State and Local Code Implementation: State Energy Offices

2014 Building Technologies Office Peer Review











Project Summary

Timeline:

Start date: October 2011

Planned end date: September 2014

Key Milestones

- 1. Facilitate State Energy Office participation in 2015 IECC Hearings (October 2013)
- Codes stakeholder coordination calls/meetings (monthly)
- Deliver new SEO Director and staff training (February 2014)
- 4. Complete State Energy Planning Guidelines and codes section (April 2014)

Budget:

Total DOE \$ to date: FY12: \$170k; FY13: \$75k Total future DOE \$: \$100k (pending for FY14)

Target Market/Audience:

State Energy Offices and their partners/stakeholders: utilities, code officials, builders/design professionals, etc.

Project Goals:

- Provide technical assistance to State Energy Offices on energy code implementation, compliance, and adoption.
- Serve as a convener of codes-support organizations in order to improve coordination and interaction with states.
- Provide feedback exchange between energy offices and BECP.

Key Partners

State Energy Offices (Directors and staff)			
ВСАР	SPEER		
SEEA	MEEA		
NEEP	NEEA		
SWEEP	PNNL		



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Problem Statement:

- States/territories are committed to code implementation and compliance.
 However, many states have limited on-going funding sources to make these activities sustainable.
- 2. There is a need to help states leverage resources, learn from their peers, and identify new sources of support (e.g., utilities) for building energy code implementation and compliance. Coordination at the national level is needed to support these goals.
- 3. In some states, State Energy Offices serve as the **predominant funder of energy codes related activities**. The energy offices usually dedicate staff time and federal funding (e.g., State Energy Program dollars) to codes.
- 4. State Energy Offices are a key stakeholder in the **code development process** but often cannot participate due to funding/approval barriers.



Target Market and Audience:

- State Energy Offices
 - In charge of developing and overseeing energy policies and programs at the state level that touch all building sectors (residential, commercial, public buildings; new construction and renovations).
 - Often have specific roles in the code adoption/implementation process and partner with other agencies (e.g., Dept. of Community Affairs, Dept. of Housing and Construction, etc.) that are responsible for enforcing codes.
- Indirect markets/audiences:
 - Utilities
 - Local governments
 - Code officials
 - Builders/Design Professionals
 - Other state agencies
 - State legislatures
 - Consumers/citizens



Why State Energy Offices (SEOs) are of particular importance to DOE on Codes:

- SEOS provide the only direct link between DOE and agencies in all 56 states and territories, through the State Energy Program (SEP \$50 million in FY14).
- SEOs and Governors receive DOE determination certification requests.
- Many SEOs organize code training and have managed compliance studies.
- Many SEOs provide significant funding for codes through SEP and other sources.

West Virginia Division of						
Energy - FY14 Codes Budget						
Training	\$	75,000				
Codes Books/						
website	\$	6,000				
Total	\$	81,000				
(50% SEP; 50% state funds)						
FTE's: Director (10%); two staff (5% each); funded						
mainly through SEP, not						
included above						

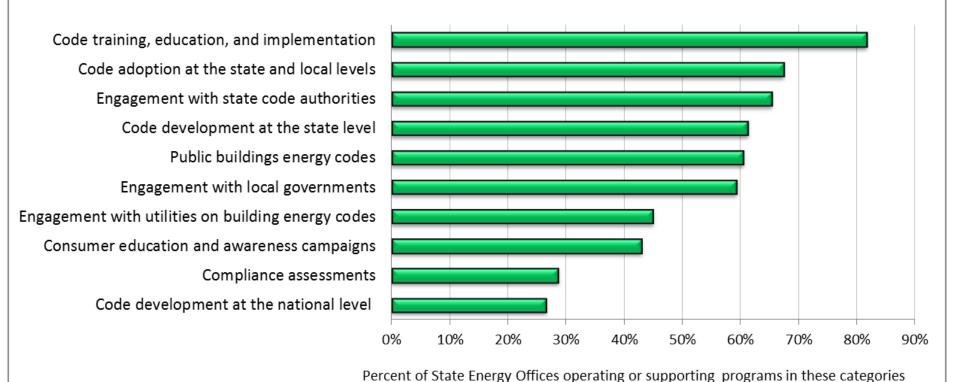
Nebraska State Energy Office						
- FY14 Codes Budget						
Commercial						
Compliance						
Study	\$	55,000				
Code books/						
training	\$	51,000				
Total (all SEP)	\$	106,000				
FTE's: 2 staff at 25%; 1 staff at						
18% funded through SEP, not						
included above						

Vermont Public Service Dept - FY14 Codes Budget				
Code Adoption				
and Stretch Code				
Development				
(SEP)	\$	150,000		
Staff time				
(Department carry-				
over)	\$	25,000		
Total	\$	175,000		
Other sources				
Efficiency Vermont		~\$100,000		

Why State Energy Offices (SEOs) are of particular importance to DOE on Codes

NASEO 2012 Member Survey Results





Impact of Project:

- Improved awareness/training among SEOs regarding energy codes and codes resources.
- **Stronger coordination** of various energy codes organizations at the national and regional levels, to improve support provided to the states.
- *Increased investment* from SEOs in codes from funding sources they control.

