

# **ADVANCED ENERGY CODES PROGRAM: KNOWLEDGE SURVEY PROCESS EVALUATION EXECUTIVE SUMMARY**

*Final*

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## Notice

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# Executive Summary

To increase compliance with the Energy Conservation Construction Code of New York State (the “Energy Code”) and to reduce energy consumption, the New York State Energy Research and Development Authority (NYSERDA) provides training and support services through the Codes initiative of its Advanced Energy Codes and Standards program. NYSEDA has contracted with multiple training contractors, including Newport Ventures (Newport) and the Urban Green Council (UGC), to develop and conduct a portfolio of training courses on updates to the Energy Code that take effect on October 3, 2016. These trainings target three audiences – code officials, design professionals, and members of the construction trades – and cover both commercial and residential buildings.

## Project Scope and Methods

The primary goal of this process evaluation is to evaluate reactions to training and learning among participants in the NYSEDA Energy Code trainings, focusing on the subset led by Newport and UGC between April 2015 and June 2016. A secondary goal is to gather trainee feedback on the value and quality of course offering to inform future course improvements. Evaluation objectives and methods are summarized in Table ES-1.

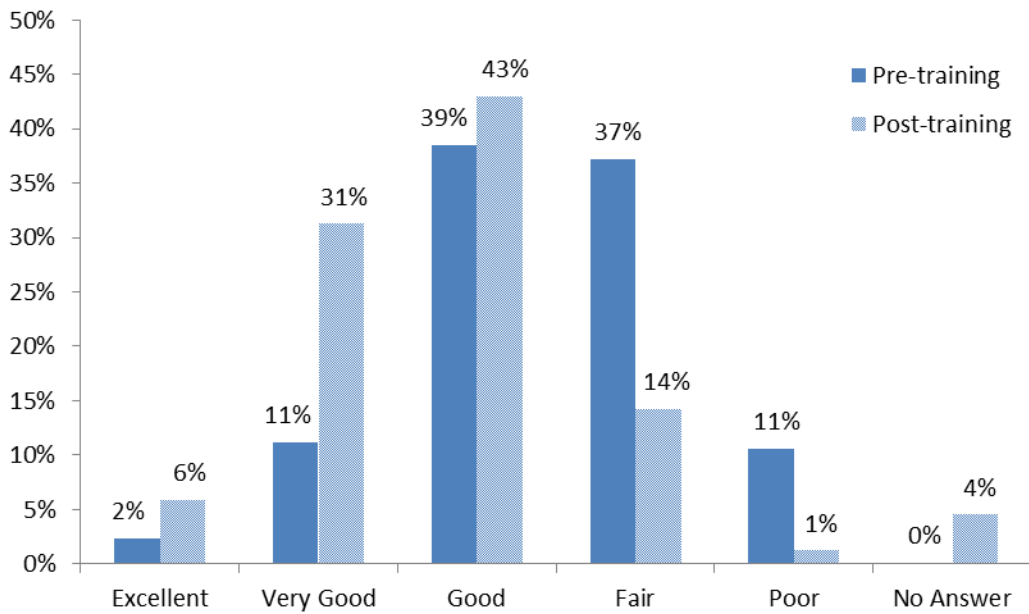
**Table ES-1. Summary of Objectives and Methods**

Objective	Purpose	Method	
		Pre-/Post-Training Survey	Interviews with NYSEDA, Training Contractors
Evaluate trainees’ reactions to the training program	Assess trainees’ satisfaction with and the value of the training program	✓	
Measure the change in trainees’ level of knowledge of the Energy Code following training	Assess training quality	✓	✓
Determine whether trainees plan to enact changes as a result of training	Assess the extent to which trainings may increase code compliance	✓	✓
Examine perceptions of training’s effectiveness at increasing code compliance	Assess the extent to which trainings may increase code compliance, and inform improvements to NYSEDA’s Energy Code initiative		✓
Solicit suggestions for other activities that trainees think would be effective at increasing code compliance	Inform improvements to NYSEDA’s Energy Code initiative	✓	✓

