



- 25-M-0248      In the Matter of the 2026-2030 Non-Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolio.**
- 25-M-0249      In the Matter of the 2026-2030 Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolio.**
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## **Energy Efficiency and Building Electrification Workforce Development Implementation Plan**

**Filed August 13, 2025**

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## SECTION 1: PORTFOLIO AND SUB-PORTFOLIO INTRODUCTION

On May 15, 2025, the New York State Public Service Commission (PSC or Commission) issued the *Order Authorizing Non-Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolios for 2026-2030*<sup>1</sup> (Non-LMI Order). The Non-LMI Order approves, with modifications, proposals by the New York State Energy Research and Development Authority (NYSERDA) and the major investor-owned utilities (Utilities), collectively referred to as Program Administrators (PAs), and authorizes budgets for respective Non-Low-to Moderate-Income (Non-LMI) energy efficiency and building electrification (EE/BE) portfolios for the 2026-2030 period. Additionally, the Commission issued its *Order Authorizing Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolios for 2026-2030*<sup>2</sup> (LMI Order), approving proposals, with modifications, from NYSERDA and the Downstate Utilities, and authorizing budgets for the 2026-2030 Low-to-Moderate Income (LMI) EE/BE portfolio.

In these EE/BE Orders, the Commission directs NYSERDA, within 90 days, to file a singular EE/BE Workforce Development Implementation Plan, including solutions for linking trainees to contractors participating in ratepayer funded EE/BE programs. NYSERDA submits this EE/BE Workforce Development Implementation Plan in compliance with the LMI and Non-LMI Orders.

### 1.1 Policy Actions by the Commission, Department of Public Service, and PAs

- On July 20, 2023, the Commission issued its *Order Directing Energy Efficiency and Building Electrification Proposals* (Order Directing Proposals)<sup>3</sup> adopting a Strategic Framework and establishing priorities for ratepayer funding, as well as providing overall guidance and directing the PAs to file proposals for the future EE/BE portfolios. The Commission also adopted a 'budget-bounded' approach to EE/BE funding, setting a \$1 billion annual cap across LMI and Non-LMI portfolios.
- On November 1 and 2, 2023, NYSERDA and the utilities individually filed LMI and non-LMI EE/BE Portfolio Proposals, providing details on their proposed programs, strategies, and regulatory structures for the 2026-2030 period.
- On May 15, 2025, the Commission issued the LMI Order and Non-LMI Order authorizing LMI and Non-LMI EE/BE Portfolios for 2026-2030, as well as budgets for the respective EE/BE portfolios.

As directed by the Commission in the Order Directing Proposals, NYSERDA's role includes serving as a single program administrator (PA) in workforce development. Further, in its LMI and Non-LMI Orders, the Commission directed that the Workforce Development activities include both LMI and Non-LMI budget allocations and designated them as a Sub-Portfolio.<sup>4</sup> Consistent with the direction provided in the Order Directing Proposals and the LMI and Non-LMI Orders, NYSERDA's EE/BE Workforce

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<sup>1</sup> Case 25-M-0248, *In the Matter of the 2026-2030 Non- Low- to Moderate- Income Energy Efficiency and Building Electrification Portfolios*, Order Authorizing Non- Low- to Moderate- Income Energy Efficiency and Building Electrification Portfolios (issued May 15, 2025).

<sup>2</sup> Case 25-M-0249, *In the Matter of the 2026-2030 Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolio*, Order Authorizing Low-to Moderate- Income Energy Efficiency and Building Electrification Portfolio for 2026-2030 (issued May 15, 2025).

<sup>3</sup> Case 14-M-0094, *Proceeding on Motion of the Commission to Consider a Clean Energy Fund*, Order Directing Energy Efficiency and Building Electrification Proposals (issued July 20, 2023)

<sup>4</sup> See Case 25-M-0248, *In the Matter of the 2026-2030 Non- Low- to Moderate- Income Energy Efficiency and Building Electrification Portfolios*, Order Authorizing Non- Low- to Moderate- Income Energy Efficiency and Building Electrification Portfolios (issued May 15, 2025), page 108.

Development Implementation Plan is responsive to NYSERDA's role within both the LMI and Non-LMI portfolios. These activities help ensure that contractor and installer capacity can sufficiently meet demand for customers across EE/BE LMI and Non-LMI sectors. This Implementation Plan articulates the budget allocations, program activities, and associated outcomes for this Sub-Portfolio.

## **1.2 Portfolio Context**

The Commission's EE/BE directives present an overarching theme of NYSERDA's role as workforce development PA to ensure that training curricula and program designs align with contractor needs and create a pipeline of trainees that can be hired by contractors conducting EE/BE work. In the Order Directing Proposals, the Strategic Framework focuses the composition of the portfolios more directly to achieve comprehensive efficiency projects and whole-building electrification. NYSERDA will leverage the Strategic Framework to meet current market needs and policy objectives. Additionally, NYSERDA will work collaboratively with the utility PAs to bridge the gap between workers trained and employers seeking to hire, especially in jobs implementing the ratepayer-funded EE/BE programs. Further, NYSERDA will work collaboratively with utility PAs and other stakeholders to ensure that outcomes that benefit Disadvantaged Communities (DACs)<sup>5</sup> result from both Non-LMI as well as LMI portfolio spending, such that Priority Populations<sup>6</sup> are positioned to participate in and benefit from the clean energy transition.

