

# Better Buildings Workforce Guidelines

## Energy Manager and Federal Facility Manager

2014 Building Technologies Office Peer Review



## Framework for a Better Buildings Workforce

# Project Summary

## Timeline

Start date: August 2013

Planned end date: December 2014

## Key Milestones

1. Present draft plan for energy manager and facility manager to CWCC Board of Direction (11/7/13)
2. Coordinate with NIBS to convene subject matter experts (SMEs) for the development of job task analyses (3/20/14)
3. Contribute to the development of the energy manager certification and federal facility manager certificate “schemes” (9/15/14)

## Budget

Total DOE \$ to date: \$197K

Total future DOE \$: \$200K for related training program

## Target Market/Audience

- Energy managers in commercial sector
- Federal facility managers (including contractors)

# Project Summary (continued)

## Key Partners

## Contractors

NIBS	Resource Dynamics
GSA	SOLID
DoD	
DOE/FEMP	
NREL	

## Project Goals

Provide technical contributions to development of Better Buildings Workforce Guidelines as follows:

1. Energy manager certification – including energy management system business processes
2. Federal facility manager certificate – satisfying requirements of Federal Buildings Personnel Training Act (FBPTA) and including relevant energy management system business processes

# Purpose and Objectives

## Problem Statement

- Absence of consistent national guidelines in commercial workforce credentialing programs related to energy use
- Proliferation of competing certifications and certificate-based training of varying quality
- Federal agencies need to demonstrate compliance with the Federal Buildings Personnel Training Act (FBPTA)

## Target Market and Audience for LBNL Scope of Work (2 credentials)

- Energy managers in the commercial sector
- Federal facility managers, including contractors (~ 50,000)

## Planned Outcomes

- Energy manager – ANSI/ISO/IEC 17024 accredited certification suitable for licensing into the market for use in the commercial sector
- Federal facility manager – certificate and training program accredited to IREC 14732 and widely available to federal employees and contractors

# Purpose and Objectives

## Planned Contribution to Energy Efficiency

- Introduce consistent standards of practice into qualification of energy and facility management qualifications for commercial and federal sectors
- Support improved building energy performance, market value and recognition
- Provide path for professional advancement, including analysis of equivalency for selected military classifications

## Outputs

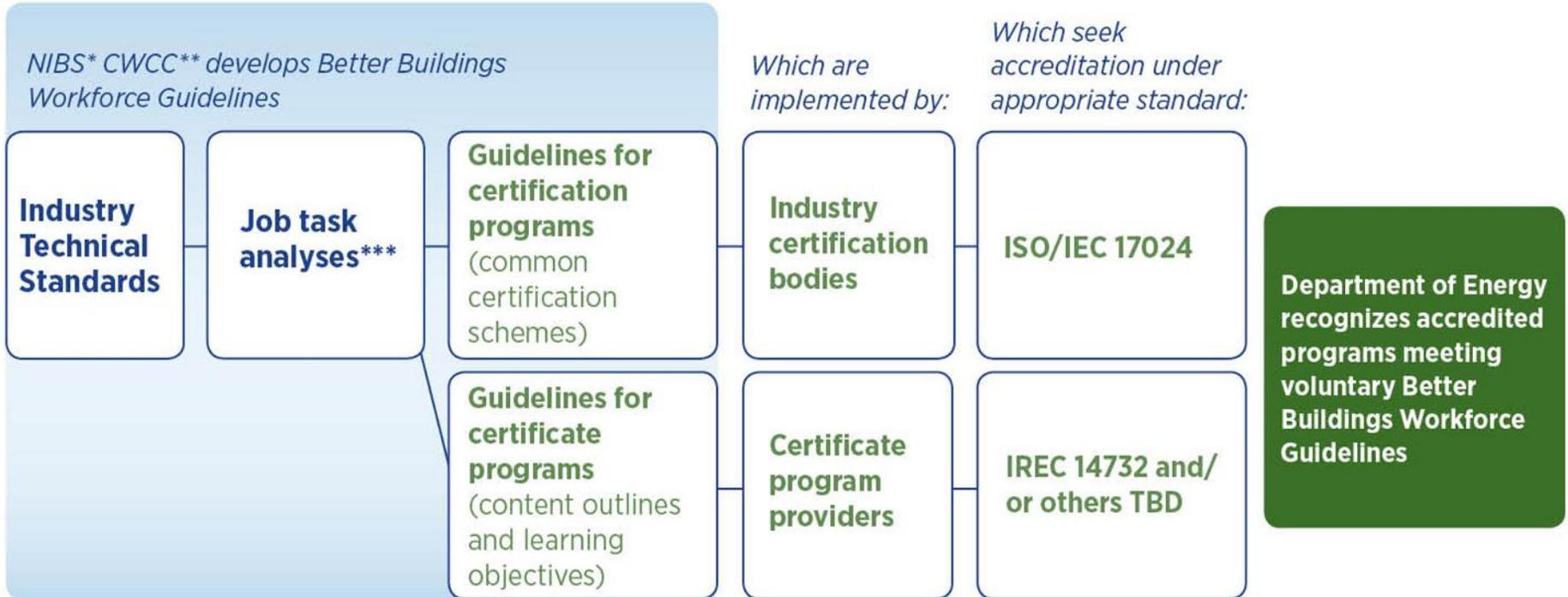
*Phase I (through 9/14 using current funding) will result in:*

