
Forest Carbon Markets in Ohio: What Landowners Need to Know

Ohio Woodland Stewards Program

November 18, 2022

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Forest Stewardship Slows Climate Change

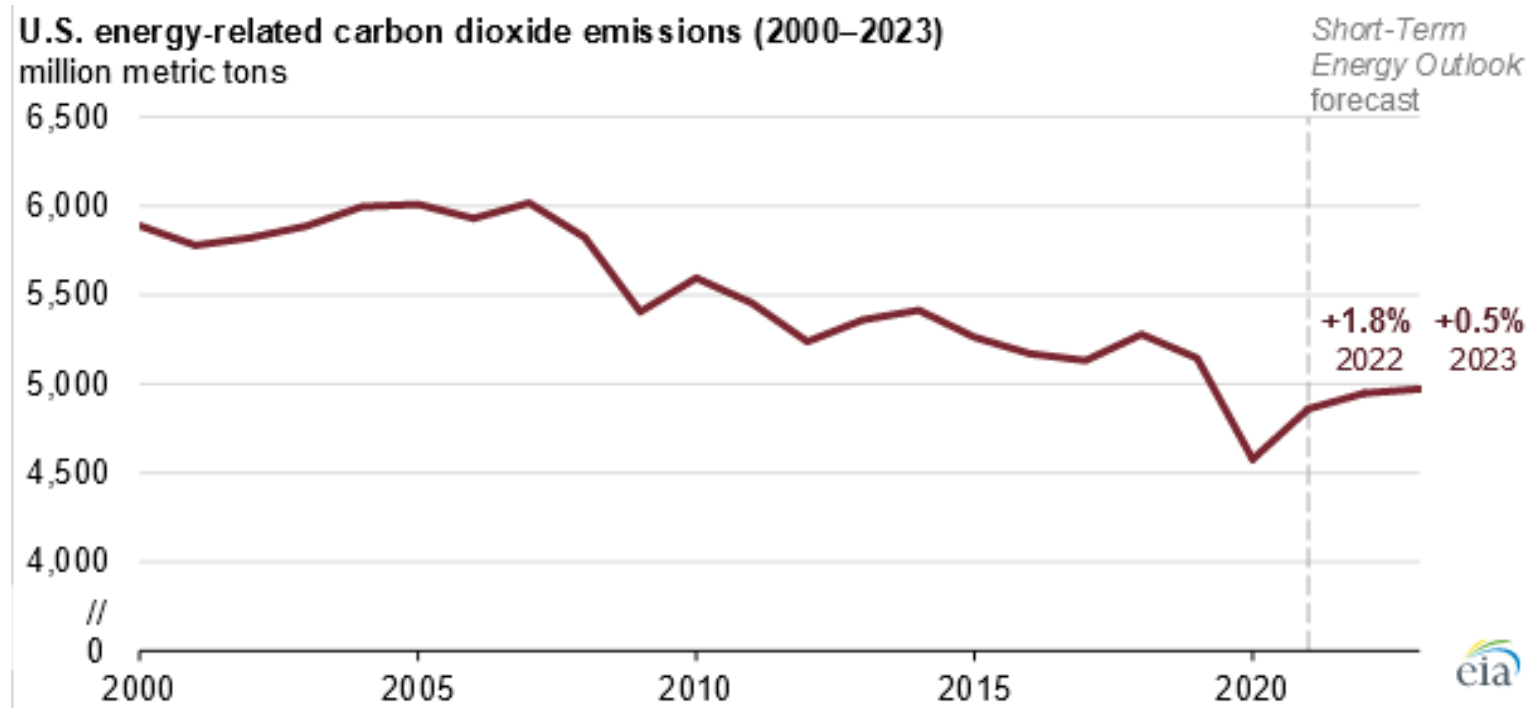
Getting Paid to For Carbon

The Family Forest Carbon Program

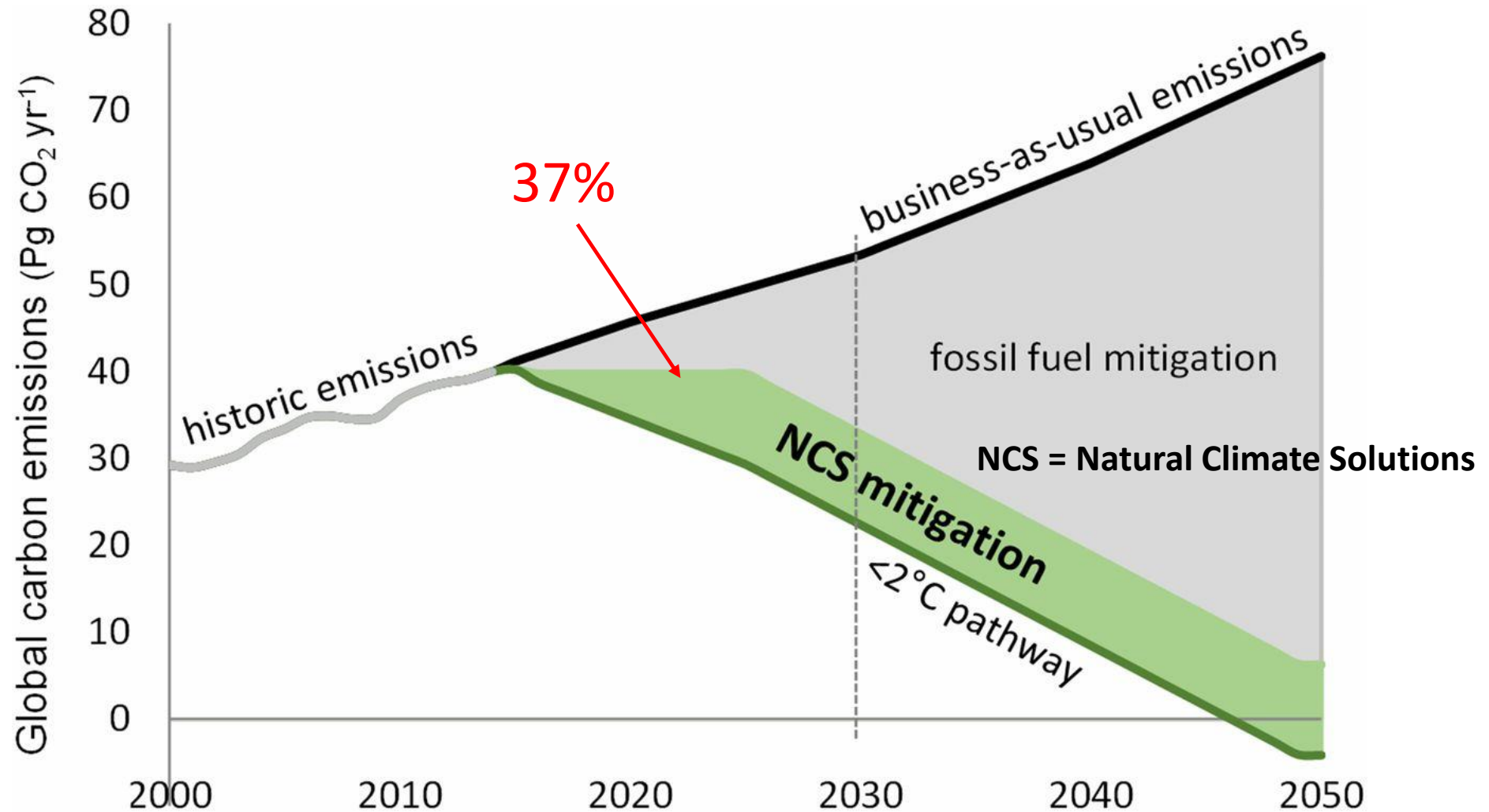
**Questions to Ask Before Signing Any Forest
Carbon Contract**

