



NYSERDA

Green Jobs - Green New York Workforce Training Working Group

Recommendations Report

Final Report

April 2017

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Green Jobs - Green New York Workforce Training Working Group

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Prepared by

New York State Energy Research and Development Authority

April 2017

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Preface

NYSERDA established a Workforce Training Working Group to make recommendations to the Green Jobs - Green New York (GJGNY) Advisory Council regarding how best to leverage resources toward future workforce development and training efforts. The undersigned members of the Working Group have convened and consulted on the content and recommendations contained in this report.

Adele Ferranti
NYSERDA, Convener

Stephan Edel
Center for Working Families

Clarke Gocker
PUSH Buffalo

Ross Gould
Workforce Development Institute

Dave Hepinstall
Association for Energy Affordability

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Executive Summary

As part of the requirements of Section A.3008/S.2008, Part SS, of the New York State 2015–2016 Budget, NYSERDA was directed to convene a working group to develop standards and/or criteria that will encourage and increase participation of and issuance of loans to low- to moderate-income (LMI) households statewide for qualified energy efficiency services under the Green Jobs - Green New York (GJGNY) program. In April 2015, NYSERDA established the GJGNY LMI Working Group, which consisted of 19 members representing community-based organizations (CBO), low- to moderate-income consumer advocates, consultants on utility and housing issues, and stakeholders (including contractors) of the solar electric and home energy services industries. The group was chaired by the president and CEO of NYSERDA. The resulting *GJGNY LMI Working Group Recommendations Report*¹ included recommendations extending beyond the initial scope of the Working Group and including workforce training topics.

Subsequent discussion during the October 23, 2015 GJGNY Advisory Council Meeting established a GJGNY Workforce Training Working Group (Workforce Training Working Group) to determine how best to leverage resources toward future workforce development and training efforts. This report is the result of the convening of the GJGNY Workforce Training Working Group. It provides a response to recommendations made in the *GJGNY LMI Working Group Recommendations Report*, which suggest that NYSERDA address community development through jobs.

The Workforce Training Working Group was charged with addressing the following opportunities and needs identified in the GJGNY LMI Work Group Recommendations Report:

- Envision the role of community-based organizations in future workforce training efforts.
- Discuss current workforce investments and job quality.
- Coordinate with NYS Department of Labor (DOL) on data collection related to workers.
- Consider the future form of workforce training efforts including career pathways, training consortia, apprenticeships, and direct entry.

¹ NYSERDA. GJGNY Low- to Moderate-Income Working Group Recommendations Report. September 2015. nyserdera.ny.gov/-/media/Files/EDPPP/GJGNY/Advisory-Council-Updates/GJGNY-LMI-Working-Group-Recommendations.pdf

- Consult regional stakeholder advisory groups including Regional Economic Development Councils.
- Incorporate lessons learned from both within GJGNY programs and in other jurisdictions.
- Brainstorm regarding labor standards.

The Workforce Training Working Group consists of 11 volunteer members who represent constituency-based organizations, training providers, organized labor, nonprofits, State agencies, and private contractors including those in the energy efficiency and solar electric fields. The group is facilitated by Adele Ferranti, Team Lead for Workforce Development at NYSERDA. Except where noted, the recommendations in this report reflect the consensus of all members of the Working Group. Where complete agreement could not be reached, multiple views are provided.

The Workforce Training Working Group put forward several recommendations for future activities under NYSERDA's workforce development and training program in addition to several broader suggestions for improved integration of workforce efforts across the State. Recommendation topics, as detailed in Section 4 of this report, include the following:

- On-the-job training (OJT) incentives to mitigate business risks associated with hiring new clean energy workers.
- New York State Registered Apprenticeships in clean energy fields.
- Innovative, employer-driven approaches to bridging the gaps between training and employment, including a hiring hall model.

Additional considerations explored by the working group include the following:

- Suggested regulatory reform related to OJT training for recipients of unemployment insurance.
- Recognizing the role of the DOL as a central resource for State-funded workforce development and job placement activities.
- Making a just transition from fossil fuel jobs to careers in renewable energy.