- Defined knowledge and skills
- Requirements for education and work experience leading to energy manager certification and federal facility manager certificate

*Phase II (through 12/14) will result in:*

- Map and identify gaps in currently available open access or federal training relevant to federal certificate requirements
- Develop implementation plan for federal certificate program in cooperation with BTO, GSA, FEMP, and DoD

# Better Buildings Workforce Guidelines Approach



\*National Institute of Building Sciences

\*\*Commercial Workforce Credentialing Council

\*\*\* Building Energy Auditor; Building Commissioning Professional; Energy Manager;

Building Operations Professional; Facility Manager (Government and FBPTA focus)

# Approach

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## Approach

Develop certificate/certification programs based on requirements of national accreditation standards

## Key Issues

- Energy manager – includes an emerging topic in this field, energy management systems business processes
- Federal facility manager – provides government agencies a method to demonstrate compliance with FBPTA

## Distinctive Characteristics

- Energy manager certification to be licensed to multiple certification bodies – unique approach to ISO 17024-accredited programs
- Federal facility manager certificate suitable for use across all federal agencies; mapped to relevant military occupations

# Progress and Accomplishments

## Discoveries

No significant barriers have been discovered

## Accomplishments

Progress is meeting planned milestones

## Project Contribution to Energy Efficiency

- Credentials will improve consistency and rigor for energy managers and federal facility managers, contributing to more effective energy management across the commercial sector
- Federal facility manager certificate will provide agencies access to a one-stop shop for training to fulfill the intent of the FBPTA – improving energy performance of federal sites

## Awards/Recognition

- Energy manager certification and federal facility manager certificate will be recognized by ANSI and IREC accreditation, respectively
- Recognition will be provided to qualified personnel via the resulting credentials

# Project Integration and Collaboration

## Project Integration

- Energy manager – several private-sector certification bodies are involved to ensure market acceptance
- Federal facility manager – GSA and other relevant agencies are involved to ensure agency acceptance
- Requirements of Veteran Skills to Job Act will be considered

## Partners, Subcontractors, and Collaborators

- Partners/Collaborators - NIBS, DoD, DOE/FEMP, NREL, GSA
- Contractors - Resource Dynamics, SOLID

