



STEP-BY-STEP GUIDE: USING THE I-TREE PLANTING CALCULATOR FOR YOUR PUBLIC GREEN SPACE GRANT APPLICATION



To complete your grant application, you must use the i-Tree Planting Calculator to generate key project data. Follow these steps to ensure accurate calculations.

Step 1: Access the Calculator

Click the following link to begin: <https://planting.itreetools.org/app/report/>. This will take you to the “Project” information page.

Step 2: Enter Project Location Details

On the “Project” page, input the following information:

- State: California
- County: Imperial or Riverside
- City: Enter the city where your tree planting project will take place

The screenshot shows the 'Location' section of the i-Tree calculator. At the top, there are 'Project' and 'Menu' dropdowns. Below that are tabs for 'Location', 'Parameters', 'Trees', and 'Report'. The 'Location' section is active and contains the following fields:

- State:** A dropdown menu with 'California' selected.
- County:** A dropdown menu with 'Imperial' selected.
- City:** A dropdown menu with 'Imperial' selected.

At the bottom of the form is a blue button labeled 'Next' with a right-pointing arrow.

Click “NEXT” to proceed to the “Parameters” section.

Step 3: Define Project Parameters

On the “Project Parameters” page, ensure the following settings:

- Electricity Emissions Factor: Use the default value 556.446088
- Units:
 - Select "pounds CO₂ equivalent/MWh"
 - Select "pounds CO₂ equivalent/MMBtu"
- Years for the Project: Keep the default value 40
- Tree Mortality Estimate: Keep the default value 70% for Project Lifetime

The screenshot shows the 'Project Parameters' section of the I-Tree calculator. At the top, there are tabs for 'Location', 'Parameters', 'Trees', and 'Report', with 'Parameters' currently selected. Below the tabs, the title 'Project Parameters' is followed by the instruction 'Configure the local parameters for the project.' The form contains four main sections: 1. 'Electricity Emissions Factor' with a text input field containing '556.4460879999999' and a note that it represents greenhouse gas emissions per unit of electricity. Below this is a 'Units' section with two radio buttons: 'pounds CO₂ equivalent/MWh' (selected) and 'kilograms CO₂ equivalent/MWh'. 2. 'Fuel Emissions Factor' with a text input field containing '114.64023999999999' and a note that it represents greenhouse gas emissions per unit of fuel. Below this is another 'Units' section with two radio buttons: 'pounds CO₂ equivalent/MMBtu' (selected) and 'kilograms CO₂ equivalent/MMBtu'. 3. 'Years for the Project (1 thru 99)' with a text input field containing '40' and a note that it represents how far to forecast tree benefit estimates. 4. 'Tree Mortality, as an estimated percentage (0 thru 100)' with a text input field containing '70' and a note that it represents the percentage of trees expected to die during the project period. Below this is a 'Mortality Type' section with two radio buttons: 'Project Lifetime' (selected) and 'Annual'. At the bottom left of the form is a blue button labeled 'Next →'.

Click “NEXT” to continue to the “Trees” section.

Step 4: Enter Tree Planting Details

On the “Trees” page, enter the required data in the “Tree Planting Configurations” section:

- Units: Select English (feet & inches)
- Nomenclature: Select Common Name

You will need to complete three key sections:

1. Tree Group Information

- Group Number: Assign a number if your project includes multiple tree groups in different areas. This field identifies each designated group within the overall project.
- Species: Type in a tree name, and a dropdown list will appear for selection.
- DBH (Diameter at Breast Height): Enter the trunk diameter in inches, measured 4 ft. 6 in. above ground.

2. Building Information (if applicable)

For trees planted near buildings, provide:

- Distance to Nearest Building: Measure in feet (horizontal distance between building and tree).
- Tree Location Relative to Building: Select the direction (e.g., North, South, etc.).
- Building Vintage: Enter the year or range when the building was constructed.
- Building Climate Control: Describe interior climate conditions.