NYSERDA thanks the members of the GJGNY Workforce Training Working Group for their time and effort in providing valuable feedback on the issues identified, along with their cooperation toward creative solutions to the challenges identified. NYSERDA looks forward to continuing the discussion on the recommendations that require further research or development, along with other program and market-related topics.

1 Introduction

The Green Jobs - Green New York (GJGNY) Act of 2009 was signed into law on October 9, 2009. As part of the employment and training services required of the GJGNY Act, the GJGNY Workforce Training and Development initiative was designed to build on existing NYSERDA and DOL programs targeted at preparing individuals for energy efficiency and renewable energy careers in New York State. Specifically, Workforce Training and Development efforts under GJGNY were designed to expand energy-specific content in New York State Registered Apprenticeship and third-party accredited building trades programs, to increase access to technical training workshops for skills enhancement and certification and bridge the gaps between training and employment through OJT incentives. Implementation of the GJGNY Workforce Training and Development initiative began in mid-2010.

1.1 Establishment of the GJGNY Workforce Training Working Group

As part of the requirements of Section A.3008/S.2008, Part SS, of the New York State 2015–2016 Budget, NYSERDA was directed to convene a working group to develop standards and/or criteria that will encourage and increase participation and issuance of loans to low- to moderate-income (LMI) households statewide for qualified energy efficiency services under the GJGNY program. In April 2015, NYSERDA established the GJGNY LMI Working Group, which consisted of 19 members representing CBOs, LMI consumer advocates, utility and housing issues advocates, and stakeholders (including contractors) of the solar electric and home energy services industries. The group was chaired by the president and CEO of NYSERDA. The resulting *GJGNY LMI Working Group Recommendations Report*² included recommendations extending beyond the initial scope of the Working Group and workforce training topics.

² NYSERDA. GJGNY Low- to Moderate-Income Working Group Recommendations Report. September 2015. nyserdera.ny.gov/-/media/Files/EDPPP/GJGNY/Advisory-Council-Updates/GJGNY-LMI-Working-Group-Recommendations.pdf

Subsequent discussion during the October 23, 2015 GJGNY Advisory Council Meeting established a GJGNY Workforce Development and Training Working Group to determine how best to leverage resources toward future workforce development and training efforts. This report is the result of the convening of the GJGNY Workforce Training Working Group and provides a response to recommendations made in the GJGNY LMI Working Group Recommendations Report, which suggest that NYSERDA address community development through jobs.

1.2 Working Group Scope, Membership, and Process

The Workforce Training Working Group was charged with addressing the following opportunities and needs identified in the GJGNY LMI Recommendations Report:

- Envision the role of community-based organizations in future workforce training efforts.
- Discuss current workforce investments and job quality.
- Coordinate with DOL on data collection related to workers.
- Consider the future form of workforce training efforts including career pathways, training continua, apprenticeships, and direct entry.
- Consult regional stakeholder advisory groups including Regional Economic Development Councils.
- Incorporate lessons learned from both within GJGNY programs and in other jurisdictions.
- Brainstorm regarding labor standards.

The Workforce Training Working Group consists of 11 volunteer members who represent constituency-based organizations, training providers, organized labor, not-for-profits, State agencies, and private contractors, including those in the energy efficiency and solar electric fields. The group is facilitated by Adele Ferranti, Team Lead for Workforce Development at NYSERDA. Table 1-1 provides a listing of participants in the group.

Table 1-1. GJGNY Workforce Training Working Group Participants

Name	Organization
Adele Ferranti	NYSERDA, Convener
Stephan Edel	Center for Working Families
Clarke Gocker	PUSH Buffalo
Ross Gould	Workforce Development Institute
Dave Hepinstall	Association for Energy Affordability
Tony Joseph	NYS Department of Labor
Jason Kuflik	Green Street Power
Ellen Redmond	International Brotherhood of Electrical Workers
Will Schweiger	Efficiency First New York
Paul Shatsoff	PS Consulting
Hal Smith	Halco
Marilyn Oppedisano	National Electrical Contractors Association

The Working Group met eight times between January 20, 2016 and August 18, 2016 to discuss workforce training barriers, review current workforce training efforts, consider best practices as applied to future plans, and develop the recommendations in this report. Working Group members participated via conference call or in-person at NYSERDA’s Albany office.

