



National Action Plan for Energy Efficiency

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Roles for Energy Efficiency Program Administrators in Advancing Building Energy Codes

EE as a Resource – September 28,
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Niko Dietsch
U.S. Environmental Protection Agency



National Action Plan for Energy Efficiency

- Goal: Achieve all cost-effective energy efficiency by 2025
- Public-private initiative led by energy offices, utility commissions, utilities, public power, coops, customers, NGOs, etc.
 - 60 plus organizations
- Determine barriers—identify and implement solutions
- EPA and DOE facilitated



Vision for 2025

- **Goal #6 supports the advancement of effective building codes**

Figure 1-1. Ten Implementation Goals of the *National Action Plan for Energy Efficiency Vision for 2025: A Framework for Change*

Goal One:	Establishing Cost-Effective Energy Efficiency as a High-Priority
Goal Two:	Developing Processes to Align Utility and Other Program Administrator Incentives Such That Efficiency and Supply Resources Are on a Level Playing Field
Goal Three:	Establishing Cost-Effectiveness Tests
Goal Four:	Establishing Evaluation, Measurement, and Verification Mechanisms
Goal Five:	Establishing Effective Energy Efficiency Delivery Mechanisms
Goal Six:	Developing State Policies to Ensure Robust Energy Efficiency Practices
Goal Seven:	Aligning Customer Pricing and Incentives to Encourage Investment in Energy Efficiency
Goal Eight:	Establishing State of the Art Billing Systems
Goal Nine:	Implementing State of the Art Efficiency Information Sharing and Delivery Systems
Goal Ten:	Implementing Advanced Technologies



Why Building Energy Codes?

- An important state policy for capturing the large, low-cost energy-efficiency resource in the U.S.
 - Set minimum requirements
 - Can help overcome substantial market barriers to greater efficiency
 - Estimated to yield buildings 8 to 35 percent more efficient than they would otherwise be
 - Important complement to other state EE policies
- “Lost opportunity”—cannot harvest later
- Potential exists for significant energy and cost savings over time as stock turns over
- American Recovery and Reinvestment Act of 2009
 - Latest IECC residential code and ASHRAE 90.1-2007 nonresidential code
 - 90% compliance within 8 years



Typical Energy Codes Process

- Development: National Level
 - ASHRAE for nonresidential
 - International Code Council (ICC) for residential
 - Open to outside participation
- Adoption: State and Local Levels
 - States and municipalities that adopt energy codes usually rely on national model codes
 - Some notable exceptions (e.g., California, Florida)
 - Occurs via a legislative or an administrative process
 - Requires stakeholder participation and sound technical/cost data
- Implementation: Local Level
 - Enforcement officials usually give lower priority than life/safety codes
 - Requires active compliance and enforcement efforts
 - Builder and inspector training is key



A Role for EE Program Administrators?

- Obstacles to achieving effective energy codes are persistent/significant
- To overcome these barriers, the following steps are necessary:
 - Conduct a thorough assessment of costs and benefits
 - Establish a routine code review and update process
 - Develop a builder/inspector training and verification package
 - Implement a robust enforcement and compliance strategy
 - Develop methods for estimating achieved savings impacts
- Energy-efficiency program administrators can play a key role in advancing each of these steps
 - Successful examples and case studies exist
 - Growing interest

- Program administrators include:**
- **Investor-owned utilities (IOUs)**
 - **Public/municipal utilities**
 - **3rd parties (e.g., NYSERDA, Efficiency Vermont)**
 - **Regional consortia (e.g., NEEP, NEEA)**



What Program Administrators Offer

To advance codes, program administrators can offer:

- Experience with beyond-code programs and other voluntary new-construction initiatives
 - PA's bring knowledge and credibility in the codes process
- Technical staff and contractors that understand efficient techniques and systems
 - PA's can assess specific measures/practices targeted for inclusion in the code
- Critical data on energy savings and the costs of adopting efficient measures
- Financial resources to assist in education and training activities to support the code processes



How Program Administrators Can Benefit

From the administrator perspective, taking steps to improve codes can:

- Be a cost-effective strategy for achieving energy and capacity savings goals
- Contribute to meeting state and regional greenhouse gas (GHG) reduction targets
- Transfer successful voluntary program strategies to a mandatory state policy framework (lowers administrative costs)
- Lower customer energy bills



Roles for Program Administrators – Code Development

National Code Development	
Selected Administrator Roles	Examples
Direct participation in ICC or ASHRAE committees that develop and advance model codes	Pacific Gas & Electric, Southern California Edison, and Sempra Utilities (San Diego Gas & Electric and Southern California Gas)
Participation through regional or national efficiency consortia and/or associations	Edison Electric Institute, National Rural Electric Cooperatives Association, and American Public Power Association
Conduct RD&D for new technologies and building practices that are included in future codes	Florida Power & Light



Roles for Program Administrators – Code Adoption

State and Local Code Adoption	
Selected Administrator Roles	Examples
Build coalitions and/or collaborate with stakeholders to support code adoption and upgrade processes	Northwest Energy Efficiency Alliance (including Bonneville Power Administration, PacifiCorp, Idaho Power Company, and others)
Participate directly in legislative or administrative code adoption and upgrades (e.g., testify)	California IOUs, Georgia Power
Conduct outreach and education in support of code adoption	Southwest Energy Efficiency Project, Midwest Energy Efficiency Alliance



Roles for Program Administrators – Code Implementation

Local Code Implementation	
Selected Administrator Roles	Examples
Fund code compliance/enforcement activities in jurisdictions with inadequate resources	Iowa utilities, Seattle City Light
Provide training and materials for code officials, building trades, and product distributors/suppliers	Efficiency Vermont, Pacific Gas & Electric, Nevada Power, Sierra Pacific, Rocky Mountain Power, Questar Gas, United Illuminating
Manage a quality assurance and evaluation program to track progress and improve coordination	Utility Code Group (funded by Washington State utilities)



Roles for Program Administrators – Other Activities

Other Activities	
Selected Administrator Roles	Examples
Manage a beyond-code program – including builder training, verification, and program evaluation – that could be linked to future codes	PSE&G (New Jersey), Texas utilities
Estimate ex-post (i.e., achieved) energy savings and other impacts from codes	Austin Energy, California IOUs
Integrate codes savings into energy resource plans	Northwest Power and Conservation Council and California Energy Commission, with assistance from affected administrators



Next Steps – For Program Administrators

- Work to better understand key issues:
 - Basic objectives of working to advance codes
 - The business case for codes investments
 - Linkages to voluntary programs
 - Linkages to broader state, regional, and national goals/policies
- Develop and improve methods for estimating the costs, savings, and other impacts of codes
- Identify and assess successful examples of program administrator roles
- Foster peer-exchange with other program administrators



Next Steps – For Regulators

- Understand the goals and policy context for program administrator activities
- Identify how administrator investments in mandatory programs interact with and may affect existing beyond-codes programs
- Work with administrators to address questions related to cost recovery, incentives, and goal-setting
- Convene/encourage collaboration with administrators, government agencies, other stakeholders



For More Information

Niko Dietsch

dietsch.nikolaas@epa.gov

202-343-9299

Paper available at:

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