


Arizona Commercial Real Estate Women

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APS Renewable Energy

APS Overview

- APS has the 7th Largest Service Territory in US & over 1.1M customers
- Arizona is the 2nd fastest growing state
- Energy demand will double in 20 yrs (3.6% yearly increase)
- Our customer growth is 3 times U.S. Average
- 90% increase in APS Customers since 1988
- 125% Growth in APS Electricity demand over the past 20 years



■ APS Retail Service Territory




APS Current Energy Mix and Projection

Comparison of Energy Resources

Resource	2009 (%)	2025 (%)
Coal	~25	~20
Natural Gas	~45	~25
Nuclear	~30	~40
New EE	0	~15


■ New EE
□ Renewable
□ Nuclear
■ Natural Gas
■ Coal



Arizona's Most Abundant Resource Solar Energy

Wh/kg m per day

- 1,000 to 1,500
- 1,500 to 2,000
- 2,000 to 2,500
- 2,500 to 3,000
- 3,000 to 3,500
- 3,500 to 4,000
- 4,000 to 4,500
- 4,500 to 5,000
- 5,000 to 5,500
- 5,500 to 6,000
- 6,000 to 6,500
- 6,500 to 7,000
- 7,000 to 7,500
- 7,500 to 8,000




Summer Generation Profile Traditional Resource Fit

MW

Hour of the Day

Combustion Turbine (Gas)
Combined Cycle (Gas)
Coal, Nuclear



Summer Generation Profile Renewable Resource Fit

MW

Hour of the Day

Solar w/storage
Solar
Wind
Biomass, Geothermal

