Clean Energy Fund Workforce Development and Training Industry Partnerships Baseline Study

Executive Summary

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Executive Summary

The New York State Energy Research and Development Authority (NYSERDA) created the Workforce Development and Training (WFD) initiative, funded by NYSERDA's Clean Energy Fund (CEF), to deliver needed clean energy workforce skills to employers. NYSERDA is currently focusing its WFD Industry Partnerships initiative efforts in the area of building operations and maintenance (O&M). This report documents the baseline performance metrics for this initiative.

The WFD Initiative Description

NYSERDA solicited proposals from organizations that employ O&M staff ("industry partners") for fund to develop in-house, industry-specific training. The proposals indicate what training would cover and who would be trained with the NYSERDA funds. The training could include training of O&M staff to provide continuous and consistent on-the-job training to others ("train-the-trainer").

Evaluation Objectives and Methods

The primary objective of this study was to develop and assess metrics for 10 baseline indicators for the WFD Industry Partnerships Initiative, where baseline was defined as the pre-CEF year of 2016. The indicators covered multiple areas representing initiative objectives: new curricula developed; workers trained, including number of workers with national O&M certifications; workers advanced or promoted, receiving salary increases, or placed into paid internships, on-the-job training, or apprenticeships; low-to-moderate (LMI) workers placed into O&M jobs; improved employee retention; and decreased time to find and hire skilled O&M workers.

To assess the metrics, the research team conducted interviews and surveys with: 1) nine of 12 industry partners or organizations participating in the initiative (referred to as "participants"); and 2) 68 large commercial and multifamily property managers (owners, managers, etc.) who were not engaged with NYSERDA in development of a training program (referred to as "non-participants"). The surveyed non-participants were similar to the participants and the overall population in terms of the market sectors they represented.

This research will be repeated in future years to ascertain change in the indicators over time.

Results and Findings

Table 1 summarizes the assessed metrics for the WFD Initiative's baseline indicators. The majority of participants reported developing new curricula with initiative funds (as opposed to modifying existing curricula). One-third to two-fifths of O&M staff had received salary increases in the baseline period that went beyond the cost of living and at least 15% possessed at least one national O&M-related certification. Other metrics all accounted for less than 5% of O&M staff or organizations.

Table 1. WFD Initiative Outputs, Outcomes, and Indicators Summary

Outputs/ Outcomes	Indicators	Updated CEF Baseline Estimate: Number (Percent) of Staff or Organizations					
		Participants		Non-participants		Combined	
Training and Certification	Percent of trainees with national certifications*	≥15%		≥15%		≥15%	
	Number (percent) of staff qualified to train others	4	(0.3%)	4,318	(2.4%)	4,322	(2.4%)
	Number (percent) of organizations with new curricula	6	(67%)	364	(11%)	370	(11%)
Workforce Advancements	Number (percent) of staff that received a wage increase	530	(41%)	57,302	(32%)	57,832	(32%)
	Number (percent) of incumbent workers advanced/promoted	55	(4.3%)	8,272	(4.7%)	8,327	(4.7%)
	Number (percent) of individuals placed into paid internships and apprenticeships	47	(3.7%)	3,122	(1.8%)	3,169	(1.8%)
	Number (percent) of LMI workers placed	3	(0.2%)	260	(0.1%)	263	(0.1%)
Workforce Hiring and Retention	Improved employee retention – number (percent) of staff who chose to leave	22	(1.7%)	4,680	(2.6%)	4,702	(2.6%)
	Time to find & train new talent (median)	6 months		6 months		6 months	

^{*} Recognized national certifications assessed were: NEEC; BPI; NATE; HVAC Excellence; EPA 608; Certified Energy Manager; Certified Energy Auditor; Refrigeration Engineers & Technicians Association (RETA), Certified Assistant Refrigeration Operator (CARO), Certified Industrial Refrigeration Operator (CIRO), or Certified Refrigeration Energy Specialist (CRES).

Several of the metrics showed differences between the participating and non-participating organizations at this baseline assessment, before any potential effect of the NYSERDA-supported training could occur. Such differences suggest that the participants are a self-selected group relative to non-participants, more motivated to adopt practices that promote good O&M

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performance and – as such – more likely to partner with NYSERDA to improve workforce training.

Conclusions and Recommendations

The findings lead to the following conclusions and recommendations:

Conclusion 1: NYSERDA's WFD Industry Partnership initiative is indeed focusing on the correct market barrier.

Recommendation: The NYSERDA WFD Industry Partnerships initiative is well-positioned to meet its goals and thus should be a continued interest and investment by NYSERDA.

Conclusion 2: There may be limited perceivable change from baseline on some indicators. For example, advancements and wage increases for some organizations are a function of union negotiations.

Recommendation: Remove advancements and wage increases from the list of metrics for the WFD Initiative.

Given that the participants appear to be a highly self-selected group relative to nonparticipants, direct comparisons over time between participants and the entire non-participant population may not be informative. As the initiative continues, however, it may begin recruiting more participants that resemble the larger nonparticipant population.