



March 3, 2017

Re: Large Customer Demand for Renewable Energy in North Carolina

Dear Secretary Regan:

Renewable energy is increasingly affordable and reliable. As a result, demand for clean, cost-effective sources of energy is rising among large energy customers in North Carolina, and across America. Access to renewable energy choices is key to meet the needs of companies with operations in North Carolina and to attract more businesses to the state.

Renewable energy buyers such as large consumer brands, retailers, manufacturers, the military, higher education, and municipalities have made commitments to procure more renewable energy. For example:

- As of 2013, 43% of the Fortune 500 – 215 companies – are addressing climate change and clean energy in their own operations and supply chain through public commitments.¹
- To date, 65 companies have joined the Corporate Renewable Energy Buyers' Principles, in support of increased access to renewable energy at the state level.² Many of these companies have a major presence in North Carolina, including Google, Microsoft, Lockheed Martin, Walmart, and VF Corporation.
- The Department of Defense (DoD) has a goal to supply 25% of all the energy it produces or buys from renewable energy by 2025.³

The availability of retail choice is a critical factor for a state's attractiveness to large buyers of renewable energy. A recent study – the [2016 Corporate Clean Energy Procurement Index](#) – jointly released by the nation's retail and information technology industries, notes that demand for clean energy among retailers and technology companies is expected to increase to 60 gigawatts (GW) by 2025. The study asserts that states that are investing in clean, domestic energy production are also the most likely to attract businesses, creating thousands of jobs in their communities. **North Carolina ranks at #30 on the overall index, indicating that the state has significant room for improvement to become an even more attractive state to buyers of renewable energy.**

¹ WWF, Ceres, Calvert Investments, and David Gardiner & Associates, Jun. 2014, *Power Forward 2.0: How American Companies Are Setting Clean Energy Targets and Capturing Greater Business Value* (www.dgardiner.com/wp-content/uploads/2014/06/power_forward_2-0_FINAL.pdf).

² WWF and World Resources Institute, Jan. 2017, *PepsiCo and TD Bank sign on to Renewable Energy Buyers' Principles* (www.buyersprinciples.org/2017/01/24/pepsico-and-td-bank-sign-on-to-renewable-energy-buyers-principles/).

³ American Council on Renewable Energy (ACORE), Feb. 2014, "Renewable Energy for Military Installations" (www.acore.org/files/pdfs/Renewable-Energy-for-Military-Installations.pdf).



As they are setting more ambitious goals to buy renewable energy, large energy users increasingly seek to contract directly for renewable energy to meet their goals and to protect against future energy price increases. Removing barriers to renewable energy in North Carolina would create an even more positive business environment in the state, attracting more companies interested in renewable energy procurement, thereby creating more jobs and an even more robust local economy. Third-Party Power Purchase Agreements (PPAs), for example, are long-term contracts between an energy consumer (like a factory or retail company) and an energy provider to procure renewable energy. This free-market solution allows companies to procure energy without making major capital expenditures or taking on the risk associated with operations and maintenance. Third-party PPAs are currently illegal in North Carolina.

In 2015, 10 major companies signed onto a letter expressing support for third-party financing in North Carolina. The companies called for more choice and options for corporate procurement of renewable energy. The 10 companies are: Cargill, Family Dollar, Lowe's, Macy's, New Belgium Brewing, Target, Unilever, VF Corporation, Volvo, and Walmart.

Renewable energy investment continues to grow in the U.S.

- In 2016, total U.S. investment in clean energy was \$58.8 billion, almost 32% higher than the total U.S. investment in 2013 (44.7 billion).⁴
- 2016 set a new record for annual renewable energy capacity additions, as the U.S. added a whopping 22 GW of renewable generating capacity, over half of which was from solar.⁵

Renewable energy is increasingly affordable.

- Installed solar PV system prices in the U.S. have dropped steadily – by 66% since 2010.⁶
- Installed wind project prices in the U.S. have dropped as well – by 27% since 2010.⁷

Renewable electricity procurement represents a growing trend among large corporate customers and other institutional buyers, such as the military and higher education.

⁴ Business Council for Sustainable Energy (BCSE), February 2017, "2017 Sustainable Energy in America Factbook" (www.bcse.org/sustainableenergyfactbook/).