2 Workforce Development and Training Initiatives Implemented Under GJGNY

Since the inception of the GJGNY Workforce Training and Development initiative, NYSERDA issued a total of seven Program Opportunity Notices (PONs) and Requests for Proposals (RFPs) designed to support the Operating Plan and the workforce training objectives of the GJGNY Act.

GJGNY workforce development and training activities have expanded the State's capacity to deliver training services by working with community-based training organizations, expanding existing training centers, providing much-needed training equipment and tools, and minimizing barriers to delivering field testing and certification examinations. The initiative has also provided direct-entry, OJT, and apprenticeship incentives to help defray the costs for businesses associated with bringing on new hires.

NYSERDA GJGNY Workforce Training and Development efforts are aligned with program strategies that promote the widespread implementation of energy efficiency and renewable energy measures and provide meaningful employment opportunities for job seekers. Access to technical training, equipment, and opportunities for hands-on experiential learning opportunities is needed to master skills, pass certification exams, and enable businesses to employ newly-trained workers that must deliver a quality work product. The majority of GJGNY-funded workforce development and training activities concluded by 2015.

2.1 Scope of Workforce Development Activities Under GJGNY

The workforce training and development initiative under the GJGNY Act of 2009 was designed to build on existing NYSERDA and DOL programs targeted at preparing individuals for energy efficiency and renewable energy careers in the State. For the purposes of the legislation, eligible technologies were limited to energy efficiency, solar hot water, and solar electric delivered in the residential, small commercial, and nonprofit sectors.

Specifically, Workforce Development efforts under GJGNY were designed to expand energy-specific content in New York State Registered Apprenticeship and third-party accredited building trades programs, to increase access to technical training workshops for skills enhancement and certification, and to bridge the gap between training and employment through OJT training incentives for businesses seeking to hire and train new workers. Implementation of the GJGNY Workforce Development initiative began in mid-2010. Many of the initiatives developed under GJGNY were designed to complement or enhance offerings under the Energy Efficiency Portfolio Standard (EEPS) or those funded via the American Recovery and Reinvestment Act (ARRA) through the DOL. For example, NYSERDA's OJT training program was delivered in coordination with the DOL, and designed to complement the DOL's registered apprenticeship programs, through which workers continue to earn a wage while receiving training, but with a specific focus on the needs of clean energy businesses.

2.2 Workforce Training and Development Approaches

In general, NYSERDA's Workforce Development initiatives are designed to address labor-related barriers to expanding the clean energy economy in New York State. Interventions included worker readiness training to prepare entry-level workers for clean energy careers; technical training to expand the skills of incumbent workers to include knowledge and abilities specific to clean energy; incentives designed to mitigate some of the financial risk associated with hiring new clean energy workers; and academic research to better inform the State's efforts to support and sustain the clean energy economy. From mid-2010 through 2015, more than 3,800 New Yorkers received GJGNY-funded clean energy training. Additional individuals were trained under EEPS.

The report sections below provide an overview of the various PONs and RFPs issued by NYSERDA using GJGNY workforce development funding. For more detailed information, please review the GJGNY Annual Reports to the Advisory Council.³

³ Visit nysesda.ny.gov/About/Publications/GJGNY-Advisory-Council-Reports to view the GJGNY Advisory Council Reports webpage.

2.2.1 Internships/Apprenticeships/On-the-Job Training

The Internships/Apprenticeships/On-the-Job Training opportunity (PON 2033) was originally released in June 2011 and was designed to expand pre-apprenticeship and registered apprenticeship programs in the State. The PON had two categories. The first provided funding for training providers, including unions, to expand their curriculum to include clean energy content and the second category was for businesses who wanted to hire and train new clean energy workers.

