

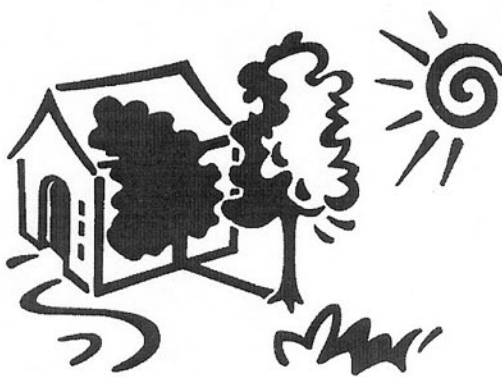
Landscaping for Energy Efficiency

Planting trees, shrubs, vines, hedges and ground cover can be a cost-effective, eye-pleasing way to lower your energy bills. Well-designed landscaping will also protect your home from the sun, while blocking out noise.

Benefits of Landscaping

One of the most cost-effective ways to reduce cooling costs is to shade windows from the sun. Landscaping can provide that shading, helping you reduce air conditioning costs and protect your home from harsh weather. Here are a few benefits to consider:

- Trees and bushes can block much of the sun's heat before it strikes your windows and walls.
- Shade trees can significantly reduce surrounding air temperatures and the temperature in your attic.
- Trees, shrubs and ground cover can reduce the heat reflected from the ground to your walls and windows.
- Deciduous trees lose their leaves in winter, making them ideal to block the sun in summer while allowing the sun to warm your home in the winter.
- Shrubs, bushes and vines provide year-round insulation by creating a dead-air space next to your home.



What to Consider When Designing Landscaping Around Your Home

- Plant trees on the east, south and west sides of your home to shade walls and windows from the hot summer sun.
- Plant trees, shrubs and ground cover to shade the ground around your home and reduce heat reflected to your walls and windows.
- Plant shrubs, bushes and vines very close to the house to help insulate your home.
- Use short shade trees to block reflected heat while admitting the sun.

Trees and Power Lines

Don't plant tall-growing trees near power lines. Trees can damage the wires, eventually causing a power outage. Trees planted too close to power lines can also pose a safety hazard to children who like to climb trees.

Shrubs should not be planted near pad-mount transformers. Shrubs can make it dangerous and difficult for APS crews who need unrestricted access to the transformer to make needed repairs.

How Well-Designed Landscaping Can Protect the Environment

Trees and vegetation can help:

- Control erosion.
- Protect water supplies.
- Provide food and create a habitat for wildlife.
- Clean the air by absorbing carbon dioxide and releasing oxygen.

You can enhance your outdoor environment even more if you:

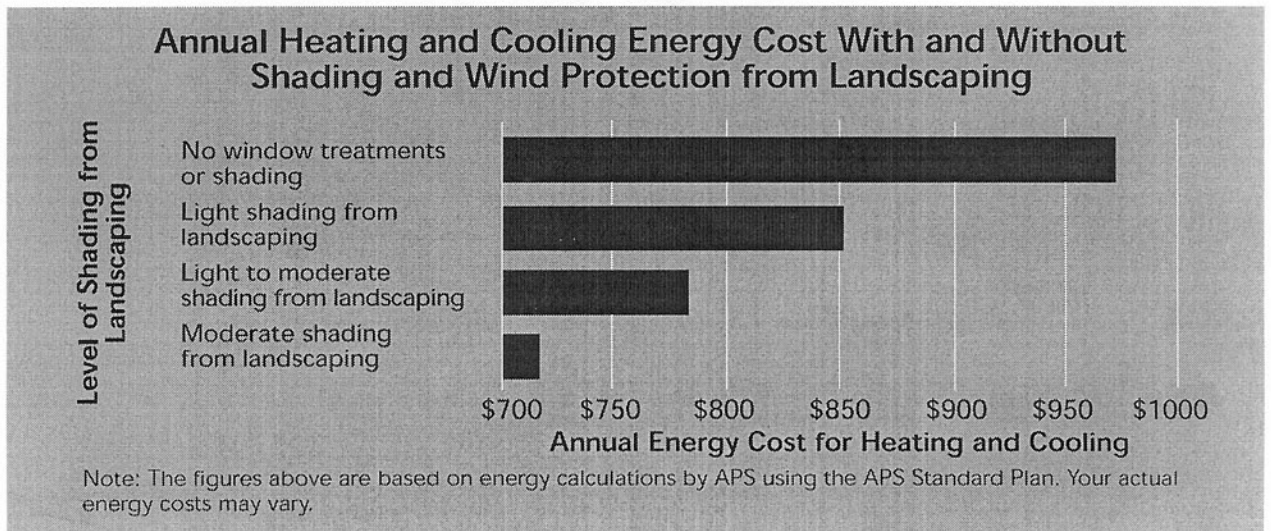
- Plant low water-use trees, bushes and grasses.
- Use plants that are naturally more resistant to pests and reduce the need for pesticides.
- Design landscaping that minimizes maintenance and the use of gas powered-blowers, mowers and edge trimmers.

Talk with local nursery and landscaping professionals. Learn which types of plants require less water and maintenance.

How Much Can Landscaping Reduce Your Energy Bill?

If your home isn't shaded, you could add well-planned landscaping and reduce your air conditioning costs by as much as 15% or more, according to the U.S. Department of Energy.

The chart below provides an estimate of the savings from landscaping that are possible for a typical Phoenix area home. Actual savings may vary depending on the features of your home and the type of shading you use.



Because of the variables, it's difficult to measure actual energy savings from landscaping. Keep in mind that windows account for as much as 50% of the load placed on an air conditioning system, so shading windows with plants and trees can effectively lower energy bills and keep your home more comfortable. By blocking the wind, you also reduce the amount of hot summer or cold winter air that leaks into your home.

For More Information Call the APS Energy Answer Line

For more information on ways to save energy, call the **APS Energy Answer Line** at **(602) 371-3636 in Phoenix** or toll-free **1 (888) 890-9730**. You can also visit our web site at www.apsc.com.