LEADING THE WAY

Reducing Connecticut's Greenhouse Gas Emissions Impact

Connecticut has long been a leader in addressing climate change. The State's commitment began as early as 1990 when it passed its landmark Public Act: An Act Concerning Global Warming[1], which required the state to implement a wide range of measures to reduce energy consumption and associated greenhouse gas emissions.

Global Warming Solutions Act

10% below 1990 levels by 2020

80% below 2001 levels by 2050

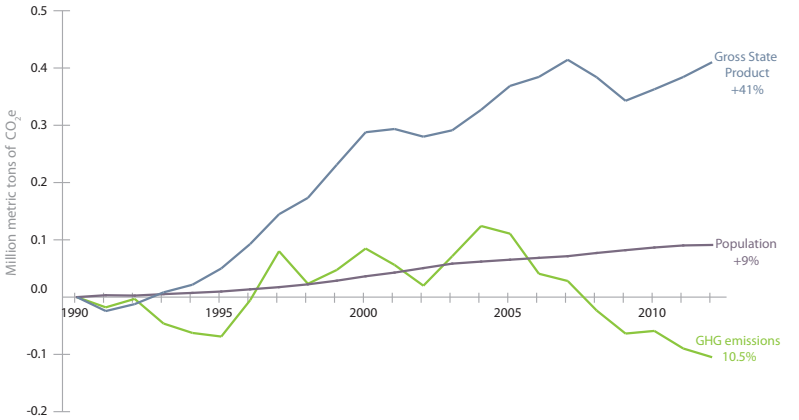
Working with the New England Governors/Eastern Canadian Premiers (NEG/ECP), in 2001 Connecticut helped to develop the first ever international, multi-jurisdictional climate change action plan. This plan established an agreement on regional greenhouse gas (GHG) reduction goals designed to achieve climate stability by mid-century. These targets include: reducing greenhouse gas emissions to 1990 levels by 2010; reducing emissions to 10% below 1990 levels by 2020; and to 75-85% below 2001 levels by 2050.

The state strengthened its leadership efforts by issuing the 2005 Connecticut Climate Action Plan (CCAP). The strategies outlined in the CCAP set Connecticut on a strong trajectory toward meeting the emissions reductions requirements of the state's 2008 Global Warming Solutions Act, which codified a 10% reduction from 1990 emissions by 2020 and an 80% reduction from 2001 emissions by 2050.

Connecticut Cuts Greenhouse Gas Emissions While Its Economy Grows

In 2012, Connecticut's greenhouse gas emissions fell to 39.5 million metric tons carbon dioxide equivalent (MMTCO2e), decreasing steadily from peak levels reached in 2004. The overall decline between 1990 and 2012 was 10.5 percent, meaning that emissions for the first time fell below the 10 percent reduction by 2020 target set in the Global Warming Solutions Act. Having reached this target eight years ahead of schedule, the state aims to maintain this progress and continue pushing for greater reductions in the coming decades to meet the 2050 goal.

Change in GHG emissions, gross state product (in 2009 $), and population, 1990-2012



Since achieving this reduction, Connecticut's population grew 9 percent and the economy grew 41 percent[2]. Increasing energy efficiency, switching to low-carbon fuels, increasing use of renewable energy, and other means is continuing to reduce greenhouse gas emissions — and transitioning the state to a "clean energy" economy.

Regional Greenhouse Gas Initiative (RGGI)

Connecticut participates in the Regional Greenhouse Gas Initiative (RGGI), in partnership with the other New England states, Delaware, Maryland and New York. RGGI is the nation's first market-based, regulatory cap-and-trade program to reduce greenhouse gas emissions from large fossil fueled power plants in the region. Collectively, the RGGI states have cut carbon pollution from the power sector 40 percent even as their economies grew 8 percent[3]. In Connecticut, carbon emissions from the electric power sector have declined significantly – 34% from 1990 to 2012[4].

Since its inception, the RGGI program has generated $137 million for Connecticut in proceeds from the sale of allowances. Connecticut reinvests 92.5% of the proceeds in energy efficiency and renewable energy programs that help

customers lower their energy bills while further reducing the state's carbon emissions[5]. A 2015 idependent study also estimated that between 2012 –2014 Connecticut's investments of RGGI proceeds added more than $56 million in net economic value to the state[6] and resulted in a net increase of 863 job-years[7].