Under the classroom training component of PON 2033, NYSERDA contracted with a total of five training providers (LaGuardia Community College, the Urban League of Rochester, Service Employees International Union [SEIU] Local 32 BJ, Urban Green Council, and Solar One) to develop and deliver energy efficiency training ranging from basic weatherization and construction through more advanced training such as Green Professional (GPRO) for union plumbers. For example, under their PON 2033 agreement, LaGuardia Community College translated United States Green Buildings Council GPRO operations and maintenance training into Spanish and delivered the course to 120 New Yorkers. In total, 609 New Yorkers were trained under these agreements.

In addition, NYSERDA executed OJT agreements with 64 businesses seeking to hire new employees or advance incumbent workers under GJGNY. The GJGNY-funded component of the program ended on December 31, 2014, resulting in 265 people being hired from DOL New York State Career Centers (formerly DOL One Stop Centers) lists, and 13 incumbent workers advanced due to training. Approximately \$1.67 million in wage and training subsidies was awarded. The average wage of workers hired under the program is \$16.97 per hour.

Under the GJGNY-funded OJT incentive, businesses could receive reimbursement for 50% of the wages that they paid the employee during training, with a maximum award per trainee of \$15,000 for the first \$150,000 in NYSERDA incentives and 25% of the wages they pay the employee for training, up to \$7,500 thereafter.

2.2.2 Worker Readiness

Worker readiness training initiatives, aligned with NYSERDA's previous Career Pathways for Disadvantaged Workers programs, were solicited under open enrollment PON 1816. The program was designed to complement EEPS-funded activities. GJGNY Worker Readiness training partnerships included Syracuse University's Southside Innovation Center, Solar One, and Northern Manhattan Improvement Corporation. These training providers delivered a range of training programs, including contextualized excel, blueprint reading, environmental literacy, and specialized entrepreneurship training and mentorship. A total of 250 New Yorkers were trained as a result of this program.

2.2.3 Solar Thermal

The Solar Thermal Training opportunity (PON 2011), issued in May 2010, offered \$300,000 in GJGNY funds to develop Solar Thermal Training or Solar Thermal modules to integrate with existing energy efficiency training, including curriculum development, equipment, code official training, and assistance to apply for the Interstate Renewable Energy Council Institute for Sustainable Power Quality (IREC ISPQ) accreditation. A total of four contracts were executed: Ulster County BOCES, Monroe Community College, and SUNY Canton in addition to Sullivan County BOCES, which was later canceled due to inactivity resulting from staff changes and low enrollment. SUNY Canton has achieved IREC ISPQ accreditation for its Solar Heating Installer Program. A total of 241 New Yorkers were trained as a direct result of these contracts and programs continue to operate as demand for the training dictates.

2.2.4 Technical Trainings

NYSERDA issued several solicitations to support technical training for incumbent workers including the following.

- PON 1817: a competitively bid solicitation issued June 2010, included \$600,000 in GJGNY funds to support the development of Oil Heat Efficiency training and Small Commercial Energy Assessment training. As a result, one contract for Oil Heat Efficiency and two contracts for Small Commercial Energy Assessment curriculum development and training were issued. A total of 988 New Yorkers were trained as a result of these initiatives.
- PON 2032: released in March 2012, the PON included \$1.48 million and included three funding categories: 1) Hands-on Technical Workshops, 2) Expanding BPI Exam Capacity, and 3) Oil and Gas Furnace Installation Certification Standards. The PON closed in December 2012.

- In total, seven proposals were funded under Category A resulting in contracts with the following training partners: Solar One, New York State Weatherization Directors Association (NYSWDA), Institute for Building Technology and Safety (IBTS), two with the Building Performance Contractor’s Association (BPCA), Northeast Parent and Child Society, and SUNY Ulster. A total of 1,557 New Yorkers were trained as a result of these initiatives.
- Under Category B, Expanding BPI Exam Capacity, Solar One and SUNY Ulster were each awarded funds to expand their network of BPI Proctors so that field exam testing capacity could be expanded.
- Under Category C, a competitive component seeking proposals for Oil and Gas Furnace Installation certification standards, several proposals were received, but none were fundable.

