

2017 NEW YORK CLEAN ENERGY INDUSTRY REPORT



New York's nation leading policies are fueling job growth, with Governor Andrew M. Cuomo's Reforming the Energy Vision (REV) enabling the framework for ground-breaking market transformation and clean energy job creation. As aggressive statewide policy standards continue to promote growth and technology diversification, a robust supply of trained clean energy workers will be increasingly important. The *2017 New York Clean Energy Industry Report* analyzes data to produce useful insights for New York as the State seeks to meet its nation-leading climate goals while creating jobs and economic opportunity.

▶ **146k** **clean energy jobs**
across New York State at the end of 2016

▶ **3.4%** **historical growth of clean energy jobs**
from December 2015 to December 2016, while State's overall employment growth was 1.9% during that time.

clean energy job growth

spans a diverse set of technologies and comes alongside aggressive policy standards that highlight the State's overarching vision to create a clean, resilient, and affordable energy system.

Report analyzes:

- > clean energy jobs
- > geographic distribution
- > employer needs

CLEAN ENERGY EMPLOYMENT BY TECHNOLOGY (number of jobs, December 2016)



110k **Energy Efficiency**
Energy efficiency technologies are commercially available throughout the State. Includes lighting, ENERGY STAR® appliances (including HVAC), insulation, advanced building materials, renewable heating and cooling, and other efficient technologies.



22k **Renewable Electric Power Generation**
Includes solar, wind, geothermal, low-impact hydropower, and other renewable generation technologies.

12k **Solar Technology**
Solar technology firms employ the largest number of part- and full-time renewable generation workers.



8.4k **Alternative Transportation**
Includes electric, hybrid, plug-in hybrid, and fuel cell/hydrogen vehicles, natural gas and other alternative fuel buses, and transportation storage.



2.9k **Renewable Fuels**
Includes biofuels such as wood pellets and ethanol.



1.4k **Grid Modernization and Storage**
Includes smart grid, microgrid, demand response management, and grid storage.

CLEAN ENERGY JOB GROWTH IS OCCURRING STATEWIDE

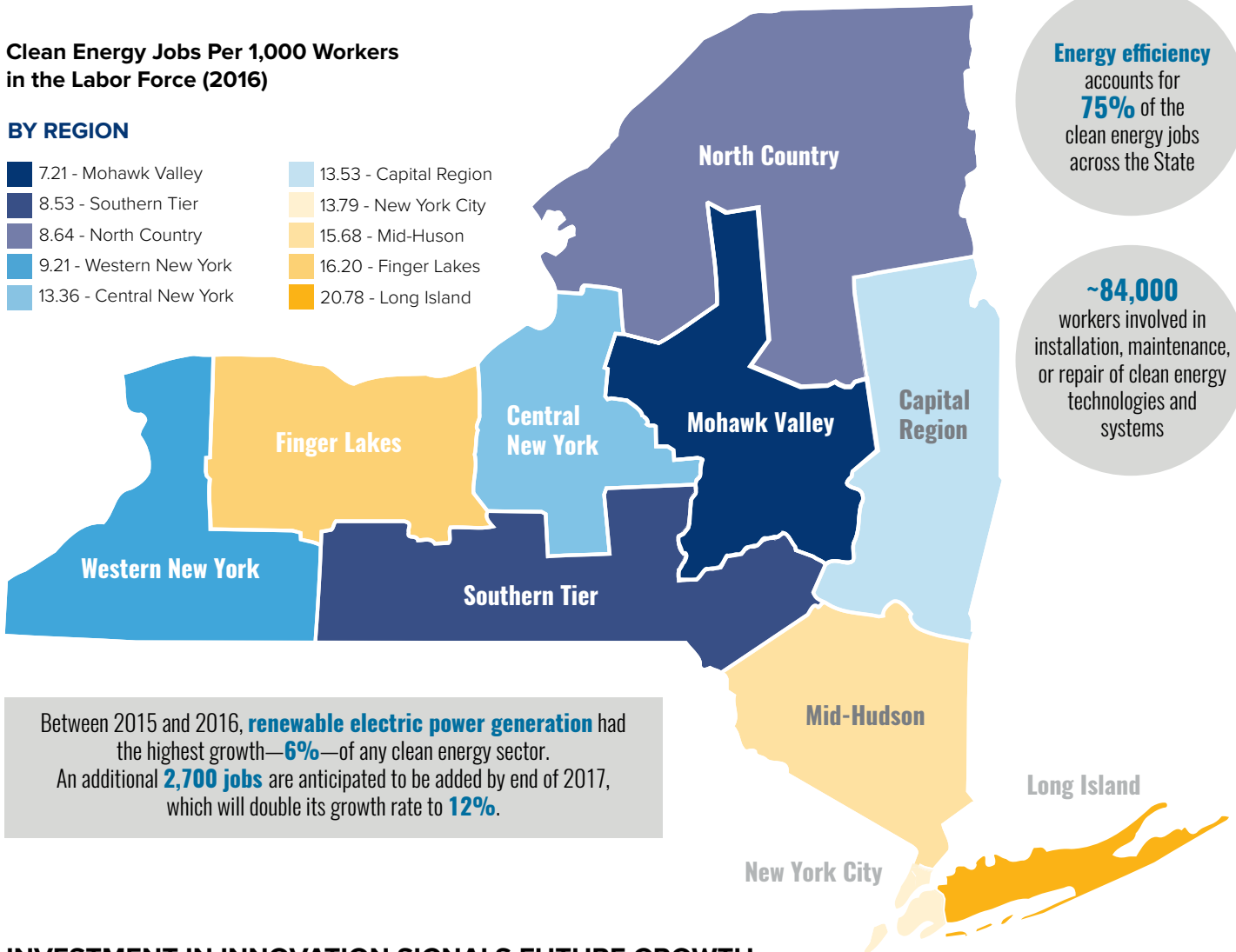
Clean Energy jobs exist in various types of companies, many of which are small businesses that serve local communities and pay competitive wages.

In general, Long Island, the Finger Lakes, and Mid-Hudson regions have the highest concentration of clean energy workers overall. New York City, the Capital Region, and Central New York also have a relatively high concentration of clean energy workers.

Clean Energy Jobs Per 1,000 Workers in the Labor Force (2016)

BY REGION

7.21 - Mohawk Valley	13.53 - Capital Region
8.53 - Southern Tier	13.79 - New York City
8.64 - North Country	15.68 - Mid-Hudson
9.21 - Western New York	16.20 - Finger Lakes
13.36 - Central New York	20.78 - Long Island



Between 2015 and 2016, **renewable electric power generation** had the highest growth—**6%**—of any clean energy sector. An additional **2,700 jobs** are anticipated to be added by end of 2017, which will double its growth rate to **12%**.

INVESTMENT IN INNOVATION SIGNALS FUTURE GROWTH

Investment in innovation is a signal of potential future growth and opportunity within the clean energy economy.

The grid modernization and storage sector is an area of significant innovative activity for New York State. With the highest percentage of companies primarily working with pre-commercial products—about 35 percent—**grid modernization and storage companies have secured the most investment dollars** from 2012 through 2016 compared with any other technology sector.

Read the 2017 New York Clean Energy Industry Report at nyserdera.ny.gov/clean-energy-jobs

The *New York Clean Energy Industry* report tracks and analyzes data on clean energy jobs, geographic distribution, and employer needs, to produce useful policy recommendations that meet New York State's climate goals and create jobs and economic opportunity across the State.