Some Good News

Carbon Emissions Falling in the US

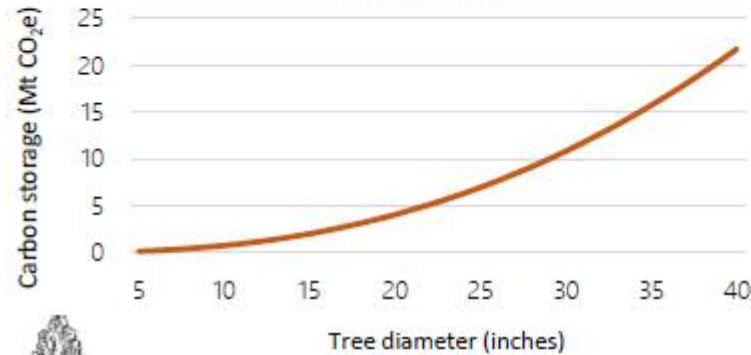


Contribution of Natural Climate Solutions to stabilizing warming to below 2°C



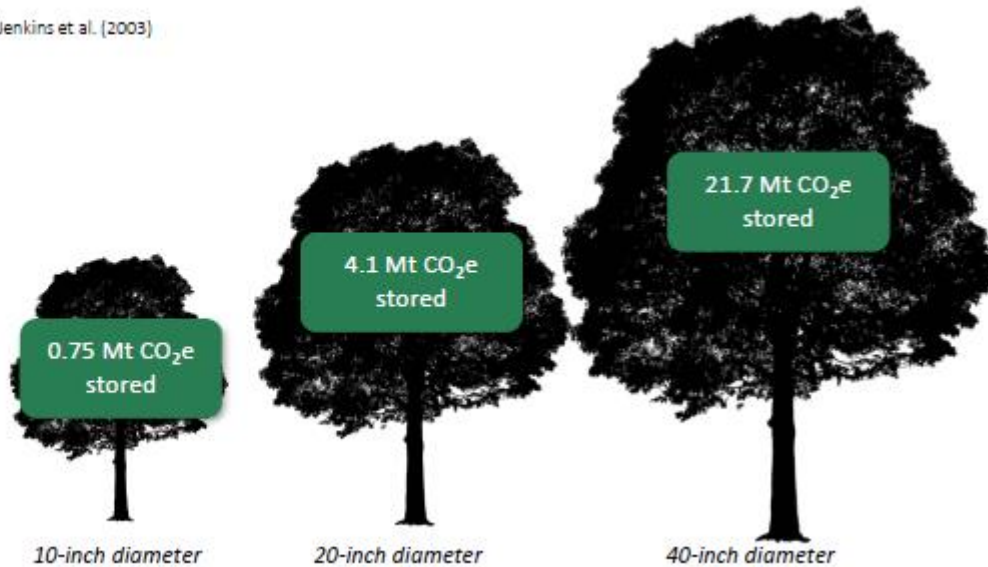
Carbon in a tree vs. forest

Carbon in a sugar maple tree at different diameter classes

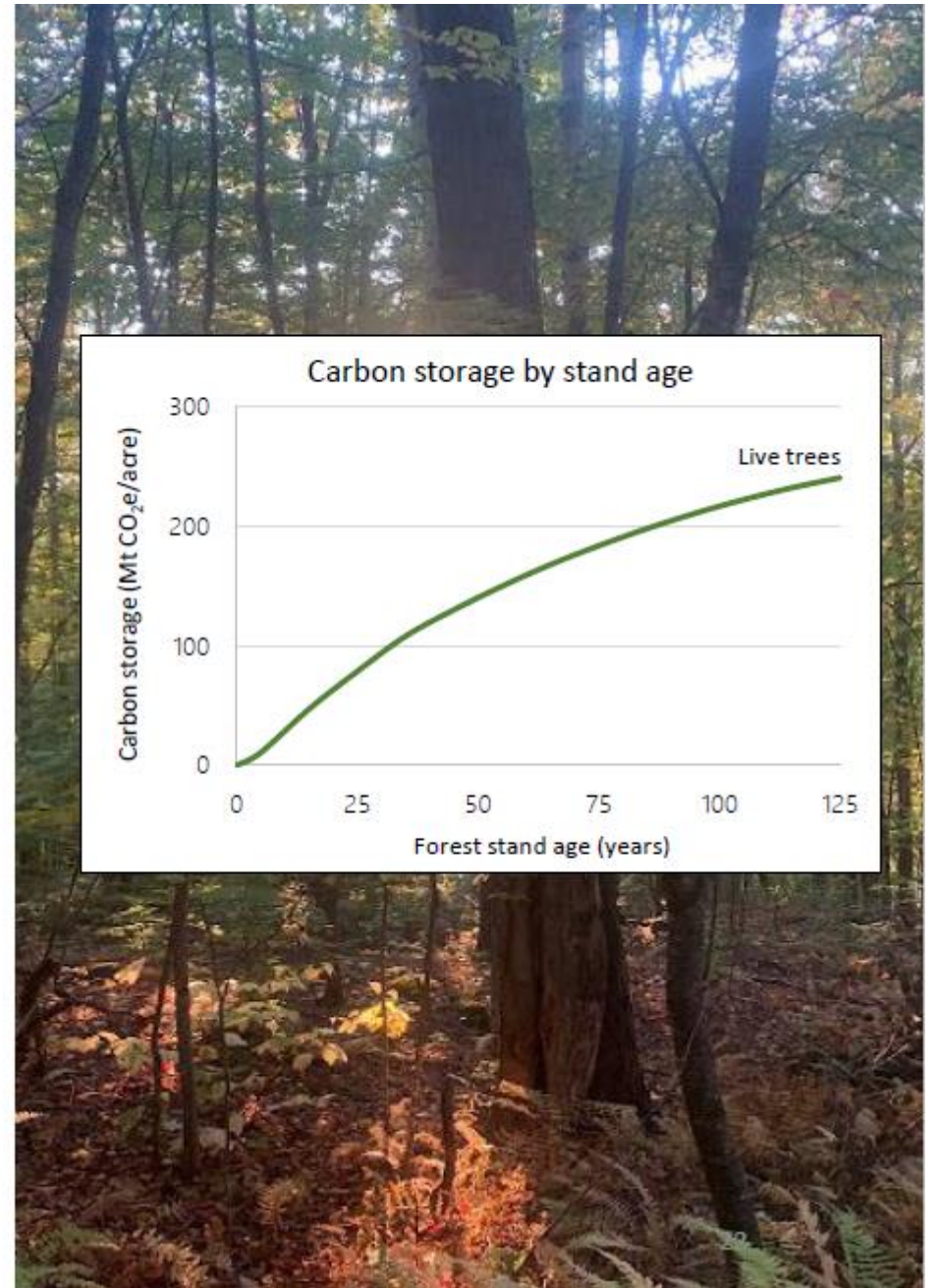
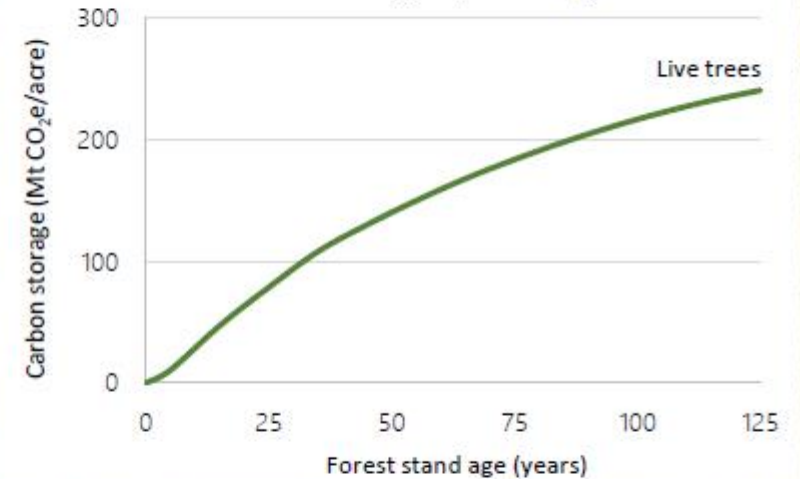