2.2.5 Curriculum Inventory, Assessment, and Curriculum Updates

The Green Jobs - Green New York: Curriculum Inventory Assessment, and Curriculum Updates opportunity (RFP 2034), issued in July 2010, offered \$475,000 to conduct a curriculum inventory, contractor needs assessment, and curriculum updates. Under the competitive solicitation, there were no fundable proposals for the curriculum update component. The curriculum inventory and contractor needs assessment were awarded to Pace University, with a final report issued in August 2013. The curriculum inventory and contractor needs assessment report were to be utilized, over the long term, to inform future curriculum development needs as they were identified under GJGNY or System Benefit Charge-funded workforce development initiatives.

Key findings of the study, titled Making the Right Connections: Ways to Improve Workforce Training to Better Meet Employer Needs in the Green Jobs - Green New York Program,⁴ focus on the need to better connect employers and training providers. Recommendations include the formation of a more integrated network of employers and training providers, continued financial support for New Yorker’s for whom cost of training is a barrier, and the need to strengthen apprenticeships and OJT training programs that can serve as a bridge between training and employment.

⁴ NYSERDA. 2013. Making the Right Connections: Ways to Improve Workforce Training to Better Meet Employer Needs in the Green Jobs Green New York Program, NYSERDA Report 13-17. Prepared by Pace Energy and Climate Center. nyserda.ny.gov/-/media/Files/EERP/GJGNY/Evaluation-Reports/making-the-right-connections-report.pdf

3 Assessment of Past and Current Initiatives

In order to put forth recommendations, the Workforce Training Working Group first outlined some of the successes and challenges associated with GJGNY workforce development and training efforts to date.

3.1 Identified Successes

Working group members unanimously viewed the OJT program (PON 2033) as a success. Members praised the program for its role in helping businesses to expand by mitigating some of the financial risk associated with hiring and training new workers. It was the view of the working group, including several contractors who hired workers under the OJT program as well as CBOs and training providers, that the market was able to expand more rapidly as a result of OJT funds being available. The group also noted the success of the OJT program, though designed after similar DOL programs, was attributed to its flexibility as compared to prior publicly-funded hiring incentives. There was no funding cap per business; the funding cap per employee was higher than other programs (\$15,000 vs. \$5,000); the program was not limited to dislocated workers, which allowed employers more control over who was hired; and, in the early years of the PON, classroom training was included as an eligible OJT expense as were certain expenses associated with the advancement of incumbent workers.

3.2 Identified Challenges

Broadly, the working group praised programs designed to encourage a higher standard of workmanship. Members were in favor of incentives that support program accreditation for businesses and training providers. When discussing the clean energy market, the working group made an important observation: market forces dictate businesses that can offer their product at the lowest price will secure the greatest market share. It was the opinion of working group members that NYSERDA's programs do not often lend themselves to market-based strategies to drive down costs. NYSERDA programs are centered on comprehensive assessments (audits) of homes and quality installation of measures to achieve savings, but recognize that home improvement contractors do not generally receive training on how to perform quality assessments and installations without intervention. These are achieved through company accreditation, worker certification, training on implementing industry best practices for the installation and maintenance, and program-delivered quality control and quality assurance. It is the view of the working group that, because the State seeks to influence market participants to choose products and services not necessarily delivered at the lowest cost to the consumer, it is the role of the State to mitigate some of the extra expenses associated with a higher quality of work.

The GJGNY program was designed around the theory that locally driven consumer demand for clean energy products and services would lead to exponential demand for entry-level technicians and installers. Early projections from the Center for American Progress⁵ predicted more than 100,000 jobs would be created in New York State alone. Contrary to projections, demand for energy retrofits in the single-family, multifamily, and small commercial sectors was far less than anticipated. As a result, several new retrofit jobs GJGNY training partners were preparing people for did not materialize. Some training providers, primarily those located in areas with high population, were able to train a significant number of individuals and facilitate connections to employers seeking to hire. Others, even with tuition subsidies to buy down the cost to participants, were challenged to fill classrooms and meet enrollment projections.

The Workforce Training Working Group discussed the challenges associated with designing programs focused on the labor supply rather than the demand for workers. The recommendations seek to address prior challenges through a better understanding of market forces and by presenting opportunities to develop more employer-driven programming.

