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STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

Building Energy Codes Working Group Blueprint

July 15, 2011



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The Building Energy Codes Working Group of the State and Local Energy Efficiency Action Network is committed to taking action to increase investment in cost-effective energy efficiency. This Blueprint was developed under the guidance of and with input from the working group. The document does not necessarily represent an endorsement by the individuals or organizations of Building Energy Codes Working Group members.

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If this document is referenced, it should be cited as: State and Local Energy Efficiency Action Network (2011). Building Energy Codes Working Group Blueprint. www.seeaction.energy.gov

Building Energy Codes Working Group Members

- Two co-chairs
- 12 Members
 - Policymakers
 - Industry
 - Coordinating Organizations

Co-Chairs	
John Hogan	Seattle Department of Planning & Development
Laura Richardson	New Hampshire Office of Energy & Planning
Policymakers	
Maureen Guttman	Pennsylvania Department of Environmental Protection
Industry	
Scott Albert	GDS Associates
Jim Ranfone	American Gas Association
Steven Rosenstock	Edison Electric Institute
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Coordinating Organizations	
Isaac Elnecave	Midwest Energy Efficiency Alliance
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Dave Hewitt	New Building Institute
Aleisha Kahn	Building Codes Assistance Project
Harry Misuriello	ACEE
Carolyn Sarno	Northeast Energy Efficiency Partnerships
Meg Waltner	Natural Resources Defense Council

Outline

- Scope/Vision/Approach
- Definitions
- Baseline/Shortfall
- Goals
- Barriers/Gaps
- Solutions and Stakeholders
- Workplan Tables



Approach to Building Energy Codes Working Group Blueprint

Big Picture Questions

- Where are we now?

- Where do we want to be?

- How do we get there?

Blueprint Components

1. Define scope and broad goal
2. Define key terms
3. Assess current baseline status
4. Review market barriers
5. Set quantitative goals
6. Review how current programs/policies are/are not overcoming barriers
7. Identify gaps
8. Identify work and recommendations to address gaps / meet goals and roles for key organizations
9. Show how we will measure progress.



Scope of the Building Energy Codes Working Group

Adoption of, and compliance with, building energy codes and standards for new buildings and renovations to existing buildings.



Vision

- **Qualitative:** All buildings will be designed and constructed to the IECC 2012 and ASHRAE/IESNA 90.1-2010, and their compliance with those documents will be readily verifiable on an annual basis
- **Quantitative:** In 2020, all new buildings and renovations to existing buildings – in all 50 states – will be compliant with IECC 2012 and ASHRAE/IESNA 90.1-2010.



Approach

- Two-fold approach (“Pillars”):
 - Increase adoption of model codes and stretch codes
 - Increase compliance with adopted codes
- This two-fold approach will need to be custom tailored, as many states currently have different processes (or in some case no processes) for updating building codes and measuring compliance.



Impact of Model Code Adoption

Where we are today:

Projected 2020 Energy Consumption for all Residential and Commercial Buildings

Working Group goals:

All states have adopted: 2009 IECC & ASHRAE/IESNA 90.1-2007 by 2015, 2012 IECC & ASHRAE/IESNA 90.1-2010 by 2020

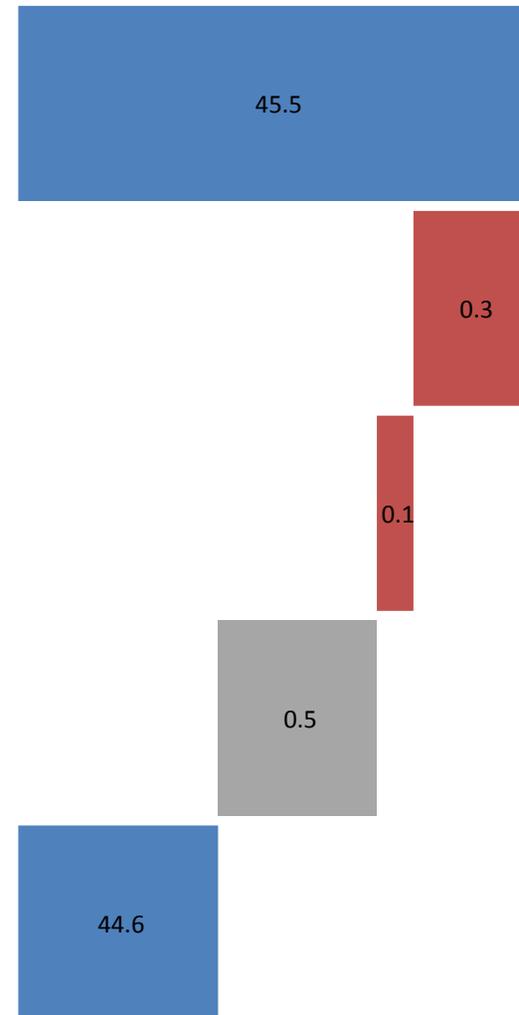
Compliance with codes increased from today's practice (approximately 50%) to 90%