## **1.3 Authorized Budgets**

The Commission has authorized \$83 million across the Non-LMI and LMI Portfolios (\$53 million allocated from the Non-LMI Portfolio, and \$30 million from the LMI Portfolio), to be implemented as a single Workforce Development Sub-Portfolio. For a complete view of NYSERDA's Non-LMI Portfolio budgets and targets, please see the Non-LMI EE/BE Implementation Plan, filed July 14, 2025. For a complete view of NYSERDA and the Downstate Utilities' LMI Portfolio budgets and targets, please refer to the Joint LMI EE/BE Implementation Plan, which is expected to be filed October 1, 2025.

## **1.4 Sub-Portfolio-Level Program Spending and Participants Forecast by Year**

NYSERDA Workforce Development programming will address market needs for training in the single-family, multifamily and the commercial sectors.

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<sup>5</sup> The Climate Act defines disadvantaged communities as communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise of high-concentrations of low- and moderate-income households. DACs are identified using criteria as established by the Climate Justice Working Group. See New York State Climate Justice Working Group, 2023 Disadvantaged Communities Criteria – Final Report (issued January 14, 2025), available at: <https://climate.ny.gov/-/media/Project/Climate/Files/Disadvantaged-Communities-Criteria/Technical-Documentation-on-the-Disadvantaged-Communities-Criteria---Final-Version.pdf> (Disadvantaged Communities Criteria Final Report).

<sup>6</sup>A list of priority populations for NYSERDA's workforce development programs is maintained here: <https://www.nyserdera.ny.gov/All-Programs/Clean-Energy-Workforce-Development-and-Training/Resources/Definitions>.

**TABLE 1. Sub-Portfolio- Level Program Spending and Participants Forecast by Year<sup>7</sup>**

<b>Workforce (Non-LMI + LMI)</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>Total</b>
<b>Program Budget Forecast</b>	5,518,750	10,231,750	13,627,875	18,478,275	17,231,350	11,582,750	6,329,250	<b>83,000,000</b>
<b>New Workers Forecast</b>								
New Workers Trained	200	900	1,420	1,440	1,440	1,100	500	<b>7,000</b>
Trainees Hired/Placed	200	575	840	1,140	1,210	870	665	<b>5,500</b>
<b>Existing Workers Forecast</b>								
Existing Workers Upskilled	858	2,145	3,289	3,289	2,860	1,430	429	<b>14,300</b>

### 1.5 Sub-Portfolio-Level Resource Full Time Equivalents by Year

Resource Full Time Equivalents (FTE) specific to the Workforce Development Sub-Portfolio are presented as an estimated subset of total LMI and non-LMI Portfolio FTEs.<sup>8</sup> For the NYSERDA Non-LMI Portfolio FTEs please see the Non-LMI EE/BE Implementation Plan, filed July 14, 2025. For the NYSERDA LMI Portfolio FTEs please refer to the Joint LMI EE/BE Implementation Plan, which is expected to be filed October 1, 2025.

**TABLE 2. Sub-Portfolio- Level Resource Full Time Equivalents (FTE) Estimate by Year**

	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>
<b>FTEs</b>	3.1	4.4	5.7	5.9	5.9	3.0	1.5

### 1.6 Managing to the MOTD Metric

NYSERDA will ensure that its budget systems are set up to accurately track budget expenditures across the appropriate categories that constitute money-out-the-door (MOTD), as determined by consultations among Department of Public Service (DPS) Staff and the PAs, as a percent of total program and administrative expenditures on a regular basis, including through interim quarterly and standardized annual reports.

NYSERDA will use budget system tracking and budget forecasts to measure its MOTD metric throughout the funding period. It is expected that MOTD will be tracked at the LMI and Non-LMI portfolio levels.

<sup>7</sup> NYSERDA will modify existing funding opportunities and launch new solicitations to align the funding opportunities with the structure and priorities of the EE/BE Orders. Funding opportunities will accept applications starting in 2026. Training projects, particularly Career Pathways initiatives, typically operate for two years. Additional activities, including, but not limited to contracting, trainee recruitment, and active training occur before an individual may be counted as trained and placed.

<sup>8</sup> These estimates exclude implementation contractors and reflect an estimated allocation from the EE/BE budgets presented herein and are therefore not fully reflective of the level of resources required to fully administer these programs. Accordingly, estimated EE/BE Workforce Development FTEs are forecasted lower in the early years of this plan as EE/BE programs ramp-up and Clean Energy Fund (CEF) programs are closed out. Estimated FTEs extend to 2032 to reflect the wind down of EE/BE expenditures and exclude any needs assessment for future ratepayer funded programs.

## **SECTION 2: SUB-PORTFOLIO DETAILS**

### **2.1 Sub-Portfolio Overview**

Building a skilled workforce is critical to advance New York State's climate goals and scale the adoption of EE/BE solutions. Doing so will require providing ample opportunities for new workers to gain exposure to EE/BE jobs and accessing placement support, training existing workers on newer technologies, and linking trainees and training providers to the large network of EE/BE contractors. Collaboration with Community Based Organizations (CBOs) and employers will be critical to expanding career opportunities for individuals from DACs and Priority Populations and ensuring that training curricula and program designs align with contractor and market needs. The completion and integration of findings from a forthcoming EE/BE Workforce Development Assessment, along with market insights and stakeholder feedback during the program period, will inform program implementation to meet the objectives outlined in this Plan.