⁵ Robert Pollin, Heidi Garrett-Peltier, James Heintz, and Helen Scharber. 2008. Green Economic Recovery Program Impact on New York Part of a National Program to Create Good Jobs and Start Building a Low-Carbon Economy. http://images2.americanprogress.org/CAP/2008/09/peri_ny.pdf

4 Working Group Recommendations

The following are Workforce Training Working Group recommendations for future activities under NYSERDA's workforce development and training program. The recommendations reflect discussions of the Working Group. Broadly, the working group seeks to

- Better understand the market forces influencing the clean energy economy
- Put forth recommendations for program design strategies leading to more employer-driven workforce solutions

4.1 On-the-Job Training

Working group members repeatedly encouraged OJT as an effective mechanism to support businesses in addition to workers. They emphasized that OJT, as compared to classroom training incentives, is demand-driven and results in direct job placement. Although OJT is more expensive on a per capita basis, it can be cost effective when compared to classroom training where only a small percentage of participants go on to clean energy employment. The Workforce Development Working Group makes the following recommendations related to OJT:

- Employers would like to have access to funding for classroom training, even if funding is limited, as well as funds for advancing incumbent workers.
- Working Group members also noted that OJT is most impactful for energy efficiency workers (air sealing, insulation, weatherization) because those are the positions that are harder to recruit for and harder to retain talent. PV is a much easier field in which to find talent.
- Some suggest that classroom training be required in addition to OJT to more closely align with the apprenticeship model.

As described in earlier sections of this report, NYSERDA's PON 2033 offered businesses wage reimbursement of 50% up to \$15,000 per worker hired. The working group recognizes that under the Clean Energy Fund (CEF), NYSERDA will develop strategies that engage markets in a more natural and cost-effective manner, leveraging existing market mechanisms, as opposed to relying on limited incentives to drive demand. Market interventions should focus on job placement, career advancement for existing employees and increased economy of scale. Based on the CEF strategy, the Working Group suggests that any future OJT initiative include a higher cost share on the part of the employer. This would increase the investment of private capital and may also increase employee retention as a result of higher investment on the part of the employer.

However, the DOL emphasized that the retention rate, even with the 50% NYSERDA cost share, exceeded 85% under PON 2033 and that increased employer investment is not likely to increase retention beyond what has already been achieved. The DOL also noted that the 50% rate of reimbursement is the lowest amount offered under their programs—where dislocated workers with barriers to employment are placed with employers, State subsidies can reach 90% of the hourly wage.

The DOL administers \$1.3 million in federal funds to offer businesses training support under their Dislocated Worker Training National Emergency Grant program. This program encourages the hiring of dislocated workers, with emphasis on those who are also long-term unemployed (27 weeks or more), to enable them to upgrade their skills and obtain employment. Dislocated workers include an individual who has been laid off or terminated and is unlikely to return to a previous industry or occupation; someone who has been terminated or laid off as the result of a permanent closure of the plant, facility, or enterprise; an individual who was self-employed, but is now unemployed due to economic conditions or a natural disaster; or an individual who is a displaced homemaker—someone who was dependent on the income of another family member, but is no longer supported by that income. The program covers 50 to 90% of training-related expenses.

4.2 Apprenticeships

New York State Registered Apprenticeship was discussed by the Working Group many times and referred to as the so-called gold standard for training. Registered Apprenticeship typically includes a minimum of 2,000 hours of OJT coupled with a minimum of 144 hours of classroom training. As noted in Section 2.2.1 of this report, NYSERDA solicited proposals for new Registered Apprenticeship programs or for proposals to add clean energy content to existing trades with very limited success. The rate of response to that solicitation was lower than expected, but the working group suggests, as a result of the growing clean economy, there may be more demand for revisions to Registered Apprenticeships if NYSERDA were to resolicit for proposals. Further, the group recommends the following:

- Link community-based hiring halls and workforce training programs to Registered Apprenticeships.
- Expand pre-apprenticeship training programs with direct entry to Registered Apprenticeships.
- Explore a model that encourages partnerships between community groups, unions, and utilities.

