

# Case Studies on SEO and Utility Involvement in Building Energy Code Programs

## ARIZONA CASE STUDY:

### Utilities and SEO Support Training and Adoption in Home Rule State

The Arizona Corporation Commission (ACC) adopted a regulatory framework in August 2010 that outlines the energy savings that investor-owned electric utilities can claim for documented support of building energy codes efforts, which helped catalyze utility involvement in building energy codes. Because Arizona is a home rule state,<sup>1</sup> utilities and the Governor's Office of Energy Policy (the GOEP) have worked with local jurisdictions and stakeholders to cosponsor building energy codes workshops that increase awareness on the benefits of improved building performance as guided by the IECC. These trainings, in addition to cost savings analysis and advocacy for building energy codes provided by utilities and other stakeholders, have prompted initiatives to adopt new energy codes in several local jurisdictions across the state. One public power utility not under the jurisdiction of the ACC, the Salt River Project, has also been active in these initiatives and has identified building energy code adoption and compliance as an important means to delivering money- and energy-saving opportunities to customers. Arizona's experience illustrates that funding is not the only valuable asset a utility provides when it comes to adopting building energy codes; leveraging a utility's data on building energy use trends and relationships with policy makers, builders, and developers and can also be critically important.

Arizona Building Energy Code	
Current Building Energy Code	Arizona is a home rule state and has no statewide building energy code. Roughly one-third of Arizona's 111 municipalities have adopted a version of the IECC.
State Code Authority	None. Codes are adopted and enforced at the local government level.

## Program Details

### Scope and Activities

An Electric Energy Efficiency Standard unanimously adopted by the ACC in August 2010 requires Arizona's investor-owned utilities (IOUs) to achieve cumulative energy savings from demand side management of 22% by the end of 2020.<sup>2</sup> The Standard allows regulated electric utilities to claim up to one-third credit for savings from energy code initiatives, if those efforts are documented and evaluated. Recent energy efficiency plans from Arizona's two largest IOUs, Arizona Public Services Company (APS) and Tucson Electric Power (TEP), include energy code support programs.<sup>3</sup> Arizona's largest public power utility, the Salt River Project (SRP), is not regulated by the ACC but is pursuing savings from energy codes as a means to achieve its own target of generating 20% of retail energy from Sustainable Resources by 2020.<sup>4</sup> Overall, utilities are active in two separate but related areas:

#### 1. Code Adoption

Arizona is a home rule state and there are many opportunities for utilities and other stakeholders to promote code adoption in municipalities. For instance, in 2010 and 2011, utilities supported the City of Mesa's initiative to adopt its first building energy code, the 2009 IECC for both commercial and residential buildings. Mesa conducted a year-long engagement process with policy makers and stakeholders, including residents,

<sup>1</sup> States that are "home rule" do not have a mandatory statewide building energy code; rather, building energy code adoption and enforcement is handled by local jurisdictions.

<sup>2</sup> The cumulative energy savings of 22% refers to 2019 electric energy sales. For more information and the specific legislation, see [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=AZ27R&re=1&ee=1](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=AZ27R&re=1&ee=1).

<sup>3</sup> As of April 9, 2012, the ACC has not made a ruling on the TEP plan; therefore, TEP has not begun a building energy codes program. TEP's potential codes activities fall into the categories of code adoption and compliance.

<sup>4</sup> The SRP Board of Directors set the 20% goal. Sustainable Resources include renewable energy, energy efficiency, behavioral programs, and up to 50% of documented savings from building energy codes programs. Reference: SRP Board of Directors, "Resolution Regarding Revisions to Sustainable Portfolio Principles," 23 May, 2011.

building owners, designers, contractors, home builders, building officials, and property managers. Utilities, including SRP, provided information on building energy use trends and residential new construction programs, which indicated that most builders were already meeting the 2009 IECC. The GOEP supported Mesa through providing building energy code trainings to contractors, designers, and city staff. SRP also collaborated with other organizations, such as the Southwest Energy Efficiency Project (SWEET), to advocate for the code to city council members, builders, and developers. This collaborative effort allowed the organizations to reach a broader audience than they could individually. The data and advocacy that utilities provided was crucial to the Mesa City Council adopting the 2009 IECC in July 2011.<sup>5</sup> Similar efforts by SRP and other utilities helped Avondale, Chandler, and Tempe adopt the 2009 IECC.

## 2. Code Implementation and Compliance

In 2010 and 2011, the GOEP received funding from the U.S. Department of Energy (DOE) for a “train the trainer” initiative called the Energy Code Workshop. Twenty energy code trainers were certified and delivered over 40 workshops on the 2009 IECC to roughly 1,000 participants. In spring 2011, SRP became a cosponsor of the workshops, which included providing meeting space and producing training DVDs. The Energy Code Workshop created a cadre of energy code trainers that have been a valuable ongoing resource as utilities have further increased energy code training efforts. For instance, SRP contracted one of the trainers to conduct outreach on energy codes in its service territory and several of the trainers led code workshops in April 2012 that were organized by APS and cosponsored by SRP and GOEP, among other organizations. This new capacity in the state to deliver code trainings has been especially important to jurisdictions that have recently adopted new energy codes and need educational support upon code implementation. Furthermore, increased capacity supports the state’s current priority to expand training to both traditional and non-traditional audiences.

2012 Program Cost			
Utility <sup>6</sup>	Energy Codes Budget	Total Energy Efficiency Program Budget	Program Status
Arizona Public Services Company <sup>7</sup>	up to \$100,000 <sup>8</sup>	\$61.2 million	Approved by ACC
Tucson Electric Power <sup>9</sup>	\$73,288	\$18.5 million	ACC approval pending

## Energy Savings and Evaluation

To claim savings from a building energy codes program, Arizona IOUs are required to document their efforts and submit a Monitoring, Evaluation, and Research report that evaluates the program’s cost-effectiveness, determines levels of energy savings and demand reductions, and describes whether to continue, modify, or terminate the program. Each utility is responsible for hiring a third-party to conduct the analysis. Utilities regulated by the ACC can claim up to one-third of the documented and evaluated energy savings from involvement in building energy codes.<sup>10</sup> Once the energy savings are determined, the utilities need to make a case for their level of involvement and the proportion of savings they should receive. This approach encourages all regulated utilities to become active in building energy codes, as utilities are vying for a limited amount of savings generated from code adoption or increased compliance.

<sup>5</sup> One specific resource SRP provided was data on utility bill reductions, emissions reductions, and other economic benefits from adopting a new building energy code. See Exhibit D at: <http://mesa.legistar.com/LegislationDetail.aspx?ID=870788&GUID=36435D0D-B36D-4E32-B49BD1B8D5FCE5C1&Options=&Search=>

<sup>6</sup> SRP’s budget for building energy codes programs is expected to be a similar amount.

<sup>7</sup> Southwest Energy Efficiency Project, “Arizona Public Service Company 2012 Energy Efficiency Budgeted Investment,” 26 Apr. 2012, <http://www.swenergy.org/news/news/documents/file/APS%202012%20Energy%20Efficiency%20Budgeted%20Investment.pdf>.

<sup>8</sup> The APS budget of \$100,000 is for a Codes and Standards program. The amount for codes only is unknown.

<sup>9</sup> Tucson Electric Power Company, “2010 Modified Energy Efficiency Implementation Plan,” 31 Jan. 2012, <http://images.edocket.azcc.gov/docketpdf/0000133827.pdf>.

<sup>10</sup> As mentioned above, SRP, which is not regulated by the ACC, will claim up to 50% of documented savings.