Peter L. Cohen
[redacted]

Thursday, February 6, 2020

Catherine Daly Woodbury
DPW Project Manager
cwoodbury@cambridgema.gov
(617) 349-4818

Re: Meeting Tonight re "Temporary" Tree Removal Ordinance and any Proposed Successor Ordinance

Dear Ms. Woodbury:

I have made comments in a few public forums so far, trying to represent the views of the five members of members of my family. I will try to do so now in writing. We understand that the current "temporary" ordinance is motivated by the noble goal of protecting tree canopy. We share that goal. And yet when the mechanics of the ordinance are applied to our property, the results actually work both against the public interest and against our private interest in a way that one can fairly characterize as "lose-lose," the very antithesis of the "win-win," which legislators so often try to create through legislation. Regrettably, the current ordinance was not ready for prime time. Now, having put our family's tree care program on hold for a year while the city and its consultants tried to come up with final recommendations for a permanent ordinance (and failed to do so within the promised one year), we are very opposed to extension of the current ordinance, without some significant amendments.

In order to provide the reader of this with context to understand our position, I am submitting the following documents attached:

(1) **Tree Removal and Maintenance PLAN** Updated 1-28-2020

(2) **Removal, Regulatory and Replacement COSTS for Three Dead Trees** (1-28-2020)

(3) **Six COMMON-SENSE PRINCIPLES for any Cambridge Ordinance Relating to the Regulation of Trees on Private Property** (1-28-2020)

Additionally, I am attaching a fourth item, which a friend sent me recently:

(4) **Should you remove trees to improve solar panel performance?** EnergySage (2-28-2019)

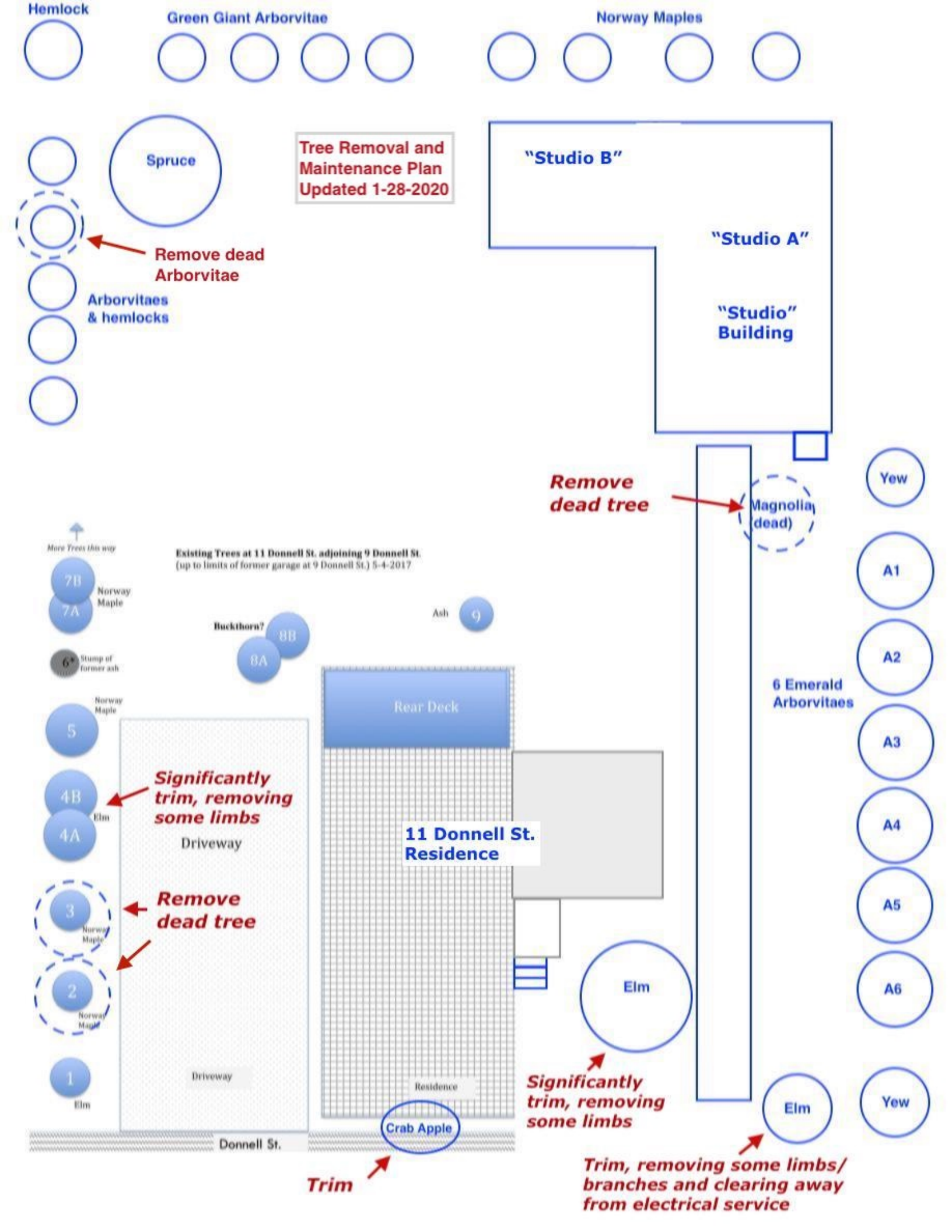
The author of this last item makes a strong case that, on environmental grounds, where there is a conflict between solar power promotion and maximum preservation of tree canopy, the promotion of solar power should be assigned a higher priority than the preservation of trees that interfere with solar power generating systems. I think the author's claims should be explored by the DPW, your consultants, and the city council, so that the council can properly balance and harmonize the city's competing goals within its various ordinances and policies.