4.3 Hiring Halls

As previously noted, there are challenges to implementing new registered apprenticeship programs in the State. The working group discussed other innovative programs that helped to support clean energy businesses while fostering high labor standards like fringe benefits, paid overtime, and family-sustaining wages. For example, PUSH Buffalo successfully implemented a hiring hall approach to job placement modeled after union hiring halls. Under this model, the host organization directly employs a pool of skilled and vetted workers. Employers then come to the host when they need workers. Employers pay the host a rate comparable to that of a temporary employment agency, but when the host is a nonprofit and overhead costs are reduced as a result, workers can be provided with a competitive wage and a benefits package. This type of model has a compound impact because, when paid a higher rate and have access to healthcare, workers are better able to provide for their families and the benefits expand beyond the individual to include the broader community.

The Working Group suggests that CBOs (whether community-based or constituency-based organizations) are uniquely positioned to act as an intermediary between workers and clean energy businesses seeking to hire. There are many CBOs across the State with missions centered on localized workforce development and community benefits that also have existing relationships with local employers.

NOTE: While representatives from organized labor do support the hiring hall model, they reminded the Working Group that unions have members who are ready to go to work and possess industry standard skills as a result of registered apprenticeship training programs. Labor representatives suggest that additional training and hiring halls could result in redundancy. Instead, they urge NYSERDA to consider ways to better connect clean energy businesses to the resources that already exist through the union. The Working Group supports the promotion of skilled tradespeople, but cautions that many of the jobs in the clean energy economy do not require skills commensurate with union wage or prevailing wage rates.

Subsequently, a Hiring Hall Working Group was convened to further discuss the role of hiring halls. The Hiring Hall Working Group consists of eight volunteer members including Clarke Glocker and Rahwa Ghirmatzion of PUSH Buffalo; Lisbeth Shepherd and Mara Cerezo of Green City Force; Sean Morrissey of CEO YouthBuild, Troy, NY; Aggie Lane of the Urban Jobs Task Force and; Ruth Pillittere and Liz Martin of NYS Department of Labor. The group is facilitated by Adele Ferranti of NYSERDA.

The Hiring Hall Working Group convened several times to discuss the benefits and needs of hiring halls as well as NYSERDA interventions that support technical training and job placement activities such as, but not limited to, curriculum development, internships, apprenticeships and OJT training. Because they can support many business models, including hiring halls, such interventions are being investigated under the Clean Energy Fund to support business needs related to finding and retaining skilled clean energy workers.

The Hiring Hall Working Group will continue to meet periodically to provide NYSERDA staff with input on new initiatives to support job placement and training activities supported under CEF.

5 Additional Recommendations

Additional considerations were explored by the Working Group. These considerations go beyond recommendations specific to the GJGNY Act and include suggestions for statewide regulatory reform in addition to identification of opportunities for better alignment of workforce efforts across State agencies.

5.1 Regulatory Reform and Unemployment Insurance Related to On-the-Job Training

Working Group members, particularly those representing clean energy contractors, suggest there is a need for regulatory reform to allow the continuation of Unemployment Insurance (UI) benefits while a job seeker takes part in OJT Under New York State Labor Law, recipients of UI can continue to receive their benefit while participating in qualified classroom training but lose their benefit as soon as they are hired by a business. Working group members note that, during the period of OJT, a new hire is not yet productive and this increases risk for the employer because a senior-level worker is typically taken away from their productive work to train the new hire—thus compounding the expense to the employer. Members of the working group advocate for a review of the regulation governing UI and job-based training. The working group suggests that, just as DOL funds classroom training for unemployed job-seekers, UI could be used for training on the job.

5.2 NYS Department of Labor as a Central Hub for Job Placement and Labor Data

Working Group members, with many decades of combined experience with workforce training and development in the State, reflected on the complexity of navigating the various program opportunities offered through NYSERDA, DOL, Empire State Development Corporation, and others. Members suggest that, even with various industry or sector-specific priorities in mind, the DOL could be a hub for businesses seeking to hire, train, and advance workers with the help of direct incentives or tax credits.