Scope:

Nearly half the new homes built 2010-2020 will be built before new codes are in place; State and local funding may not be adequate enough to achieve 100% compliance

All Economic potential captured
 (This accounts for model code impact only, as savings from stretch codes and voluntary programs are difficult to project)

Energy, quadrillion primary Btu's



Definitions

- **Building codes** – Reference documents which regulate the design and construction of buildings for the effective use of energy
- **Model codes** – Generally, the International Energy Conservation Code (IECC) is used as the model residential model code, and ASHRAE 90.1 is used as the model commercial model code.
 - Both IECC and ASHRAE 90.1 are updated periodically
- **Stretch codes** – Voluntary codes or standards with energy efficiency levels greater than the most recent model codes

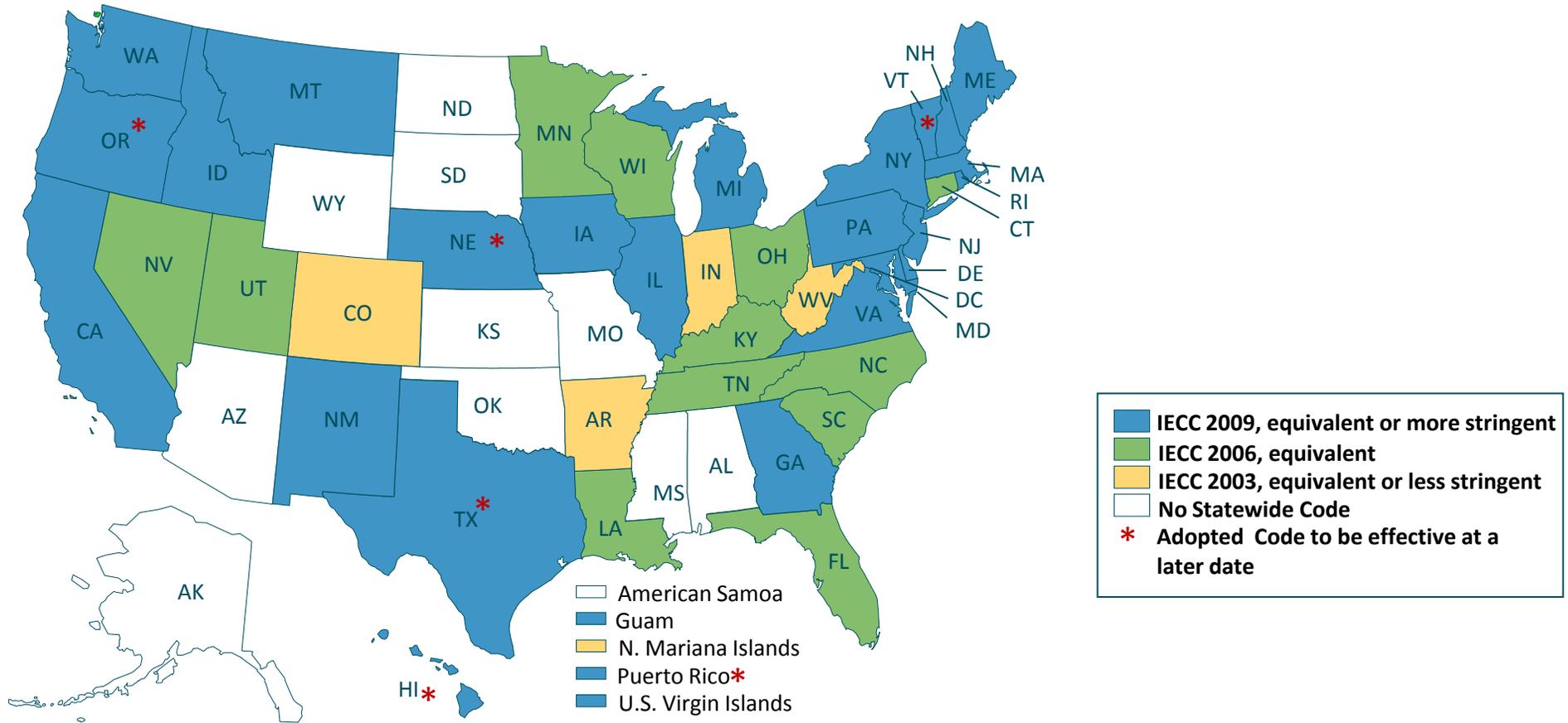


Definitions, cont.

- **Commercial building** – All non-residential buildings, plus residential high-rise multifamily buildings greater than three stories
- **Residential building** – (within the IECC) Includes all one- and two-family dwellings (R-3) regardless of height, as well as low-rise apartments and dormitories (R-2), and low-rise group homes with not more than 16 occupants (R-4)



Baseline: About Half the States Have Adopted the IECC 2009 Residential Code



- 19 states, one district, and two territories have adopted 2009 IECC
- An additional five states and one territory have adopted with a later effective date

As of June 16, 2011



Shortfall in Residential Code Adoption Today

- Ideal today: All 50 states should have adopted the latest code, 2009 IECC
- 12 states have adopted 2006 IECC or equivalent
- Four states and one territory have adopted 2003 IECC, equivalent or less stringent
- **10 states and one territory have no state-wide residential energy codes**



Shortfall in Commercial Code Adoption Today

- Ideal today: All 50 states should have adopted ASHRAE 90.1-07
- Six states have adopted ASHRAE 90.1-04 or equivalent
- Four states and one territory have adopted ASHRAE 90.1-01 equivalent or less stringent
- **10 states and one territory have no state-wide energy codes for commercial buildings**



Quantitative Goals Over Time: Model and Stretch Code Adoption

