



## **RENEWABLE ENERGY PLAN**

July 2018

## **Introduction**

The facts are clear and the evidence incontrovertible: our earth is getting warmer, ice caps and glaciers are melting, the sea level is rising, and an array of other related events are underway from storm surges to droughts. I strongly believe that human-induced climate change is an urgent threat that must be tackled immediately, and as governor I will rebuild the political conversation on climate change and what we must do to prepare for a new future.

I applaud the steps that Connecticut has already taken to transition to a sustainable energy future and counter the adverse effects of climate change. Our state has committed to the Paris Agreement even as the Trump administration has pulled out, and Connecticut along with 175 other governments has pledged to reduce emissions by 80 percent by 2050.

**However, I know that we can and must do more, which is why I will commit Connecticut to a further reduction in carbon emissions from current levels of 35 percent by 2030, 70 percent by 2040, and carbon neutral by 2050. These targets are tougher than required under the Paris Agreement but are achievable, measurable goals that will guide our state's energy and environmental policy.**

Further, our transition to a sustainable energy future will create thousands of new jobs in the green economy – not destroy jobs as the Trump administration alleges. We know this because across our country the states with the least carbon-intensive economies, like Washington state and Massachusetts, have had some of the highest economic growth rates. We have already seen good-paying jobs created in the fuel cell, solar installation, and home weatherization industries, and I am proud that New London will become a new manufacturing and assembling base for offshore wind turbines. As the sustainable energy transition continues, I believe our state's growth in jobs in fuel cells, solar power, and resiliency construction will pave the way for even greater growth in this area. I will make sure that many more green jobs are created. This will require bringing multiple stakeholders to the table, including industry, labor, and our fine academic institutions, and promoting innovative solutions such as the state's recent long-term contracting in order to promote the the offshore wind project out of New London.

I have spoken to many families throughout this campaign and have heard so much about how difficult it is for families to afford their energy needs, particularly during the winter. I will work diligently to bring energy costs down through a variety of steps, including investments in energy efficiency, peak shaving, more competitive bidding, and smart metering. I am a strong proponent of shifting homes away from home heating oil to much cleaner alternatives like natural gas, even better such advanced technologies efficient electric heat pumps and thermal loops. And as more renewable energy comes online in our state, we will reduce our dependence on the spot-price of natural gas which so often drives up our cost of electricity.

Lastly, I pledge to seek out and be sure that science, facts, and transparency are inherent in our decision-making. I will have the state work in closer partnership with all our cities and towns to ensure sea-level rise and resiliency are more deeply imbedded in our planning and zoning processes. I myself will be, and will have all state agencies remain, open to new ideas, and be

more receptive to how best to conceptualize and implement new policies and regulations with respect to climate change.

I will never support a budget that diverts money from our Energy Efficiency Fund, the Green Bank, and other dedicated funding sources. These programs are funded by ratepayers and make important investments in energy efficiency, conservation, and the development of new renewable energy markets. It is simply short-sighted to shortchange these programs since they are crucial to our state's response to climate change, and to our development of a renewable energy platform essential for the energy independence of our citizens.

In order to continue Connecticut's transition toward sustainable energy sources, to increase employment in the green economy, and to lower retail costs, I will:

- A. Broaden Our Search For and Increase Our Reliance on Renewable Energy**
- B. Strengthen State Programs and Pursue Regional Solutions**
- C. Modernize our Grid**
- D. Pursue Energy Conservation and Efficiency Strategies**
- E. Invest in Sustainable Transportation**
- F. Promote Resiliency Against Rising Sea Levels**

## **A. Broaden Our Search For and Increase Our Reliance on Renewable Energy**

- I support the recent toughening of the state's Renewable Portfolio Standards (RPS), yet I believe that we must go further in order to achieve our carbon reduction goals by 2050. The RPS sets standards for electricity production in Connecticut. I support strengthening the state's RPS to at least 35 percent Class I renewable energy sources by 2025; at least 50 percent by 2030; at least 80 percent by 2040; and 100 percent by 2050.
- I will support growth of distributed generation. Distributed generation resources, such as solar photovoltaic and wind generation, can provide economic, environmental, and energy security benefits to electricity customers.
- I will review the recently-passed SB 9 to ensure that net metering fairly compensates homeowners who produce solar power and reflects the value of the carbon they are offsetting. However, I am opposed to any cost-shifting to other ratepayers.
- I will streamline our state's community solar permitting process and virtual net metering rules to speed construction of medium-to-large solar installations over brownfields, parking lots, and warehouses. My goal is to create standards that drive clean energy development to sites that lack other good uses while keeping the door open to owners of productive lands who want to integrate clean energy into their mix of uses. I would prefer to see more solar arrays on urban rooftops than over our farmlands.

## **B. Strengthen State Programs and Pursue Regional Solutions**

We must continue to update and strengthen **existing state programs** and work collaboratively with other state governments to **pursue regional solutions**. This collaboration will be modeled on the Regional Greenhouse Gas Initiative (RGGI) and the Transportation and Climate Initiative (TCI).

