Workshop Summary

Ensuring High Performance Buildings through a Skilled Workforce

August 18, 2016
Davis, CA

Background

In October 2015, Governor Edmund G. Brown Jr. signed into law Senate Bill 350, which calls for increasing California's renewable energy mix to 50 percent and doubling the energy efficiency of existing buildings by 2030. SB 350 has the potential to create thousands of new jobs, but there is mounting evidence that workforce quality must be addressed. While there are a number of workforce training programs, there is currently no coordinated effort. California needs a plan to meet the workforce needs of SB 350.

Purpose

This workshop brought together stakeholders and experts, including policy makers, regulators, academics, labor representatives, utilities, and workforce advocates, to explore how to organize an industry-led coalition that directly aligns workforce initiatives and funding with specific requirements to meet the SB 350 energy mandates. Discussion focused on two key questions:

- What is the biggest barrier building owners/managers face with regard to energy efficiency retrofit investments in the context of skilled workers?
- What can workforce development programs do to simplify and minimize transaction costs for building owners/managers who are interested in increasing the efficiency of their facilities?

Key Takeaways

√ **Knowledge transfer is not occurring at the pace and detail necessary** to keep up with changes in markets and technology.

√ **There are significant training gaps**—many manufacturer-delivered training opportunities focus exclusively on their products.

√ Deemed savings (pre-calculated savings by energy efficiency measure) approaches tend to result in low cost and poorly operating installations that do not yield the savings anticipated. **More emphasis should be placed on pay-for-performance approaches.**

√ **SB 350 is driving the development of workforce initiatives.** Industry-led partnerships are forming among associations and large building portfolio owners to launch courses and certificate programs that bridge the supply/demand gap.

√ **Broader alignment of workforce stakeholders and funders is key to the success of California policies, regulations, and goals.**

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Discussion Summary

What is the biggest barrier building owners/managers face with regard to energy efficiency retrofit investments in the context of skilled workers?

- Building owners tend to be task oriented. Knowledge transfer is not occurring at the pace and detail necessary to keep up with changes in markets and technology.
- Building owners want high performance buildings and they acknowledge that pursuing zero net energy buildings, with the corresponding renewable energy requirements, will be a challenge.
- A systematic process was described and discussed as a proxy to drive large buildings towards high performance and zero net energy ready. This process included: benchmarking, and creating a baseline; performing energy analytics; a breakdown of building loads; an energy audit/inventory; and operationalizing an energy management plan.
- Deemed savings (pre-calculated savings by energy efficiency measure) approaches tend to result in low cost and poorly operating installations that do not yield the savings anticipated. More emphasis should be placed on pay-for-performance approaches.

What can workforce development programs do to simplify and minimize transaction costs for building owners/managers who are interested in increasing the efficiency of their facilities?

- There are significant training gaps—many manufacturer-delivered training opportunities focus exclusively on their products.
- SB 350 is a principal driver in developing strategies that need to be reflected in occupational workforce initiatives.
- Industry-led partnerships are forming among associations and large building portfolio owners to launch courses and certificate programs that bridge the supply/demand gap.
- Broader alignment of workforce stakeholders and funders is key to the success of California policies, regulations, and goals.
- Labor standards need to be better integrated with workforce requirements.
- It could be beneficial to identify successful efforts in the energy efficiency marketplace and replicate them to create scale opportunities.

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