Model and Stretch Code Adoption		
Term	Goals	
Near Term – 2012	At least 25 states have adopted 2009 IECC and ASHRAE 90.1-2007 or equivalent	At least 10 states, or localities within 10 states, have adopted “stretch” codes that provide for design and construction of buildings that are 15% better than minimum code
Intermediate 2013-2014	At least 30 states have adopted 2009 IECC and ASHRAE 90.1-2007 or equivalent and 3 states have adopted 2012 IECC/90.1-2010	At least 10 states, or localities within 10 states, have adopted “stretch” codes that provide for design and construction of buildings that are 15% better than minimum code
Long Term - 2015	At least 40 states have adopted 2009 IECC and ASHRAE 90.1-2007 or equivalent	At least 10 states have adopted 2012 IECC and ASHRAE 90.1-2010

Quantitative Goals Over Time: Energy Code Compliance

Energy Code Compliance				
Term		Goals		
Near Term – 2012		At least 10 states have evaluated compliance by building type and system	At least 10 states or localities have developed proposed revenue options, and 5 states have implemented new revenue plans	At least 10 states or localities have developed training options, and 5 states have implemented training programs that have reached at least 80% of the states building construction industry
Intermediate 2013 – 2014	2013	15 states have 90% compliance plans in place	20 states with proposed revenue options and training options in hand	10 states have implemented new revenue and training programs that have reached at least 80% of the states building construction industry
Intermediate 2013 – 2014	2014	15 states have achieved 90% compliance by building		
Long Term 2015 – 2017	2015	At least 30 states have achieved 90% compliance		
Long Term 2015 – 2017	2016	At least 45 states have achieved 90% compliance		
Long Term 2015 - 2017	2017	All states, territories, and District of Columbia have achieved 90% compliance		



Top Barriers to Code Adoption and Compliance Have Been Identified

Barriers

Structural	Capital Constraint
	Awareness and Information
	Ownership transfer

Behavioral	Risk and uncertainty
	Awareness and information
	Custom and habit
	Elevated hurdle rate

Availability	Transaction Costs constraints
	Political Reluctance and Perceived Costs
	Installation and use