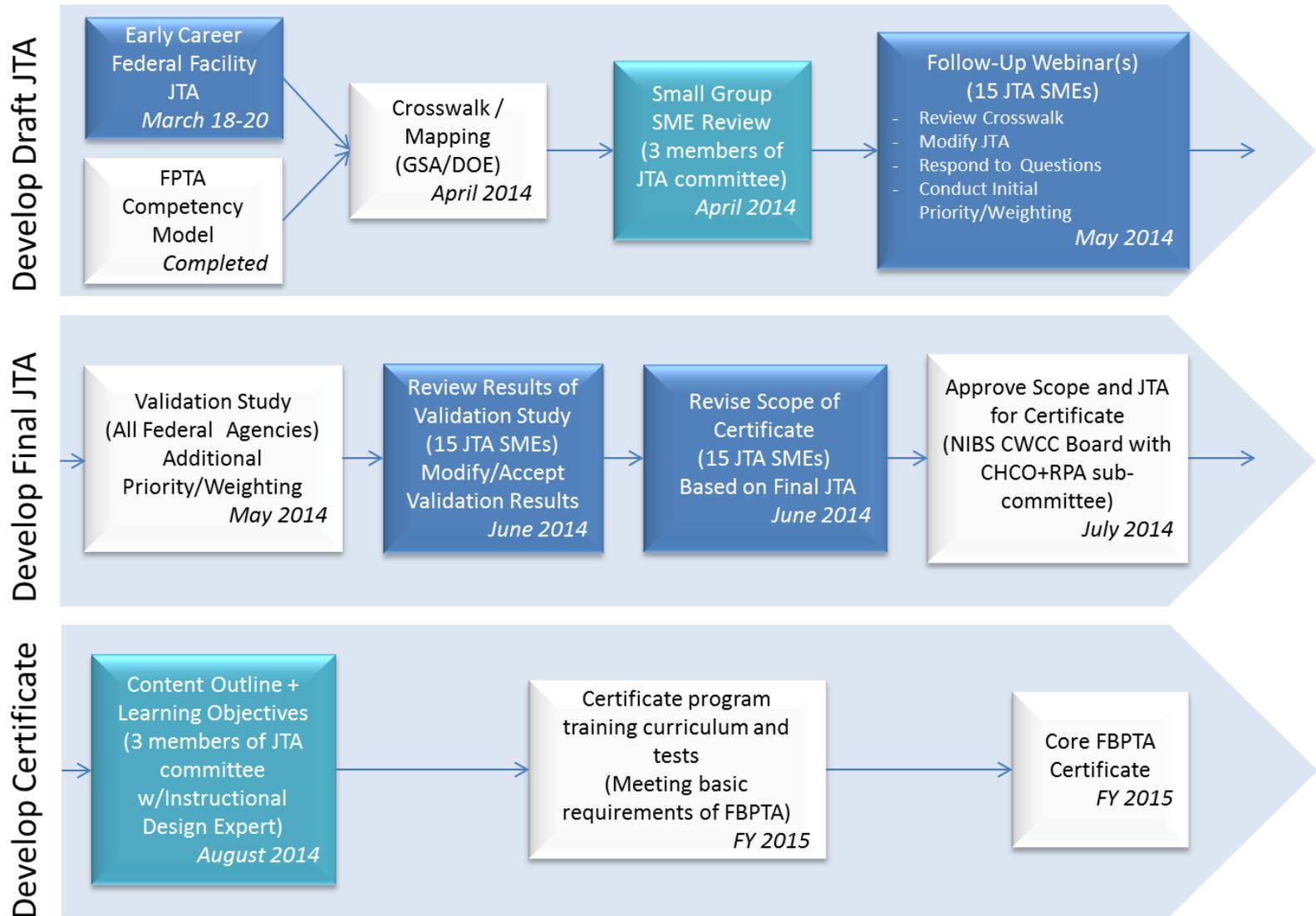
## Communications

- External communication managed by NIBS under DOE direction
- Presentations:
  - NIBS CWCC Board of Advisors and Board of Direction
  - SME workshops (energy manager and federal facility manager)

# Next Steps and Future Plans – Energy Manager

1. Next steps
  - a. Participate in JTA validation study
  - b. Collaborate with partners and SMEs to define certification scheme
  
2. Risks
  - a. Number of entities involved
  - b. Resulting certification scheme will not be accepted in market
  - c. Mitigation of risk managed by NIBS and DOE through CWCC Board of Direction and relevant stakeholders
  
3. Impacts
  - Intermediate-term – strong market acceptance of resulting certification scheme improves number and breadth of energy efficiency actions undertaken in commercial sector

# Next Steps and Future Plans – Federal Facility Manager



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# REFERENCE SLIDES

# Project Budget

**Project Budget:** \$197K

**Variations:** Per request of the NIBS Board of Direction, project plan revised to focus on Federal Facility Manager and Federal interagency value, rather than market-based facility manager

**Cost to Date:** \$90.5K

**Additional Funding:** anticipate \$200K later in FY14

## Budget History

August– FY2013 (past)		FY2014 (current)		FY2015 (not planned)	
DOE	Cost-share	DOE	Cost-share	DOE	Cost-share
\$197,000		**		N/A	

\*\* anticipated \$200K additional later in the FY

# Project Plan and Schedule

Project Schedule												
Project Start: August 2013	Completed Work											
Projected End: December 2014	Active Task (in progress work)											
	◆ Milestone/Deliverable (Originally Planned)											
	◆ Milestone/Deliverable (Actual)											
	FY2013				FY2014				FY2015			
Task	Q1 (Oct-Dec)	Q2 (Jan-Mar)	Q3 (Apr-Jun)	Q4 (Jul-Sep)	Q1 (Oct-Dec)	Q2 (Jan-Mar)	Q3 (Apr-Jun)	Q4 (Jul-Sep)	Q1 (Oct-Dec)	Q2 (Jan-Mar)	Q3 (Apr-Jun)	Q4 (Jul-Sep)
Q1 Present draft written plan for energy and facility management workforce guidelines to Board of Direction				Completed Work	Milestone/Deliverable (Actual)							
Q2 Coordinate with NIBS to convene the energy and facility management SMEs				Completed Work	Milestone/Deliverable (Actual)							
Q3 Prepare draft JTAs,, gap analysis of GSA core competencies and CP EnMS						Active Task	Milestone/Deliverable (Originally Planned)					
Q3 Contribute to final JTAs based on survey results and other inputs							Active Task	Milestone/Deliverable (Originally Planned)				
Q3 Draft development plan for Federal Facility Manager certificate program							Active Task	Milestone/Deliverable (Originally Planned)				
Q4 Develop draft Certificate(s) Content Outline/Learning Objective							Active Task	Milestone/Deliverable (Originally Planned)				
Q4 Draft crosswalk of existing training against certificate learning objectives; identification of gaps							Active Task	Milestone/Deliverable (Originally Planned)				
Q4 Present plan to NIBS CWCC Boards for review and approval							Active Task	Milestone/Deliverable (Originally Planned)				