⁵ BCSE, February 10, 2017, "View BCSE's 2017 Factbook for Updated Statistics on Energy Efficiency in the United States" (www.bcse.org/view-bcse-2017-factbook-for-updated-statistics-on-energy-efficiency-in-the-united-states/).

⁶ Solar Energy Industries Association (SEIA), Sep. 9, 2016, "Solar Spotlight: North Carolina" (www.seia.org/sites/default/files/NC%20State%20Fact%20Sheet_9.9.2016.pdf).

⁷ American Wind Energy Association (AWEA), 2015, "The Cost of Wind Energy in the U.S." (www.awea.org/falling-wind-energy-costs).



- Corporate procurement of renewable energy doubled from 2013 to 2014 and again from 2014 to 2015. Although corporate procurement declined slightly in 2016 (2.5 GW, compared to 3.7 GW in 2015), it remains well above 2014 levels.
- Non-utility customers accounted for 52% of all wind PPAs in 2015 and 39% of all wind PPAs in 2016.^{8,9}

There is a tremendous opportunity for renewable energy deployment in North Carolina.

- The 2,436 MW of solar energy currently installed in North Carolina ranks the state third in the country in installed solar capacity.¹⁰ Of this capacity, 28 megawatts (MW) are residential, 117 MW are commercial, and 2,292 MW are utility-scale. There is enough solar energy installed in the state to power 260,000 homes.¹¹
- The Amazon Wind Farm US East, which will begin operation in early 2017, is the first utility-scale wind farm in North Carolina, and the first large scale wind energy facility in the southeastern U.S.¹²
- In 2010, the National Renewable Energy Laboratory released a report that found that North Carolina had 297 GW of offshore wind capacity within 50 miles of the coast, the largest resource potential of any state on the East Coast.¹³

Increasing North Carolina's use of renewable energy will create jobs and spark investment in the state.

- According to the 2016 NC Clean Energy Industry Census, there are currently more than 34,294 full-time equivalent jobs in the renewable energy and energy efficiency related sectors, which is a 31% increase since 2015.
- Energy efficiency remained the state's top clean energy sector, accounting for 47% of all employment with 16,107 FTE jobs, most of them coming from the sale of building system components.
- There are currently more than 206 solar companies at work throughout the value chain in North Carolina, employing 5,950 people.
- In 2015, \$1.689 billion was invested in solar installations in North Carolina. This represents a 159% increase over the previous year, and is expected to grow again this year.

⁸ BCSE, *supra* note **Error! Bookmark not defined.**

⁹ AWEA, January 26, 2017, "U.S. Wind Industry Fourth Quarter 2016 Market Report" (www.awea.files.cms-plus.com/FileDownloads/pdfs/4Q2016%20AWEA%20Market%20Report%20Public%20Version.pdf).

¹⁰ SEIA, *supra* note 6.

¹¹ SEIA, *supra* note 6.

¹² Elizabeth City, NC, "North Carolina's First Wind Farm" (www.elizabethcitypasquotankcdc.com/north-carolinas-first-wind-farm/).

¹³ Clean Energy States Alliance, "North Carolina Opportunities Offshore Wind Businesses" (www.cesa.org/assets/2013-Files/OSW/DW-OSW-State-Profiles/North-Carolinafinal.pdf).



- There are 27 active manufacturing facilities in the state that produce components for the wind industry, which employ hundreds of workers.¹⁴

We welcome the opportunity for a dialogue between the Department of Environmental Quality and large renewable energy customers and are eager to participate in such an educational session in 2017.

About David Gardiner and Associates

David Gardiner and Associates (DGA) is an Arlington-based strategic advisory firm focused on climate change, clean energy, and sustainability. Our clients are non-profit organizations, corporations, and trade associations. We help our clients with strategic planning, research and analysis, and improved communications through our partnership building and advocacy. Our team integrates decades of practical experience across business sectors with diverse subject expertise and produces highly tailored and high quality products to meet the specific needs of each client. For more information, visit www.dgardiner.com and follow @dgardinera, @CustomerREVO, and @AllianceIndEff on Twitter.

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¹⁴ AWEA, "North Carolina Wind Energy" (www.awea.files.cms-plus.com/FileDownloads/pdfs/North%20Carolina.pdf).