NYSERDA's Clean Energy Workforce Development Funding Opportunities

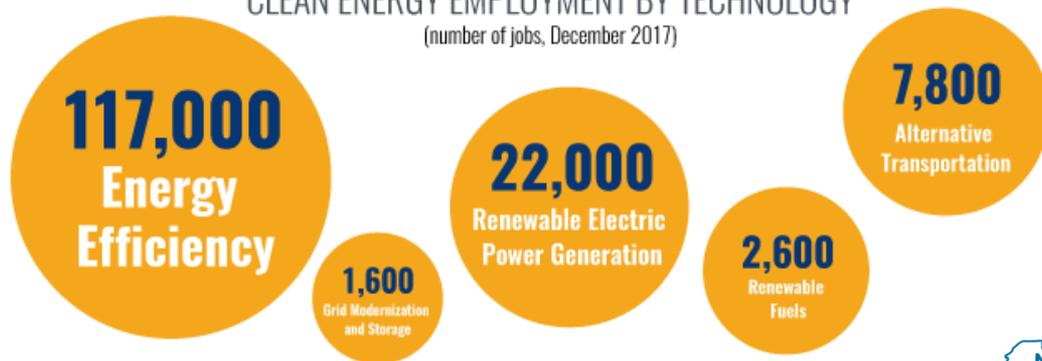## Program Opportunity Notices (PONs) 3981, 3982, 3715 & 4000

Employment Overview

over **151k** clean energy jobs in 2017 across New York State

5.6k new clean energy jobs in 2017 employers expect to hire 8,000 more in 2018

CLEAN ENERGY EMPLOYMENT BY TECHNOLOGY
(number of jobs, December 2017)

117,000 Energy Efficiency

1,600 Grid Modernization and Storage

22,000 Renewable Electric Power Generation

2,600 Renewable Fuels

7,800 Alternative Transportation

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Overview of Findings

Over 151,000 Jobs: The clean energy sector now employs more workers than the thriving biotech and agriculture industries combined

Job Growth: New York's clean energy economy continues to see stronger job growth than the State's economy overall

- Clean energy employment grew by 3.9**%** from 2016 to 2017
- Overall NY employment grew 1.7**%** in that time

Energy Efficiency Is Key: Of the five clean energy technology categories, this one continues to be the largest in terms of jobs and investment

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Technology - Highlights

Energy Efficiency: Largest number of jobs by technology category; work includes installing, manufacturing, and selling energy efficiency technologies like high-efficiency HVAC and LED lighting systems