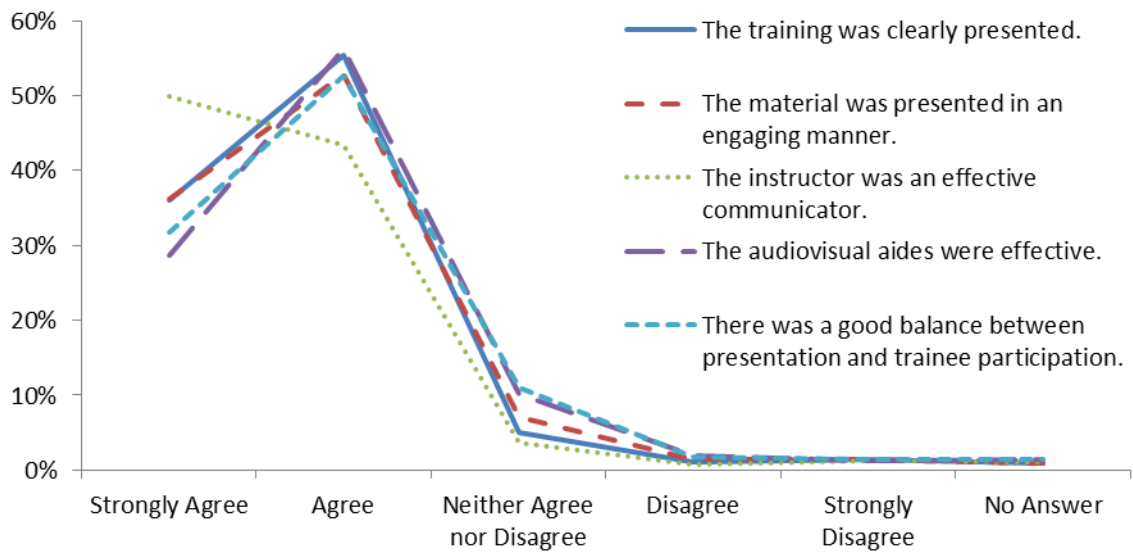
## Key Findings

Overall, the NYSEDA Energy Code trainings have been well-received and very successful in increasing participant knowledge, as shown in Figures ES-1 and ES-2 below. Trainees also indicated that they intend to make changes to how they do their jobs as a result of the training (Figure ES-3). Finally, NYSEDA program staff and training contractors indicated that the trainings are meeting their objectives.

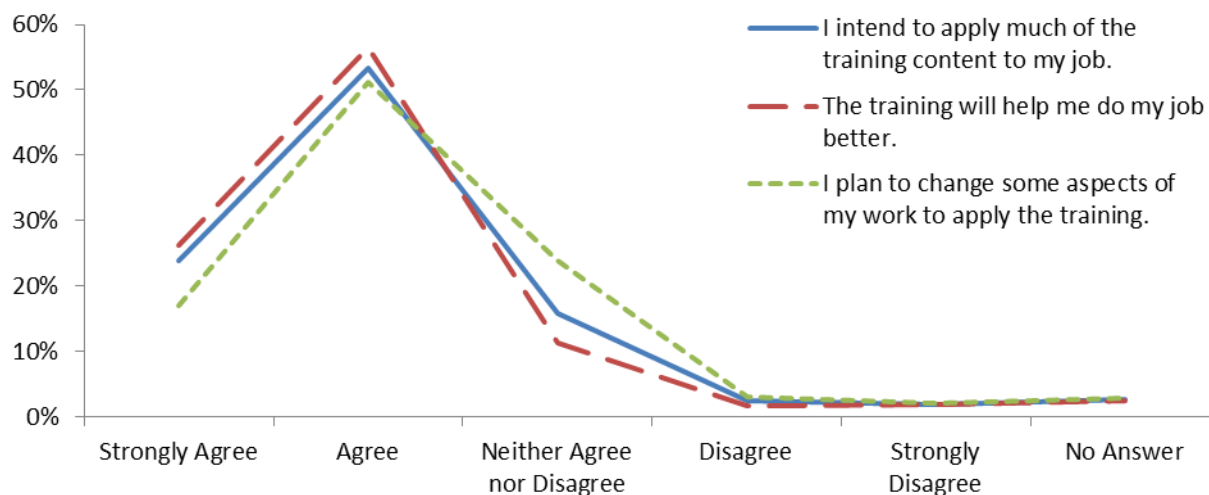
**Figure ES-1. Trainee Understanding of the Energy Code**



**Figure ES-2. Trainee Satisfaction**



**Figure ES-3. Trainee Plans to Apply Training**



Most trainees (73 percent) did not recommend covering additional topics as part of the training, either because they believed the training was complete as-is or there was no time to cover additional topics. Only 22 percent provided feedback on the course, and many of those responses were positive comments such as “thank you.” The two most common categories of suggestions were changes to course materials (e.g., requests for more handouts and sample documents) and additional courses or content (e.g., requests for advanced training). Suggestions for other ways to increase code compliance included incorporating more case studies into the trainings, extending training time, and offering trade-specific trainings.

## Recommendations

While the trainings have largely been successful, IEC offers four recommendations for future trainings:

1. **Build on introductory trainings by incorporating additional topics or courses that go into greater depth regarding specific elements of the code and code compliance.** When asked about ways to improve the trainings or increase code compliance, some trainees requested more advanced training. This could be a natural follow-on to the current introductory trainings.
2. **Consider changes to training exercises, materials, and class format.** Many trainees suggested increasing the use of sample projects and case studies and experimenting with alternative class formats. Trainees also frequently requested copies of the presentation slides, the Energy Code, and other resources; training contractors should consider providing a web link for participants to download at least the training slides.
3. **Focus on increasing participation by the construction trades.** Engaging members of the construction trades remains a key challenge. According to NYSERDA, trade-specific trainings, which were requested by some trainees, can help attract members of the construction trades, and may therefore be an effective strategy in the short term.
4. **Follow up with trainees to determine whether they have applied knowledge from the trainings to their jobs.** NYSERDA program staff and training contractors identified several provisions that trainees are likely to struggle with in practice. Follow-on surveys could help determine the extent to which participants are applying information from the trainings to their jobs, and would provide context for the results of any future code compliance studies.