
Competency Models In Action:

New Competency Model for Advanced Commercial Buildings Workforce

February 2015

- Collaborating with the Department of Energy and industry stakeholders
- Demonstrating the common and unique competencies required for advanced commercial building job titles
- Addressing the increased demand for a skilled commercial buildings workforce

Introduction

Under a grant from the Department of Energy (DOE), the Consortium for Building Energy Innovation (CBEI), based at the Pennsylvania State University (PSU), has developed a new competency model. The mission of CBEI is to advance improvement of energy efficiency in small to medium-sized commercial buildings. “Transforming how we approach energy in the building industry is a big challenge,” says Dr. David Riley, Associate Professor of Architectural Engineering at PSU. “The key competencies of people charged with energy efficiency are actually dispersed across a wide variety of occupations. DOE seeks to establish a new set of standards and titles for these occupations.”

CBEI worked in collaboration with DOE and subject matter experts from the commercial buildings industry to develop the Advanced Commercial Buildings Workforce (ACBW) Competency Model and an accompanying Career Map, scheduled for launch by spring 2015. The ACBW model aligns with the DOE and National Institute of Building Sciences (NIBS) Better Buildings Workforce Guidelines effort.

The Workforce Need

Improving the operational performance of the nation’s offices, schools, hospitals, and other commercial buildings offers significant energy savings. It also requires highly skilled and qualified workers, particularly as building technologies become more advanced. Yet there are currently no national guidelines for energy-related professional credentials, posing a major barrier to the quality, consistency, and scalability of this workforce.¹

As building owners turn their attention to rising utility costs, demand is increasing for a commercial buildings workforce with advanced competencies in operations, maintenance, and energy-related technologies². The direct and indirect jobs supported by energy efficiency are diverse, and require an array of skill sets, many of which are abundant in the existing

¹ www4.eere.energy.gov/workforce/projects/workforceguidelines

² CBEI Fact Sheet, Commercial Buildings Professional Competency Model and Career Map

American workforce³. The development of the ACBW Competency Model and Career Map is intended to help scale up the workforce to meet the needs of an expanding industry.

Approach

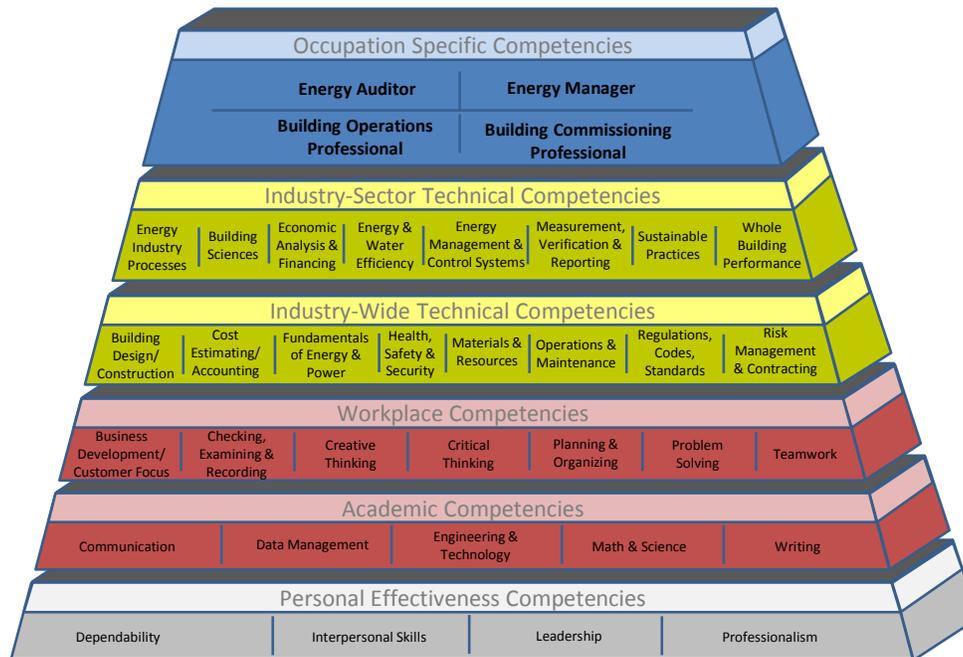
“We pulled together a team that had experience in building and energy and also had an interest in training and education,” says Dr. Riley. “We initially convened a series of stakeholder meetings which included employers, universities with large facilities and local engineering firms. It became clear that many of the skills in short supply were not in the skilled trades. The labor market need was mostly for mid-level career professionals who can help advance energy retrofit projects that would put the skilled trades to work.”

CBEI utilized the Job Task Analyses for four advanced commercial building workforce job titles that are the focus of the DOE’s and NIBS’ Better Buildings Workforce Guidelines Effort: 1) Building Operations Professional, 2) Energy Auditor, 3) Commissioning Professional, and 4) Energy Manager.

“A critical workplace competency that emerged in the model development process was business development/customer focus,” says Dr. Riley. “There is no shortage of individuals with technical competencies. What we did find was the need for business development skills among these professions to convince commercial building owners to make necessary improvements to improve energy efficiency. We have also identified other “keys to success” or what we refer to as “performance competencies” that specifically relate to each of the four job titles and that we are trying to elevate through our research. For example, for Energy Auditors, these competencies would include the ability to communicate effectively with key stakeholders and to work collaboratively with clients.”

³ Energy Efficiency Job Creation: Real World Experiences, Bell, C. American Council for an Energy-Efficient Economy White Paper

Advanced Commercial Buildings Workforce Competency Model



Next Steps

“The Career Map provides a conceptual framework to help individuals better understand the career paths described in the model,” says Dr. Riley. “It is designed to attract an array of individuals at different entry points in their professional lives, e.g., veterans, tradespersons, and college graduates. The Career Map demonstrates how these advanced energy-related commercial buildings jobs fit into a logical career progression from the building trades and construction industry professions via an engaging Web tool available to workers, employers, policymakers, education and training providers, and the human capital/workforce development community.”⁴

Related Links

Consortium for Building Innovation

<http://cbei.psu.edu/>

Department of Energy, Office of Energy Efficiency and Renewable Energy

<http://energy.gov/eere/office-energy-efficiency-renewable-energy>

Better Buildings Workforce Guidelines

<https://www4.eere.energy.gov/workforce/projects/workforceguidelines>

⁴ Ibid