Manifestation of barrier or opportunities

<i>Building Industry reluctant to increase first cost as they do not get benefit of lower bills.</i>
<i>The value of higher efficiency is not marketed fairly or transparently.</i>
<i>Building industry reluctant to increase first cost as they are interested in the "quick flip"</i>

<i>States and local jurisdictions slow to adopt the latest version of codes due to concerns of economic impacts, as well as the increased burden on agencies already thinly staffed.</i>
<i>Policy makers being presented conflicting information from competing influences.</i>
<i>Efficiency not at the forefront of consumers' minds. Granite countertops and stainless steel appliances are currently higher priorities than energy efficiency.</i>
<i>Consumer financing hurdles make builders / developers cautious of higher initial costs.</i>

<i>Some jurisdictions may be spread thin in terms of code enforcement.</i>
<i>States and local jurisdictions need to adopt latest version of codes.</i>
<i>The codes are only as effective as the level to which they are complied . Compliance is relatively low in many jurisdictions leaving significant potential energy savings to be had.</i>



Summary of Gap Analysis

1. Perceptions of high cost, low benefit for building energy codes
2. Insufficient cooperation between builders, owners, and regulators
3. Inadequate compliance
4. Gaps in information, training, and awareness
5. Insufficient revenue for code officials



Many Stakeholders for Building Energy Codes

DOE EERE Office of Building Technologies, Building Energy Codes Program (DOE BECP)

American Council for an Energy Efficient Economy (ACEEE)	American Institute of Architects (AIA)	American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)	Associated General Contractors of America (AGC)
Building Codes Assistance Project (BCAP)	Building Owners and Managers Association (BOMA)	Construction Specifications Institute (CSI)	Energy Foundation (EF)
Illuminating Engineering Society of North America (IES NA)	International Code Council (ICC)	National Association of Home Builders (NAHB)	National Association of State Energy Officials (NASEO)
National Association of State Fire Marshals (NASFM)	National Governors Association (NGA)	National Institute of Building Sciences (NIBS)	National Multi-housing Council (NMHC)
 New Buildings Institute (NBI) http://newbuildings.org	 Responsible Energy Codes Alliance (RECA) http://reca-codes.org	 Midwest Energy Efficiency Alliance (MEEA) www.mwalliance.org	 Northeast Energy Efficiency Partnership (NEEP) www.neep.org
 Northwest Energy Efficiency Alliance (NEEA) http://neea.org	 Southeast Energy Efficiency Alliance (SEEA) www.seealliance.org	 Southwest Energy Efficiency Project (SWEEP) www.swenergy.org	



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List of Current Activities: DOE

Task/Activity	Deliverable
Residential & Commercial Cost Database	Report Summarizing the Cost Data and Incremental Costs Between the Residential Codes (2006 & 2009 IECC) and Commercial Codes (90.1-2010, 2007 & 2004) Based on Publicly Available Cost Data; release of First Public Version of Cost Database
90% Compliance Pilots	Compliance Tools & Info. based on pilot studies
Adoption & Compliance Special Studies, including revenue options & training plans	for Cost-Effectiveness Analysis for 50 States, First Cost Data for 24 States, Adoption/Implementation Templates for 4 Identified States, Tailored Model Policy Took Kits 5 Identified States
Software Framework for Comparing Energy Codes	Online Framework for Analyzing Energy Use of Commercial Building Code Features (Lighting and Envelope)
Determinations of Energy Savings for 90.1-2010 & 2012 IECC	2009 IECC, 90.1-2007, & 90.1-2010 Final Determination, 2012 IECC Preliminary Determination
RESCheck & COMCheck Compliance software updating	COMcheck Desktop Release with 90.1-2010 & 2012 IECC, REScheck Desktop Release with 2012 IECC

Task/Activity	Deliverable
BECP Website	Implementation of a Searchable/Categorized Solution Center Database
Benefits Measurement	Deployment Impacts Measurement Report, Residential Building Codes Impact Report, Commercial Building Codes Impact Report
Collaboration with National Organizations & Energy Efficiency Partnerships	Develop & Implement Strategic Plans for National Organizations and EEPs
Annual Energy Codes Training Event - Energy Codes 2011	Training event providing a forum for all stakeholder groups involved in building energy codes; presentations, training seminars, and networking with peers
Advocacy Support	Release RFP – to provide advocacy assistance to states for overcoming barriers to upgrading & adopting energy codes; advocacy support to states will begin after the contract is awarded
Green Building Support	Coordination with EEPs/States/Jurisdictions, Compile Resources, Develop Policy and Resource Overview



