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# Solar energy's future in Connecticut - Is there an eclipse on the horizon?

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Progress toward revitalizing a struggling commercial solar industry in Connecticut may be thwarted by the veto of the Energy Bill on May 24th. Broadly, the bill contained measures to address high electricity costs, promote green energy, and reorganize the Department of Public Utilities Control (DPUC) to focus on clean energy issues. The bill also incorporated House Bill 5362, An Act Concerning Renewable Energy, which sought to implement a market-based solar financing program with the goal of installing over 300 megawatts (MW) of solar power in Connecticut over the next ten years. Implementation of large-scale solar is an important component of the state's efforts to meet the requirements of the CT Global Warming Solutions Act and the Renewable Portfolio Standard (RPS), particularly given the limited wind resources in the state.

Previously in Connecticut, solar projects were supported through the CT Clean Energy Fund's solar rebate incentive programs; however, rebates for commercial systems were suspended in 2009. The solar legislation in HB 5362 reflected a shift from solar rebate programs to market-based solar financing programs that rely on the use of Solar Renewable Energy Certificates (SRECs) to incentivize the installation of commercial-scale solar photovoltaic (PV) systems. More northeastern states are pursuing this path, including New Jersey which introduced a market-based program in 2007 and Massachusetts which introduced the Solar Carve Out of the state's RPS in 2010.

Under HB 5362, one SREC would have been issued for each megawatt hour (MWh) of energy generated by a solar PV system. The SRECs would be sold to utilities that are required to enter into long-term contracts with developers of large commercial solar systems. Developers use the SREC value generated to provide a portion of the upfront capital needed to finance commercial-scale solar projects. A standard development scenario involves a "power purchase agreement", under which the developer typically leases roof space to install a solar system. The owner of the building agrees to purchase the power generated by the system typically at a rate lower than utility rates. This system is attractive to businesses, schools, municipalities, and other owners of large facilities because it allows for the installation of solar PV systems with little (if any) upfront cost.

The fate of the bill was caught up in debate about whether it would lower or raise electric rates in Connecticut, which are the second highest in the nation, only behind Hawaii. While opponents can claim that rate payers would, in effect, subsidize solar power, it should also be recognized that market-based financial incentives can help to develop a sustainable solar market that reduces dependence on state subsidies and has long-term growth potential, thereby minimizing long term impacts on rate payers.

Installation of solar PV can provide companies protection against rising electric rates and the ability to forecast a portion of their utility expenses far into the future. In addition, installation of commercial-scale solar on unused rooftops of large buildings or ground-mounted solar on brownfield

sites can help to spur economic development by utilizing otherwise idle assets. Solar PV systems also offer long term reliability and low maintenance costs.

In the meantime, solar developers are looking north to Massachusetts where the state's Solar RPS Carve-Out program has resulted in a virtual solar energy gold rush. This program is designed to help achieve the commonwealth's goal of developing 400 MW of solar statewide. In contrast to most RPS carve-outs, which set a percentage of electricity sales to be sourced from solar power, the Massachusetts program identifies a total amount of solar generation in MWh and divides it among utilities according to their proportion of total state sales. This requirement is known as the Minimum Standard, set at an equivalent to 30 MW of capacity in 2010. If a utility does not meet the Minimum Standard RPS obligation, it must pay an Alternative Compliance Payment (ACP). The 2010 ACP rate for the SREC program of $600/MWh is among the highest in the nation. In contrast, the ACP rate for other Class I Renewables (wind, hydro) is set at $60.92/MWh. The current value of SRECs at $300/MWh provides an incentive for utilities to purchase the SRECs to avoid the ACP, and in turn for developers to build projects that will generate them.

Supporting the solar energy industry helps to promote a clean power source which produces electricity at a stable cost, creates jobs, and strengthens business.

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