

# Money Does Grow On Trees



Growing Trees Make Great Neighborhoods





A strategic tree planting energy-efficiency program





**Our Vision:**  
**Solve global Issues through Trees**

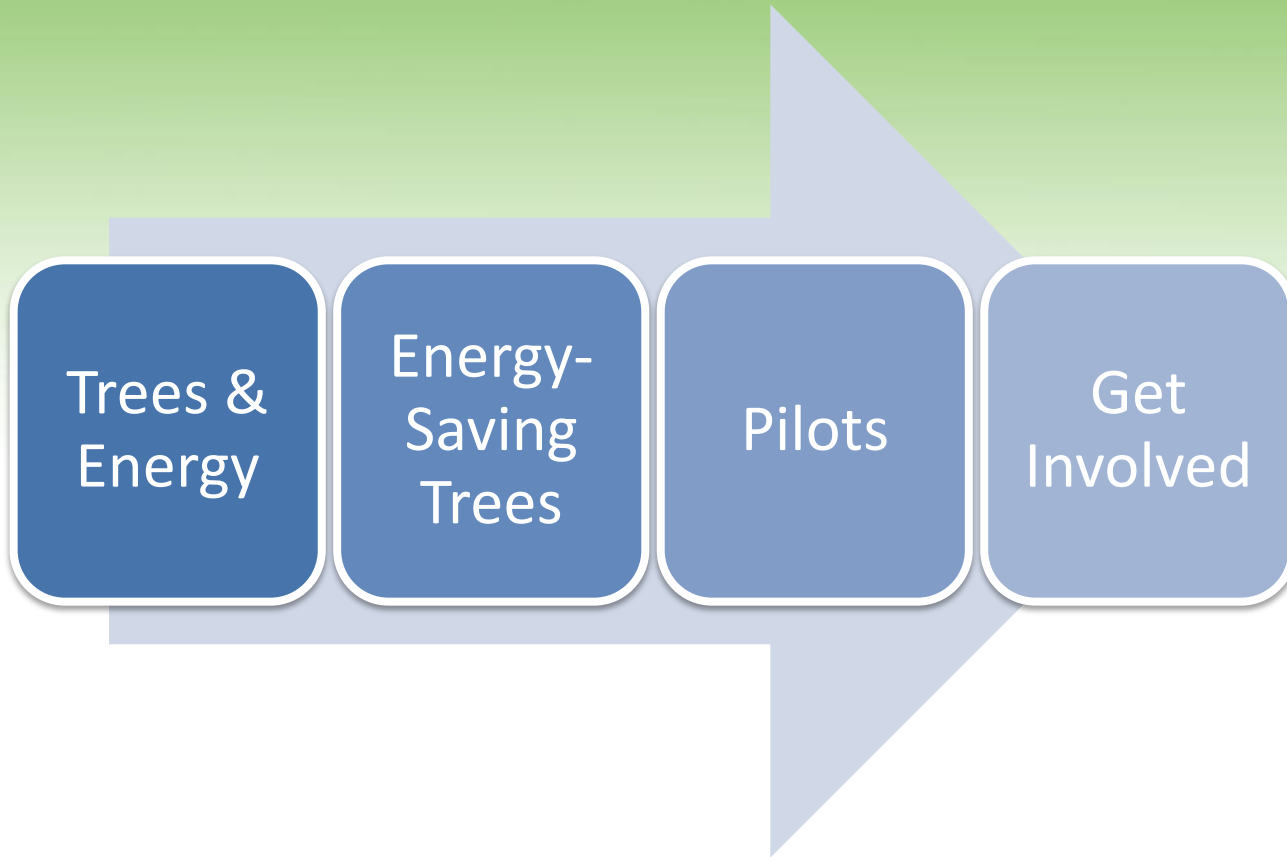


**TREE LINE USA<sup>®</sup>**  
Arbor Day Foundation



**TREE CITY USA<sup>®</sup>**

# EST Overview

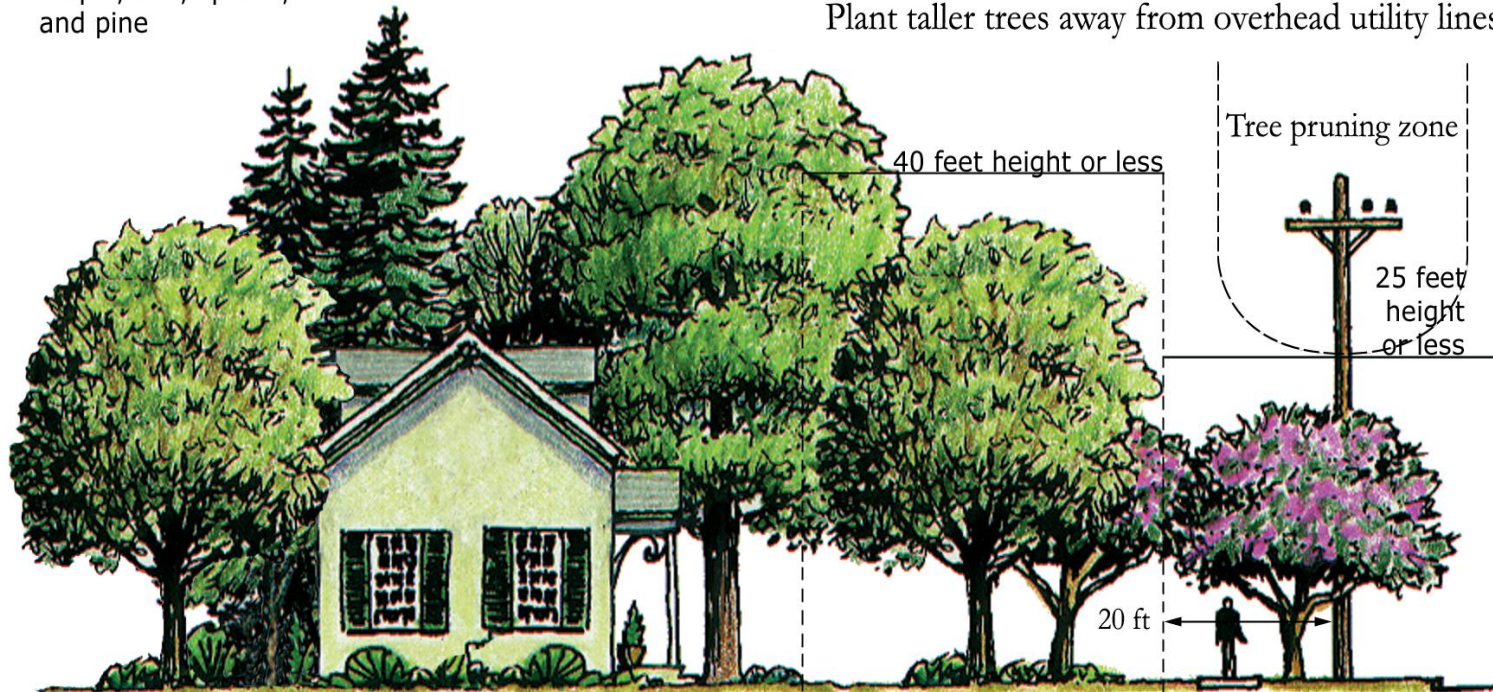


# Right Tree, Right Place

**Tall trees, such as:**  
maple, oak, spruce,  
and pine

## Plant the right tree in the right place

Plant taller trees away from overhead utility lines



 **Arbor Day Foundation**<sup>™</sup>  
[arborday.org](http://arborday.org)

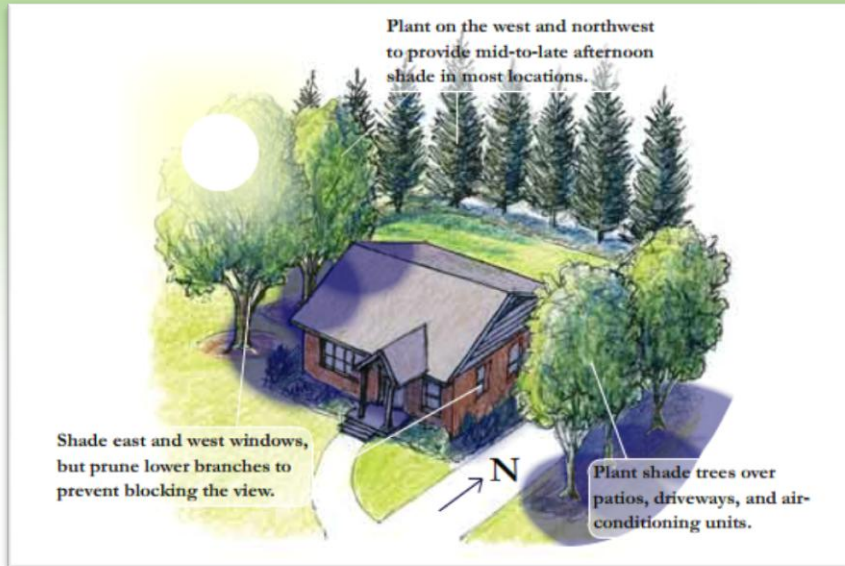
50 ft

**Medium trees, such as:**  
washington hawthorn  
and goldenraintree

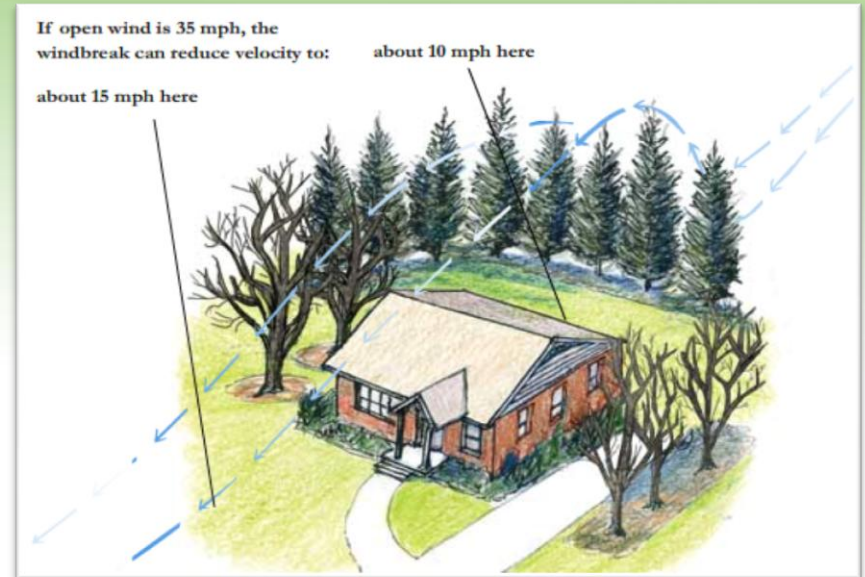
20 ft

**Small trees, such as:**  
redbud, dogwood,  
and crabapple

# How Trees Save Energy

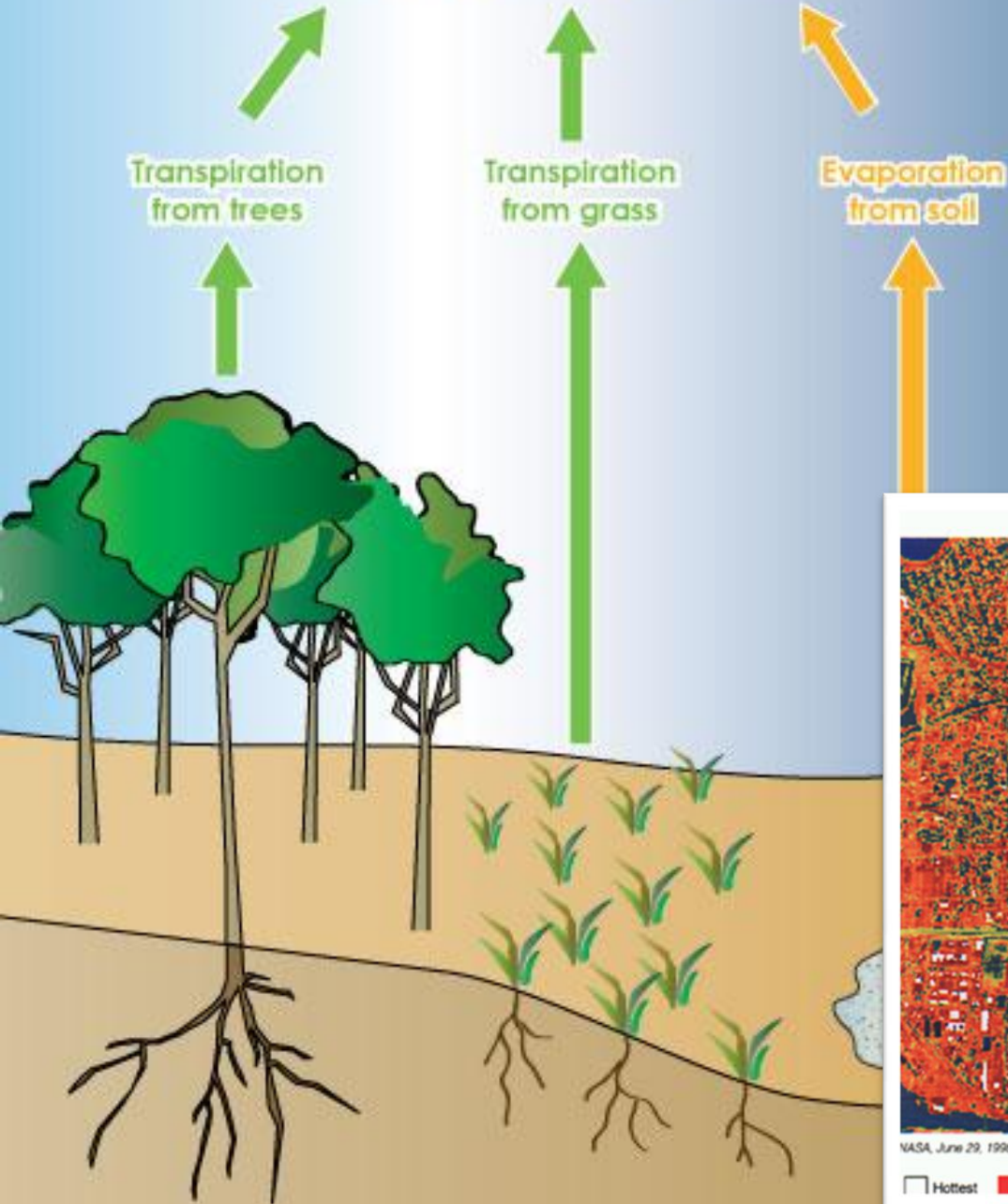


## Summer

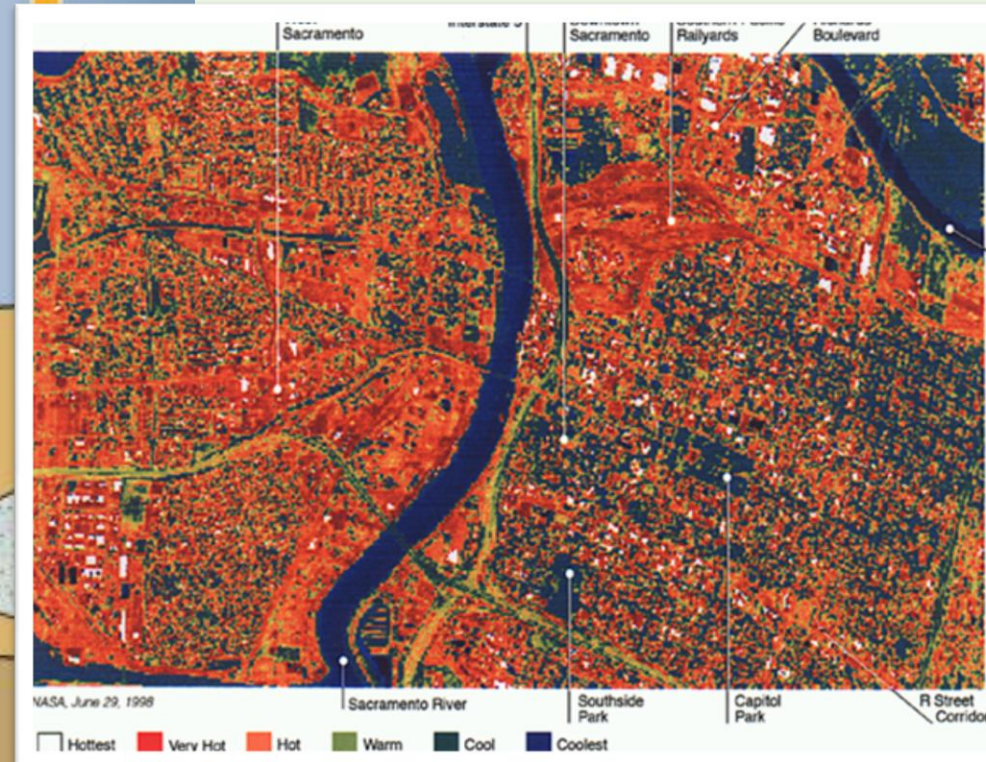


## Winter

# Evapotranspiration



**Urban Heat Island:**  
Shading and  
evapo-transpiration  
can reduce  
surrounding air  
temperatures 2-9°F.





# Total Benefits

City	Ft. Collins	Cheyenne	Bismarck	Berkeley	Glendale
Energy	112,025	186,967	84,348	553,061	116,735
CO2	40,454	29,134	27,268	49,588	12,039
Air Quality	18,477	11,907	3,715	20,635	32,571