DOE and EPA Role

- While SEE Action is focused on guidance and resources for non-federal entities, success will require all parties working to complement each-other. Generally, the federal role will include:
 - Develop/update case studies
 - Convene stakeholders to identify needs
 - Collaborate with stakeholders on program design/development
 - Provide technical assistance
 - Encourage programs to document and share results and performance data.



Addressing Barrier 1: Perceptions of High Cost, Low Benefit

- Ongoing DOE BECP Activities
 - Residential and Commercial Cost Database: Report Summarizing the Cost Data and Incremental Costs Between the Residential Codes (2006 & 2009 IECC) and Commercial Codes (90.1-2010, 2007 & 2004) Based on Publicly Available Cost Data. Release of First Public Version of Cost Database.
 - Adoption Special Studies: First Cost Data for 24 States.
 - Benefits Measurement: Deployment Impacts Measurement Report, Residential Building Codes Impact Report, Commercial Building Codes Impact Report.



Addressing Barrier 1: Perceptions of High Cost, Low Benefit (cont.)

- SEE Action Solution 1: Develop adoption strategies focused on energy/cost savings impacts, while branching out to new audiences such as the general public.
 1. Categorize states according to adoption processes and how frequently they update.
 2. Categorize states into tiers according to the stringency of their codes.
 3. Develop an action plan with solutions to promote code adoption improvement for each type of adoption process and cross-referenced to match the appropriate states from each Tier.
 4. Identify the data needs for each of the 50 states.
 5. Implement steps to collect data/develop robust estimates in identified states.
 6. Distribute marketing materials, with energy codes benefits detailed, to at least 25 states.



Addressing Barrier 2: More Stakeholder Collaboration

- ICC and ASHRAE have broadly collaborative processes to update their energy codes and standards for state and local adoption
- Ongoing DOE BECP Activities
 - BECP Website: Implementation of a Searchable/Categorized Solution Center Database.
 - Benefits Measurement: Deployment Impacts Measurement Report, Residential Building Codes Impact Report, Commercial Building Codes Impact Report.
 - Advocacy Support: Release RFP to provide advocacy assistance to states for overcoming barriers to upgrading & adopting energy codes. Advocacy support to states will begin after the contract is awarded.
 - Collaboration with National Organizations & Energy Efficiency Partnerships.
 - Develop & Implement Strategic Plans for National Organizations and EEPs.
 - Green Building Support: Coordination with EEPs/States/Jurisdictions, Compile Resources, Develop Policy and Resource Overview.



Addressing Barrier 2: More Stakeholder Collaboration (cont.)

- SEE Action Solution 2: Strategically team stakeholders to implement best practices for code adoption on State or Local level.
 1. Identify participants and new stakeholders.
 2. Identify code cycle process.
 3. Implement measures for best practices in update process, including moving from legislative process to regulatory body.
 4. Identify and market incentives for code adoption.
 5. Identify energy code champions for update process.
 6. Deploy analysis results including outreach efforts to present and market the results in states.



Addressing Barrier 3: Low Code Compliance

- Based on existing information, there is a significant need for 6,000 more FTE's (~40% increase) dedicated solely to Energy Codes.
- Ongoing DOE BECP Activities
 - 90% Compliance Pilots: Compliance Tools and Info. based on pilot studies in nine states
 - RESCheck & COMCheck Compliance software updating: COMcheck Desktop Release with 90.1-2010 & 2012 IECC, REScheck Desktop Release with 2012 IECC.



Addressing Barrier 3: Low Code Compliance (cont.)