### **2.2 Sub-Portfolio Description**

NYSERDA will build upon over two decades of partnership with education and training providers to develop and deliver the skilled workforce that employers in the EE/BE industry need. NYSERDA works closely with contractors, unions, utilities, industry leaders, other state agencies, CBOs, and other entities within the workforce development and educational ecosystem. These partnerships allow NYSERDA to assess and address skills and training gaps across the State, proactively fund training in emerging technologies, help close the gap between labor supply and demand, and strengthen partnerships between employers and training organizations to ensure EE/BE training meets specified business needs.

The Workforce Development Sub-Portfolio and its associated Programs build and expand the training and workforce capacity for the design, sales, installation, operation, and maintenance of EE/BE technologies. NYSERDA supports technical training projects that provide upskilling opportunities for incumbent workers as well as those that prepare individuals to join the EE/BE industry for the first time. For new worker training, NYSERDA remains committed to increasing economic opportunity for residents of DACs and members of Priority Populations.

### **2.3 Market Context**

NYSERDA's Workforce Development Programs are designed to meet the needs of the growing EE/BE economy. An initial analysis conducted for the Draft State Energy Plan found the buildings sector is expected to experience notable growth, adding over 19,000 net jobs by 2030, a more than 10% increase from 2025.<sup>9</sup> The most sizeable increases will be in the residential and commercial shell and residential Heating, Ventilation, and Air Conditioning (HVAC) subsectors, with the majority being construction and installation jobs, indicating the need to expand the residential building workforce considerably.

Compounding this projected new labor demand is a wave of impending retirements in the construction trades. The resulting loss of skilled labor will only widen the workforce gap and impede the transfer of institutional knowledge to the next generation, leading to a mismatch between available skills and job

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<sup>9</sup> New York Draft 2025 Energy Plan, Job Impacts Analysis. Retrieval at <https://energyplan.ny.gov/-/media/Project/EnergyPlan/files/Draft-2025-Energy-Plan/Topic-Area-Chapters/Draft-New-York-State-Energy-Plan-19-Jobs-Analysis.pdf>.

requirements. As evidenced in the 2024 Clean Energy Industry Report, nearly three-quarters (73%) of clean energy employers reported it was “somewhat difficult” to hire additional workers. An additional 26 percent of employers stated it was “very difficult.”<sup>10</sup>

The delivery of the EE/BE programs described in the respective 2026-2030 LMI and Non-LMI Portfolios for all PAs will require a robust workforce. Skilled workers are needed in the areas of design, equipment installation, operation, and maintenance of large commercial, institutional, and industrial buildings, as well as the residential sector, which may include transitioning fossil fuel workers. Skill training will include newer technologies such as heat pumps and integrated controls, as well as new best practices in building automation, weatherization, Passive House techniques, and efficient building operations and maintenance in single-family, multifamily, and commercial market sectors.

NYSERDA is responding to this market demand by coordinating with the workforce ecosystem to identify training needs, continuing support to training providers that prepare new workers for EE/BE jobs, and to upskill existing workers on new and in-demand industry skills. All training will be informed by employer needs, utility needs, stakeholder input and market assessments. Additionally, NYSERDA investments will support the placement of trained workers for a variety of EE/BE jobs through partnerships with CBOs, State and local agencies, and through incentives provided to the businesses hiring. NYSERDA will specifically target job placements in positions that directly support New York ratepayer-funded EE/BE programs.

This Plan is based upon best available market insights and needs at this time. NYSERDA will continue to monitor market conditions and work with DPS Staff to modify in the future as warranted.

### *2.3.1 EE/BE Workforce Assessment*

As directed in the Commission’s Orders, NYSERDA will conduct an EE/BE Workforce Assessment (“Assessment”) of the workforce training and employment needs and opportunities across New York State’s EE/BE ecosystem. This Assessment will build upon other studies recently completed or currently underway by State agencies and institutions and will focus on specific gaps and/or opportunities related to the EE/BE workforce and training. This Assessment will incorporate data and input from contractors, workforce training entities, various State and local agencies and institutions, and nonprofit entities and CBOs including those that specialize in serving DACs. NYSERDA will use the findings of the EE/BE Workforce Assessment to inform continued program development and administration, communication and outreach, coordination with other NYS agencies and training providers, and stakeholder engagement to meet the needs identified in the Assessment. Updates from the Assessment will be incorporated into future filings of this EE/BE Workforce Development Implementation Plan. NYSERDA will also monitor and seek further opportunities to leverage other EE/BE job and training assessments conducted by other entities.

Planned objectives of the Assessment include:

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<sup>10</sup>New York State Energy Research and Development Authority, *2024 Clean Energy Industry Report* <https://www.nyserdera.ny.gov/About/Publications/New-York-Clean-Energy-Industry-Report>.

- Identify, define, and prioritize, with support of local, regional, and state stakeholders, existing training resources as well as identify any existing gaps in workforce training and development for the EE/BE sectors, including barriers or challenges.
- Summarize industry data and forecasts of the existing number of overall EE/BE workers (capacity) against existing jobs (demand) and projected future demand, reflecting activity driven in part by the LMI and Non-LMI EE/BE Orders.
- Leverage existing EE/BE jobs data and analysis, publicly available reports and policy studies, stakeholder input and insight, and any additional resources to assess workforce development opportunities and training challenges within the State, specifically within the State's EE/BE ecosystem.
- Provide recommendations to close gaps and meet future EE/BE workforce needs, while providing opportunities for New Yorkers facing barriers to employment, including DAC residents.