Stormwater	403,597	55,297	496,227	215,648	37,298
Property increase	1,596,247	402,723	367,536	2,449,884	467,213
Total benefits	2,170,799	688,029	979,094	3,247,545	665,856

# Costs Associated With Trees

City	Ft. Collins	Cheyenne	Bismarck	Berkeley	Glendale
Planting	111,052	45,913	5,880	95,000	21,100
Pruning	405,344	84,677	94,850	770,000	88,412
Remove/dispose	130,487	23,337	50,061	70,000	12,710
Im/liter/gm waste	94,394	97,840	38,241	195,000	65,813
Infrastructure and liability	72,200	0	21,490	1,062,000	3,000
Amin/inspect/other	184,161	76,130	106,118	180,000	85,401
Total costs	997,638	327,897	316,640	2,372,000	276,436

# Community Net Benefits

\$1 Cost = \$1.37-\$3.09 Benefits

City	Ft. Collins	Cheyenne	Bismarck	Berkeley	Glendale
Net benefits	1,173,161	3,581,331	662,454	875,545	389,421
Benefit Cost Ratio	2.18	2.09	3.09	1.37	2.41

# Interactive | Turn-Key | Powerful

The screenshot shows a web browser window with the URL <http://energysavingtrees.arborday.org/?partnerCode=00000#PlaceTrees>. The page header includes the "ENERGY-SAVING TREES" logo, "presented by: Arbor Day Foundation" and "DAVEY", and "sponsored by: Green Energy, Inc.". Navigation links include "Need help?", "855-234-3801", and "info@arborday.org".

The main interface features a "Place your trees" section with "Back" and "Checkout" buttons. It displays two tree selection cards:

- Card 1:** Norway Spruce (*Picea abies*). Est. savings: \$24.72 /yr. A progress bar shows it is in the "GOOD" range. Below the card are options for "Eastern Redbud" and "Norway Spruce".
- Card 2:** Red Maple (*Acer rubrum*). Est. savings: \$16.68 /yr. A progress bar shows it is in the "GOOD" range. Below the card are options for "Red Maple" and "River Birch".

A "Add a tree (You've reached your limit of 2 trees)" button is visible at the bottom of the selection area. The background is an aerial map of a residential street between S 27th St and S 28th St. Two tree placement callouts are shown on the map:

- Callout 1: A house with a green circle above it, labeled "1 \$24.72/yr".
- Callout 2: A house with a green circle above it, labeled "2 \$16.68/yr".

The map also shows a "POWERED BY Beehive" logo in the bottom right corner. The Windows taskbar at the bottom shows the time as 11:02 PM on 12/12/2013.



# Meet Your Goals

Raise Funding for Tree Planting

Energy Efficiency

Carbon Sequestration

Positive Relationships

Education

Positive Media



## 1 Spread the Word

Promote the program to customers through statement inserts or other channels.



## 2 Easy, Powerful, Online Tool

Customers go online, map their home, determine best planting location and order trees.