- The Regional Greenhouse Gas Initiative (RGGI) is a multi-state initiative requiring power plants to purchase emission allowances at an auction, and the money is reinvested in energy efficiency programs and the Connecticut Green Bank. RGGI investments have saved the state millions in energy costs, saved lives, and created thousands of jobs. I strongly support RGGI and support reforms including instituting a minimum price for carbon.
- The financing mechanism known as property-assessed clean energy (PACE) helps customers afford energy efficiency and renewable energy improvements located on private properties. PACE programs help finance the initial cost of improvements and are paid back over time by the property owners on their property tax bills. The C-PACE (for commercial properties) program has been updated and it is now very successful, but the R-PACE (for residential properties) statutes need to be revised to provide private homeowners in Connecticut access to such a program.

- I support extension and improvement of Connecticut's Zero Emissions Renewable Energy Credit (ZREC) program. The ZREC program is widely supported by the business community and is an important tool in promoting new renewable energy capacity.

### **C. Modernize our Grid**

As we move toward a more sustainable energy model, we will need to leverage new technologies and improve our current transmission and distribution systems. Such **grid modernization** will require the state to support a grid that integrates distributed generation, has storage capacity, and is capable of bringing in sustainable energy from distant locations. It will require substation upgrades that allow for distribution voltage optimization, enabling time-varying electricity rates and improved system operation and awareness. In addition, with rising sea-levels and increased intensity of storms we must make the grid more resilient to extreme weather, geomagnetic disturbances, and cyber-related threats.

### **D. Pursue Energy Conservation and Efficiency Strategies**

Over the past 10 years, the New England states have dramatically increased investments in energy efficiency resources. Massachusetts, for example, has increased energy efficiency spending by 150 percent between the years 2009 and 2012, and today ranks first among the 50 states in energy efficiency spending. While we will continue to seek to reduce our kilowatt costs, energy efficiency is an equally good way to reduce energy bills for everyone in the state.

Energy conservation will reduce homeowners' bills and spare us from having to fund large infrastructure projects like pipelines and transmission lines that crisscross the state.

- I support our state's Energy Efficiency Fund and Green Bank and pledge to never support a budget that raids these programs. In 2016, the design, installation and manufacture of energy efficiency products and services in Connecticut accounted for nearly 34,000 jobs, with approximately 12,000 of those jobs generated directly from the Connecticut Energy Efficiency Fund. Further, the investments in energy efficiency made in 2016 will save Connecticut consumers approximately \$961.8 million in lifetime bill savings, meaning every \$1 invested in energy efficiency will save another \$3.89 on utility bills.
- I support continued investment in weatherization and peak shaving so that we can reduce demand for carbon-intensive energy, particularly in the early evenings when natural gas-based electricity is in high demand and when prices are highest. In particular, I support programs to help homeowners shift away from home heating oil to new, efficient alternatives like electric heat pumps and thermal loops.
- I support continued improvements in energy efficiency standards for new homes and buildings, and I believe that all new homes and buildings should be zero carbon from 2035.
- CT state government facilities account for 15 percent of the energy consumed by the state's commercial and industrial sector, and energy costs the state \$150-\$200 million annually. But a potential 40 percent reduction in energy use could save \$60 million to

\$80 million every year. I support legislation to expand and accelerate the existing Lead by Example program to foster in-state job creation and economic development while reducing the state's substantial energy costs.

- I also believe that our state and local governments can do more. I support legislation that requires the state and all local governments to participate in internal carbon pricing by 2021. Yale University successfully launched internal carbon pricing, which has proven to be effective at lowering emissions. Internal carbon pricing has no budgetary impact but promotes energy conservation and efficiency. This internal carbon pricing program will be opened to businesses on a voluntary basis.

## **E. Invest in Sustainable Transportation**

Forty percent of our state's emissions are from transportation. We cannot achieve our clean air goals and emission goals without reducing vehicle emissions.

I support tolls on large tractor trailers to reduce highway congestion and to reduce dirty diesel emissions. I support the widespread adoption of electric vehicles, zero emission vehicles, and stronger emission standards in the state, and I will protect the CHEAPR tax credits for electric vehicles. I will not allow the Trump administration to weaken our vehicular emissions laws, and I strongly oppose the recent loosening of regulations on dirty glider trucks. I will put Connecticut at the forefront of the electric car revolution by working closely with manufacturers and utilities to build out the nation's leading electric car charging infrastructure. Connecticut's participation in the regional Transportation and Climate Initiative is important to helping meet our clean air goals and emission goals regarding transportation.

## **F. Promote Resiliency Against Rising Sea Levels**

Climate Change is a lot more than just fixing our energy policy. Our response must be multifaceted and include addressing the repercussions already underway, such as rising ambient temperatures, rising sea-level, and storm intensities. While Connecticut decreases our carbon footprint, we must also prepare our society and the world we live in with education, adaptation, and environmental resiliency.

I will have the state work in closer partnership with all our cities and towns to ensure sea-level rise and resiliency are more deeply embedded in our planning and zoning processes. I will be, and will have all state agencies remain, open to new ideas, and be more receptive to how best to conceptualize and implement new policies and regulations with respect to climate change.

Our coastline is one of our most important drivers of economic growth. Furthermore, our beautiful shoreline is one of many reasons people are attracted to live and work in Connecticut. Protecting our coastline by hardening our communities against the impacts of climate change like sea-level rise will be an important component of my resiliency strategy.