

# Counting on Energy Efficiency as a Resource, Now and in the Future

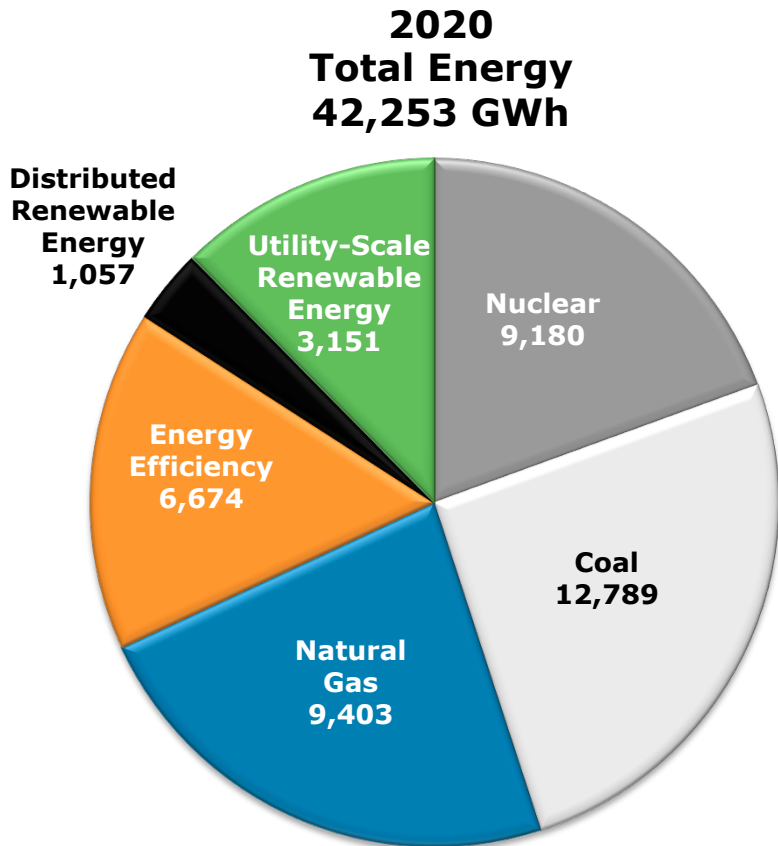
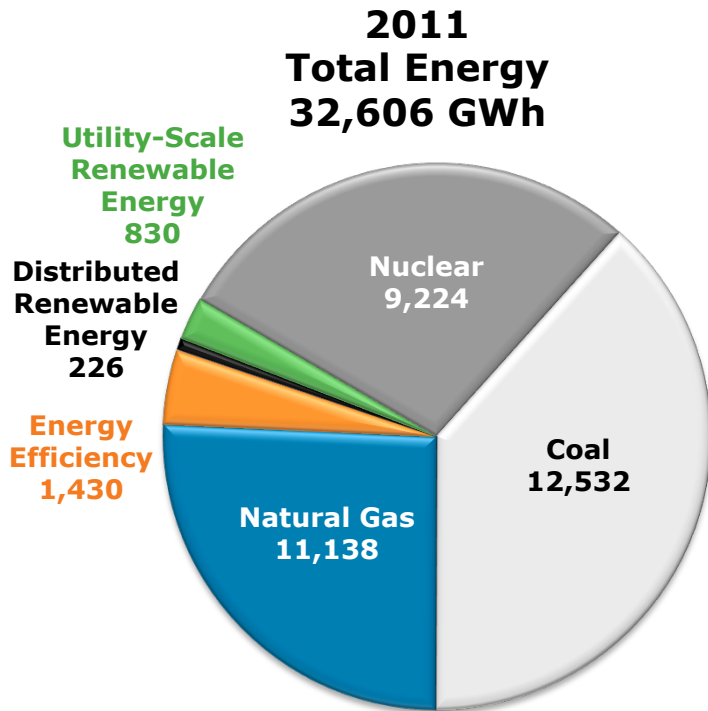
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Vice President, Rates & Regulation  
Arizona Public Service

