



ZERO ENERGY COMMERCIAL BUILDINGS CONSORTIUM

Workforce Development

Working Group

Zero Energy Commercial Buildings Consortium (CBC)

Call Notes

August 9, 2010; 2:00-3:00 pm EST

Attendees

Mike Bobker, CUNY Building Performance Lab,
Chair
Jim Snook
Bud DeFlavis, SBIC
Diana Lin, NASEO
Kim Hughes, NEEA

Aaron Needham, Garner Energy Solutions
Ryan Colker, NIBS
Don Cotchen, McGraw Hill Construction
Jeff Harris, Alliance to Save Energy
Abi Kallushi, Alliance to Save Energy
Michael Doane

Key Conclusions

- There needs to be better education & information in the FIRE community.
- There needs to be consensus on standards (skills, competencies, etc.) in order for trainers to train to those new skills.
- There needs to be increased and sustained market demand for these services.

Next Steps

- **Assignments are due by Wednesday, August 18**, but if you can get input to Mike Bobker by Friday, August 13, he can incorporate it into a discussion draft for his informal session on Monday, August 16 at the ACEEE Building Summer Study.
- Members please review the minutes below and find **your name in green** for assignments.

Meeting Minutes

Guidance on Drafting Content

- General framing and background such as characterizing energy usage in commercial buildings and defining net zero energy will be done at the broader report level rather than in individual chapters.
- Ruthlessly prioritize barriers and actionable recommendations. –this is the area we should concentrate efforts and thought.
- Solicit information and coordinate with other working groups who are affected by the lack of a trained workforce.

Discussion of Outline - Section 1 – Defining the Topic

- Add in section 1.3.1: K-12 Education and its role in engaging students early and feeding into the other professions and trades.
 - **Ryan Colker** will put a few sentences together on this.

- Add a paragraph on the need for integration, coordination, and communication across and between disciplines as a conclusion to the 1.3 Segmentation & Integration section.
- There is a major gap in the FIRE (Finance, Insurance and Real Estate) professions who do not recognize EE as an asset and do not value it in financing, assessments, or underwriting.
 - **Ryan Colker** will write a 1-2 paragraphs on this.
 - **Don Cotchen** will connect with Ryan and assist.

Section 2 – State of the Art

- What is the role of government in workforce development?
 - In NYC's experience, new aggressive legislation has been accompanied by realization of a lack of workforce. Has prompted NYC to look at workforce requirements and certifications.
 - On the federal level, there is pending legislation ([H.R. 5112](#) and S. 3250) which has passed in the Senate and is waiting to come to the floor of the House. The legislation attempts to direct the GSA to identify core competencies for federal building operations personnel, appropriate training and certifications needed for each job category, and continuing education courses.
 - On the state level, NY State has a program Green Jobs/Green Homes. Mike knows that other states such as CA, VT, WI, OR, and WA have state-level programs, but doesn't know many details.
 - **Diana Lin** offered to dig into state level programs and also recommended Dave Hewitt to provide information on CA. She will get in touch with Dave.
 - Are government programs in other sectors like residential relevant to our scope? For instance, the [National Energy Rating Program](#) for homes has several workforce related components.
 - Diana: I think these can be referenced insofar as to point out how parallel activity in the commercial sector is needed. Perhaps this is a recommendation to highlight.

Section 3 – Gaps and Barriers

Information & Education

- Don: one of the things I hear – work with international trade unions which are quick to train skilled craftsmen to built greener – I often hear from that sector people say what exactly is different from his project?? What's different in an energy efficient project from any other project. So educating people on what people need and DEFINE what exactly it is: what new requirements do we have for skilled workers or for CRAFT or equipment that's unique in a market that demands higher energy efficiency.
- Kim: in addition to HOW its different we need to make it clear and understandable to folks in trade as to WHY this is different and important. We need to communicate the business case: (economics, health, productivity, etc.)
- Don: Agreed. do craft folk realize that they can be the difference between a measurable improvement and simply mediocre result simply by doing good work. There is a benefit to the tradesman: if he does good work, he will set himself apart from his competitors and get more business.
 - **Don and Kim** will write a few paragraphs on this barrier

- Mike asked is our only gap an informational issue? Seems like there must also be some structural barriers.
- Yes, there is the challenge in creating market demand. Unless the market actually values a more efficient product or building, the workforce will not respond.
- Don: This goes back to the FIRE and owners community. Unless they demand this consistently, there will be no systematic and sustained demand.
- Mike- It's either that or a regulatory scheme. Within those frameworks, information becomes very important, but in and of itself is not sufficient.

Training – Chicken & Egg problem (market demand and training)

- Trainers do not like to overtrain. They will not train people for jobs that don't exist. There must be guaranteed job placement. This conservative approach is reinforced with DOL federal incentives (funding is disbursed based on placement results).
- Don: Trainers will adapt and they will train based on specifications. But someone needs to tell them what those new specs and skills are! Trainers will never be market drivers; they trail the market. We need consensus on standards. What do you expect a sheet metal worker or a pipe-fitter to do that they are not doing now?
- Jeff Harris: Perhaps we can start thinking about demand aggregation – partnering with owners with large building portfolios, others? Perhaps there are lessons from the product and technology market development sectors that may be instructive. How do you create a supply for demand that doesn't yet exist?
- To further complicate things, technologies have a hard time becoming cost-effective if the labor supply is highly specialized and restricted. i.e. PV can't become cheaper if there isn't a ready labor supply. Moreover, the construction market is so fickle, it's hard to predict any kind of sustained demand.
- **Kim Hughes** agreed to write a few paragraphs on this problem and the need for clearer career paths.

Section 4 - Recommendations

- Jharris – we need to be clear about who's the audience/subject for each recommendation. Who is the actor for each recommendation? Who is the ideal leadership?
- The Report and recommendations are for DOE, but we shouldn't let that limit us from identifying other relevant actors.
- On 4.3 – who do we see as leaders to take on a ZE Workforce Commission? Is this something the CBC could take on?

Process for completing report:

- Please provide Mike your input by Wednesday, August 18 or by Friday, August 13 if you want it included in the ACEEE discussion draft for Monday, August 16.
- Mike Bobker will compile and synthesize a review draft.
- We will ask WG members and other related organizations to review and provide feedback. These include:
 - IFMA, BOMA, AFE (**Ryan Colker and Diana Lin** will follow-up with them)
 - Perhaps Building product manufacturers (**Don Cotchen and Diana Lin** will follow-up with them).