

The U.S. Department of Energy (DOE) and the National Institute of Building Sciences (NIBS) worked with industry stakeholders to develop voluntary national guidelines to improve the quality and consistency of commercial building workforce credentials for four key energy-efficiency related jobs.

Improving Building Performance

Achieving the maximum potential 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. National guidelines for energy-related professional credentials improve the quality, consistency, and scalability of this workforce.

Before developing national guidelines, many workforce training, certificate, and certification programs had emerged. They addressed different scopes, assessed different skills, and demonstrate varying degrees of quality and rigor. This array of credentialing programs created confusion and uncertainty and added cost to the industry. It also hampered the development of a quality workforce with clear pathways for professional skill development and impeded progress in optimizing commercial building performance.

Better Credentialing for a Qualified Workforce

The Better Buildings Workforce Guidelines (BBWG) reduce the confusion and uncertainty around workforce credentialing.

- ▶ Credentials can now be built on a clear set of industry-developed guidelines.
- ▶ New and experienced professionals can better understand their training and certification options and seize opportunities to improve their technical skills.
- ▶ Employers, building owners, government officials, and program administrators across the country can use the guidelines to identify skilled and qualified workers.

Facilitating a Successful Process

DOE provided leadership and funding for the workforce guidelines project while relying on industry subject matter experts to develop the technical content. DOE now recognizes credentialing programs that implement the guidelines and achieve third-party accreditation, providing a way for these programs to distinguish themselves in the market. DOE is working with NIBS and industry stakeholders to educate and build broad-based support for using the guidelines.

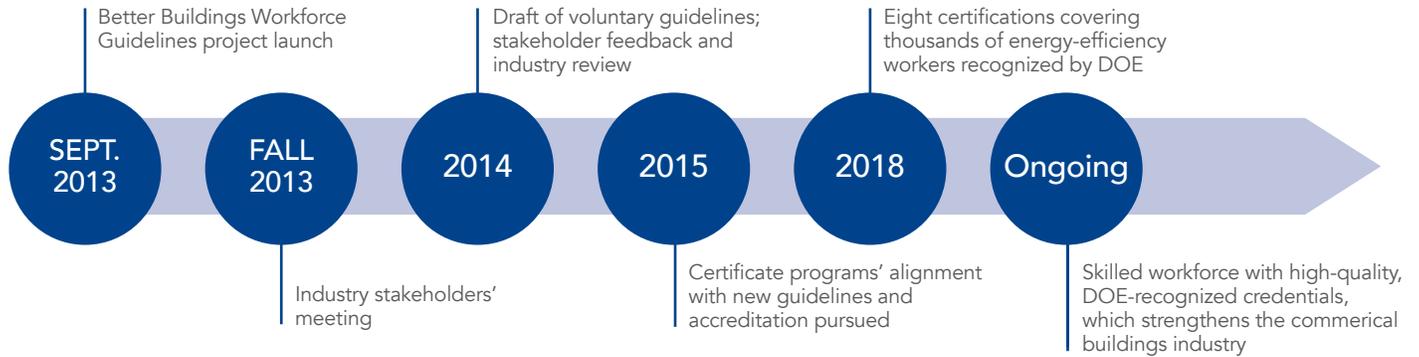
PROJECT SCOPE

Job Titles	Job Descriptions
Building Energy Auditor	The Building Energy Auditor is an energy solutions professional who assesses building systems and site conditions, analyzes and evaluates equipment and energy usage, and recommends strategies to optimize building resource use.
Building Commissioning Professional	The Building Commissioning Professional leads, plans, coordinates, and manages a commissioning team to implement commissioning processes in new and existing buildings.
Energy Manager	The Energy Manager is responsible for managing and continually improving energy performance in commercial buildings by establishing and maintaining an energy program management system that supports the organization’s mission and goals.
Building Operations Professional	The Building Operations Professional manages the maintenance and operation of building systems and installed equipment and performs general maintenance to maintain the building’s operability, optimize building performance, and ensure the comfort, productivity, and safety of the building occupants.

Engaging Industry Expertise

NIBS—a congressionally authorized nonprofit organization and respected building industry convener—facilitated the guidelines development process. NIBS created the Commercial Workforce Credentialing Council (CWCC) to guide and oversee the guidelines effort. The CWCC is open to all interested industry stakeholders, including building owners; industry trade associations; credentialing bodies; energy-efficiency advocates; utility program

PROJECT TIMELINE



administrators; labor unions; the real estate community; and state, local, and federal officials.

For each job title, a committee of subject matter experts nominated by the CWCC developed an industry-validated job task analysis (JTA), outlining key duties, tasks, knowledge, skills, and abilities. Based on the JTA, each committee then developed complete guidelines:

- ▶ For competency-based **professional certifications**, the guidelines consist of validated JTAs along with certification schemes identifying eligibility criteria and prerequisites, exam structures, recertification requirements, and other elements. Qualified industry certification bodies use these guidelines to develop written and/or performance-based assessments, write test questions, screen candidates, administer examinations, and confer nationally recognized professional certifications.
- ▶ For assessment-based **certificate programs**, the guidelines include content outlines and learning objectives derived from the validated JTAs. Certificate program providers can use these guidelines to inform curriculum development and approaches to instructional delivery, and to measure whether learning objectives are being met. DOE and NIBS have also developed a process for certificate providers to achieve DOE recognition for programs based on the four energy-efficiency jobs. The CWCC website contains the "Better Buildings Workforce Guidelines Certificate Program Development Guide," which describes the process for achieving accreditation using the BBWG JTA. The website also offers an example reduced scope JTA for a Building Operations Journey worker, which could form the basis of a certificate program.

Third-party accreditation, required for DOE recognition, is the final component of the guidelines. Information on the recognition process, including a current listing of recognized credentials, is available on the BBWG website at <https://betterbuildingssolutioncenter.energy.gov/workforce/participating-certifying-organizations>.

Aligning with Other Federal Efforts

The guidelines were developed in close coordination with the U.S. Department of Labor Office of Apprenticeship; the U.S. Department of Education, Office of Vocational and Adult Education; and the U.S. General Services Administration Office of Federal High-Performance Green Buildings. The guidelines assist federal agencies, and contractors serving them, in successfully implementing the Federal Buildings Personnel Training Act and the Veterans Skills to Jobs Act.

Project Outcomes

Since 2016, the BBWG have been available for adoption by certification and certificate program providers, enabling them to develop new or revised credentials that are high-quality, industry-endorsed, and nationally recognized by DOE. As of mid-2018, eight programs have been accredited and are recognized.

Participate

For more information on the BBWG, please visit <https://betterbuildingssolutioncenter.energy.gov/workforce>. The guidelines project is part of DOE's Better Buildings Initiative, whose goal is to make our nation's buildings 20% more energy efficient over the next 10 years and accelerate private sector investment in energy efficiency.