2011 ACEEE Energy Efficiency as a Resource  
National Conference  
September 26, 2011



# EE and Resource Diversity

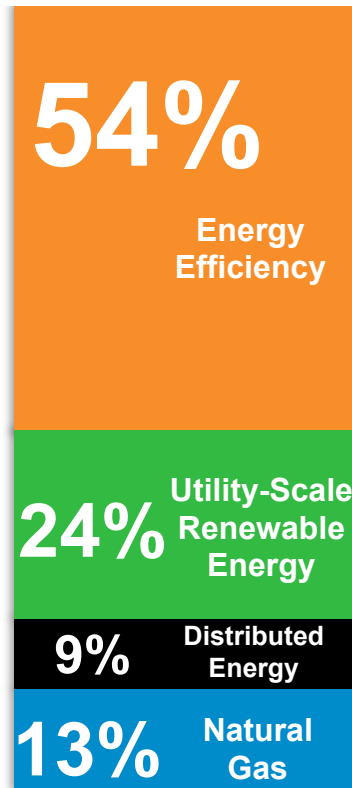
Energy efficiency is the fastest growing resource at APS, reaching 16% of total resources and 19% of retail sales by 2020



Customer energy growth of ~9,650 GWh *without EE impacts*, nearly 30% above current levels

# Meeting Energy Growth

## APS Energy Growth Sources 2011 - 2020

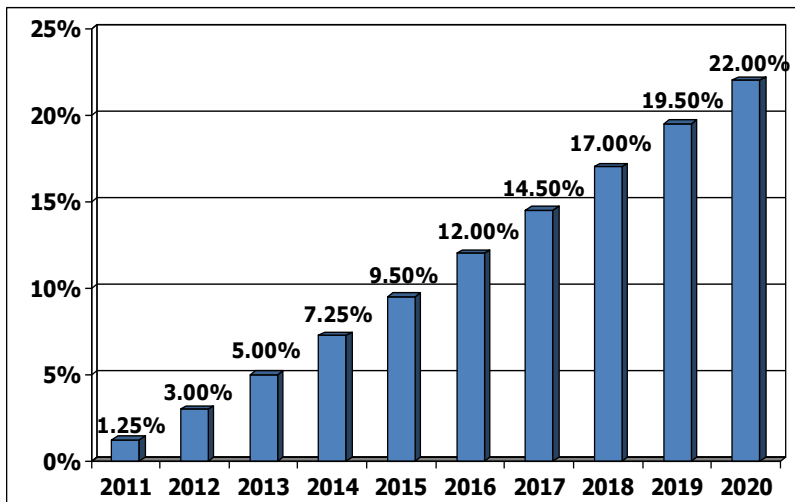


- Over 85% of our energy growth for the 10 year planning horizon is anticipated to be met by
  - Renewable Energy
  - Energy Efficiency
- Natural gas generation enables integration of renewable resources while meeting peaking requirements
- More reliance on customer program participation
- Consistent with energy efficiency and renewable energy standards

# EE Standard in Arizona

## Savings equivalent to 22% of Retail Sales by 2020

- Passed by ACC in 2010; effective 1/1/2011
- Different than Renewable Energy Standard; no overlap
  - Renewable Standard = 15% by 2025
- Energy savings of about 20% by 2020 (2% DR credit)
- Cumulative savings from 2005 to 2020 counted
- One of the most aggressive EE standards in the country



Annual incremental savings from DSM programs starts at 1.25% in 2011 and grows to 2.50% by 2016



