Just Plant Trees

Imagine a solution to rising energy bills as simple as planting a tree. We’ve all grown up with trees, climbed in them, and probably even planted a few. But how many of us know that they significantly contribute to cooling our homes, businesses, and communities?

General Tree Planting Recommendations:

- Plant shade trees on the west and northwest sides of homes (west and southwest sides in northern climates) to provide the greatest energy benefit. Plant deciduous trees on the east side of homes to provide the next greatest energy benefit.

- Avoid planting trees in front of south windows.

- Locate trees so, when mature, they will not shade solar collectors.

- Plant evergreen trees as windbreaks. Check with your state urban forester or local tree professional for site-specific information.

- Use shade trees to make paved driveways and patios cooler and more comfortable.

- Shade your air conditioner to reduce its energy use, but do not plant vegetation so close that it will obstruct air flow around the unit.

- Plant appropriate trees near overhead power lines, and do not plant directly above underground water and sewer lines.

- Be sure to pick the right tree and right location. Check with your local tree professional for advice on selecting appropriate species and properly locating, planting, and maintaining them.

Trees Conserve Energy By:

- Shading, which reduces the amount of radiant energy absorbed and stored by built surfaces.

- Evapotranspiration, which converts liquid water in leaves to vapor, thereby cooling the air.

- Reducing the velocity of wind, which slows the infiltration of outside air into inside spaces.

Different trees have different planting locations.
References: Save Dollars With Shade

For more information on the benefit/cost of the urban forest, refer to the following publications, written by Center researchers and associates:


Checklist for designing a tree planting program

Your whole community needs energy-conserving trees. If you would like to organize a community-wide tree planting program, use this checklist.

- Envision your community’s future with trees
- Create a tree advocacy group
- Develop a tree planting plan
- Set goals and priorities
- Recruit, mobilize and recognize volunteers
- Provide timely, hands-on training and technical assistance
- Develop list of recommended trees
- Obtain high quality nursery stock
- Commit to long term care and maintenance
- Educate the public
- Continually evaluate your progress

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