- SEE Action Solution 3: Increase the number and availability of compliance guides and field measurement tools.
 1. Develop materials derived from 90% compliance pilots
 2. Collect compliance "best practices" and lessons learned from builders and regions
 3. Distribute compliance tools and info



Addressing Barrier 4: Inadequate Training

- Ongoing DOE BECP Activities
 - Annual Energy Codes Training Event - Energy Codes 2011: Training event providing a forum for all stakeholder groups involved in building energy codes; presentations, training seminars, and networking with peers
- SEE Action Solution 4: Develop and distribute training plans
 1. Identify low cost training mechanisms
 2. Identify and research best practices in training
 3. Develop and distribute training plans to all parties involved from design to sale
 4. Implement training plans



Addressing Barrier 5: Inadequate Revenue for Code Enforcement

- 106,000 building officials spend approximately 15% of their time on Energy Codes, or roughly 16,000 FTE's solely for Energy Codes.
- Ongoing DOE BECP Activities
 - Green Building Support: Coordination with EEPS/States/Jurisdictions, Compile Resources, Develop Policy and Resource Overview



Addressing Barrier 5: Inadequate Revenue for Code Enforcement (cont.)

- SEE Action Solution 5: Understand and share best practices for funding code enforcement
 1. Research revenue options
 2. Identify best practices in funding
 3. Develop new revenue options
 4. Develop funding toolkits for states
 5. Outreach and market toolkits



Identifying Resources for the Codes Working Group

Needed Resources	Audience	Existing Resources	Additional Resources Needed
State Impact Analyses regarding cost and energy savings associated with adopting latest codes & stretch codes	<ul style="list-style-type: none"> • State and local governments • Industry groups 	<ul style="list-style-type: none"> • DOE: Code Impacts solely: http://www.energycodes.gov/publications/techassist.stm • BCAP 2009 IECC Incremental Cost Analysis: http://bcap-ocean.org/incremental-cost-analysis 	<ul style="list-style-type: none"> • DOE currently working on cost/benefit analysis for 24 States, more States could be analyzed. • IECC 2012/90.1-2010 Analyses.
Compliance guides	<ul style="list-style-type: none"> • State and local governments • Utilities • Property owners/managers • Industry groups 	<ul style="list-style-type: none"> • DOE Compliance materials: http://www.energycodes.gov/arra/compliance_evaluation.stm 	<ul style="list-style-type: none"> • DOE is currently administering nine 90% compliance pilots, these pilots will advance the present materials.
Funding Analyses	<ul style="list-style-type: none"> • State and local governments • Utilities 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Reports on how states who regularly adopt and have high compliance fund their energy code activities.

Priority Solutions and Actions to Achieve the Goal

Mid-term Goal (2013)

At least 30 states have adopted the 2009 IECC and ASHRAE 90.1-2007 or equivalent, and three states have adopted 2012 IECC/90.1-2010. 15 states have evaluated compliance by building type & system, and have 90% compliance plans in place.

Two Pillars

Drive model and stretch code update processes

Increase compliance with existing codes

Priority Solutions Areas

Solution 1: Develop adoption strategies focused on energy/cost savings impacts, while branching out to new audiences such as the general public.

Solution 2: Strategically team stakeholders to implement best practices for code adoption on State or Local level

Solution 3: Increase the number and availability of compliance guides and field measurement tools.

Solution 4: Develop and distribute training plans.

Solution 5: Understand and share best practices for funding code enforcement.



Priority Solutions

- **Rational:**
 - Targeted support is required to increase state level adoption and compliance
 - Resources need to be state specific and strategically deployed with a consistent message
- **Approach:**
 - Given adoption takes place on the state level, priority solutions will be developed and implemented on the state level through strategic teaming
- **Deliverables:**
 - Develop analysis for 25 states
 - Identify code champions for 20 states
 - Develop best practices for update process and market incentives
 - Deploy analysis and best practices for update process and market incentives 25 states
 - Develop and deploy compliance resources for 10 states
 - Develop training plans for 10 states
 - Deploy training plans for five states
 - Develop funding toolkits for 10 states
 - Deploy funding toolkits for five states
- **Audience:** States, policymakers, and industry stakeholders
- **Timeline:** Oct. 2011- Sept. 2012