3. Tree Details

- Condition: Select “Good” as the default.
- Exposure to Sunlight: Choose the appropriate level.
- Number of Trees: Enter the total number in your project.

Project ▾
Menu ▾

Location
Parameters
Trees
Report

Tree Planting Configurations

ATTENTION: Please, limit projects to batches of 100 or less tree groups.

Enter the tree groups for the project - use the “+” button to enter additional groups. Search for a species by entering at least 2 characters of its name. DBH and Tree Details are for the time of planting. Building information is used to estimate the impact of trees on building energy usage; enter “None” for Climate Controls to exclude these estimates.

Units
 English (feet & inches) Metric (meters & cm)

Nomenclature
 Common Name Scientific Name

Tree Group Information				Building Information			Tree Details			
	Group Number	Species	DBH in inches	Distance to Nearest in feet	Tree is ___ of Building	Building Vintage	Building Climate Control	Condition	Exposure to Sunlight	Number of Trees
✕	1	Chinese ash	1	0-19	West (270°)	Built after 1980	Heat & Cool	Good	Full Sun	1
+	Group Number	Species	DBH in inches	Distance to Nearest in feet	Tree is ___ of Building	Building Vintage	Building Climate Control	Condition	Exposure to Sunlight	Number of Trees

Consider periodically saving your project via Project > Save on the top menu to avoid data loss.

Next →

Click “NEXT” to proceed to the “Report” section.

Step 5: Generate Reports

On the “Report” page, you will see five report categories:

1. Tree Growth
2. CO₂
3. Energy
4. Hydro
5. Air Pollution

For each tab, generate and print a report. These reports must be submitted with your grant application.

Tree Growth calculated report:


Project ▾ Menu ▾

Location Parameters Trees **Report**
Print

NOTE: Printing is recommended as the "landscape" orientation or at a reduced scale.

Project Report - i-Tree Planting Calculator

Location: Imperial, California 92251
 Total number of trees planted in this project: 1
 Electricity Emissions Factor: 556.45 pounds CO2 equivalent/MWh
 Fuel Emissions Factor: 114.64 pounds CO2 equivalent/MMBtu
 Lifetime: 40 years
 Project Lifetime Tree Mortality: 70%



All amounts in the tables are for the full lifetime of the project.

Units
 English (pounds & tons; kWh & MMBtu; gallons) Metric (kilograms & metric tons; kWh & MMBtu; cubic meters)

Show 10 entries Search:

Copy Export **Tree Growth** CO₂ Energy Hydro Air Pollution

Location		CO ₂ Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO ₂ Avoided (pounds)	CO ₂ Avoided (\$)	CO ₂ Sequestered (pounds)	CO ₂ Sequestered (\$)
1	<ul style="list-style-type: none"> 1 Chinese ash(<i>Fraxinus chinensis</i>) tree of 1 inch initial DBH. Planted 0-19 feet and west (270°) of buildings that were built post-1980 with heating and cooling. Trees are in good condition and planted in full sun. 	1	7,027.4	\$414.67	9,137.7	\$539.20
Total		1	7,027.4	\$414.67	9,137.7	\$539.20

Showing 1 to 1 of 1 entries First Previous **1** Next Last

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CO2 calculated report:


Project ▾ Menu ▾

Location Parameters Trees **Report**

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Project Report - i-Tree Planting Calculator

Location: Imperial, California 92251
 Total number of trees planted in this project: 1
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Show 10 ▾ entries Search:

Copy Export Tree Growth CO2 Energy Hydro Air Pollution

Location		CO2 Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	CO2 Avoided (pounds)	CO2 Avoided (\$)	CO2 Sequestered (pounds)	CO2 Sequestered (\$)
1	<ul style="list-style-type: none"> 1 Chinese ash(Fraxinus chinensis) tree of 1 inch initial DBH. Planted 0-19 feet and west (270°) of buildings that were built post-1980 with heating and cooling. Trees are in good condition and planted in full sun. 	1	7,027.4	\$414.67	9,137.7	\$539.20
Total		1	7,027.4	\$414.67	9,137.7	\$539.20