Renewable Energy: Growth in the number of workers who spend a "majority of their time" and "all of their time" working on renewables projects: from 77.3% to 81.8% for the former and 74.0% to 77.8% for the latter
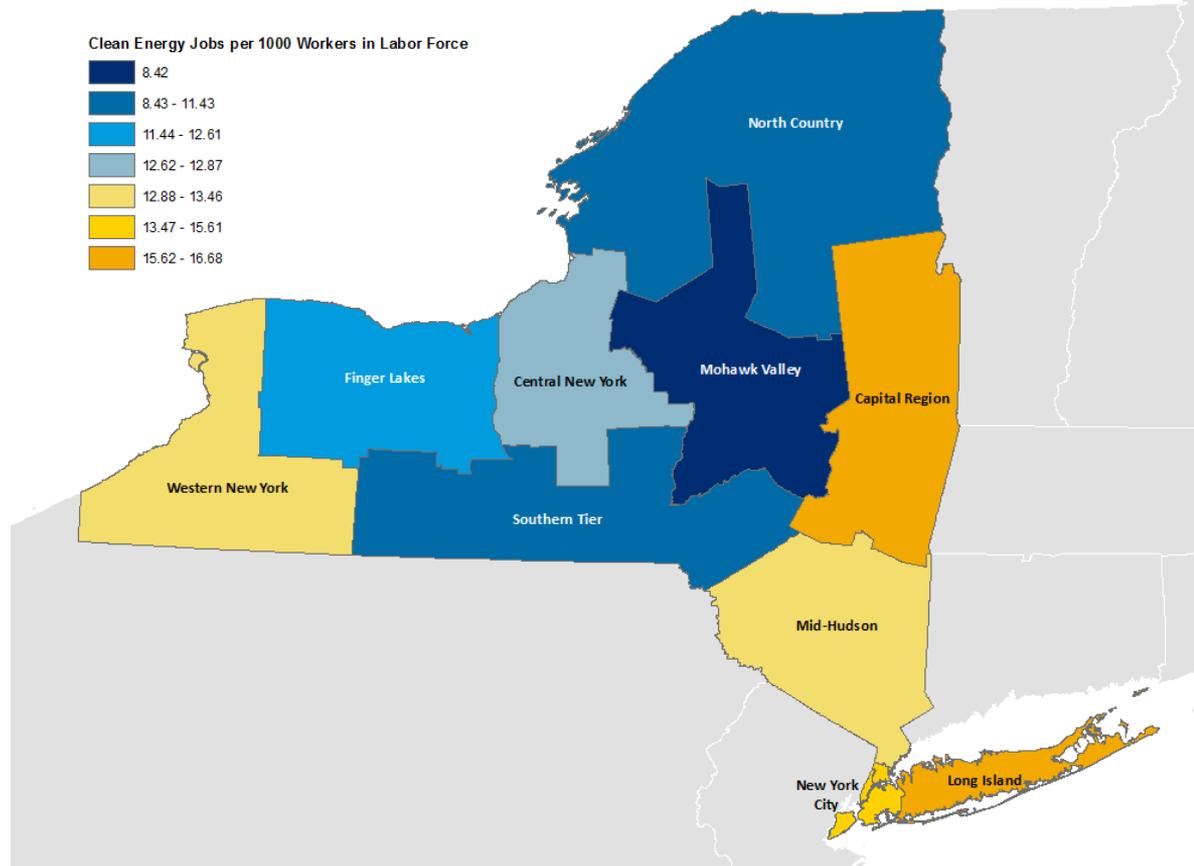
Grid Modernization and Storage: Tremendous job growth in 2017 (12.6%) and high expected growth through 2018 as well (8%). Employer expectations are consistent with climbing levels of investment in the demonstration and commercialization of these technologies

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Clean Energy Employment by REDC

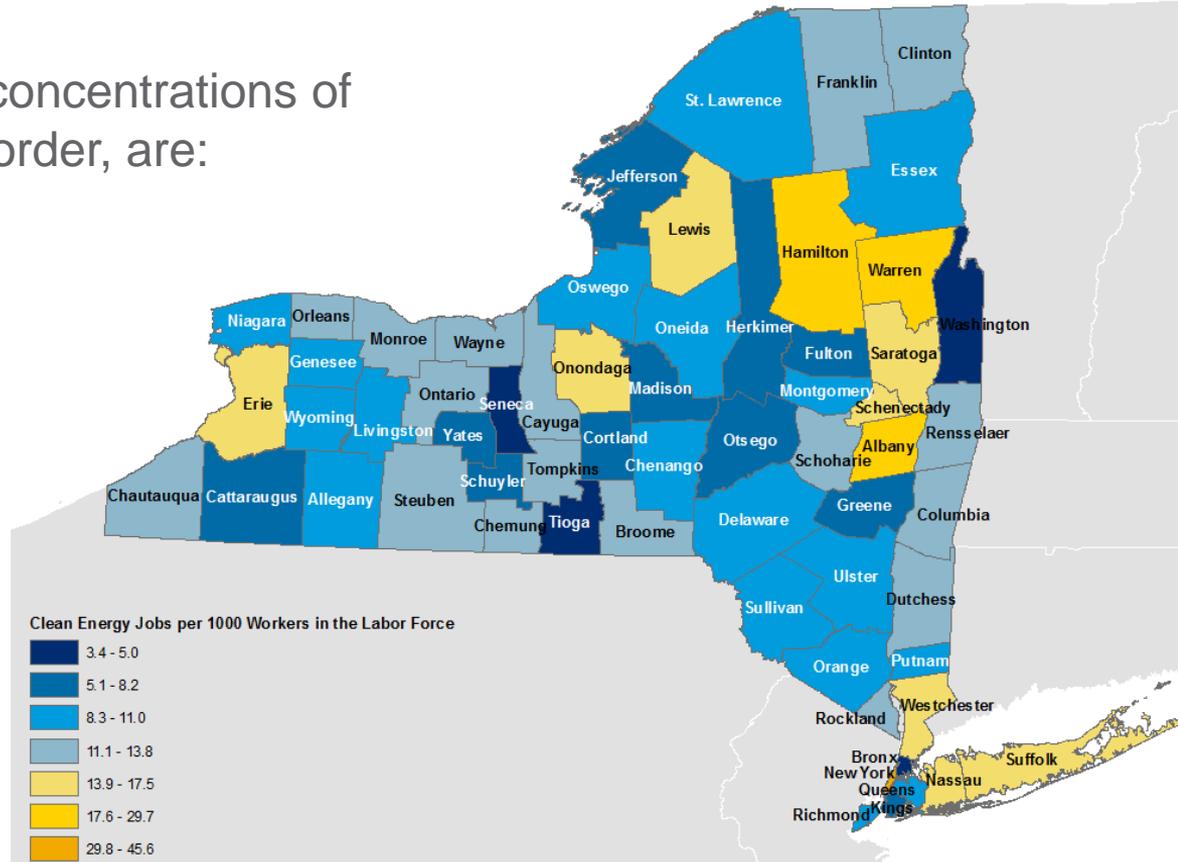By REDC, the highest concentrations of clean energy workers are located in:

- Capital Region
- Long Island
- New York City
- Western New York
- Mid-Hudson

Clean Energy Jobs per 1000 Workers in Labor Force
- 8.42
- 8.43 - 11.43
- 11.44 - 12.61
- 12.62 - 12.87
- 12.88 - 13.46
- 13.47 - 15.61
- 15.62 - 16.68

Clean Energy Employment by County

The counties with the highest concentrations of clean energy workers, in rank order, are:

- New York
- Warren
- Hamilton
- Albany

Clean Energy Jobs per 1000 Workers in the Labor Force

- 3.4 - 5.0
- 5.1 - 8.2
- 8.3 - 11.0
- 11.1 - 13.8
- 13.9 - 17.5
- 17.6 - 29.7
- 29.8 - 45.6

Workforce Needs: Hiring

- Employers see plenty of applicants, but often not with desired qualifications

- The occupations that employers find hardest to hire for are:
  - Technicians
  - Sales, marketing, and customer service staff
  - Engineers

Reasons for Hiring Difficulty Reported by Employers

Reason	Percent
Lack of experience, training, or technical skills	51%
Insufficient non-technical skills (work ethic, dependability, critical thinking)	34%
Insufficient qualifications (certifications or education)	26%
Competition/ small applicant pool	20%
Cannot provide competitive wages	11%
Cannot pass employment screening	9%
Economy/structural problem	6%
Other	3%
Cultural fit	3%
Location	3%
Difficulty finding industry-specific knowledge, skills, and interest	3%

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Workforce Development Funding Opportunities

- PON 3891: Capacity Building for a Pipeline of Clean Energy Workers: $7 million

- PON 3892: On-the-Job Training for Clean Energy Workers: $10 million

- PON 4000: Clean Energy Internships: $10.5 million

- PON 3715: Workforce Training for Building Operations & Maintenance: $5 million

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Program Goals and Details for PON 3981: Capacity Building

PON 3981 Basics

- Competitive solicitation with multiple due dates, $7 million available. First due date is December 13, 2018, 3 PM.

- Proposers must be in SBC/CEF service territory.

- Up to $250,000 per proposal, 30% cost share.

- Proposers should be training organizations partnered with businesses.

Goals

- Assist clean energy businesses in finding/hiring skilled workers and upskilling existing workers.

- Reduce the risk and expense for businesses of recruiting/onboarding/training/retaining workers.

- Projects funded will develop/deliver training and/or hands-on experience and provide job placement assistance.

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Target Audiences

- Those who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, or inspect energy efficiency and clean energy technologies/systems.

- Priority populations

Priority Populations

- Veterans
- Native Americans
- Individuals w/ Disabilities
- Low-income individuals (definition in PON)
- Unemployed power plant workers
- Previously incarcerated individuals
- 18-24 year-olds participating in work preparedness programs (BOCES, technical high schools, Conservation Corp, YouthBuild, AmeriCorp, etc.)
- Residents in Environmental Justice communities (definition in PON)

Examples of Eligible Technology Areas*

- High efficiency HVAC

- Renewable heating & cooling

- High efficiency water heating

- Insulation and air sealing

- High efficiency lighting and controls

- Building automation and controls

- Smart Grid

- Energy Storage

- Related Areas

*Should have a measurable impact on energy efficiency and reduction in greenhouse gas emissions

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Training Providers

- Must have training locations located in the **SBC/CEF** service territories and can include: technical high schools, community colleges, universities, trade associations, manufacturers, unions, community-based organizations and not-for-profit organizations.

