

# EXPANDING THE CLEAN ENERGY INDUSTRY

Danielle Simms // Virginia League of Conservation Voters

## INTRODUCTION

The clean energy industry is booming in the United States. Renewable energy is becoming cheaper to produce and is now more cost-effective than its fossil fuel counterparts. Several states, the District of Columbia, and Puerto Rico have committed to transitioning their energy portfolio to 100% renewable energy sources by 2050. This shift has spurred clean energy workforce development in these states and jump started conversations on how to equitably transition the workforce of the fossil fuel industry to clean energy jobs.

Virginia is also approaching an energy crossroads. With the proper incentives, the Commonwealth can ensure that as we shift from fossil fuels to renewable energy all Virginians have the opportunity to participate in this growing sector.

## BACKGROUND

The renewable energy sector employs over three million people in the United States. This is three times more than the roughly one million people who work in the fossil fuel economy. Clean energy job growth grew 3.6% in 2018, netting over 100,00 new jobs and is expected to grow an additional 6% in 2019. Additionally, renewable energy is the fastest growing source of energy generation in the United States. The U.S. Bureau of Labor Statistics projects that the two fastest growing jobs until 2026 will be solar installers and wind technicians.

Currently, Virginia is #10 in the number of clean energy jobs, with more than 78,000 Virginians working in the industry. Of that figure, 5,000 are clean vehicles jobs, over 4,000 are solar jobs, and more than 600 are wind jobs. Already, demand for wind turbine technicians will grow by 96% by 2026, while demand for solar photovoltaic installers will grow by 105% in the same time.

With a port, offshore wind potential, communities yearning for economic development, and a strong veteran workforce, Virginia is primed to be a leader in the clean energy economy. To ensure that the Commonwealth's workforce can fully benefit from the new energy economy, Virginians need the training and experience to be competitive in the marketplace.

**RENEWABLE ENERGY IS THE FASTEST GROWING SOURCE OF ENERGY GENERATION IN THE UNITED STATES. THE U.S. BUREAU OF LABOR STATISTICS PROJECT THAT THE TWO FASTEST GROWING JOBS UNTIL 2026 WILL BE SOLAR INSTALLERS AND WIND TECHNICIANS.**

Investing in the clean energy economy, can be achieved several ways including training & education programs, apprenticeships, and tax incentives for companies.

## TRAINING & EDUCATION

Community colleges across Virginia offer courses on renewable energy, with some offering boot camps or certifications to prepare students to install renewable systems. As Virginia expands these renewable energy programs and trainings, processes and procedures should be implemented to prioritize minority-serving institutions and areas impacted by fossil fuel extraction and power generation.

## APPRENTICESHIP PROGRAMS

According to the American Jobs Project, apprenticeship programs can produce more than \$27 in tax returns for every \$1 invested by the state over the career of an apprentice. For example, South Carolina established an apprenticeship program offering companies \$1,000 in state tax credits per apprentice (employed for at least 7 months) per year for up to 4 years. The system has trained over 30,000 apprentices, and has seen measured growth of over 100 new apprentices per month. The program was recognized by the US Department of Labor as a national model for state agency workforce development partnership.

## TAX INCENTIVES

Virginia provides a green job creation tax credit. While this tax incentives is valuable, other options exist to further spur recruitment of new businesses to the Commonwealth, including establishing an Anchor Institution Tax Credit. With this tax credit, if a renewable energy manufacturer is responsible for bringing a company from the renewable supply chain to the state, then the referring company would receive a tax credit if the other entity established operations in Virginia. You can view more tax incentives at the Database of State Incentives for Renewables & Efficiency (DSIRE).

For each of these investments, it is critical Virginia look to diversifying the renewable energy workforce. A recent report found that white males account for 80% of solar executives, 73% of the workforce is male, and 74% of the workforce is white. Additionally, most solar energy jobs are concentrated in the eastern parts of the state. Residents of Virginia's south and southwest working to transition away from the fossil fuel economy are not benefiting from the growth of the solar workforce. With the industry continuing to grow, Virginia should ensure that the workforce and its leadership is representative of the geographic, socioeconomic, and racial diversity of the Commonwealth.

## CONCLUSION

Virginia should invest more in the clean energy economy in order to meet Virginia's energy demands completely with clean energy and spur job growth in the Commonwealth. As more businesses relocate to Virginia with pledges to power their companies by clean energy – such as Amazon's pledge to use 100% renewables - we must be equipped with the clean energy workforce in the Commonwealth

## POLICY RECOMMENDATIONS

**Establish a statewide framework that** provides clean energy jobs education and training with an emphasis in communities left behind in the fossil fuel industry, low-income communities, and communities of color:

- Develop a clean energy jobs curriculum at community colleges focused on critical growth areas such as buildings, energy, engineering, environment, and transportation;
- Expand Military2Manufacturing to train veterans for advanced manufacturing careers; and,
- Establish a Foundation Liaison role within the Governor's Administration to leverage grant makers to spur recruiting new businesses, job creation and workforce development

## Use Virginia's tax code to incentivize

investments in job creation in the clean energy economy:

- Protect Virginia's Green Job Tax Credit program;
- Create an apprenticeship tax credit program predominantly in fossil fuel communities, low income communities, and communities of color to train and educate the communities most affected by fossil fuels, energy burden, and environmental health concerns; and,
- Entice more companies (and thus clean energy jobs) to come to Virginia by creating an Anchor Institution Tax Credit to bolster the solar and offshore wind industry.

WORKERS INSTALLING A SOLAR CELL ON A ROOF..

Image credit: Shutterstock