Mapping Solutions to Stakeholders: Increasing Adoption

		Stakeholder					
		Local Government	State Government	Federal Government	Utilities	National, Regional NGOs	Industry Groups
Solution	Solution 1: Develop adoption strategies focused on energy/cost savings impacts, while branching out to new audiences such as the general public	Code Adoption					
		Local governments that are code-savvy should consider offering their knowledge & expertise to help make the case for codes.	State governments that are code leaders should consider taking a more active leadership role in the codes community.	Expand the Consumer Awareness Program for energy codes. (Current DOE Pilot) Perform energy/cost savings impact analysis to cover all additional states that have not yet adopted the 2009 IECC or an equivalent code.	Create voluntary programs Provide data to help state & local governments understand the value of energy codes.	Develop/update case studies with emphasis on governments in “no-code” states. Outline differences between stretch code and model code adoption.	Create voluntary programs. Educate members & public. Provide technical assistance.
	Solution 2: Strategically team stakeholders to implement best practices for code adoption on State or Local level	Implement measures for best practices in update process, including moving from legislative process to regulatory body.		Provide funding to regional and national NGOs to provide assistance with code adoption, compliance, development, and training activities in the states.	Work with governments to ease the transition to more stringent codes	Coordinate the necessary participants on a state basis and deploy materials from Solution 1.	Advocate for energy codes at the state and local level.



Mapping Solutions to Stakeholders: Increasing Compliance

		Stakeholder					
		Local Government	State Government	Federal Government	Utilities	National, Regional NGOs	Industry Groups
Solution	Solution 3: Increase the number and availability of compliance guides and field measurement tools	Code Compliance					
		<p>Ensure employees involved with energy code compliance are using the latest guides, such as Referencing DOE materials for State Compliance. http://www.energycodes.gov/arra/compliance_evaluation.stm</p> <p>Attempt to increase funding for compliance tools, including field measurement tools.</p>	<p>2nd Round of Compliance Pilot Programs.</p> <p>Provide additional free code downloads of the 2009 IECC/ASHRAE Standard 90.1-2007.</p>	<p>Implement a strategy to add basic energy codes to utility energy efficiency program portfolios in partnership with DOE/EPA and the advocacy community.</p> <p>Partner with governments and industry to take an active role in pushing for greater compliance.</p>	<p>Develop/update compliance tools, provide training, and help to distribute.</p>	<p>Provide technical assistance and be a compliance leader by offering products and solutions that meet or exceed the most stringent codes.</p>	
	Solutions 4 and 5: Develop & Distribute Training plans & Funding options	<p>Provide training for employees involved with energy codes. Attempt to increase funding for codes programs through new revenue plans.</p>	<p>Support Builder Field Guides, with state customization, to promote better building science education and the link to code requirements.</p>	<p>Provide incentive programs to governments and customers, and support training programs.</p>	<p>Develop/update plans and options, help to distribute and provide courses.</p>	<p>Support training programs for industry members.</p>	

Work Plan: Drive Model and Stretch Code Update Processes

Priority Area	Code Adoption Key Work	Role for Stakeholder Groups						First Year Schedule				At End of 1 year 2012	Year 2 2013	Year 3 2014	Year 4 2015
		Federal	State	Local	Regional EE groups	Building Communities	NGOs	1 st Q	2 nd Q	3 rd Q	4 th Q				
Solution 1: Develop adoption strategies focused on energy/cost savings impacts, while branching out to new audiences such as the general public	Identify needed analysis required on state and local levels, ie state specific first cost data, energy and carbon savings, and funding mechanism analysis.		X	X	X	X	X	X	X	X		Identify needs for 50 states			
	Implement steps to collect data/develop robust estimates in identified states	X	X		X	X	X	X	X	X		25 states with solid information on codes benefits	50 states	25 states update	50 states update
	Identify and develop "market and capture sales" approach with raw data from above task. Includes standardized presentation material to address messaging and public awareness.	X	X	X	X	X	X	X	X	X		25 states with marketing material	50 states	25 states update	50 states update
	Implement data through Strategic Stakeholder Teaming/Coordination on State or Local level	X	X	X	X	X	X	X	X	X		25 states have adopted up-to-date codes	30 states with model code/ 3 states with 2012 code	35 states, 5 states adopted 2012 IECC & 90.1-2010	40 states, 10 states adopted 2012 IECC & 90.1-2010