I hope that those who are actively pushing extension of the "temporary" ordinance — and any successor ordinance — will carefully review these materials and contact me about any questions they may have about them. Our family would like to work collaboratively on improvements to any ordinance to enhance the city's interest in the health of tree canopy on private residential property. Wherever possible any ordinance should use carrots rather than sticks to motivate property owners to save and even expand their net canopy coverage. We continue to encourage city representatives and their consultants to visit our property, by appointment, to see whether the ordinance — as currently

drafted, or as it may be in subsequent drafts — actually makes sense in a real property that is affected by many aspects of the ordinance.

Sincerely,

Peter L. Cohen,
joined by Michelle Mentis-Cohen, Simon M. Cohen,
Byron M. Cohen and Julian M. Cohen


Hemlock
Green Giant Arborvitae
Norway Maples
Spruce
Tree Removal and Maintenance Plan Updated 1-28-2020
"Studio B"
"Studio A"
"Studio" Building
Remove dead Arborvitae
Arborvitaes & hemlocks
Remove dead tree
Magnolia (dead)
Yew
A1
A2
A3
A4
A5
A6
6 Emerald Arborvitaes
More Trees this way
Existing Trees at 11 Donnell St. adjoining 9 Donnell St. (up to limits of former garage at 9 Donnell St.) 5-4-2017
7B
7A
Norway Maple
Buckthorn?
8B
8A
Ash
9
6*
Stump of former ash
Norway Maple
5
Rear Deck
Significantly trim, removing some limbs
4B
Elm
4A
Driveway
11 Donnell St. Residence
Remove dead tree
3
Norway Maple
2
Norway Maple
Elm
1
Elm
Driveway
Residence
Crab Apple
Donnell St.
Trim
Significantly trim, removing some limbs
Elm
Yew
Trim, removing some limbs/ branches and clearing away from electrical service

Removal, Regulatory and Replacement Costs for Three Dead Trees
Prepared by Peter L. Cohen, 1/28/2020

This real life case relates to 11 Donnell St., which has three dead or dying and dangerous trees that are arguably subject to the current "temporary" tree removal moratorium. It illustrates the additional cost imposed by the city's requirement that the homeowner obtain certifications by a licensed arborist for removal of dead or dying trees, a requirement that never existed in law in Cambridge prior to this ordinance and which relates solely to policing the city's agenda (but at the homeowner's expense).