Required Elements

- Documented gaps and opportunities in the clean energy market for the proposed training.

- Labor market data, job posting data, or other market input to identify the employee/skills gap, occupations targeted, state/region, and worker populations to be recruited/served.

Required Elements – cont'd.

- Strategies to recruit students/workers for training and details on the population the proposal is targeting.

- Teaming plans with businesses for upskilling existing workers/job placement for new workers.

- Plan for tracking trainees placed in new jobs <u>and</u> plan for sustaining training beyond contract term.

Eligible Activities

- Developing, modifying or delivering curriculum
- Delivering training (on-line, classroom, on-site)
- Equipment purchase for hands-on training
- Hiring/training trainers
- Pre-Apprenticeships and Apprenticeships
- Internships

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Eligible Activities – cont'd.

- Marketing

- Certification costs

- Job placement services

- Expansion of existing clean energy training if demand is proven

- Combination of activities is a plus

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Additional Criteria

- Strategies may include activities to provide training in languages other than English to meet business needs.

- Where possible, technical training should be developed/implemented as part of a degree, certificate, continuing ed, career pathway, apprenticeship, or job preparedness program.

Program Goals and Details for PON 3982: On-the-Job Training

Goals

- Reduce the costs to clean energy businesses of recruiting, hiring, and training new workers.

- Teach new workers occupational skills to help clean energy businesses succeed.

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PON 3982 Basics

- $10 million in incentives available statewide, including a limited amount of funding for Long Island energy efficiency and clean technology businesses.

- NYSERDA is working closely with **NYSDOL** to implement this program.

Target Audiences

- Those who design, manufacture, specify, sell, distribute, install, operate, maintain, repair, inspect energy efficiency and clean energy technologies/systems
- Priority populations

Priority Populations

- Veterans
- Native Americans
- Individuals w/ disabilities
- Low-income individuals (definition in PON)
- Unemployed power plant workers
- Previously incarcerated individuals
- 18- to 24-year-olds participating in work preparedness programs (BOCES, technical high schools, Conservation Corp, YouthBuild, AmeriCorp, etc.)
- Residents in Environmental Justice communities (definition in PON)

Incentive Details

- <u>For businesses with 100 employees or less</u>, NYSERDA pays 50 percent of a new employee's hourly wage for 16 weeks. If the employer hires an employee from one of the priority populations defined above, NYSERDA will pay 50 percent of a new employee's hourly wage for 24 weeks.

- <u>Businesses with 101 employees or more</u> are eligible for OJT incentives **for an individual in a priority population only**, at 50 percent of a new employee's hourly wage, for 24 weeks.

- NYSERDA funding is capped at $100,000 per business and a maximum of $16 per hour for the NYSERDA cost share for each hire.

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Examples of Eligible Technology Areas*

- High efficiency HVAC

- Renewable heating & cooling

- High efficiency water heating

- Insulation and air sealing

- High efficiency lighting and controls

- Building automation and controls

- Smart grid

- Energy storage

- Related areas

*Should have a measurable impact on energy efficiency and reduction in greenhouse gas emissions

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Easy Application Process

- Application process begins with an email to NYSERDA.

- Application goes to the NYS Department of Labor (NYSDOL) after preliminary screen, and NYSDOL conducts a due diligence review of the applicant.

- If review passes, the application is sent to a NYSDOL Business Service Representative (BSR).

Application Process – cont'd.

- NYSDOL BSRs work with companies to determine skills gaps, locate interviewees, and set up interviews.

- Once companies selects new hire(s), a training plan is completed for the hire, and the document is sent to NYSERDA, becoming part of the contract. Award letter is then sent to the business.

Final Steps

- Companies hire new worker(s) and begin OJT.
- Companies can invoice NYSERDA once the new employee has worked for four weeks.

