



**THE PROBLEM** In 2014, 41% of total U.S. energy consumption was consumed in residential and commercial buildings, or about 40 quadrillion British thermal units.<sup>1</sup> Accordingly, for the City of Scottsdale, city-owned buildings' energy use also represents a substantial budget cost and environmental impact. Scottsdale wanted to better understand how its buildings' energy usage compared to that of other similar buildings across the country, as well as to better understand the pro's and con's of the new U.S. Department of Energy Commercial Building Energy Asset Scoring Tool in helping benchmark that consumption.

**THE PARTNERS** City of Scottsdale Office of Environmental Initiatives

**THE SERVICE** Analyze energy benchmarking ordinances and other related policy options, score nine public and private buildings to understand their performance and the strengths and weaknesses of the tool, and provide education on ISO 50001 regarding development of an organizations' internal energy management system.

**THE SOLUTION** While Scottsdale's buildings generally scored well in the tool, the scoring process revealed several current tool limitations relative to the building design and construction techniques used in Scottsdale's buildings that address a hot, arid climate. ASU Global Solutions also created a benchmarking policy development methodology for Scottsdale to understand and evaluate the various policy options should City Council chose to pursue such policy in the future.

**THE OUTLOOK** City staff are now more informed about energy benchmarking tools and policy options to manage the City's energy use and be able to respond to and inform policymaker decisions. The Commercial Building Energy Asset Scoring Tool shows promise for the future and a new way to evaluate buildings' energy performance, but the incumbent Energy Star Portfolio Manager is likely to remain the benchmarking tool of choice for quite some time.

<sup>1</sup>Energy Information Agency (<http://www.eia.gov/tools/faqs/faq.cfm?id=86&t=1>, accessed 08/13/15)