## 3 Trees Delivered Or Picked Up

Free trees are delivered directly to your customers.







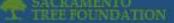
## 4 Planted Trees Create Shade to Save Energy



Customer plants and maintains trees. You improve energy efficiency and reduce peak demand load.

[Energy Saving Trees](#)

[Dashboard](#)

# Energy-Saving Trees Visual Overview

 presented by:   sponsored by:  

Need help?  916-924-8733  [treetips@sactree.com](mailto:treetips@sactree.com)

**Welcome!**

Welcome to Energy-Saving Trees, a free service to plant trees on your property. Get started by entering your address below:

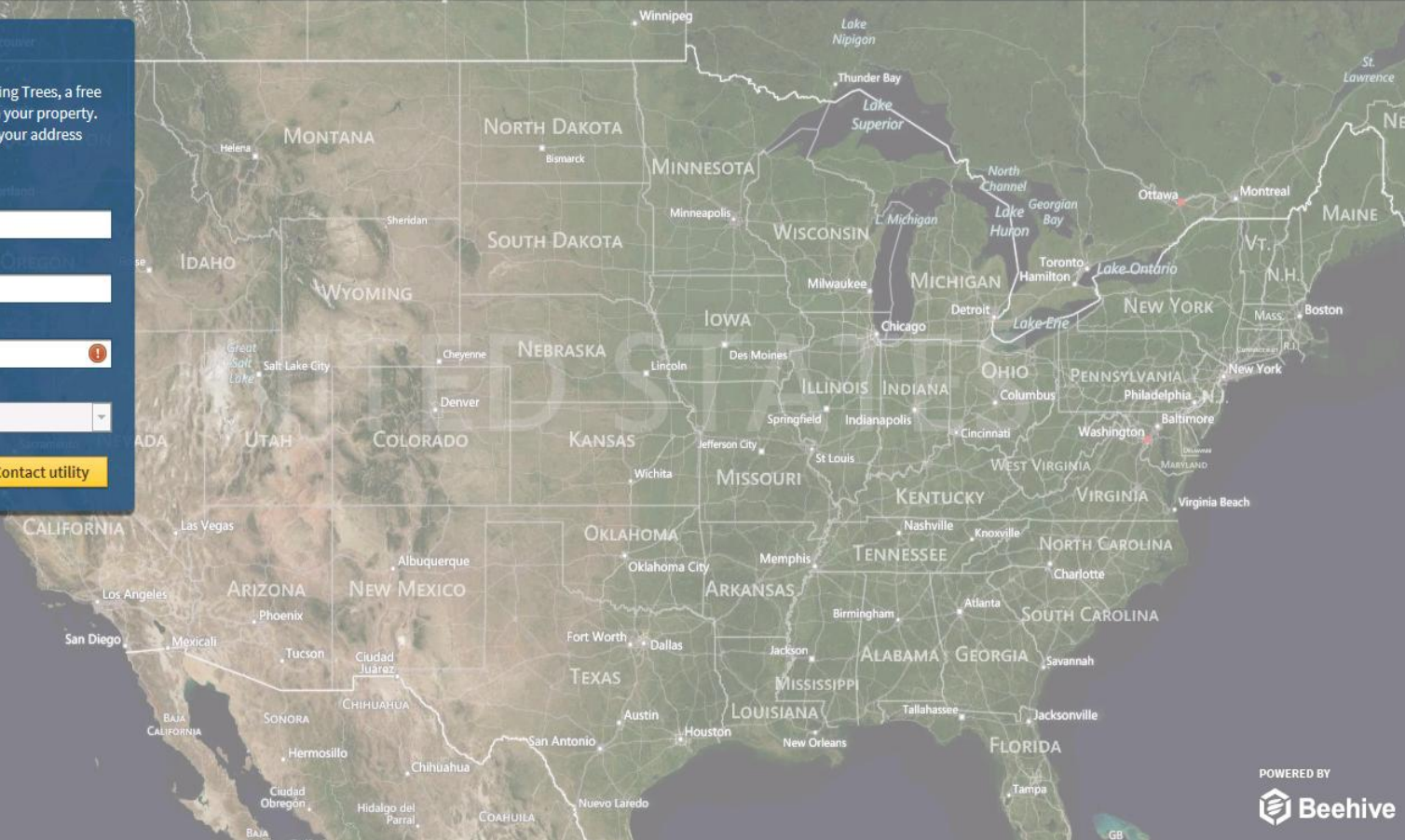
Street address


City

ZIP code

Utility company

[Contact utility](#)



POWERED BY  **Beehive**



# Landing Page

## Welcome!

Welcome to Energy-Saving Trees, a free service to plant trees on your property. Get started by entering your address below:

Street address

City

Zip



Utility Company



Start



# Step 1: Outline Your Home

**ENERGY-SAVING TREES**

presented by:  **Arbor Day Foundation** | **DAVEY** 



Need help?  1-855-234-3801  [info@arborday.org](mailto:info@arborday.org)

**Outline your home** *(Step 1 of 3)*

Your address  
4330 Birch Creek,  
Lincoln, NE68516


Size the box on the map to create the shape of your home. We'll use this shape to help determine the best placement of your trees.


Here are some tips to help you get started:

-  Drag the round handles to the corners of your home.
-  Drag the square handles to create new round handles on the outline.

[Back](#) [Done](#)