Program Goals and Details for PON 4000: Clean Energy Internships

Goals

- To provide clean energy businesses in the state with a pool of young, skilled professionals
- To provide relevant career experiences to people entering the workforce

Funding

- $10.5 million available over the next six years to eligible businesses on a first-come, first-served basis

- Approximately $1.75 million reserved annually through 2024

Eligible Businesses

- Energy efficiency and clean technology businesses, including start-up companies or business/labor management organizations working on behalf of energy efficiency or clean technology businesses

- Private for-profit business (including LLPs and LLCs) or private not-for-profit businesses located in the SBC/CEF service territories

Eligible Interns

- Students attending or having attended a college or university in NYS within the last calendar year

- A NYS resident attending or having attended a college or university outside of NYS within the last calendar year (summer only)

- An 18- to 24 year-old participating in a work preparedness training program such as BOCES, technical high schools, AmeriCorps, etc.

Reimbursement

- NYSERDA will reimburse intern salaries based on the size of the business:
  - For businesses with 20 or fewer employees, reimbursement of 90 percent of intern wages
  - 21 to 100 employees, reimbursement of 75 percent of intern wages
  - 100 or more employees, reimbursement of 50 percent of intern wages
- Intern wages can range from minimum wage to $2 above minimum wage. Businesses may pay more, but the NYSERDA share is capped.
- Maximum of five interns per session, and a maximum of 12 interns over the course of the program.

Application Process

- For businesses: simple online application with the upload of job descriptions. NYSDOL provides due diligence.

- For interns: online application with resume, cover letter, and unofficial transcripts

Application Process - cont'd.

- NYSERDA provides businesses with student resumes applicable to their region and industry

- Program currently open for Spring 2019 internships

- Soon to open for Summer 2019

Program Goals and Eligible Activities for PON 3715: Building Operations & Maintenance

PON 3715 Basics

- Designed to improve the skills of workers in building operations and maintenance occupations across New York State.
- Up to $5,000,000 in funding; additional funds may be added if available, and the PON may be reissued with or without modifications.
- Open enrollment - applications are accepted on a first-come, first-served basis through February 5, 2019 or as long as funding is available.
- Funding is capped at $400,000 per proposal and requires a minimum cost share of 50 percent.

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Goals

Support employers and building owners with workforce development and training projects:

- Creating talent development strategies
- Improving corporate culture
- Developing the framework for on-site training
- Creating training tools that support building O&M beyond classroom training opportunities

Eligible Activities

- Curriculum development
- Career pathways training
- Coaching and mentorship
- Apprenticeships and internships
- Training trainers with a company (training partner)
- On-site training laboratories
- Partnerships with manufacturers

Targeted Building Types

- Multifamily housing

- Office buildings

- Retail

- Education institutions including colleges/universities and K-12

- Hospitals and healthcare facilities

- State and local governments

- Not-for-profit and private institutions

Other building types will be evaluated on a case-by-case basis.

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Proposer Eligibility

- Facilities that are New York State *electricity* customers and pay into the System Benefits Charge (SBC)/Clean Energy Fund (CEF).

- The lead proposer may be an entity that employs building O&M workers (building owners/managers, property management companies, business associations/trade groups) or a training provider.

- Proposals must be for buildings or groups of buildings with total annual energy expenditures of $1 million or more.

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Targeted Occupations or Job Titles

- Facilities and property managers
- Operating and stationary engineers
- Technicians
- Building superintendents
- Maintenance workers, mechanics, and supervisors
- Electricians and HVAC technicians
- Procurement staff
- Facility coordinators
- Energy/sustainability managers

Project Example (Hypothetical)

A company with a portfolio including commercial and residential properties proposes a training initiative to retain staff and improve energy efficiency:

- Partnership with a local union for training on the latest building science technologies

- Mentorship component with key staff trained to coach their peers on best practices (i.e., chiller optimization, matching boiler capacity to loads, measuring/optimizing systems, etc.)

A strong proposal would include training as well as measurement of potential outcomes. Proposer may include billing analysis to measure energy savings and employee statistics determine if mentorship correlates to reduced attrition.

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Current BOM Projects

- Colleges/Universities/Schools: RPI, Cooper Union, SUNY Brockport, SUNY ESF, NYS School Facilities Association

- Real Estate Management: First Service Residential, Related Management, Prestige Management, LeFrak Estates, A&E Real Estate, WinnCompanies, Dunn Development, Housing Works, Riseboro Community

- Hospitals/Healthcare: Memorial Sloane Kettering, NYU Langone Hospital, Montefiore Medical Center, Weill Cornell Medicine

- Training Organizations: 32 BJ, Steven Winter Associates, IREC, Association for Energy Affordability, Urban Green Council

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