NYSERDA will engage stakeholders, including CBOs, training providers, labor market experts, non-profit organizations, educational institutions, state agencies, utilities, labor unions, and others in the scoping of the Assessment. Stakeholder engagement efforts will be carried out throughout calendar years 2025 and 2026 and may include soliciting written comments, information gathering sessions, and stakeholder conferences. NYSERDA will coordinate with DPS to align the scope, breadth, and depth of the assessment with the broader objectives for the Workforce Development Sub-Portfolio.

#### **2.4 Applicable Measures of Progress & Performance**

NYSERDA will monitor and report progress for the Workforce Development Sub-Portfolio with three metrics, as described in the LMI and Non-LMI Orders: 1) number of new workers trained for EE/BE jobs, 2) number of trainees placed in EE/BE jobs, and 3) number of existing workers upskilled. These metrics will be reported where applicable at the Program level.

NYSERDA will also track and can report on additional market transformation metrics that convey the impact of the Workforce Development Sub-Portfolio, with several measures currently under consideration such as:

- Number of DAC residents and individuals from priority populations trained as a subset of total trainees.
- Locations of EE/BE training delivered.
- Number of businesses/employers whose employees participate in upskill training.
- Retention rate for new hires after 12 months of employment when enrolled in a NYSERDA-funded On-the-Job Training program.
- Total number of businesses participating in On-the-Job Training Program.
- Number of new businesses joining the program annually and businesses that continue to participate each year,

NYSERDA will work with DPS Staff to develop appropriate annual and quarterly reporting structures for the Workforce Development Sub-Portfolio that provides a holistic view on its impacts in a manner that allows for consistency with broader LMI and Non-LMI Portfolio reporting, while avoiding or minimizing overlap with other reporting attributes. Reporting will occur in accordance with DPS Staff guidance documents.

## **2.5 Disadvantaged Community Impact**

In support of New York’s clean energy goals, NYSERDA will design and implement its Workforce Development Programs to prioritize investments that benefit DACs. NYSERDA will implement programs so that DAC benefits will be tracked and attributed to both LMI and Non-LMI Portfolio investments.

To enable residents of DACs and members of Priority Populations to participate in and benefit from the career opportunities in the EE/BE industry, NYSERDA will design and deliver programs, informed by CBO and other stakeholder input, to prioritize activities that support training and hiring of these individuals. NYSERDA’s programs will be designed to address the hiring and training needs (new and existing workers) of contractors serving DACs and LMI households. For new worker training initiatives, at least fifty percent of trainees must be individuals who reside in DACs or meet the criteria of a Priority Population. Additional preference will be given to projects that train exclusively or a significant number of DAC residents and/or Priority Population individuals. Through training providers and other partners, NYSERDA will support activities that foster job placement outcomes for DACs and Priority Populations. Initiatives will be designed to enhance connections with industry groups and businesses looking to hire. Through the On-The-Job Training Program, NYSERDA will provide higher funding incentives to employers to hire and train new workers that meet the criteria of DAC residents or Priority Population(s). Larger employers will only be eligible to receive funding to hire individuals from DACs or Priority Populations. NYSERDA will track the locations of trainings supported by EE/BE Workforce Development funding. More information about the Workforce Development Programs referenced here is provided in Section 3 of this Implementation Plan.

Funds authorized under the LMI and Non-LMI Orders will be used to provide technical and skills training to individuals as well as job placement support. Supplementing these funds, NYSERDA intends to continue supporting experiential learning opportunities (e.g., internships, fellowships) and mitigate barriers to employment and training for residents of DACs and Priority Populations (i.e., wraparound services).

## **2.6 Program Coordination**

NYSERDA recognizes the critical need to coordinate programming efforts and communication across the EE/BE ecosystem to maximize the impact and effectiveness of its efforts. NYSERDA will coordinate with the following partners, among others, as described below to ensure a strategic approach to supporting training providers and employers while aligning with related initiatives.

### *2.6.1 Coordination with Program Administrators*

- Coordinate and communicate with EE/BE program administrators and implementers – including utility PAs – to ensure that workforce training activities align with contractor needs and are effective in building a pipeline of workers with the skills that can enable deployment of EE/BE services across the LMI and Non-LMI markets.
  - NYSERDA will meet with representatives from the utilities to discuss workforce development programs, needs, and coordination opportunities at least annually.
  - NYSERDA will meet with individual utility trade ally network coordinators more frequently, as requested by the utilities. The focus on this collaboration will be to maximize support for participating contractors through technical training resources,

connections to NYSERDA's On-the-Job Training Program, and coordination between businesses and local training partners preparing new workers for in-demand EE/BE jobs.

- Deploy training resources to contractors (e.g., heat pump technical assistance, Clean Heat Connect content) through trade ally network channels to streamline program offerings.

#### *2.6.2 Coordination with State and City Entities*

- Work closely with New York State Department of Labor (NYSDOL), New York Power Authority (NYPA), NYS Empire State Development, the New York City Mayor's Office, and others to coordinate initiatives and design programs that complement each other and promote market alignment.
- Partner with NYSDOL to support trainee and employer participation in services such as their Virtual Career Center and in-person career fairs.