A.	**ACTUAL REMOVAL COST** (no certification or replacement included)	
	Removal of Norway Maple 14"	$900
	Removal of Norway Maple 16"	$1,000
	Removal of Magnolia	$400
	Total Actual Removal Cost	**$2,300**
B.	**REGULATORY COST** (governmentally required paperwork)	
	Certifications from arborist for City of Cambridge	
	Tree Removal Permits (**Regulatory Cost**)	$750
	Total Removal and Regulatory Job Cost	**$3,050**
	Increase in Job Cost just to remove trees	***32.6%***

C.	**REPLACEMENT COSTS** (not including removal or certifications)		
	Note that if one wants to replace those trees in the same location there will be additional costs such as:		
	• Stump grinding and soil prep – 3 trees	$750	*est*
	• Purchase of 3 new trees	$500	*est*
	Installation of 3 new trees	$600	*est*
	Maintenance of 3 new trees for 1 year	$300	*est*
		$2,150	

D. **SUMMARY: Total Cost for removal and replacement of 3 dead or dangerous trees**

(a) REMOVAL	$2,300
(b) REGULATORY	$750
(c) REPLACEMENT	$2,150
	$5,200
Mean cost per tree	$1,733

SIX COMMON-SENSE PRINCIPLES FOR ANY CAMBRIDGE ORDINANCE RELATING TO THE REGULATION OF TREES ON PRIVATE PROPERTY

1. **THE CITY'S INTEREST IN TREES SHOULD NOT UNFAIRLY BURDEN PROPERTY OWNERS**. If the city council claims that the public has a property interest in the status of trees on private property, and if the council wants to regulate the fate of such trees, it must do so in a manner that is: (a) narrowly targeted; (b) efficient; and (c) does not unfairly and unduly burden property owners by causing them to incur economic costs that are solely related to compliance with the city's regulatory scheme. In other words, *the city should be willing to put its money where its mouth is.*

2. **FOCUS ON NET CANOPY COVERAGE RATHER THAN JUST CANOPY LOSS**. Any ordinance dealing with trees should promote new tree planting and care as much as the preservation of existing trees. Except in the case of unusually large and valuable trees, the focus on any given property should be on the net amount of canopy rather than on the fate of individual trees.

3. **USE THE ZONING CODE TO TARGET ECONOMIC CONFLICT BETWEEN REAL ESTATE DEVELOPMENT AND CANOPY COVERAGE**. In dealing with private property, any ordinance should narrowly target the development of those lots where new housing units or commercial uses are being developed and where the property owner has a direct economic incentive to remove existing trees because their location interferes with the planned development. The zoning code is the appropriate place for such targeting and regulation to take place.

4. **ACKNOWLEDGE COMPETING CITY GOALS SUCH AS THE PROMOTION OF SOLAR ENERGY**. Any tree ordinance should acknowledge that on some properties there will be a conflict between the city's goal of promoting the use of solar power and the goal of protecting and increasing the tree canopy. In other words, if a property owner installs a solar system that advances the city's solar interests, then any tree removal that might be required to make such a solar system viable should neither be prohibited nor require tree mitigation. There are tradeoffs and any ordinance should directly and fairly deal with them.