The group also spent considerable time exploring opportunities to leverage existing DOL programs and incentives. Because so many of DOL's programs are federally funded under the National Emergency Grant, beneficiaries are often limited to dislocated workers. This is a narrowly defined subgroup of job seekers and very difficult to align with other State workforce priorities because of strict definitions of dislocated workers. Wherever possible, the group recommends that the DOL leverage NYSERDA opportunities to serve dislocated workers seeking to enter the clean energy field.

Furthermore, the Working Group recognizes that the DOL's network of Business Services Representatives represents a tremendous resource that can be better leveraged to meet the State's ambitious energy goals. If these representatives are better trained on clean energy technologies and required skills, they can better assist businesses with improved job postings, better or more informed screening of job candidates, and better tracking of industry-specific job outcomes. It was also noted that CBOs can play a key intermediary role as talent brokers by identifying regional skills needs and shortages and by funneling qualified job seekers through local DOL offices.

As part of its initial call to action, the group discussed the need for improved labor data and collection of data related to workers (i.e., demographic information). The group unanimously recognized the need for real-time labor data (job vacancies by occupation and industry), but debated the usefulness of replicating the DOL's 2009 Labor Market and Workforce Intelligence Report.⁶ Since the group last convened, NYSERDA issued a solicitation (RFP 3370) seeking proposals to "quantify, characterize, and analyze clean energy industry jobs in the State of New York." The NYSERDA workforce development and training team, drawing on feedback received from Working Group members, provided feedback on the clean energy jobs RFP and will share results, expected in spring/summer 2017, with the Working Group.

⁶ NYS Department of Labor. May 2009. Labor Market and Workforce Intelligence. <https://www.labor.ny.gov/workforcenypartners/PDFs/NYS%20Clean%20Energy%20Jobs%20Report%20FINAL%2006-09-09.pdf>

Note: The Working Group recognizes the limitations to extracting clean energy labor data from broader occupations and industries. As a result of prior experience under GJGNY, the group also cautions that there are limitations to job forecasting, even when the best available information is considered.

5.3 Just Transition from Fossil Fuels to Renewable Resources

The Working Group discussed the impending retirement of several fossil fuel plants and NYSERDA's role in assisting with a just transition to the renewable energy economy. The group agreed that DOL needs better data regarding the skills, abilities, and wage rates of the transitioning workers at each site before an informed recommendation can be made. The group also noted that Empire State Development Corporation has \$19 million for the just transition of fossil fuel workers and that, in coordination with the DOL, they may be best positioned to address potential barriers and opportunities.

6 Concluding Remarks

The members of the GJGNY Workforce Training Working Group dedicated significant time and expertise to exploring opportunities to better support businesses and workers in the clean energy economy. In addition to the specific recommendations detailed in the previous sections, the Working Group also reached several high-level conclusions, including the following:

- NYSERDA and other State agencies can redefine success. Previous interventions have largely focused on the supply of skilled labor. NYSERDA supported classroom training designed to upskill and credential the highest number of participants possible. Under the CEF, NYSERDA will support businesses seeking to grow as the clean energy economy expands. Success should be defined, not by the number trained, but by metrics including job placements, jobs retained, incumbent workers advanced, and access to clean energy jobs for women and minorities.
- It was the opinion of Working Group members that NYSERDA and New York State can drive meaningful change by implementing labor standards as a component of program participation. The Working Group emphasized the importance of living wage rates and benefits packages in solidifying community benefits and as critical components of retaining talent and growing the clean economy responsibly. The Working Group also emphasized the role of NYSERDA's OJT program as a mechanism to enable businesses to pay a more competitive rate and suggested that NYSERDA set a minimum wage rate for participating businesses if the program is reinstated.
- New York State needs to grow and develop a talent pipeline. Developing such a pipeline requires starting early with STEM education, partnerships between trade unions and high schools, and career pathways programs for young adults. The working group favored programs like NYSERDA's Career Pathways (PON 2774) that required a 15% placement rate of trainees into paid internships in clean energy occupations.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

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