Showing 1 to 1 of 1 entries First Previous 1 Next Last

Energy calculated report:


Project ▾ Menu ▾

Location Parameters Trees **Report**

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Show 10 ▾ entries Search:

Copy Export Tree Growth CO2 Energy Hydro Air Pollution

Location		Energy Benefits				
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Electricity Saved (kWh)	Electricity Saved (\$)	Fuel Saved (MMBtu)	Fuel Saved (\$)
1	<ul style="list-style-type: none"> 1 Chinese ash(Fraxinus chinensis) tree of 1 inch initial DBH. Planted 0-19 feet and west (270°) of buildings that were built post-1980 with heating and cooling. Trees are in good condition and planted in full sun. 	1	11,469.8	\$2,347.86	0.2	\$2.70
Total		1	11,469.8	\$2,347.86	0.2	\$2.70

Showing 1 to 1 of 1 entries First Previous 1 Next Last

Hydro calculated report:


Project ▾ Menu ▾

Location Parameters Trees **Report**

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Units
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Show 10 entries Search:

Copy Export Tree Growth CO₂ Energy Hydro **Air Pollution**

Location		Hydrological Benefits					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Avoided Runoff (gallons)	Avoided Runoff (\$)
1	<ul style="list-style-type: none"> 1 Chinese ash(<i>Fraxinus chinensis</i>) tree of 1 inch initial DBH. Planted 0-19 feet and west (270°) of buildings that were built post-1980 with heating and cooling. Trees are in good condition and planted in full sun. 	1	7,971.9	7,971.9	107,995.8	1,391.9	\$12.44
Total		1	7,971.9	7,971.9	107,995.8	1,391.9	\$12.44

Showing 1 to 1 of 1 entries First Previous 1 Next Last

Air Pollution calculated report:


Project ▾ Menu ▾

Location Parameters Trees **Report**

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Show 10 entries Search:

Copy Export Tree Growth CO₂ Energy Hydro **Air Pollution**

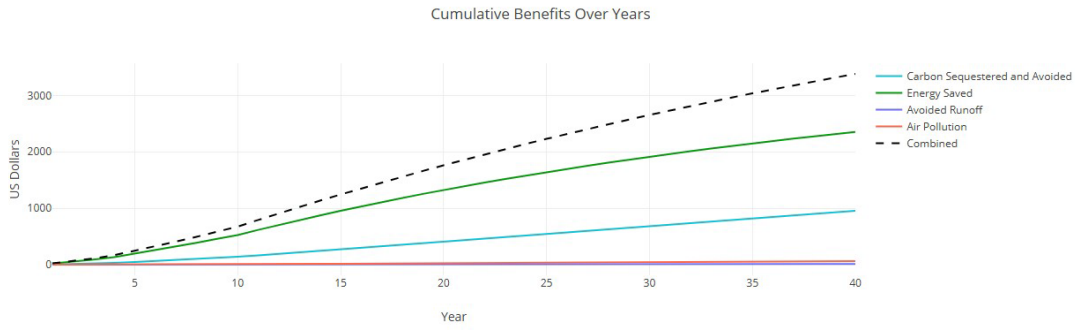
Location		Hydrological Benefits					
Group Identifier	Tree Group Characteristics	Initial Number of Trees	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Avoided Runoff (gallons)	Avoided Runoff (\$)
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Showing 1 to 1 of 1 entries First Previous 1 Next Last

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Showing 1 to 1 of 1 entries

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Mortality is modeled as a fractional (not whole) tree estimate and may not align year-over-year.
Sequestration does not account for net differences like decay.
Tree canopy cover estimate assumes no overlap between crowns.
Application v2.7.1, powered by engine v0.17.0 (APV3) and database v12.0.90.

Since 2006, i-Tree has been a cooperative, public/private partnership between:



Use of this tool indicates acceptance of the EULA.

Version 2.7.1

