ARIZONA SOLAR SNAPSHOT

FACTS POLICYMAKERS SHOULD KNOW

ARIZONA SOLAR DEPLOYMENT AT SCALE

- Arizona has 11,388 megawatts of installed solar generation, ranking 4th nationally for total solar deployment.
- Solar supplies ~14.7% of Arizona's electricity, providing reliable generation and reducing reliance on imported fuels.
- Solar systems in Arizona generate enough electricity to power approximately 1.65 million homes on an annual energy-equivalent basis, with that energy serving residential, commercial, and industrial customers across the grid.
- ~15% of Arizona homes have rooftop solar, adopted directly by residential customers, additional solar generation comes from utility-scale and commercial systems that serve the broader electric system.

DIVERSE DEPLOYMENT ACROSS MARKETS

Arizona ranks 3rd nationally in residential solar installations and 5th in utility-scale solar development, demonstrating strength across customer-owned and utility-scale projects.

RELIABLE AND RESILIENT ENERGY CONTRIBUTION

Solar in Arizona is an established part of the energy mix. When paired with energy storage and integrated into grid planning, solar improves reliability, reduces peak demand, and strengthens system resilience.

BY THE NUMBERS: SOLAR'S IMPACT ON ARIZONA'S ECONOMY

$23.6b

Market value Arizona solar represents

347

Number of solar companies operating in Arizona, including manufacturers, installers, and developers

9,726

Approx. number of solar jobs the industry supports statewide

1,793

Approx. number of megawatts Arizona is projected to add of additional installed solar generation over the next five years

$2.6b

Solar investment amount the state attracted in 2024

SIX SOLAR MYTHS BUSTED

Myth 1: "Solar is unreliable because it only works when the sun is shining."
Fact: Solar generates power whenever sunlight reaches panels and, when paired with energy storage, can deliver electricity during evening hours and cloudy conditions. Grid-connected systems ensure reliability.

Myth 2: "Solar makes electricity more expensive."
Fact: Solar costs have declined dramatically. Utilities deploy solar because it reduces fuel and generation costs, and long-term solar contracts provide price stability.

Myth 3: "Solar harms the grid."
Fact: Solar paired with storage reduces peak load stress, improves local generation, and is incorporated into modern grid reliability planning.

Myth 4: "Solar uses too much land."
Fact: Rooftop solar uses existing structures, and utility-scale solar often uses marginal land or integrates with agriculture. Solar avoids the permanent land conversion associated with residential and commercial development.

Myth 5: "Solar panels create environmental or water contamination."
Fact: Modern photovoltaic panels contain minimal hazardous materials, have long operating lives, and recycling options continue to expand. Properly sited solar projects do not contaminate soil or water.

Myth 6: "Solar only benefits wealthy homeowners."
Fact: Solar deployment spans residential, commercial, agricultural, and utility-scale projects. Community solar and third-party ownership models expand access, and solar jobs benefit communities statewide.

WHY SOLAR MATTERS IN A DESERT STATE

Low water use: Solar photovoltaic systems require minimal water to operate compared to conventional power plants that rely on large volumes of water for cooling. In an arid state, solar helps reduce pressure on groundwater and limited Colorado River supplies.

Cleaner air: Solar produces electricity without combustion, reducing pollutants linked to asthma and respiratory illness, particularly during high-heat, high-demand periods. Cleaner air means fewer missed workdays and lower long-term health costs for Arizona families.

Economic and energy security benefits: Solar supports local jobs and investment that stay in Arizona, diversifies the energy mix, and reduces exposure to fuel price volatility while strengthening system resilience.

Land preservation and rural stability: Solar provides stable lease income for farmers and rural landowners, offering a voluntary option that helps keep land in family hands and avoids permanent conversion to residential or commercial development. Unlike traditional power plants, solar projects are reversible and can coexist with agriculture.

Cost competitiveness: Even without subsidies, utility-scale solar and onshore wind remain the most cost-effective forms of new-build electricity generation in the United States and among the quickest resources to deploy, making them central to future power system buildout.[1]

[1] *Lazard, Levelized Cost of Energy+ Report, 2025.*