# Informed Perception Project



APS Informed Perception Project Report

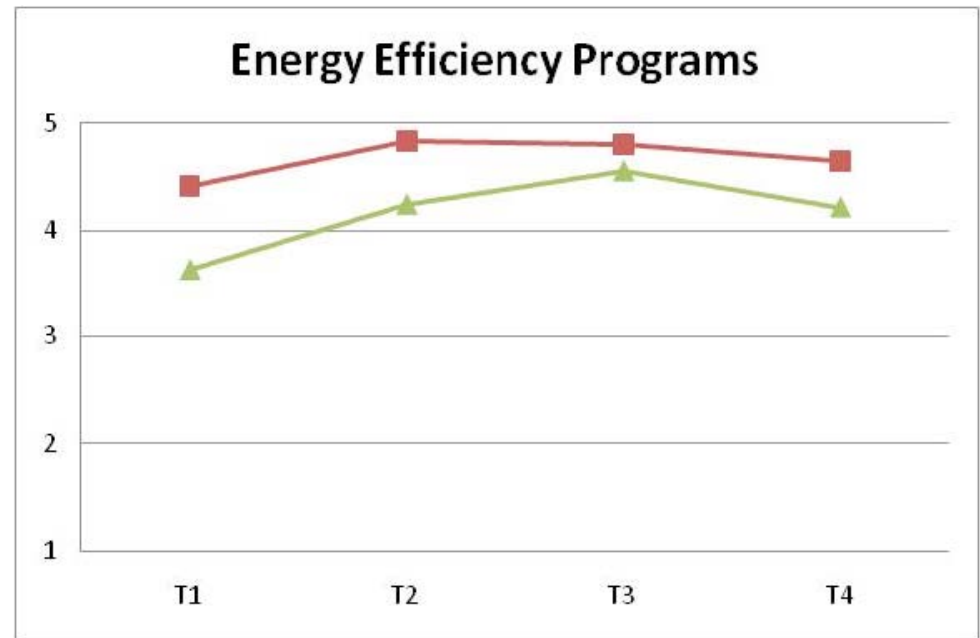
Prepared by:



May 2011

Morrison Institute contributors:

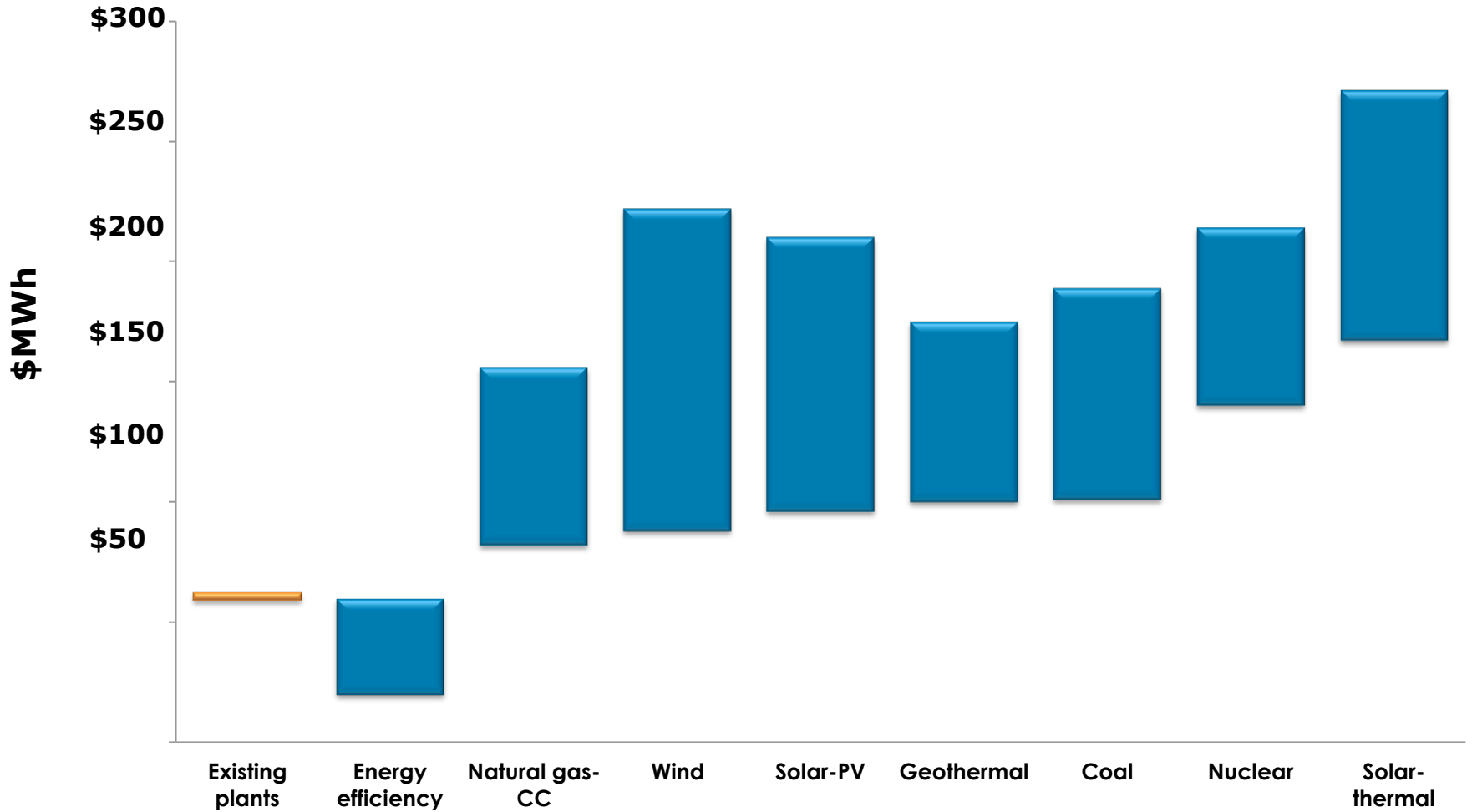
David Daugherty  
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Nancy Welch



