental benefits from allowing large-scale Canadian hydro to count towards the RPS. It will have the effect of reducing investment in state and in-region in wind projects, fuel cells and other Class I technologies.

If Connecticut wishes to procure Canadian energy resources outside the RPS, it should do so through a competitive process that values energy, emissions and transmission costs, rather than by picking winners through special deals with companies like HydroQuebec.

**b. Require CT to participate in regional renewable energy solicitation**

The CES implementation bill needs to reduce CT’s reliance on natural gas to generate electricity, with our subsequent vulnerability to increases in gas prices and supply disruptions.

Connecticut can meet its RPS goals at lower cost, stabilize electricity rates, and spur new projects by soliciting long-term contracts for electricity and RECs with in-region Class I generators. The other New England states are moving ahead with a regional procurement. The legislature should direct CT to join.

**c. Reject new trash incineration subsidies**

We strongly oppose additional subsidies from electric ratepayers to polluting, and increasingly uneconomic trash incinerators. The RPS is intended to support new and clean energy sources, and including existing incinerators in Class I (or creating a special class just for CRRA) wastes ratepayer money with

no additional value. As the state ramps up its nation-leading recycling, producer take back and composting programs, their economics will likely worsen. The legislature should not pick winners on waste and wrongly put incineration before source reduction and recycling.

**d. Fix Virtual Net Metering**

Virtual net metering is a great policy that can help break the siting barriers associated with renewable energy. Solar is not viable if a building is shaded by trees or has an old roof. Wind is strongest in Connecticut on hilltops and very close to the water. Fuel cells have minimum sizes of 300 or 400kW, which is too large for many buildings. Connecticut is full of parking lots, brownfields and other land that could be made productive, but these spaces do not consume electricity, so they can't be net metered.

We work with towns that would like to greatly expand their use of renewable energy, but are stymied by Connecticut's broken Virtual Net Metering pilot program.

We urge several changes:

- i. Allow businesses, non-profits and municipalities to engage in virtual net metering (not just municipally owned systems)
- ii. Remove the \$1 million (or proposed \$10 million) annual cap for virtual net metering and replace it with up to 2% of annual electric sales. Public entities should be exempt from this limit as these systems serve a public purpose.
- iii. Allow virtual net metering to recoup most or all of the distribution costs as the presence of distributed generation is a net positive for the grid

**e. Commercial Renewable Property Tax Exemption**

We support expanding the property tax exemption which residential clean energy projects receive to commercial distributed Class I renewable energy generation. We know of towns that are in the bizarre situation of paying themselves property tax as they have signed solar power purchase agreements with a third party owner, and the agreement passes through the cost of municipal taxes. Other businesses avoid solar as they see that property tax is assessed on the capital cost of a system, which greatly penalizes solar PV, which is all capital cost and no fuel cost.

### **3. Energy Efficiency**

**a. Heating Oil Efficiency Funding Missing**

While the CES itself talks about the need for stable funding for heating oil efficiency, there is no mention of it in the implementer bill. Without a permanent funding source for oil, heating oil customers will lose all access to Energy Efficiency Fund programs on July 1, 2013.

Customers who heat with natural gas and electricity contribute to the Energy Efficiency Fund and have full access to their programs. Heating oil customers also contribute on their electric bill, but pay less. As a matter of fairness, oil and propane customers should also contribute to the Fund, and then have access to rebates for oil boilers and furnaces, insulation, water heaters, as well as low-cost financing (currently at 0%, 2.99% and 4.99%).

DEEP estimates that a conservation charge of 3.5 cents/gallon will fully fund heating oil efficiency. For an average heating oil customer, that would mean less than \$25 compared to the \$2500 they spend on oil each year.

In past years the heating oil dealers have opposed this. This year they testified in unison on the CES about the many benefits of oil efficiency. Will they put their money where their mouths are?

**b. CES Efficiency Fixes positive**

We support critical changes in this bill to move to three year efficiency plans, the clarification to how funding approval works to achieve all cost-effective efficiency, and support coordination of energy and water conservation.

**c. Other Efficiency Improvements Needed**

As we ramp up efficiency investments as a state, it's critical to make sure that large groups of customers aren't left out and our state's programs are designed to meet their needs. To this end we support comments by ConnPIRG to balance the composition of the Energy Efficiency Board by adding more members focused on residential consumers (including elderly/hard to serve) and municipalities.

We also support giving the Energy Efficiency Board the authority to hire and fire their program administrator, to ensure that we choose the right one for the state.

Additionally, we support the legislature directing the Efficiency Fund and CEFIA to ramp-up effective community-based outreach strategies. This will be critical to reach customers who are skeptical of utilities and government.

## **4. Reliability**

**a. Safe and secure energy for each town**

We support the microgrids program but \$15 or \$30 million doesn't go far enough. The goal should be that each town in Connecticut have shelter facilities able to house residents, conduct emergency operations, and meet basic food and medicine needs even in the event of disruptions in electricity, natural gas and gasoline supplies. We don't want to become like New Jersey and Long Island during Storm Sandy.

A portion of investments on new natural gas mains would be better invested to ensure the safety and well-being of Connecticut residents in emergencies and extreme weather events. Class III and LREC could be expanded and targeted to support generation for microgrids.

We support the critical change allowing microgrids to cross utility rights-of-way, as existing utility regulatory law likely makes the existing program unworkable.

**b. Resilient Renewable Homes- create pilot program**

The CES is largely silent on resiliency and reliability for individual residents. As the two 2011 storms and Superstorm Sandy demonstrated, energy policy can literally be life and death for residents. The current situation when a storm hits and the power grid goes down, results in entire communities losing electricity, communications, and as seen in New Jersey, also gasoline or diesel based transportation and emergency generators. At a community level we need some homes need to stay online and able to access radio and TV to get emergency information. We need some homes to have heat and power to help vulnerable neighbors through the crisis.

Connecticut needs revamp its renewable policies to incentivize and help finance residential solar power with in-home back-up systems (or electric vehicles), support renovations and new home construction which combine solar power systems, back-up and ductless heat pump heating. Over time all new homes constructed and renovated should be safe and secure homes.