Birch Creek Dr

POWERED BY  **Beehive**



# Customized Home Mapping



# Step 2: Add a Tree



presented by: Arbor Day Foundation DAVEY

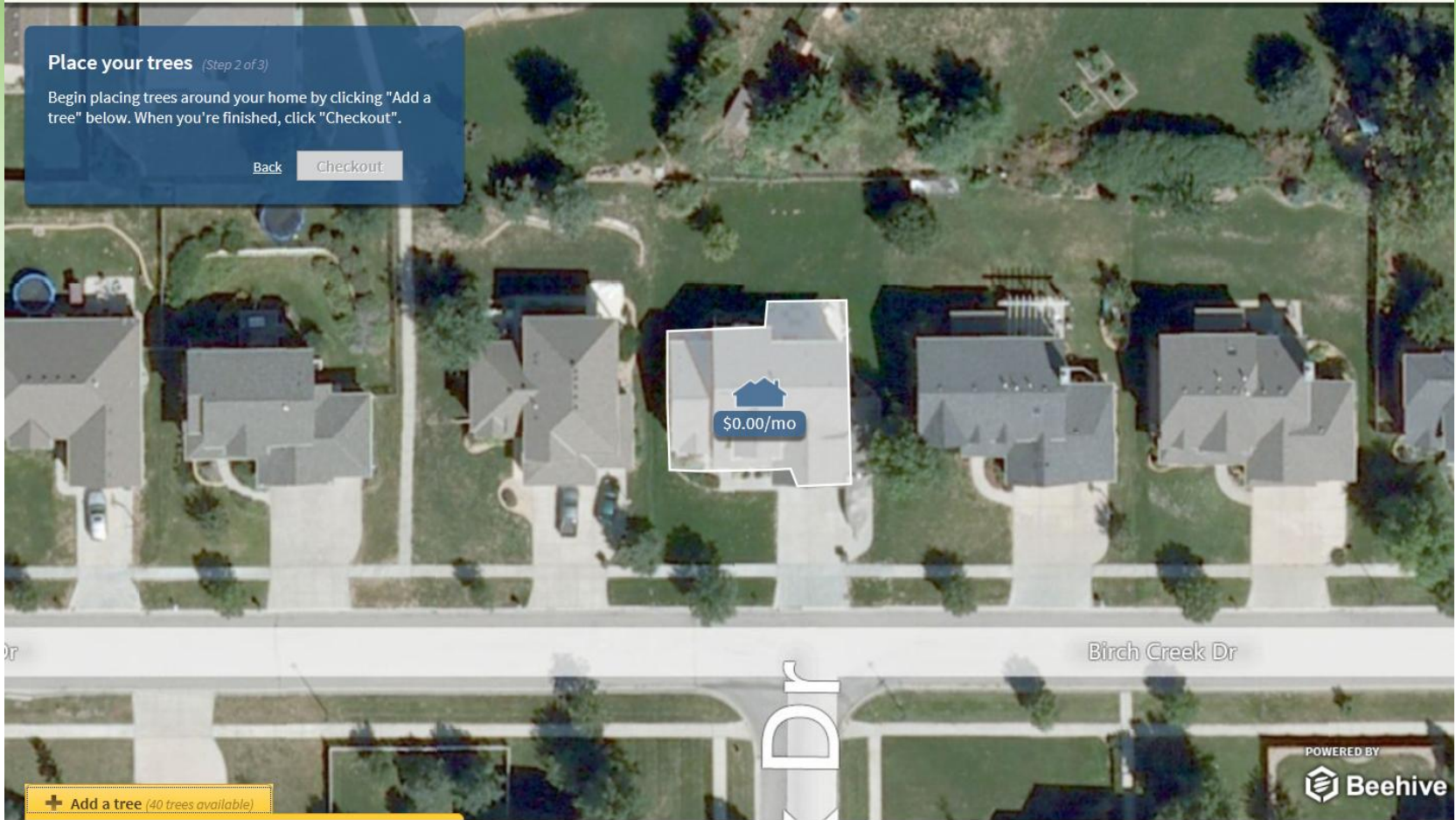
Need help? 1-855-234-3801 [info@arborday.org](mailto:info@arborday.org)

## Place your trees (Step 2 of 3)

Begin placing trees around your home by clicking "Add a tree" below. When you're finished, click "Checkout".

[Back](#)

[Checkout](#)



# Step 2: Add a Tree

**+ Add a tree** (40 trees available) [click "Checkout"](#).

To add a tree, drag the circle below to the desired area near your house. Once you drop the circle, you'll be able to specify the type of tree you'd like to plant. **You can order up to 3 free trees.**



Drag to the map

---

**Placement guide**

For higher energy savings, place your tree on the Northwest or North side.



**Utility poles**

Trees within 20 feet of a utility line should be no taller than 25 feet, whereas trees within 50 feet should be no taller than 40 feet.




# Select Tree Location

**Place your trees** (Step 2 of 3)

Begin placing trees around your home by clicking "Add a tree", click "Checkout".

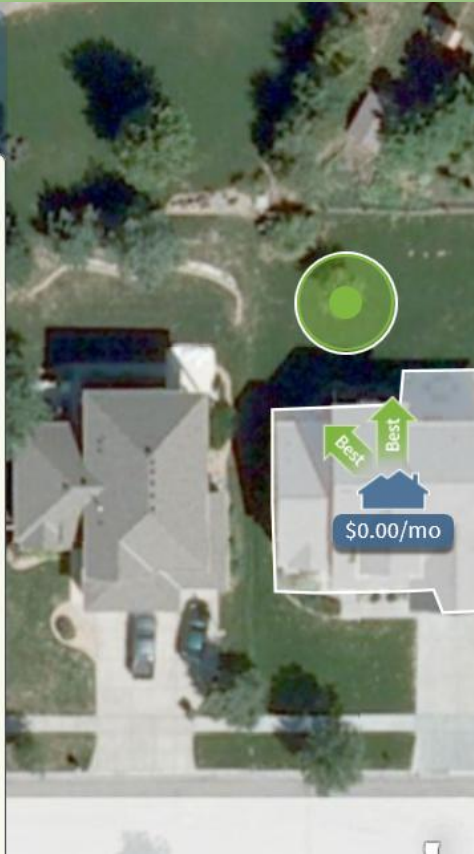

**+ Add a tree** (40 trees available)

To add a tree, drag the circle below to the desired area near your house. Once you drop the circle, you'll be able to specify the type of tree you'd like to plant. **You can order up to 3 free trees.**

  
Drag to the map

**Placement guide**

For higher energy savings, place your tree on the Northwest or North side.



# Select Tree Species

**1**



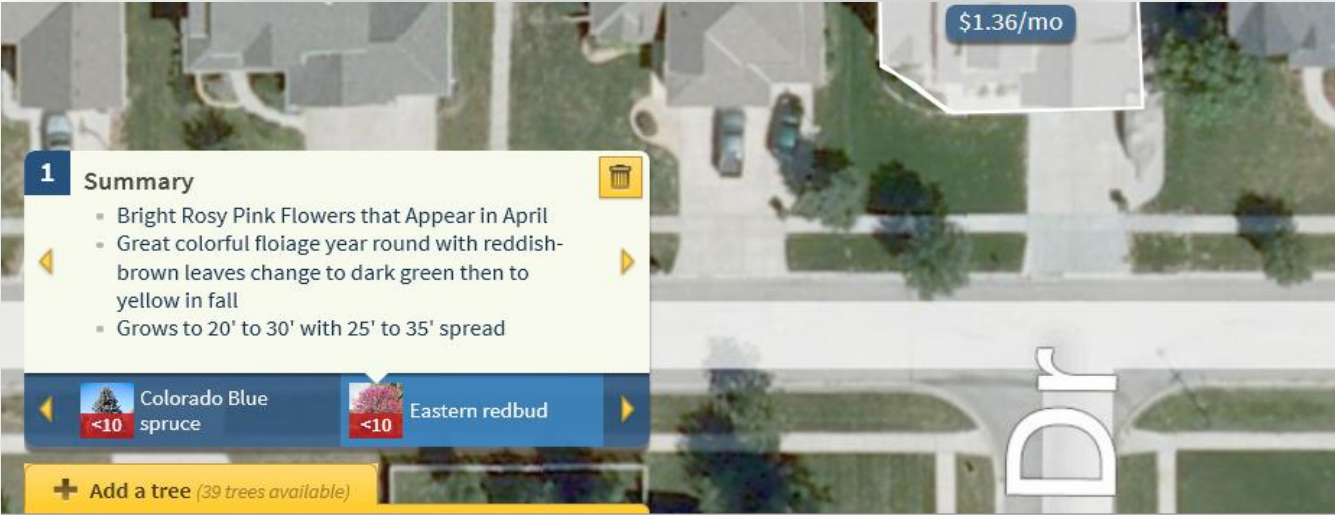
**Colorado Blue spruce**  
*Picea pungens*

Only a few left!