Outputs:

- Training and resources for SEOs
- Research reports
- Meetings related to energy efficiency in 111(d)
- SEO engagement in IECC Public Comment Hearings
- Monthly codes stakeholder meetings
- Peer-exchange among SEOs

Progress tracking:

- Increased engagement in codes process (e.g., development Hearings, certification letters).
- Researching levels of SEO investment in energy codes and issues impacting
 that investment.

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Semi-annual SEO member survey.

Approach

Approach:

- Stakeholder engagement and facilitating meetings.
- Research on state compliance activities, including those related to utility collaborations. Use experience of "early adopters" to inform other states.
- Providing funding support/technical assistance to SEOs to help increase their codes involvement.
- Strong partnerships with REEOs, BCAP, and other organizations.

Key Issues:

- Code Compliance and Enforcement
- Coordination with other Energy Codes Organizations
- Utility Engagement on Building Energy Codes
- SEO Input in Code Development Process
- State Funding for Energy Codes



Approach

Distinctive Characteristics:

- Utilize NASEO's network of 56 State and Territory Energy Offices, Affiliate members, and NASEO's committee structure.
- 2. Serve as a trusted, credible resource regarding U.S. State Energy Program (SEP) funding and program best-practices.
- 3. National research on Comprehensive State Energy Plans and encouraging states to leverage energy codes.
- 4. Engagement with SEOs, National Association of Regulatory Utility Commissioners (NARUC), and National Association of Clean Air Agencies (NACAA) on pending EPA 111(d) rulemaking: developing proposal for inclusion of energy efficiency and potential for code compliance.
- 5. Identify successful strategies for code compliance and enforcement, and transfer to national SEO network through peer-to-peer exchange and NASEO conferences/Buildings Committee/regional meetings.



Lessons Learned:

- SEO staff turnover, both Director level and codes staff.
- Opportunities to improve state energy code legislation.
- Opportunity to improve awareness of ICC code development process and increase number of active ICC memberships.
- Codes back-sliding initiatives increasing.

Accomplishments:

1. Codes Education and Technical Assistance for SEOs

- a) New SEO director and staff training (February 2014 NASEO Conference)
- b) Examples of support on adoption/implementation
 - Michigan
 - Organized calls between Michigan SEO staff and peers in Minnesota and Illinois to hear their experiences with 2012 IECC.
 - West Virginia
 - SEO has been working with Home Builders Association to increase consumer awareness of recently adopted 2009 IECC code.
 - Organized call with BCAP to determine potential for consumer outreach support. Program currently in development.

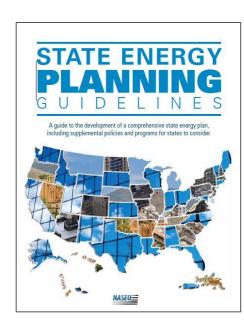


Accomplishments:

- 1. Codes Education and Technical Assistance for SEOs
 - c) Submitted comments on behalf of SEOs to DOE code compliance RFI
 - Main themes:
 - Compliance measurement and evaluation is important to states; however, many states prioritize code training and creating market demand.
 - ii. State desire flexible, affordable code compliance approaches.
 - iii. Long-term, sustainable training and compliance solutions are still needed.
 - iv. Barriers to compliance have been overcome through sustained engagement/funding and relationship-building.
 - d) Assisted States in Responding to DOE Code Determination Letters
 - SEO Directors and Governors received request for certification letters in summer 2013.
 - NASEO educated SEO Directors about the certification request and encouraged states to contact NASEO with questions.
 - Worked with 15 states to help them respond.



- 2. Organized attendance of 16 SEO staff at 2015 IECC Public Comment Hearings (travel was <u>not</u> supported by DOE funding).
 - During the height of the voting, constituted about 15% of total voters.
 Several key votes were within this margin.
- 3. Completed "State Energy Planning Guidelines" report and integrated codes as a key strategy for states to achieve energy efficiency goals.
 - Highlight several examples of energy plans that highlight codes (WV, NY, TX).
 - Recommendations:
 - i. Establishing "stretch" codes for state/public buildings
 - ii. Updating state commercial and residential codes to most recent versions of AHSRAE 90.1 and IECC.
 - iii. Providing technical assistance and training for code officials, design professionals, etc.
 - 22 of 44 current state energy plans include a focus on energy codes.



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4. Developing specific energy efficiency proposal for 111(d)

- Convened group of 20 NASEO, NARUC, and NACAA members (April 16, 2014).
- Proposal is focused around widely accepted energy efficiency EM&V methodologies and providing states flexibility.