#### *2.6.3 Coordination with Education Institutions and Training Organizations*

- Build upon existing relationships with State University of New York (SUNY) and City University of New York (CUNY) (including community colleges), as well as the State Education Department, Board of Cooperative Educational Services (BOCES) programs, and New York City (NYC) Career and Technical Education to invest in scalable EE/BE workforce training within established institutions.
- Support the ecosystem of non-profit, for-profit, and institutional education and training entities by serving as a connector to industry and scale effective training delivery models.

#### *2.6.4 Coordination with Community-Based Organizations*

- Leverage Regional Clean Energy Hubs (Hubs) to promote NYSERDA's Workforce Development Program offerings and serve as a communication conduit on regional needs and challenges related to workforce development. The Hubs can connect contractors and small businesses, especially Minority / Women-Owned Business Enterprises (MWBEs) and Service-Disabled Veteran Owned Businesses (SDVOBs), interested in hiring and training support with NYSERDA workforce development opportunities and promote NYSERDA-funded training programs in their regions.
- Connect with and support a range of CBOs across the State to build stronger, healthier, cleaner communities by partnering on training initiatives that will expand EE/BE career opportunities and provide supportive services to community members seeking to join the EE/BE industry.

#### *2.6.5 Coordination with Industry Groups, Unions, and Contractors*

- Maintain open, two-way communication channels with businesses and industry groups in the EE/BE market to design and deploy NYSERDA programming to meet identified needs and challenges. For example, NYSERDA routinely participates in conferences, industry convenings, and small group meetings with industry associations, trade groups, and contractors. This includes but is not limited to organizations such as the Residential Market Advisory Group, the Building Performance Contractors Association, the Association of Energy Engineers, and the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE).
- Sustain NYSERDA's strong relationships with labor organizations administering Registered Apprenticeship Programs and Direct Entry Pre-Apprenticeship Programs to expand their training

capacity and infrastructure to meet market needs.

- Ensure that training curricula and program designs align with contractor needs and that training programs have industry connections to create a pipeline of trainees that can be hired by EE/BE contractors.

## **2.7 Stakeholder Engagement**

Ongoing stakeholder engagement is a key element of NYSERDA's approach for EE/BE Workforce Program implementation. NYSERDA collects stakeholder input on areas such as skills gaps and training needs, deployment of new technologies, market conditions impacting hiring needs, program design, and strategies to mitigate barriers to program participation. NYSERDA has conducted stakeholder engagement, including with the Energy Equity Collaborative's (EEC) Workforce Development and Economic Development Working Group, as well as with the Hubs' Workforce Development Working Group, to gain initial feedback on this implementation plan. Stakeholder engagement will continue to assess dynamic market needs and further guide the effective implementation of NYSERDA's Workforce Development Programs. NYSERDA will solicit cross-cutting feedback from stakeholder groups across New York State, potentially including:

- EEC Workforce Development & Economic Development Working Group.
- NYSERDA's 12 Regional Clean Energy Hubs and their Workforce Development Working Group; and
- NYSERDA's Workforce Development Community of Practice that includes training providers specializing in career pathway initiatives.
- Business and industry groups, including On-the-Job Training participants seeking and hiring new workers.

Additionally, NYSERDA will conduct site visits and engage with stakeholders one-on-one as well as at conferences and industry meetings. NYSERDA will follow up with stakeholders to inform them how their input was used to shape or hone its Workforce Development Programs.

## **2.8 Program Marketing**

To promote its Workforce Development Program offerings, NYSERDA will develop custom messaging tailored to each of its target audiences, including trainees and employers, as program plans are finalized. This approach will ensure that marketing investments are designed to increase the number of new and existing workers trained, and ultimately seek to increase the number of individuals placed in EE/BE jobs. Strategic marketing plans will be developed to generate awareness and educate potential program participants on the benefits of a career in the EE/BE industry as well as target program participants with messaging to help overcome barriers.

## **SECTION 3: PROGRAM DETAILS**

NYSERDA will implement three Programs in support of the broader Workforce Development Sub-Portfolio: Clean Energy Career Pathways Training for new workers, Targeted Skills Training and Upskilling for existing workers, and "Earn as you Learn" wage reimbursement through On-the-Job Training. These Programs were previously included in NYSERDA's Workforce Development Talent Pipeline Initiative under the Clean Energy Fund.

In the near term, NYSERDA will modify existing solicitations that currently support these three Programs to serve the market in 2026. Activities in each Program will include cost share requirements from project partners. These existing programs are established, proven, and have been informed by on-going stakeholder engagement and market assessments. NYSERDA typically designs its solicitations as either an open enrollment model or a multiple due date solicitation. Based on the results of the impending Workforce Assessment and continued stakeholder engagement, additional or different solicitations may be needed to address stakeholder and market input.

