



Landscape Your Way to Energy Savings

Tips to Boost Your Home's Energy Efficiency

A well-designed landscape can help protect your home from winter wind and summer sun, and effectively reduce your energy costs year-round. Before you start landscaping, consider your climate, your home's microclimate, as well as the wind directions and shading around your home to help you devise a plan.

SHADE

Planting trees, bushes or shrubs to shade windows, roofs and air conditioners helps reduce solar heat gain in your home, surrounding air temperatures and overall energy costs.



Planting Tips

- Plant a six- to eight-foot deciduous tree near your home, and it will start shading your windows in the first year.
- Plant trees with crowns lower to the ground on the west side if you want to shade from lower, afternoon sun angles.
- Plant deciduous trees to the south of your home; they can screen 70-90% of the heat.
- Plant bushes, shrubs or climbing vines with a trellis to shade your patio area.
- To cool the air before it reaches your home, plant shrubs and groundcover plants.

WINDBREAKS

A windbreak reduces heating costs by lowering the wind chill around your home. It also creates dead air space that insulates your home in the summer and winter.



Planting Tips

- Plant coniferous trees and shrubs to the north and northwest of your home to stop wind.
- Make the distance between your home and the windbreak about two to five times the height of the mature tree for maximum protection.
- Build a fence or wall, in addition to planting coniferous trees, to deflect the wind over your home.
- Plant low shrubs on the windward side of the windbreak to trap snow before it blows next to your home.

TAKE ADVANTAGE OF TREES

Coniferous trees and shrubs have leaves year round, which provides continuous shade.



Deciduous trees block solar heat in the summer and lose their leaves in the fall, which lets sunlight in during the winter.



QUICK TIP

Clear leaves and debris from around your heating, ventilation and air conditioning (HVAC) unit to maximize efficiency.

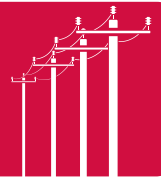




Relentless Wind Storm Causes Catastrophic Damage

In early March, Rappahannock Electric Cooperative (REC) crews completed the weeklong, tedious task of restoring outages caused by the 36-hour wind storm that thrashed REC's 22-county service territory. Beginning March 2, the wind storm launched gusts of 78 mph in REC's western counties of Culpeper, Greene, Madison and Rappahannock. The storm spun off 60-plus mph winds throughout much of the Cooperative's service territory. Over 71,000 REC members experienced a power outage.

By the time crews restored the last member, they had replaced more than 350 poles, rebuilt power lines and set dozens of transformers. They brought in specialized equipment such as tracked vehicles to reach the more remote damaged areas.



"It's one thing for a single wind gust to blow through during any given storm. But those winds continued for a solid day and a half. Outside of a hurricane or tropical storm, I can't recall ever seeing that kind of relentless wind," said Robbie Beard, manager of REC's western region. "It not only kept some crews from being able to safely restore service, but also inflicted catastrophic damage to much of REC's electric system."

REC secures agreements with other electric co-ops in advance of dangerous weather. As a result, more than 200 additional crew members from six different states and 26 different co-ops quickly joined REC's storm restoration team, doubling the size of the Cooperative's forces in the field. Crews worked nonstop until all members were restored on March 8.



Some outages required several hours to restore, and crews had to re-set some poles by hand. By the end of the weeklong effort, over 112,000 power outages had been restored as some members experienced repeat outages.