5. On-going convening of codes support organizations

- NASEO's counsel continues to hold monthly energy codes stakeholder meetings/calls, well-attended by national, regional, and state/local organizations.
 - Served as a key touchstone for strategizing about 2015 IECC Hearings.

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 Opportunity to leverage national resources to respond to pressing state issues.

6. Increased collaboration with REEOs

- NASEO is an active member of National Code Collaborative organized by BCAP, BECP, PNNL, and REEOs.
- Actively involved in REEOs code efforts (e.g., Southeast Energy Codes
 Coalition; NEEP codes webinars/in-person meetings).

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Project Integration and Collaboration

Project Integration:

- Monthly codes stakeholder call held by NASEO
- NASEO Buildings Committee
 - Includes State Energy Offices and private-sector/non-profit
 Affiliates.
- National Codes Collaborative (monthly)

Partners, Subcontractors, and Collaborators:

- Partners/Collaborators: SEOs, BCAP, REEOs, PNNL, IMT, RECA, EECC, ACEEE, USGBC, ASHRAE, ICC, ICLEI, AIA, RESNET
- Brian Henderson, NASEO Southeast Regional Coordinator

Communications:

- NASEO events
 - February/September conferences
 - Regional meetings
 - Board meetings (4 per year)

- **ACI** (on 111(d) effort)
- DOE Better Buildings
 Summit (state energy guidelines)



Next Steps and Future Plans

1. Outreach on State Energy Planning Guidelines

- a. Providing technical assistance to 14 states working on plan updates to give them examples of how to integrate/prioritize energy codes.
- b. Emphasize "stretch" codes for public buildings.

2. Code Compliance

- a. Organize presentation on code compliance best practices at NASEO September 2014 Conference (e.g., Illinois and Rhode Island utility programs).
- b. Continued discussions with utility associations (EEI, NRECA, APPA) regarding compliance programs their members support.
- c. Explore potential inclusion of code compliance programs in 111(d).
- d. DOE BECP presentation at July 2014 NASEO Board meeting to discuss compliance needs and successful state strategies.

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e. Work with NASEO Affiliates on innovative approaches to measuring commercial code compliance.

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Next Steps and Future Plans

3. Building Codes Capacity at State Energy Offices

- a. Develop codes training course for new staff.
- b. Explore options for codes-specific staff funding outside of SEP.
- c. Improve awareness of code determination certification process.
- d. 2014 NASEO Member survey (non-DOE \$).

4. Stakeholder Engagement

- a. Monthly codes stakeholder call.
- b. National Codes Collaborative.
- c. Regional codes efforts.

5. Code Development

- a. Build awareness of IECC 2012 vs. 2015 changes (e.g. HERS compliance path).
- b. Beginning planning for the 2018 IECC cycle: earlier, in-depth discussions with SEOs regarding ICC process and value of involvement.
- c. Education on new cdpACCESS platform.



REFERENCE SLIDES



Project Budget

Variances: Overall, there have not been any major variances. NASEO carried over funding from FY13 to FY14 partly because our subcontractors cost in FY13 was less than anticipated. We also wanted to be prepared for the anticipated delayed release of FY14 funding, which has proven to be the case.

Cost to Date: \$295,938;

\$49,062 remaining as of Feb. 28, 2014 (14% of total)

Additional Funding (non-DOE): \$98,500

Private foundations; NASEO Affiliate Dues; NASEO general funds

Budget History						
)11– FY2013 ast)	FY2014 (current)		FY2015 (planned)		
DOE	Cost-share	DOE	Cost-share	DOE	Cost-share	
\$245,000	\$0**	\$100,000*	\$0**	TBD		

^{*}Allocated but not received yet

^{**} Cost share was not required for this agreement. However, as noted above we have used non-DOE funds to support the project.



Project Plan and Schedule

Project Schedule								
Project Start: October 2011	Completed Work							
Projected End: September 2014	Active Task (in progress work) Milestone/Deliverable (Originally Plann							
						anned)		
	•	◆ Milestone/Deliverable (Actual)						
	FY2013				FY2014			
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)
Past Work								
Codes Stakeholder Meetings (monthly)								
Compliance webinar/session at NASEO conf.								
Technical assistance/outreach/support (monthly)								
Support states on code determination letters								
Facilitate SEO engagement in IECC Hearings								
NASEO/NARUC/NACAA 111(d) meeting (formal energy efficiency proposal language in Q3FY14)					•		•	
Codes training forSEO Directors and staff								
Current/Future Work								
State energy plan guidelines and codes section*								
BECP Presentation at NASEO Board meeting								
Compliance presentation at NASEO conf.								
TA on codes for states developing energy plan								
State outreach on 2015 IECC								

*Energy plan guidelines report was a multi-quarter project. Delay mainly due to extended revision process with multiple DOE programs (beyond BECP).

Plan currently goes through end of FY14. However, depending on timeline for allocation of FY14 funding, the project will likely extend to FY15. NASEO will work with DOE to refine milestones/timeline in that case.