Est. Savings  
**\$2.99/mo**

POOR | GOOD | IDEAL

Colorado Blue spruce <10 | Eastern redbud <10



**1** Summary

- Bright Rosy Pink Flowers that Appear in April
- Great colorful foliage year round with reddish-brown leaves change to dark green then to yellow in fall
- Grows to 20' to 30' with 25' to 35' spread

Colorado Blue spruce <10 | Eastern redbud <10


+ Add a tree (39 trees available)


\$1.36/mo


# Tree & Energy Savings Visualization

ENERGY-SAVING TREES presented by: Arbor Day Foundation DAVEY


Place your trees (Step 2 of 3) [Back](#) [Checkout](#)

**1**  **Eastern redbud**  
*Cercis canadensis*  
Est. Savings **\$1.36/mo**  
POOR | GOOD | IDEAL  
Only a few left!

**2**  **Colorado Blue spruce**  
*Picea pungens*  
Est. Savings **\$2.98/mo**  
POOR | GOOD | IDEAL  
Only a few left!

**3**  **Colorado Blue spruce**  
*Picea pungens*  
Est. Savings **\$3.06/mo**  
POOR | GOOD | IDEAL  
Only a few left!

[+ Add a tree \(You've reached your limit of 3 trees\)](#)









# Step 3: Checkout Process

ENERGY-SAVING TREES presented by: Arbor Day Foundation DAVEY

## Checkout (Step 3 of 3)

Mapping address  
4330 Birch Creek  
Lincoln, NE68516

Your trees (Savings shown are in year 20)

-  **Colorado Blue spruce**   
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.10 kWh / yr  
Thermal Benefits: 33.51 Therm / yr
-  **Colorado Blue spruce**   
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.49 kWh / yr  
Thermal Benefits: 33.52 Therm / yr
-  **Colorado Blue spruce**   
Estimated Savings: \$3.06 / mo  
kWh Benefits: 135.82 kWh / yr  
Thermal Benefits: 33.20 Therm / yr

### 1. Provide your information

Shipping address	Your information
<input checked="" type="checkbox"/> This is the same as my mapping address	
Street address 4330 Birch Creek	Full name <input type="text"/>
City Lincoln	E-mail address <input type="text"/>
State NE	Daytime phone number <input type="text"/>
Zip 68516	Utility bill account number <input type="text"/> <small>Please enter your account number</small>
<input type="button" value="Next"/>	

2. Accept the agreement

3. Learn more about your trees






# Step 3: Terms & Agreements

**Checkout** (Step 3 of 3)

Mapping address  
4330 Birch Creek  
Lincoln, NE68516

Your trees (Savings shown are in year 20)

-  **Colorado Blue spruce**  
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.10 kWh / yr  
Thermal Benefits: 33.51 Therm / yr
-  **Colorado Blue spruce**  
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.49 kWh / yr  
Thermal Benefits: 33.52 Therm / yr
-  **Colorado Blue spruce**  
Estimated Savings: \$3.06 / mo  
kWh Benefits: 135.82 kWh / yr  
Thermal Benefits: 33.20 Therm / yr

1. Provide your information

2. Accept the agreement

The terms and conditions herein are applicable to any and all customers of the Baltimore Gas and Electric Company ("BGE") receiving tree(s) from the Arbor Day Foundation at BGE's expense ("Customer").

By accepting a tree from the Arbor Day Foundation, Customer understands and agrees to the following:

Customer certifies:

- that Customer is a BGE electric service customer within BGE's service territory; or
- that Customer owns the property in BGE's service territory on which Customer will plant the tree(s) or that Customer has the permission of the landowner on which Customer will plant the tree(s).

Customer agrees:

- to plant the tree(s) in the location(s) identified and approved by Arbor Day Foundation on the Energy-Saving Trees online tool report map (the "Report Map") provided to BGE's customer by Arbor Day Foundation; and
- to assume full ownership and responsibility for the tree(s) including, but not limited to, planting, watering and pruning responsibilities, as well as any damages such tree(s) may cause now or in the future.

**BGE Disclaimer:**  
IN MAKING TREES AVAILABLE TO BGE CUSTOMERS THROUGH BGE'S ARRANGEMENT WITH THE ARBOR DAY FOUNDATION, BGE ASSUMES NO LIABILITY WHATSOEVER FOR ANY PROPERTY DAMAGE OR BODILY INJURIES TO

By checking this box, Customer agrees that the representations contained in the above Agreement are true and correct, and he/she agrees to comply with the terms and conditions set forth in the Agreement.

[Next](#)

3. Learn more about your trees

[Back](#) [Submit My Order](#)







# Step 3: Tree Care Options



**Checkout** (Step 3 of 3)

Mapping address  
4330 Birch Creek  
Lincoln, NE68516

Your trees (Savings shown are in year 20)

 **Colorado Blue spruce**   
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.10 kWh / yr  
Thermal Benefits: 33.51 Therm / yr

 **Colorado Blue spruce**   
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.49 kWh / yr  
Thermal Benefits: 33.52 Therm / yr

 **Colorado Blue spruce**   
Estimated Savings: \$3.06 / mo  
kWh Benefits: 135.82 kWh / yr  
Thermal Benefits: 33.20 Therm / yr

Birch Creek Dr

**1. Provide your information**


**2. Accept the agreement**

**3. Learn more about your trees**

**We inspire people to plant, nurture, and celebrate trees**

This is the mission statement of the Arbor Day Foundation, a 501(c) nonprofit conservation and education organization. Founded in 1972, the centennial of the first Arbor Day observance in the 19th century, the Foundation has grown to become the largest nonprofit membership organization dedicated to planting trees, with over one million members, supporters, and valued partners.

YES, I'm interested in learning more about becoming an Arbor Day Foundation member.




**Don't neglect your new tree!**




Now that you've made an investment in your green space, don't simply plant and walk away. Since 1880 tree care has been our business, and we'd like to help your new tree thrive.

YES, I'm interested in a free download of the Davey Guide to Plant Health Care with tips and recommended cultural practices to ensure my tree reaches its full potential.

YES, I'm interested in learning more about having a Davey arborist care for my tree.



[Back](#) [Submit My Order](#)




# Confirmation Screen

**Thank you for your order!**

Your order has been received and will be processed and shipped in a timely manner.

Your order number is **10003**. A confirmation e-mail has been sent to [luke\\_mllr@yahoo.com](mailto:luke_mllr@yahoo.com).