■ Least Harmful = 5

▲ Least Expensive = 5

# New Resource Costs



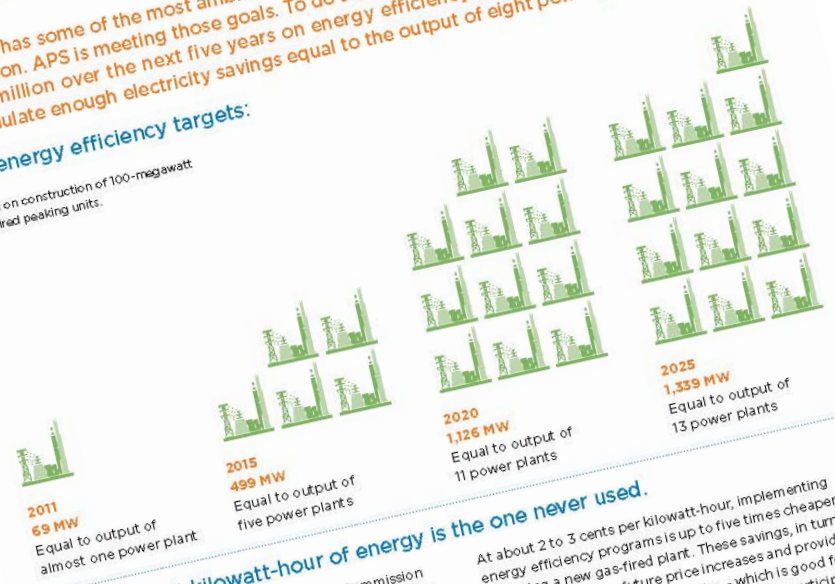
# Customer Outreach and Education

## APS is meeting Arizona's energy efficiency goals.

Arizona has some of the most ambitious energy efficiency goals in the nation. APS is meeting those goals. To do so, the company will spend \$800 million over the next five years on energy efficiency programs and accumulate enough electricity savings equal to the output of eight power plants.\*

### Our energy efficiency targets:

\*Based on construction of 100-megawatt gas-fired peaking units.



### The cheapest kilowatt-hour of energy is the one never used.

In late 2009, APS, the Arizona Corporation Commission and 21 other diverse groups adopted long-term goals for Arizona's energy future. These goals laid the foundation for cleaner, more efficient production and distribution of electricity in our state.

Today, that vision is providing substantial benefits to APS customers, including an ambitious energy efficiency program that recognizes that the cheapest kilowatt-hour of energy is the one never used. That's why energy efficiency is every bit as important a resource as coal, nuclear or natural gas. Making energy efficiency a priority for Arizona defers the need to build new, expensive power plants.

At about 2 to 3 cents per kilowatt-hour, implementing energy efficiency programs is up to five times cheaper than operating a new gas-fired plant. These savings, in turn, reduce the need for future price increases and provide significant environmental benefits — which is good for all customers. And, customers who proactively participate in energy efficiency programs see immediate savings on their bills.

By 2020, this program will reduce electricity usage per customer by 22 percent.

[azenergyfuture.com](http://azenergyfuture.com)



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