### 3.1 Clean Energy Career Pathways Training

#### 3.1.1 Program Budgets and Participants Forecast

**TABLE 3. Clean Energy Career Pathways Training Program Budgets and Participants Forecast**

Clean Energy Career Pathways	2026	2027	2028	2029	2030	2031	2032	Total
<b>Program Budget Forecast</b>	2,848,750	4,431,750	6,877,875	9,778,275	8,531,350	6,982,750	4,594,250	<b>44,045,000</b>
<b>New Workers Forecast</b>								
New Workers Trained	-	500	1,000	1,000	1,000	1,000	500	<b>5,000</b>
Trainees Hired/Placed	-	175	420	700	770	770	665	<b>3,500</b>

#### 3.1.2 Implementation Details

Clean Energy Career Pathways Training focuses on preparing new workers for EE/BE jobs. NYSERDA will allocate most of the funding in this Program to competitive solicitations that will award funding to training providers for comprehensive, industry-aligned *Career Pathways* training projects, described below. These projects will be designed by the project teams to reflect their tailored approach to meeting both program objectives and identified business needs. For example, a technical high school, community college, a trade association, or CBO can deliver specific training to meet the skills needs identified by employers to ensure the trainees are prepared for and placed into EE/BE jobs. The balance of the funding will be dedicated to specific or unique programming determined by market needs and gaps, such as in certain technology areas, geographies, or sectors, referred to as *Additional Programming for New Workers* below.

Continuing its comprehensive and partner-led approach to supporting EE/BE new worker training, NYSERDA may modify existing program offerings to better meet the needs of businesses, training providers, and trainees. Career Pathways new worker programming will continue to place an emphasis on job placement as an outcome of EE/BE technical training. Through intentional design, programs will be constructed to enable training providers to focus on serving members of DACs and Priority Populations.

NYSERDA will focus on bridging the gap between workers trained and employers seeking to hire. Building upon NYSERDA's Partner Connector platform,<sup>11</sup> NYSERDA will facilitate connections between

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<sup>11</sup> NYSERDA's online Partner Connector platform facilitates connections among training providers, employers, and other service providers that are interested in forming partnerships to collaborate on funding opportunities. Available at: <https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Workforce-Development-and-Training/Resources/Partner-Connector>.

training partners and the large network of EE/BE contractors that participate in NYSERDA and utility EE/BE programs to align training efforts with their hiring needs. Using utility trade ally network communication channels, NYSERDA will improve the engagement between businesses in regions seeking to hire and training organizations seeking employer partners for trainee job placement. NYSERDA will work closely with NYSDOL to leverage their business services representatives and other resources to assist employers and job seekers across the state in further expanding contractor engagement in the EE/BE workforce ecosystem, as noted in the *Collaboration* section above.

***Career Pathways.*** Career Pathways projects are a proven, comprehensive approach to preparing new workers for EE/BE and other clean energy careers. CBOs are key partners in Career Pathway training and job placement initiatives. As NYSERDA's primary initiative within the Clean Energy Career Pathways Training Program, Career Pathways projects address market needs through a combination of clean energy technical training, career preparation, and wraparound support. Career preparation activities typically include academic and employment-related supports (e.g., mentoring, interview preparation, job coaching, apprenticeship and job placement assistance, and retention services) while wraparound supports focus on social services (e.g., case management, childcare, and transportation) needed to ensure successful training completion and subsequent job retention. Training providers will be required to leverage wraparound support offered by external entities prior to requesting NYSERDA funding for these services. These services will not be supported with ratepayer funds. NYSERDA will explore other sources of funding to fill any gaps for wraparound services for qualifying individuals that are members of DACs and/or Priority Populations. Modest stipends of approximately \$500 may be provided as needed using ratepayer funds for individuals from DACs and Priority Populations, to cover costs such as personal protective equipment and tools relevant to the technical training.

Career Pathways initiatives are delivered in a variety of different formats, including in classrooms, in the field, online (live/asynchronous) and via hybrid models.

- EE/BE funding will be applied to the career preparation, technical training, and job placement activities within a Career Pathways project.

***Additional Programming for New Workers.*** In addition to the Career Pathways approach, NYSERDA will support other innovative new worker training activities that are industry- and employer-driven, as well as activities that leverage existing educational infrastructure in the state to advance new worker training at scale. NYSERDA will use findings from the EE/BE Workforce Assessment to inform program design and projects funded for these activities.

- NYSERDA intends to establish a pre-qualified training provider pool that is prepared to deliver training services as needed.
- NYSERDA will outline in-demand workforce development activities identified by the Assessment, contractors, trade allies in NYSERDA and utility EE/BE programs, and other stakeholders, and issue mini bids to the pre-qualified training partner list to deliver the requested trainings.
- Training activities may include short-term EE/BE training programs independent from, or in addition to, established Career Pathways training programs.

## 3.2 Targeted Skills Training and Upskilling

### 3.2.1 Program Budgets and Participants Forecast

**TABLE 4. Targeted Skills Training and Upskilling Program Budgets and Participants Forecast**

Targeted Training/Upskilling	2026	2027	2028	2029	2030	2031	2032	Total
<b>Program Budget Forecast</b>	670,000	1,800,000	2,750,000	4,700,000	4,700,000	2,700,000	1,635,000	<b>18,955,000</b>
<b>Existing Workers Forecast</b>								
Existing Workers Upskilled	858	2,145	3,289	3,289	2,860	1,430	429	<b>14,300</b>

### 3.2.2 Implementation Details

Targeted skills training and upskilling programs are proven long-term investments in augmenting the knowledge, skills, and competencies that help workers advance in their careers. NYSERDA seeks to build and expand training capacity that upskills existing workers currently employed in EE/BE jobs. These include individuals working in design, equipment installation, operation, and maintenance of large commercial, institutional, and industrial buildings, as well as the residential sector, and may comprise transitioning fossil fuel workers.