[Print this page](#)




© 2013 Microsoft Corporation  
Image courtesy of 3Di


**Mapping Address**  
4330 Birch Creek  
Lincoln , NE 68516

**Shipping Address**  
4330 Birch Creek  
Lincoln , NE 68516


**Your trees (Savings shown are in year 20)**



**Colorado Blue spruce**  
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.10 kWh / yr  
Thermal Benefits: 33.51 Therm / yr



**Colorado Blue spruce**  
Estimated Savings: \$2.99 / mo  
kWh Benefits: 122.49 kWh / yr  
Thermal Benefits: 33.52 Therm / yr



**Colorado Blue spruce**  
Estimated Savings: \$3.06 / mo  
kWh Benefits: 135.82 kWh / yr  
Thermal Benefits: 33.20 Therm / yr

**Your Information**

Full name  
Luke Miller

Email Address  
[luke\\_mllr@yahoo.com](mailto:luke_mllr@yahoo.com)

Daytime Phone  
4026170425

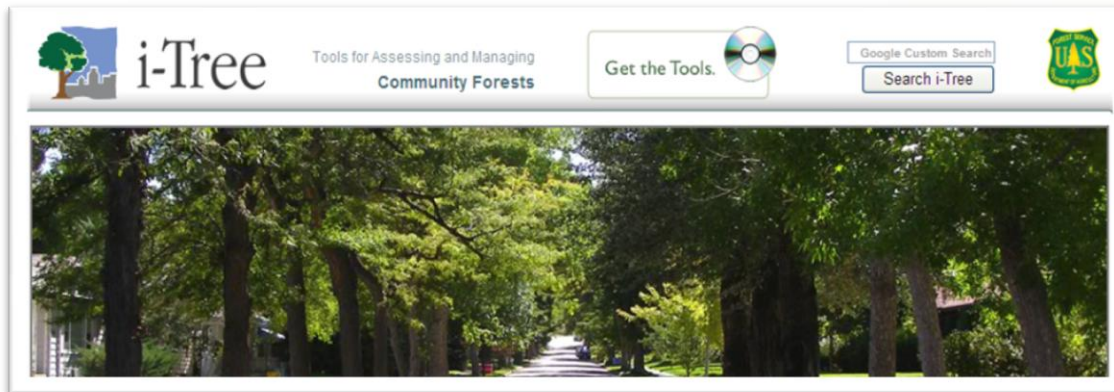
Utility bill account #  
123

[Return to the homepage](#)

Powered by:  i-Tree™

# Why being powered by i-Tree is important

- **Credible peer-reviewed research**
  - US Forest Service
  - University Research
- **Urban Foresters Preferred Tool to Manage and Enhance Forest**



Consortium Partners:





# Pilot Programs



# Pepco Holdings Pilot Program

- Partnership between Pepco and the **Arbor Day Foundation**
  - Total Number of Trees: 21,500
  - 10 Year KWH savings: 15 million
  - 10 Year Community benefits: \$1.5 million



# Pepco 20 Year Savings Break-Down

## Community Benefits

### Storm Water

- \$4,000,000

### Air Quality

- \$1,480,000

### CO2 Savings

- \$650,000

### Energy Savings

- \$5,000,000

# Promotional Outlets

News Releases

Website

Social Media

Emails to Customers

Bill inserts



NBC4 interviews  
Jason Tucker, PHI  
Environmental Engineer










Trees “Sold Out” before end of promotion, waitlist created





# Effective Marketing Methods

		Response Percent
Utility website		22.9%
<b>Bill insert</b>		<b>25.4%</b>
Email from Utility		16.0%
Email from Arbor Day Foundation		11.3%
News Article		9.1%
Word of mouth		19.6%
Facebook		2.4%



# Customer Satisfaction:

# 9 out of 10

Pepco Customer Quotes:

This is great, I love beautifying our streets and neighborhood while saving energy!”

–Washington D.C.

I love this program and would gladly plant more trees!”

–Washington D.C.



Arbor Day Foundation®

&



Proven Solutions for a Growing World



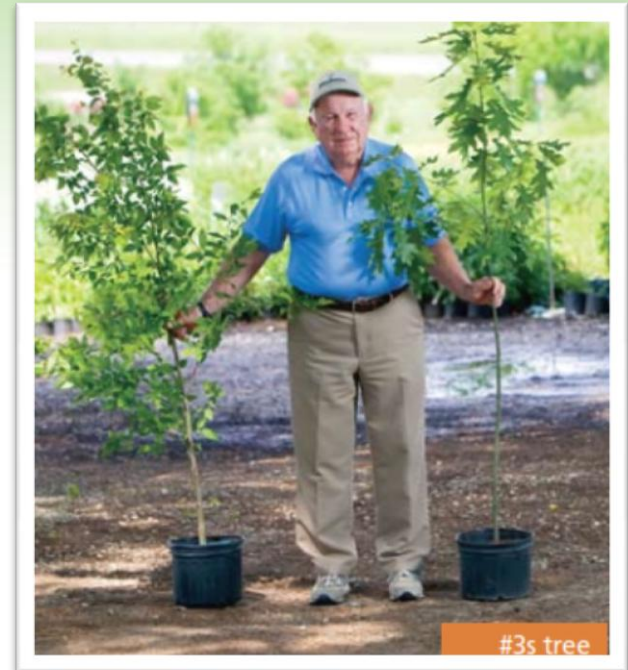
## Models of Tree Delivery

### Direct Delivery



2' - 4' Trees

### Local Pick-Up



Potted Trees



# Idaho Power Trees





# How to Get Involved

[Caucfc.org/enertrees](http://Caucfc.org/enertrees)



Growing Trees Make Great Neighborhoods



# Energy-Saving Trees –Application process

- 8 simple steps
  1. Company information
  2. Marketing information
  3. Service ZIP codes
  4. Select your trees
  5. Customer validation
  6. Customizations
  7. Information review
  8. Confirmation

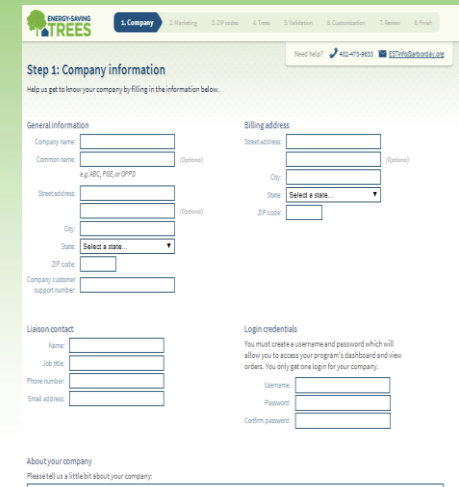


# Energy-Saving Trees –Application process

## Steps 1 & 2

### 1. Company information

- Help us get to know your organization.



The screenshot shows a web form titled "Step 1: Company information" for the "ENERGY-SAVING TREES" program. The form is divided into several sections: "General information" with fields for Company name, Common name, Street address, City, State (dropdown), and ZIP code; "Billing address" with fields for Street address, City, State (dropdown), and ZIP code; "Liaison contact" with fields for Name, Job title, Phone number, and Email address; and "Login credentials" with fields for Username, Password, and Confirm password. A "Need help?" link with phone and email icons is in the top right. At the bottom, there is a section for "About your company" with a text area.

