

Doug O'Malley, Director Environment New Jersey EMP Summary Comments: Modernizing the Electric Grid September 21, 2018

Environment New Jersey Research & Policy Center referenced the importance of modernizing the electric grid and specifically the impact of the rise of renewables and clean energy technology across New Jersey, and referenced a report illustrating the state's mixed record over the last decade. The report also highlights advances in the use of energy storage and electric vehicles, as well as clean, renewable energy sources like solar and wind as well as the expansion of energy efficiency technologies.

The report, *Renewables on the Rise: A Decade of Progress Positions America for a 100% Renewable Future*, provides a state-by-state assessment of the growth of key technologies needed to power the nation with clean, renewable energy, including wind, solar, energy efficiency, energy storage and electric vehicles.

New Jersey has seen significant progress on clean energy and has helped lead on clean energy, especially on solar. But, we have a long way to make the kind of energy transformation that is needed and to fulfill our potential to meet our energy needs with clean, renewable energy.

The report describes the factors that rapid growth in each category since 2007, including policies, improved technologies and lower costs, all of which suggest the potential for continued rapid growth in the years to come

New Jersey's solar program was the leading program for the state, ranking 6th nationally, with a growth of 2,727 GWh, which was a growth of more than 26 times based on our solar generation in 2008. Our total renewable energy percentage of overall energy load was 3.9%, mainly attributable to solar, which ranked us 30 overall amongst states. Nine state now generate more than 20% of their energy from clean, renewable sources.

New Jersey's growth in energy efficiency was abysmal, with a negative growth of -.06, comparing the savings in energy efficiency with the overall growth of electricity, which ranked the state 44th. Wind generation remained nearly static, with no increase and a slight decrease from 21 GWh to 20 GWh, mainly attributable to the failure of moving forward with off-shore wind.

The state had a stronger record on electric vehicle growth, with 6,219 electric vehicles sold through 2017, which ranked us as 10^{th} in the country. But we had less than 500 charging stations as of April 2018, which placed us out of the top 10 in the country.

America's utility-scale battery storage capacity grew 17-fold from 2008 to 2017, but New Jersey is not an industry leader, with the growth of 1 MW, which ranked 20th nationally.

We're seen progress on solar and electric vehicles, but it's clear New Jersey has a lot of catch up to do. This should be a wake-up call as the state initiates the state Energy Master Plan that we will need to take bold policy steps to reassert New Jersey as a national clean energy leader. The neglect of the Christie era pushed us clearly behind, and we think thi this as a successful Murphy But, we're falling behind, and missing huge opportunities to protect our health and our environment by taking clean energy to the next level.

The report comes as a diverse group of U.S. cities, states, corporations and institutions commit to 100 percent renewable energy. In 2015, Hawaii became the first state in the country to set a 100 percent renewable energy requirement, and similar bills in both Massachusetts and California have cleared major hurdles this year. At the local level, 61 American cities, led by a mix of Republican and Democratic mayors, have committed to that goal. In addition, 131 major companies, including Bank of America, Google and Anheuser-Busch have committed to power their operations with 100 percent renewable energy.

The reality is inescapable: fossil fuels pollute our air, water and land, threatening our health and changing our climate even faster than scientists predicted. We need to seize the moment, build on recent progress and lean into a future powered by clean, renewable energy.

Repowering our economy with clean, renewable energy can put our nation on a healthier, more sustainable course. And with rapid improvements in technology, vast clean energy resources, and a willing public, a future powered entirely by clean, renewable energy is increasingly within our reach.