



ENERGY ELEMENT[‡]

A safe, reliable energy supply is important to commerce and the city's overall health. Using renewable energy systems allows Scottsdale to become more independent and less reliant on greenhouse gas emitting fossil fuels. Moving to clean energy sources demonstrates the city's commitment to a sustainable energy future. Furthermore, reducing energy consumption and encouraging conservation per capita are critical to future economic and environmental vitality.

In Scottsdale, the most viable renewable energy resource is solar energy. Other sources of renewable energies include water and wind generation; however, Scottsdale has no significant sources of these other renewable energy generation types.

The city's total demand for energy will increase with projected population growth. Therefore, Scottsdale must provide flexibility and incentives for energy efficiency and renewable energy technologies. Furthermore, protecting existing energy resources from security breaches and other supply and distribution vulnerabilities will remain important to ensure no permanent or long-term damage to power system operations occurs.

The goals and policies included in this element seek to balance the energy needs of consumers with the community's clean and renewable energy sources.

Goals and Policies

Goal E 1

Work toward becoming a net-zero energy community that balances energy efficiency with renewable energy generation.

Policies

- E 1.1 †** Encourage and provide incentives for efficient use of energy, including the use of solar energy.
- E 1.2 †** Assess and identify policies and practices that provide for greater uses of renewable energy sources.
- E 1.3** Support off-site or shared renewable energy generation for a group of buildings or entire neighborhood.
- E 1.4 †** Consider the use of alternative finance options to achieve renewable energy supply goals.
- E 1.5** Promote renewable energy-ready designs for new construction and major remodels. *[Cross-reference Character & Design and Environmental Planning Elements]*
- E 1.6** Promote energy efficiency improvements for existing residential properties and educate property owners on opportunities for such improvements.



Goal E 2

Reduce per capita energy consumption and promote energy efficiency.

Policies

- E 2.1** Develop public-private partnerships to provide energy efficiency education and incentive programs.
- E 2.2** Promote use and provide education on the benefits of energy efficiency best practices.
- E 2.3** Explore emerging smart energy technologies.
- E 2.4** Support development of regional waste-to-energy facilities. *[Cross-reference Environmental Planning and Public Services & Facilities Elements]*
- E 2.5** Encourage local industries to adopt energy efficiency measures and renewable energy to minimize the environmental impacts of their operations.
- E 2.6** Support efforts to make energy usage and its associated impacts more transparent for greater understanding by property owners and tenants.

Goal E 3

Promote building and site designs that maximize energy efficiency.

Policies

E 3.1 Encourage the use of natural properties and sustainable building systems (e.g., sun, shade, thick walls, insulation) to reduce the demand for and use of mechanical cooling and heating systems. *[Cross-reference Character & Design and Environmental Planning Elements]*

E 3.2 Encourage the use of drought tolerant landscaping to reduce summer solar heat gain. *[Cross-reference Character & Design and Environmental Planning Elements]*



E 3.3 Promote solar energy opportunities in building and site design. *[Cross-reference Character & Design and Environmental Planning Elements]*

E 3.4 Incorporate healthy, resource- and energy-efficient materials and methods in design, construction, and remodeling of buildings. *[Cross-reference Character & Design; Housing; Healthy Community; Conservation; and Environmental Planning Elements]*

E 3.5 Orient buildings and lots in ways that minimize summer solar heat gain, maximize roof solar access and natural ventilation, and limit roof solar access obstructions of neighboring structures. *[Cross-reference Character & Design and Environmental Planning Elements]*

E 3.6 Improve the energy efficiency of the building envelope, heating and cooling systems, lighting, and appliances.

Goal E 4

Seek creative means to increase the energy efficiency of city facilities and operations.

Policies

- E 4.1** Promote fuel conservation in city vehicles, and use clean, alternative fuels.
- E 4.2** Reduce energy consumption in the provision of municipal services and maintenance of city infrastructure, without affecting the quality and quantity of services. *[Cross-reference Public Services & Facilities and Public Buildings Elements]*
- E 4.3** Develop strategies to lower utility costs and reinvest savings into energy efficiency measures and renewable energy. *[Cross-reference Public Buildings Element]*
- E 4.4** Perform energy audits and benchmarking of city facilities, projects, and programs to assess their energy efficiency potential. *[Cross-reference Public Services & Facilities and Public Buildings Elements]*
- E 4.5** Incorporate renewable energy technologies in the design of city facilities. *[Cross-reference Public Buildings Element]*
- E 4.6** Aim for net zero energy in city operations through the use of public-private partnerships and other means available.

Goal E 5 †

Support the development of renewable energy sources that are compatible with Scottsdale's environmental and aesthetic goals.

Policies

- E 5.1** Support regional efforts to increase the supply of energy from renewable sources, distributed generation, and cogeneration. *[Cross-reference Public Services & Facilities Element]*
- E 5.2** Optimize existing energy infrastructure and encourage interconnection with smart grid technologies. *[Cross-reference Public Services & Facilities Element]*
- E 5.3** Diversify the city's energy supply sources with emphasis on cost-effective, efficient, clean, renewable, reliable, and secure energy sources. *[Cross-reference Public Services & Facilities Element]*
- E 5.4** Promote clean and renewable energy and fuel sources to reduce the community's dependence on fossil fuels.