

how will planting a tree help me conserve energy?

Planting trees around your home can reduce heating and cooling needs significantly. In the summer, shade trees planted on the west and south sides of your home can reduce cooling costs by 25-40% and reduce peak energy demand by up to 30%, according to a study by the University of California Berkeley. Evergreen trees planted for windbreak purposes on the north side of your property can save you 6-11% on winter heating energy needs. Shading your air conditioning unit with shrubs allows it to run more efficiently, saving you even more!

your tree is part of the urban forest!

Each individual tree plays an important role in improving the health of our urban communities. In addition to reducing energy costs by providing shade for our streets and buildings, trees work hard to sequester carbon dioxide, filter pollutants from the air, and reduce the amount of storm water that flows into our water treatment system. The presence of trees on your property or street can also increase your property value, provide natural privacy and create a more pleasant place to live. Planting larger growing trees increases these benefits!



the birds, the bees and the butterflies

It is estimated that one out of every three bites of food you take is thanks to a butterfly, bee, bird, or other pollinator! Pollinators transfer pollen from one flower to another, providing a critical service necessary for plant and food production. Native tree and shrub species in particular play a crucial role in supporting pollinators because they have evolved together over millions of years. Unfortunately, due to habitat loss, pesticide use, diseases and pests, our pollinators are declining at alarming rates. By planting native trees and shrubs in your yard, you can help provide the food and habitat that insects and animals require.

what is the Cool Communities Project?

THE COOL COMMUNITIES PROJECT ENCOURAGES HOMEOWNERS TO PLANT TREES AROUND THEIR HOUSE TO HELP CONSERVE ENERGY.

Cool Communities is a LEAF (Local Enhancement and Appreciation of Forests) initiative. LEAF is an award-winning environmental non-profit organization dedicated to protecting and improving our urban forest. Since 1996 LEAF has planted over 13,000 native trees and shrubs in residential backyards.

LEAF's Cool Communities project is supported by the Ontario Power Authority's Conservation Fund, which funds new and innovative electricity conservation projects.



For more information about planting and caring for trees and shrubs visit: www.yourleaf.org

For more energy saving tips and rebates visit: www.everykilowattcounts.ca



HOW TO SELECT YOUR TREE

conserve energy
help the environment
save money

COOL communities

RESIDENTIAL SHADE TREE PLANTING PROGRAM

416.413.9244 | www.yourleaf.org

A joint collaboration



OPA and Ontario Power Authority are each official marks of the Ontario Power Authority.

Planting new trees and shrubs is exciting!

Be sure you take the time to plant a tree that is appropriate for your yard. If you are unsure of your sun and soil conditions, select species that will do well in a wide variety of conditions.

If you would like to plant a tree on the **west**, **south** or **east** side of your home, a shade tree is best.

If you would like to plant a tree on the **north** side of your home, choose an evergreen.

Choose which trees and shrubs you would like to plant.

Consult with retailer to see if your tree is in stock.

Sign up for the program by filling out a quick survey. You will need to fill this out to receive your rebates.

Purchase your tree and obtain your rebate upon checkout.

Follow the instructions in the Cool Communities placement, planting and care guide.

SELECT YOUR SUN AND SOIL CONDITIONS

SANDY LOAM SOILS can have a gritty feel. They may be able to form a ball but it will easily fall apart

CLAY SOILS are smooth, are easily shaped into a ball, are sticky and may have a shine. They do not drain quickly.

FULL SUN receives six hours or more of direct sunlight each day.

PART SUN receives two to six hours of direct sunlight each day. A tree grows best if it receives at least four hours of direct sun.

- A** Full sun and sandy loam
- B** Full sun and clay
- C** Part sun and sandy loam
- D** Part sun and clay

NOTE: Trees will not grow properly in shady conditions and will add no additional energy conservation benefit.