NYSERDA recognizes the importance of training and upskilling building operators and maintenance (O&M) staff for in-demand positions in the EE/BE sector. Although NYSERDA does not intend to offer a standalone program focused exclusively on delivering highly customized training to specific building owners' portfolios, NYSERDA's program offerings for existing worker upskilling will support cost-effective training for building operators that aligns with market demand. The topic of building O&M training will be included in the forthcoming EE/BE Workforce Assessment.

NYSERDA has been developing resources and strategies to effectively upskill contractors through supply chain partnership channels, and these resources and relationships will facilitate further building electrification upskilling efforts under the EE/BE Workforce Development Sub-Portfolio. NYSERDA will coordinate Workforce Development Sub-Portfolio activities with ongoing and new efforts such as Clean Heat Connect, a Heat Pump Accelerator Program for HVAC Contractors, and a contractor technical assistance training series to increase the reach and impact of these initiatives.

In the near term, NYSERDA will adapt current funding opportunities to focus investment in priority skills areas necessary for the existing and growing EE/BE workforce. Skills training will include newer technologies such as heat pumps and integrated controls, as well as new best practices in building automation, weatherization, Passive House techniques, testing and balancing of ventilation systems, and efficient building operations and maintenance in single-family, multifamily, and commercial market sectors. Particular focus will be given to meeting the upskilling needs of workers and contractors serving LMI households. NYSERDA will leverage its relationship with utility trade ally networks and industry professional associations to stay up-to-date on in-demand training topics.

A majority of funding in the Targeted Skills Training and Upskilling Program will be awarded through a competitive solicitation(s) for projects that support curriculum development, training delivery, training for trainers, training equipment purchases, and certifications based on market need and business demand. As

a requirement for funding, applicants must outline their approach and solution to meeting the training and workforce gaps and market needs.

- NYSERDA will fund training provided through private training providers, non-profit industry organizations, trade unions, businesses, trade associations, and other similar entities with demonstrated expertise. Training may also be provided by manufacturers, distributors, vendors, and suppliers.
- Training is delivered in classrooms, training labs, the field and through hybrid approaches.
- Training may take the form of webinars, multi-hour courses, all-day workshops, EE/BE modules integrated into pre-apprenticeship and apprenticeship programs, certificate programs, continuing education, job shadowing and job coaching.
- Training projects will need to demonstrate a critical EE/BE training gap, market demand for the training, and a clear plan to ensure existing workers participate in the training.
- EE/BE funding will range across projects funded through this initiative, with funding commensurate with the length, depth, and rigor of the training activity.

Similar to the approach outlined for Clean Energy Career Pathways Training for new workers, NYSERDA recognizes that industry workforce needs arise in certain geographies or sectors that may not be met through projects submitted through the solicitation process. As such, NYSERDA will reserve a portion of the Targeted Skills Training and Upskilling funding for priority initiatives. By establishing a pre-qualified training provider pool that is prepared to deliver training services as needed, NYSERDA can initiate training services via mini bid in response to specific needs identified in the EE/BE Workforce Assessment. In doing so, NYSERDA will closely coordinate with trade allies in both NYSERDA and utility EE/BE programs as well as other industry partners.

Training will be coordinated with state agency partners as well as program administrators and/or implementers managing utility trade ally program networks. As the success of the EE/BE programs is dependent on contractor capacity to complete the work and do it well, NYSERDA will collect and leverage insights from Quality Assurance/Quality Control (QA/QC) activities, PAs, distributors, industry groups, and contractors to identify critical upskilling training topics that will have the most impact on the market as well as the most effective delivery methods to reach the target contractor audience.

### 3.3 On-the-Job Training / “Earn as You Learn” Wage Reimbursement and Retention Incentives

#### 3.3.1 Program Budgets and Participants Forecast

**TABLE 5. On-the-Job Training/ “Earn as You Learn” Program Budgets and Participants Forecast**

On-The-Job Training	2026	2027	2028	2029	2030	2031	2032	Total
<b>Program Budget Forecast</b>	2,000,000	4,000,000	4,000,000	4,000,000	4,000,000	1,900,000	100,000	<b>20,000,000</b>
<b>New Workers Forecast</b>								
New Workers Trained	200	400	420	440	440	100	-	<b>2,000</b>
Trainees Hired/Placed	200	400	420	440	440	100	-	<b>2,000</b>

#### 3.3.2 Implementation Details

The On-the-Job Training program model, also referred to as “Earn-as-You-Learn”, is a well-documented training approach in which a worker earns a paycheck while learning new skills for an in-demand job.

Wage support for businesses that invest the time in providing on-the-job training to new employees helps reduce the financial risk associated with businesses hiring and training new workers.

NYSERDA's On-the-Job Training Program will leverage this model and build upon existing hiring support programs. The Program will offer funding to EE/BE employers to offset a new hire's wages and training expenses during an initial on-the-job training period, as well as funding to incentivize and track the retention of the new workers. The program will focus on offering support for entry-level workers, rather than hiring highly credentialed, experienced workers for senior-level or management positions. Program enhancements that tie funding to employee retention will also encourage employers to invest in staff development and job quality. Funding will be awarded to compensate businesses in a manner that creates dual benefits for both the worker and the employer – funding will enable businesses to provide new workers with professional development and growth opportunities, thereby increasing job satisfaction and promoting job retention. NYSERDA will prioritize and provide additional funding for those hiring DAC residents and Priority Populations.

To meet program objectives, employers applying to the program must demonstrate clear EE/BE skills gaps for their new hire that will be addressed through a robust training plan.