Work Plan: Drive Model and Stretch Code Update Processes

Priority Area	Code Adoption Key Work	Role for Stakeholder Groups						First Year Schedule				At End of 1 year 2012	Year 2 2013	Year 3 2014	Year 4 2015	
		Federal	State	Local	Regional EE	Buildings	NGOs	1 st Q	2 nd Q	3 rd Q	4 th Q					
Solution 2: Strategically team stakeholders to implement best practices for code adoption on State or Local level	Identify participants and new stakeholders		X		X		X	X								
	Identify code cycle process		X		X		X		X			25 states with solid info. and policy recs. supporting regular code updates	50 states			
	Implement measures for best practices in update process, including moving from legislative process to regulatory body		X		X		X			X	X	10 states have enacted policy requiring regular code updates	20 states	30 states	50 states	
	Identify and market incentives for code adoption	X	X	X	X	X	X	X	X	X		Identify market incentives for 25 states	Identify market incentives for other 25 states			
	Identify energy code champions for update process	X	X	X	X	X	X	X	X	X		Identify energy code champions in 20 states	Identify energy code champions in 40 states	Identify energy code champions in 50 states		
	Deployment of analysis results including outreach efforts to present and market the results in states.	X	X	X	X	X	X	X	X	X		25 states have adopted up-to-date codes	30 states with model code/ 3 states with 2012 code	35 states, 5 states adopted 2012 IECC & 90.1-2010	40 states, 10 states adopted 2012 IECC & 90.1-2010	

Work Plan: Increase Compliance with Existing Codes

Priority Area	Code Compliance Key Work	Role for Stakeholder Groups						First Year Schedule				At End of 1 year	Year 2	Year 3	Year 4
		Federal	State	Local	Regional EE	Building	NGOs	1 st Q	2 nd Q	3 rd Q	4 th Q				
Solution 3: Increase the number and availability of compliance guides and field measurement tools	Develop materials derived from 90% compliance pilots	X	X		X	X	X	X	X	X	X	10 states with data and materials to aid in increasing compliance	20 states with data and materials to aid in increasing compliance	35 states with data and materials to aid in increasing compliance	50 states with data and materials to aid in increasing compliance
	Collect compliance "best practices" and lessons learned from builders and regions	X	X	X	X	X	X		X	X	X				
	Distribute compliance tools & info.	X	X	X	X	X	X			X	X				



Work Plan: Increase Compliance with Existing Codes

Priority Area	Code Compliance Key Work	Role for Stakeholder Groups						First Year Schedule				At End of 1 year 2012	Year 2 2013	Year 3 2014	Year 4 2015	
		Federal	State	Local	Regional IEE	Building Commu	NGOs	1 st Q	2 nd Q	3 rd Q	4 th Q					
Solution 4: Understand and share best practices for training	Identify low cost training mechanisms	X	X	X	X	X	X	X	X							
	Identify and research best practices in training	X		X	X		X		X	X	X					
	Develop and distribute training plans to all parties involved from design to sale	X				X	X		X	X	X	10 states or localities within states have new low cost training program options in hand	20 states or localities within states have new low cost training program options in hand	35 states or localities within states have new low cost training program options in hand	50 states or localities within states have new low cost training program options in hand	
	Implement training plans		X	X	X		X				X	5 states or localities within states have implemented new low cost training programs	10 states or localities within states have implemented new low cost training programs	20 states or localities within states have implemented new low cost training programs	35 states or localities within states have implemented new low cost training programs	

Work Plan: Increase Compliance with Existing Codes

Priority Area	Code Compliance Key Work	Role for Stakeholder Groups						First Year Schedule				At End of 1 year 2012	Year 2 2013	Year 3 2014	Year 4 2015
		Federal	State	Local	Regional EE groups	Building Communit	NGOs	1 st Q	2 nd Q	3 rd Q	4 th Q				
Solution 5: Understand and share best practices for funding code enforcement	Research revenue options	X	X	X	X		X		X	X	X				
	Identify best practices in funding	X	X	X	X		X								
	Develop new revenue options	X	X	X	X		X		X	X					
	Develop funding toolkits for states	X			X		X		X	X	X	10 states with proposed revenue options in hand	20 states with proposed revenue options in hand	35 states with proposed revenue options in hand	50 states with proposed revenue options in hand
	Outreach and market toolkits	X	X	X	X	X	X		X	X	X	5 states have implemented new revenue plans	10 states have implemented new revenue plans	20 states have implemented new revenue plans	35 states have implemented new revenue plans