5. **EXEMPT RESIDENTIAL PROPERTY NOT BEING DEVELOPED — FOCUS ON PUBLIC PROPERTY —USE CARROTS, NOT STICKS.** Homeowners who are not constructing new housing units on their residential properties should be exempt from the punitive regulatory measures currently embodied in the "temporary" ordinance. Instead, the city should: (a) plant as many trees as it can on public property; and (b) offer technical advice and incentives to homeowners to encourage the voluntary planting of new trees on private property to: (i) replace trees that are dead or dangerous and which should be removed; and/or (ii) add new trees to their property. *If there is public benefit to retaining, replacing, or adding trees to private land, then the city should put its money where its mouth is.*

6. **NEED FOR CANDOR FROM THE CITY IN DISCUSSING THE ISSUES**. In the course of discussing the future of any ordinance governing trees on private property, city council members, members of the city staff, and their highly paid consultants (such as Reed Hilderbrand), should be candid and refrain from double-talk. For example, the Department of Public Works currently claims that the city has the legal authority to regulate trees on private land but that it can't send city arborists to inspect trees and determine whether they are dead or dangerous, even when they have been explicitly invited by a property owner. If the city has the power to issues stop work orders or issue large fines to homeowners, then the city arborist certainly has the power, when invited, to enter a property and determine whether a tree is dead, or dying and is a danger to persons and property. In other words, don't make specious claims about potential city liability, in one breath, while asserting city power to forbid and punish homeowners for normal tree maintenance (such as removing dangerous trees without a permit) and making normal choices about the number, type, size, of their trees, in the next breath.

By Peter L. Cohen, 1/22/2018 (Revised and corrected 1-28-2020)

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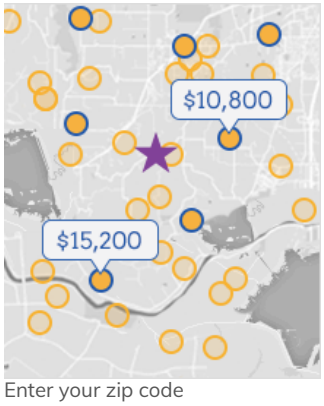
Find out what solar costs in your area in 2020



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Enter your zip code

See Solar Prices

Should you remove trees to improve solar panel performance?

Last updated 2/28/2019

When we talk about the environmental benefits of solar power, we often talk about how installing a solar energy system can have the same effect on the environment as planting trees. Ironically, maximizing those solar benefits may involve cutting down a tree or two. It's a difficult truth, but solar power and trees do not always get along. Branches and leaves can block sunlight from hitting your roof, which means your solar panels aren't maximizing their electricity production potential.

The good news is that most homeowners can usually get away with just trimming back a few branches. At most, you may need to remove one or two whole trees. Many homeowners hesitate to sacrifice trees for solar, because it doesn't seem like an environmentally friendly or cost-effective solution. However, the net benefits of removing trees to install solar can be significant.

When removing trees is good for the environment

According to American Forests, one tree stores about 0.5 metric tons of carbon dioxide (CO_2) over its lifetime. Manufacturing a typical 5-kilowatt (kW) solar energy system produces about 10 metric tons of CO_2, so the total CO_2 emissions associated with removing one tree and installing a residential solar power system are roughly 10.5 metric tons.