CHOOSE YOUR TREE

Common Name	Latin Name	Size: small 3-5m, med 5-10m, large 10-15m	Salt Tolerant	Tolerates Air Pollution	Tolerates Poorly Drained Soil	Tolerates Drought	Tolerates Compacted Soil Recommended for New Developments	Tolerates Dense Shade	Soil/Sun Conditions	Fall Colour	Features
SHADE TREES											
basswood	<i>Tilia americana</i>	large							ABCD	yellow	fragrant flowers in mid-summer
black maple	<i>Acer nigrum</i>	large							ABCD	orange-red	closely related to sugar maple, with darker leaves and smaller keys
black walnut	<i>Juglans nigra</i>	large							AB	yellow	large, fast growing tree produces edible nuts
blue beech	<i>Carpinus caroliniana</i>	medium							ABCD	orange	smooth gray bark, tree often holds on to dried leaves through winter
bur oak	<i>Quercus macrocarpa</i>	large							AB	orange	hardy tree with a very high wildlife value
eastern redbud	<i>Cercis canadensis</i>	small							CD	yellow	beautiful pink blossoms in spring and large heart-shaped leaves
Freeman maple	<i>Acer freemanii</i>	large							ABCD	red	a hybrid between Ontario's red and silver maple, a hardy urban tree
gray dogwood	<i>Cornus racemosa</i>	small							ABCD	red	hardy small tree, white spring flowers followed by white berries
hackberry	<i>Celtis occidentalis</i>	large							ABCD	yellow	fast growing tree tolerant of city conditions, interesting corky bark
honey locust	<i>Gleditsia triacanthos</i>	large							AB	yellow	tolerant of urban stresses, delicate leaflets provide dappled shade
ironwood	<i>Ostrya virginiana</i>	medium							ABCD	yellow-orange	interesting gray bark peels in strips, catkins provide year-round interest
Kentucky coffee tree	<i>Gymnocladus dioicus</i>	large							AB	yellow	hardy tree with beautiful bark and graceful leaves
paper birch	<i>Betula papyrifera</i>	medium							AB	yellow	attractive white bark peels in layers as it matures
red maple	<i>Acer rubrum</i>	large							ABCD	red	red twigs and buds, has brilliant red foliage in autumn
red oak	<i>Quercus rubra</i>	large							AB	orange-red	long-lived tree with attractive fall colour
serviceberry	<i>Amelanchier spp.</i>	small							ABCD	red-orange	beautiful white blossoms in very early spring, edible berries
silver maple	<i>Acer saccharinum</i>	large							ABCD	yellow	hardy, fast growing tree, leaves silver underneath
sugar maple	<i>Acer saccharum</i>	large							ABCD	orange-red	Canada's national emblem, famous for producing maple syrup
swamp white oak	<i>Quercus bicolor</i>	large							AB	orange-red	long-lived tree, naturally grows along edges of streams
tulip tree	<i>Liriodendron tulipifera</i>	large							AB	yellow	very large tree with yellow blossoms and tulip-shaped leaves
EVERGREENS (windbreak trees)											
Eastern hemlock	<i>Tsuga canadensis</i>	large							AC	green	shade tolerant evergreen with soft green needles
Eastern white cedar	<i>Thuja occidentalis</i>	medium							ABCD	green	may be used as a hedge or tree, excellent bird habitat
white pine	<i>Pinus strobus</i>	large							A	green	a majestic tree with long soft needles, official tree of Ontario
white spruce	<i>Picea glauca</i>	large							ABCD	green	tolerant of many conditions, excellent bird habitat

CHOOSE YOUR SHRUB

Common Name	Latin Name	Salt Tolerant	Tolerates Air Pollution	Tolerates Poorly Drained Soil	Tolerates Drought	Tolerates Compacted Soil Recommended for New Developments	Tolerates Dense Shade	Fall Colour	Features
SHRUBS FOR SHADE									
American hazelnut	<i>Corylus americana</i>							yellow	shade tolerant with edible nuts
arrowwood	<i>Viburnum dentatum</i>							red-purple	dark green leaves, white blossoms attract butterflies
bayberry	<i>Myrica pensylvanica</i>							orange	leaves often stay on shrub through winter
black chokeberry	<i>Aronia melanocarpa</i>							red	clusters of small white flowers in May followed by dark purple berries
common ninebark	<i>Physocarpus opulifolius</i>							yellow	hardy shrub, mature bark peels in layers
common witchhazel	<i>Hamamelis virginiana</i>							yellow	unusual yellow flower, blossoms over winter
elderberry	<i>Sambucus canadensis</i>							yellow	white flat-topped clusters of flowers in June, edible berries
fragrant sumac	<i>Rhus aromatica</i>							red-orange	fuzzy, red berries provide year-round food for birds
gray dogwood	<i>Cornus racemosa</i>							red	tall hardy shrub, white flowers followed by clusters of white berries
highbush cranberry	<i>Viburnum trilobum</i>							red-purple	showy white flowers in spring, red berries persist into winter
nannyberry	<i>Viburnum lentago</i>							red-purple	large, hardy shrub with creamy white flowers in May
pagoda dogwood	<i>Cornus alternifolia</i>							red	tree has a graceful pagoda form, white flowers followed by purple berries
pussy willow	<i>Salix discolor</i>							yellow	silver silky catkins in early spring
red osier dogwood	<i>Cornus sericea</i>							red	red bark and white berries provide year-round interest
St. John's wort	<i>Hypericum kalmianum</i>							orange-purple	small yellow flowers in spring, excellent for dry, sunny conditions
serviceberry	<i>Amelanchier spp.</i>							red-orange	beautiful white blossoms in very early spring, edible berries

IMPORTANT SPACING INFORMATION

SHADE TREES The optimal direction to plant shade trees is on the west side of your property, followed by the south and then east sides, between 5 and 15m (15 - 50ft) from your house to allow enough room for them to grow up and out!

EVERGREEN TREES Plant along the north side of your property, between 10 and 50m (32 - 160ft) from your house to break the wind.