Energize Connecticut

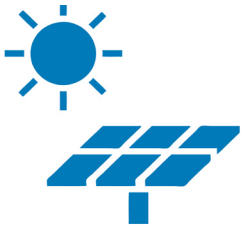
Energize Connecticut[sm] is a resource dedicated to empowering Connecticut citizens to make smart energy choices, now and in the future. A joint partnership of the Connecticut Energy Efficiency Fund, the Connecticut Green Bank, the state Department of Energy and Environmental Protection, and the local electric and gas utilities, this successful initiative provides Connecticut consumers, businesses and communities the resources and information they need to make it easy to save energy and build a clean energy future.

Connecticut's energy-saving programs play a vital role in reducing emissions and increasing economic activity in the state. For every $1 spent on utility-administered energy efficiency programs, Connecticut receives electric, gas, fuel oil, and propane system benefits valued at nearly $2.40[8]. This continued return on investment demonstrates that Energy Efficiency Fund programs are a powerful economic catalyst: they reduce customer costs, generate jobs, and make the state's businesses more competitive.

The lifetime energy savings achieved through Energy Efficiency Fund programs in 2014 resulted in 4.2 billion kilowatt hours reduced; 103 million CCF (centum cubic feet) of natural gas saved; 42.2 million gallons of fuel oil and propane reduced; and avoided emissions of 3.2 million tons of carbon dioxide equivalent, which is the same as removing 466,259 cars off the road for a year[9].

Renewable Portfolio Standard (RPS) and Deployment of Renewables

Connecticut's renewable portfolio standard (RPS) requires all retail electricity suppliers to obtain at least 27% of their supply from renewable sources by 2020. In recent years, Connecticut has launched new initiatives that harness market forces to boost the supply of low-cost, in-state renewables. Small-scale (up to 1-2 megawatts) renewable distributed generation projects can compete for long-term power purchase agreements that Connecticut's electric distribution companies are required to offer through reverse auctions. These projects support local economic development and also reduce local electricity consumption. At the regional level, in 2013, Connecticut's electric companies have signed long-term power purchase agreements that will bring more grid-scale solar and wind to the regional wholesale power market, while staying on track to meet its RPS goals and displace fossil fuel generating units.



Innovative financing mechanisms from Connecticut's Green Bank have also led to significant growth in installed solar capacity within the state. The CT Green Bank has employed its model of leveraging limited state funding to attract private capital and investment in clean energy to ramp up the deployment of renewables and energy efficiency throughout Connecticut. As a result of these programs, the state has increased its deployment of in-state renewables more than ten-fold since 2010,[10] and has deployed 43 megawatts in the first half of fiscal year 2015 alone[11].

---

[1] PA 90-219: An Act Concerning Global Warming. CT Climate Change Stakeholder Dialogue: Recommendations to the Governor's Steering Committee, Table A.1.1 (2004) http://www.ct.gov/deep/lib/deep/climatechange/2004_connecticut_stakeholder_recommendations.pdf

[2] Connecticut Department of Energy and Environmental Protection, Connecticut Greenhouse Gas Emissions Inventory 2012, Executive Summary (June 2015). http://www.ct.gov/deep/lib/deep/climatechange/2012_ghg_inventory_2015/2012_ct_ghg_inventory_final.pdf

[3] Regional Greenhouse Gas Initiative, Inc., Investment of RGGI Proceeds Through 2013 (April 2015). https://www.rggi.org/docs/ProceedsReport/Investment-RGGI-Proceeds-Through-2013.pdf

[4] Connecticut Department of Energy and Environmental Protection, Connecticut Greenhouse Gas Emissions Inventory 2012, Executive Summary (June 2015). http://www.ct.gov/deep/lib/deep/climatechange/2012_ghg_inventory_2015/2012_ct_ghg_inventory_final.pdf

[5] Regional Greenhouse Gas Initiative, CT Proceeds by Auction (2015). http://www.rggi.org/docs/Auctions/28/CT_Proceeds_By_Auction.pdf

[6] Analysis Group, Economic Financial and Strategy Consultants, The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States (July 2015). http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_july_2015.pdf [7] A job-year represents one job held for one year over a 13 year period.

[8] Connecticut Energy Efficiency Board, 2014 Programs and Operations Report, (March 2015). http://www.energizect.com/sites/default/files/uploads/Final%20ALR%202014%20Pages.2.26.15.pdf

[9] Ibid.

[10] Connecticut Department of Energy and Environmental Protection, Restructuring Connecticut's Renewable Portfolio Standard (April 2013). http://www.ct.gov/deep/lib/deep/energy/rps/rps_final.pdf

[11] CT Green Bank, presentation (Feb. 2015). http://www.ctpower.org/wp-content/uploads/2015/02/Connecticut-Green-Bank_CPES_021115.pdf.