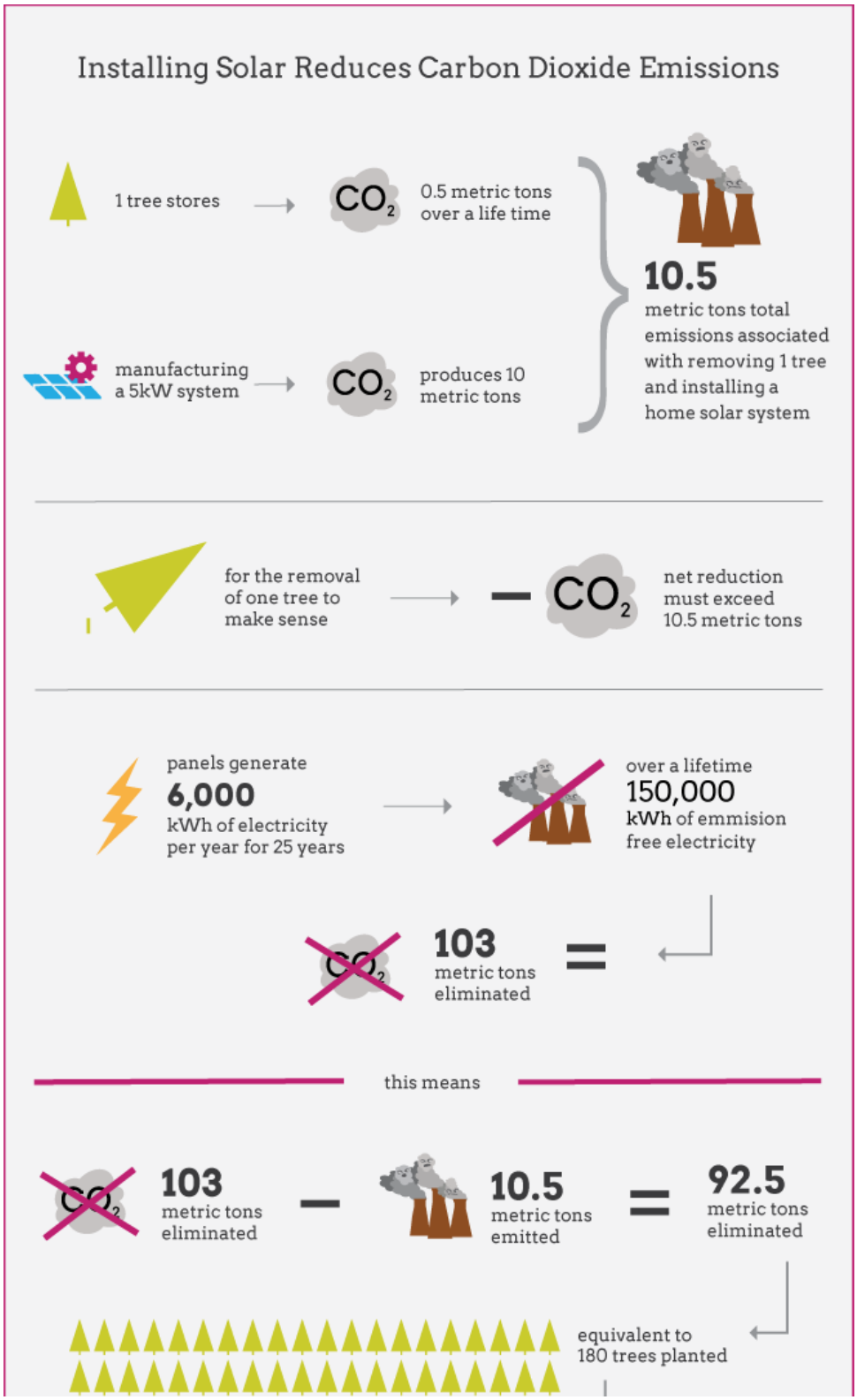
For the removal of the tree to make sense, the net CO_2 reduction needs to exceed 10.5 metric tons. That seems like a lot at first, but your solar panels should generate at least 6,000 kilowatt-hours (kWh) of electricity per year for 25 years.

This means that over the lifetime of your panels, you will produce about 150,000 kWh of emissions-free electricity. This translates to a whopping 103 metric tons of CO2 eliminated over the life of the panels!

Subtracting the original 10.5 metric tons of CO2 emissions needed to install the panels from the 103 metric tons of CO2 benefits they will generate results in a net benefit of 92.5 metric tons of CO2 offsets. That's the equivalent of planting more than 180 trees. While this isn't good news for the tree in question, it is good news for the environment – and for your wallet.

We recognize that there are other factors to be considered, too. First, you may have to pay to remove your tree. There are other less quantifiable factors to consider as well. The trees in question could house wildlife, shade your home during the summer, or provide aesthetic or other "quality of life" benefits. One of the newest options in solar, community solar, allows you to support solar without putting it on your own property.

How these costs affect the equation is a function of your personal preferences and may or may not change the outcome. For most people, though, removing one or more trees to install solar panels is an excellent investment – from both a financial and an environmental standpoint – and shouldn't stand in the way of installing a solar energy system on your home.



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