### 2. Marketing information

- Tell us how you would like to market your program and who your target audience is.





# Energy-Saving Trees –Application process

## Step 3- Service ZIP codes

- Where do you want to offer your Energy-Saving Trees program?
- In this step you will need to provide zip codes for where you want your program to be located



## Step 4- Select your trees

- Tell us what kind of trees you would like to offer through your program.
- The application process will suggest trees approved for your area.

ENERGY-SAVING TREES

1. Company 2. Marketing 3. ZIP codes 4. Trees 5. Validation 6. Customization 7. Review 8. Finish

Need help? 404-479-8803 ESInfo@arborday.org

### Step 4: Select your trees







Please choose how many trees customers can order as well as how the trees will get delivered.

Max number of trees per customer:

Tree delivery method:

Will your company provide the trees?  Yes  No

If you choose the option above to have the Arbor Day Foundation provide your trees, please select which of the species below you'd like to offer customers and how many of each you'd like to make available. You may choose up to 7 different tree types.

<input type="button" value="Select"/>	 <p>American Arborvitae <i>Thuja occidentalis</i> <a href="#">More information</a></p>	<input type="button" value="Select"/>	 <p>American Beech <i>Fagus grandifolia</i> <a href="#">More information</a></p>
<input type="button" value="Select"/>	 <p>American Hornbeam <i>Cornus caroliniana</i> <a href="#">More information</a></p>	<input type="button" value="Select"/>	 <p>Bald Cypress <i>Taxodium distichum</i> <a href="#">More information</a></p>
<input type="button" value="Select"/>	 <p>Black Tupelo <i>Nyssa sylvatica</i> <a href="#">More information</a></p>	<input type="button" value="Select"/>	 <p>Colorado Blue Spruce <i>Picea pungens</i> <a href="#">More information</a></p>

# Energy-Saving Trees –Application process

## Step 5- Customer validation

- In this step you can choose to add validation to only allow certain users to place orders.
- Commonly used for companies with account numbers.
- Can also use offer/promotional codes.

## Step 6-Customizations

- In this step you can customize content that are shown to users
- Add a logo for branding purposes
- Create terms and conditions language

The screenshot shows the 'ENERGY-SAVING TREES' logo at the top left. A progress bar at the top indicates the current step is '5. Validation', with other steps being '1. Company', '2. Marketing', '3. ZIP codes', '4. Trees', '6. Customization', '7. Review', and '8. Finish'. Below the progress bar, there is a 'Need help?' section with a phone icon and the number '402-473-9633' and an email icon with 'ESTinfo@arborday.org'. The main heading is 'Step 5: Customer validation'. The text below explains that validation can be imposed at checkout to ensure customers are from the company's service area, typically achieved by asking for an account number or a custom promotion code. A dropdown menu is shown with the text 'Please select which type of customer validation you'd like to use:' and the selected option is 'No validation'.

The screenshot shows a 'Welcome!' message on the left side, followed by the 'Jeeves Energy, Inc.' logo. The text explains that the program is designed to help users understand where to plant trees for maximum energy savings. It also mentions that the program is made possible by the Arbor Day Foundation and JEI. Below this, there is a paragraph about JEI's commitment to a greener world and the benefits of trees. The 'Available trees' section lists 'Eastern Redbud, Norway Spruce, Red Maple, River Birch, River Birch Clump, and Worplesdon Sweetgum'. On the right side, there is a 'Find your home' section with the subtext '(Step 1 of 4)'. It prompts the user to 'Type in your address below to get started.' and provides three input fields: 'Street address' (with '2533 W Washington St' entered), 'City, State' (with 'Lincoln, Ne' entered), and 'ZIP code' (with '68522' entered and a green checkmark icon). A 'Start' button is located below the ZIP code field. At the bottom right, there is a link that says 'Ordering for multiple homes?'.

# Energy-Saving Trees –Application process

## Step 7- Information review

- In this step you are given the opportunity to review your information.
- You can make changes by clicking on the edit links.
- To finish the application process click submit button at the bottom of the page.

## Step 8- Confirmation

- Once you have submitted your application it will be sent to the Arbor Day Foundation for review and approval.
- You will also receive a confirmation email.

The screenshot shows the 'Step 7: Information review' page. At the top, there is a progress bar with steps 1 through 8, with '7. Review' highlighted. Below the progress bar, there is a 'Need help?' link with a phone icon and the number 402-473-9633, and an email link ESTinfo@arborday.org. The main content area is divided into several sections, each with an 'Edit' link:

- General information:** Miller Electric, 1234 Fake St, Lincoln, NE 68533.
- Liaison contact:** Luke Miller, Operations manager, 402-473-9633, lmill@arborday.org.
- Support information:** 855-234-3801, info@arborday.org.
- Billing address:** 1234 Fake St, Lincoln, NE 68533.
- Marketing information:** 1,000 potential customers, \$10,000 budget, You'll offer the program in the Spring.
- Marketing materials:** Bill Inserts, Brochures, Web banners.
- ZIP codes:** 32 ZIP codes uploaded.
- Customer validation:** No customer validation.
- GIS data:** You don't have GIS data you'd like to import.
- Trees:** 100 American Arborvitae, 100 Colorado Blue Spruce, 100 Eastern Redbud, 300 trees selected.
- Branding:** A 'Welcome!' message box is visible at the bottom.

The screenshot shows the 'Your application has been received!' confirmation page. At the top, there is the Energy-Saving Trees logo and the Arbor Day Foundation logo. The main content area contains the following text:

**Your application has been received!**

Thanks for submitting your application for the Energy-Saving Trees program! We look forward to reviewing the information you have provided and will do so in a timely manner. Once we have decided on the viability of your company's proposal, you should receive an "application approved" email and we will subsequently contact you to begin making final arrangements.

If you have any questions in the meantime, you may contact Energy-Saving Trees at [ESTinfo@arborday.org](mailto:ESTinfo@arborday.org). We look forward to a possible partnership with you.

Sincerely,  
The Arbor Day Foundation

At the bottom, there is a contact information box for The Arbor Day Foundation: 211 North 12th Street, Lincoln, NE 68508. A 'Need help?' link is also present with the phone number 402-473-9633 and the email ESTinfo@arborday.org. The footer includes the copyright notice ©2013 Arbor Day Foundation.

# Win – Win – Win

## Customers

Less Energy  
Consumption

Beautifies  
Home

Adds Property  
Value

## Community

Storm Water  
Reduction

Carbon  
Sequestration

Air Quality

## Corporation

Energy  
Conservation

Greenhouse  
Gas Reduction

Customer  
Satisfaction



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[arborday.org/enertrees](http://arborday.org/enertrees)



Arbor Day Foundation®

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