- Eligible positions include workers who design, specify, sell/distribute, audit, inspect, install, manufacture, operate, and maintain buildings and technologies with a demonstrated connection to EE and/or BE.
- The program will prioritize the hiring of residents of DACs and Priority Populations. Higher incentives will be offered to businesses hiring DAC residents and Priority Population New Yorkers compared to individuals who do not meet these criteria.
- Businesses will be limited on the number of workers they can hire who do not meet the DAC resident or Priority Populations criteria; large employers may only be eligible for funding if they hire from these targeted populations. This will ensure that the funding is appropriately directed to create opportunities for DAC residents and Priority Populations.

The funding structure will prioritize retention of new hires beyond the formal on-the-job training period. This funding will help employers invest in professional development courses, certifications, and other support for new hires. NYSERDA will also develop a streamlined application processes for employers hiring and training large numbers of new employees at scale.

NYSERDA will work closely with trade ally network administrators to promote the On-the-Job Training incentives to contractors working on EE/BE programs. NYSERDA will continue to work with NYSDOL to administer these initiatives.

## **SECTION 4: EVALUATION, MEASUREMENT, AND VERIFICATION (EM&V)**

### **4.1 EM&V Methodology**

The Workforce Development Sub-Portfolio will produce market transformative impacts. Using its independent, third-party evaluation consultants, NYSERDA plans to measure the market transformative impacts of the Workforce Development efforts to develop and deliver the skilled workforce that EE/BE

employers need through a variety of data collection and analysis. This approach may include, but not be limited to:

- Market baselining and characterization of market transformative impacts
  - Surveys and interviews of training providers and employers to assess the gaps in current training curricula; additions needed to address new industry standards, advancing technologies, and changing business needs; and effectiveness of partnership channels to inform employee-driven workforce solutions.
  - Surveys and interviews of trainees to assess satisfaction with training as well as retention rates.<sup>12</sup>
- Process evaluation of program efficiency and effectiveness
  - Surveys of stakeholders to understand their experience and satisfaction with the program.

#### **4.2 Key EM&V Metrics**

NYSERDA will complete a metrics development process and will provide updated market transformation metrics in the next update to the annual implementation plan. NYSERDA's process to finalize metrics will include development of a logic model that will document the theory of change and identify the key outputs and outcomes to measure progress and success. Through this process, NYSERDA will align final metrics with the proposed Common Metrics Framework which identifies the stages of market transformation: engagement, adoption and ownership. While direct and indirect energy impacts will not be assessed or quantified for this sub-portfolio, other examples of market transformation metrics that could be included for Workforce Development, pending completion of the metrics development process, are:

- Number of new workers trained, including the subset of these trainees who are DAC residents and/or Priority Populations
- Existing workers upskilled for EE/BE jobs
- The number of employers with employees participating in EE/BE related training
- Programs and locations delivering hands-on training in EE/BE skills
- Skilled labor development with new and existing trained workers placed in EE/BE jobs and workers hired through the On-the-Job Training Program
- Market penetration as evidenced by greater availability of EE/BE training content and an enhanced partnership network between employers and training organizations.
- Information and data availability to allow for improved tracking of retention rates for new hires.

#### **4.3 Anticipated Timing**

NYSERDA plans to undertake evaluation activities starting in 2026 with annual assessments as warranted. This anticipated schedule may be further refined as evaluation tasks are scoped and conducted.

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<sup>12</sup> As in past evaluations, NYSERDA anticipates implementing the Kirkpatrick Model, a framework used to evaluate the effectiveness of training programs in a structured manner based on four levels: Reaction, Learning, Behavior, and Results. <https://www.kirkpatrickpartners.com/the-kirkpatrick-model/>.

## APPENDIX A: ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
Assessment	Energy Efficiency/Building Electrification Workforce Assessment
BOCES	Board of Cooperative Educational Services
CBO	Community-based Organizations
Commission	New York State Public Service Commission
CUNY	City University of New York
DACs	Disadvantaged Communities
DPS	New York State Department of Public Service
EE/BE	Energy efficiency and building electrification
EEC	Energy Equity Collaborative
EM&V	Evaluation, measurement and verification
FTE	Full Time Equivalent
Hubs	Regional Clean Energy Hubs
HVAC	Heating Ventilation and Air Conditioning
Utilities	Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., KeySpan Gas East Corporation d/b/a National Grid, Brooklyn Union Gas Company d/b/a National Grid, National Fuel Gas Corporation, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange & Rockland Utilities, Inc., and Rochester Gas & Electric Corporation.
LMI	Low-to Moderate-Income
LMI Order	Order Authorizing Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolios for 2026-2030
MOTD	Money-out-the-door
MWBE	Minority- and Women-Owned Business Enterprises
Non-LMI	Non-Low-to Moderate-Income
Non-LMI Order	Order Authorizing Non-Low- to Moderate-Income Energy Efficiency and Building Electrification Portfolios for 2026-2030
NYC	New York City
NYS	New York State
NYSDOL	New York State Department of Labor
NYPA	New York Power Authority
NYSERDA	New York State Energy Research and Development Authority
O&M	Operation and Maintenance
PA	Program Administrator
PSC	New York State Public Service Commission
QA/QC	Quality Assurance and Quality Control
SDVOB	Service-Disabled Veteran-Owned Business
State	State of New York
SUNY	State University of New York