Data source: Jenkins et al. (2003)

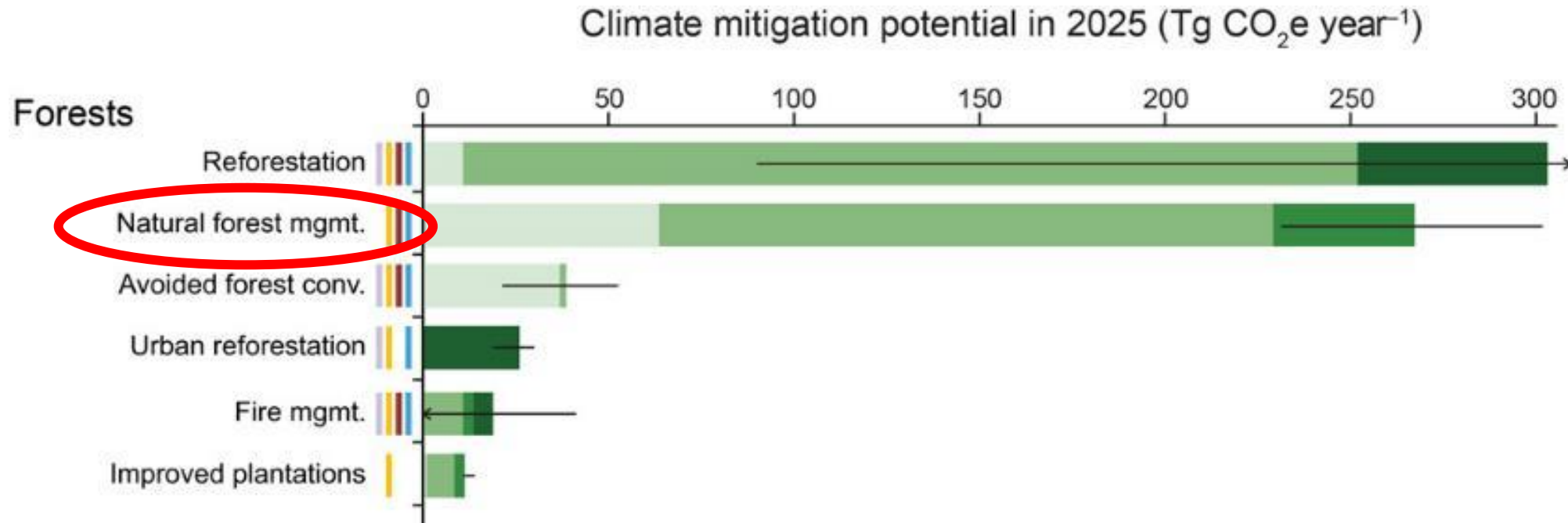
- A 10" sugar maple would add 0.2 Mt CO₂e to get to 11"
- A 20" sugar maple would add 0.5 Mt CO₂e to get to 21"
- A 40" sugar maple would add 1.3 Mt CO₂e to get to 41"



Carbon storage by stand age



The Potential

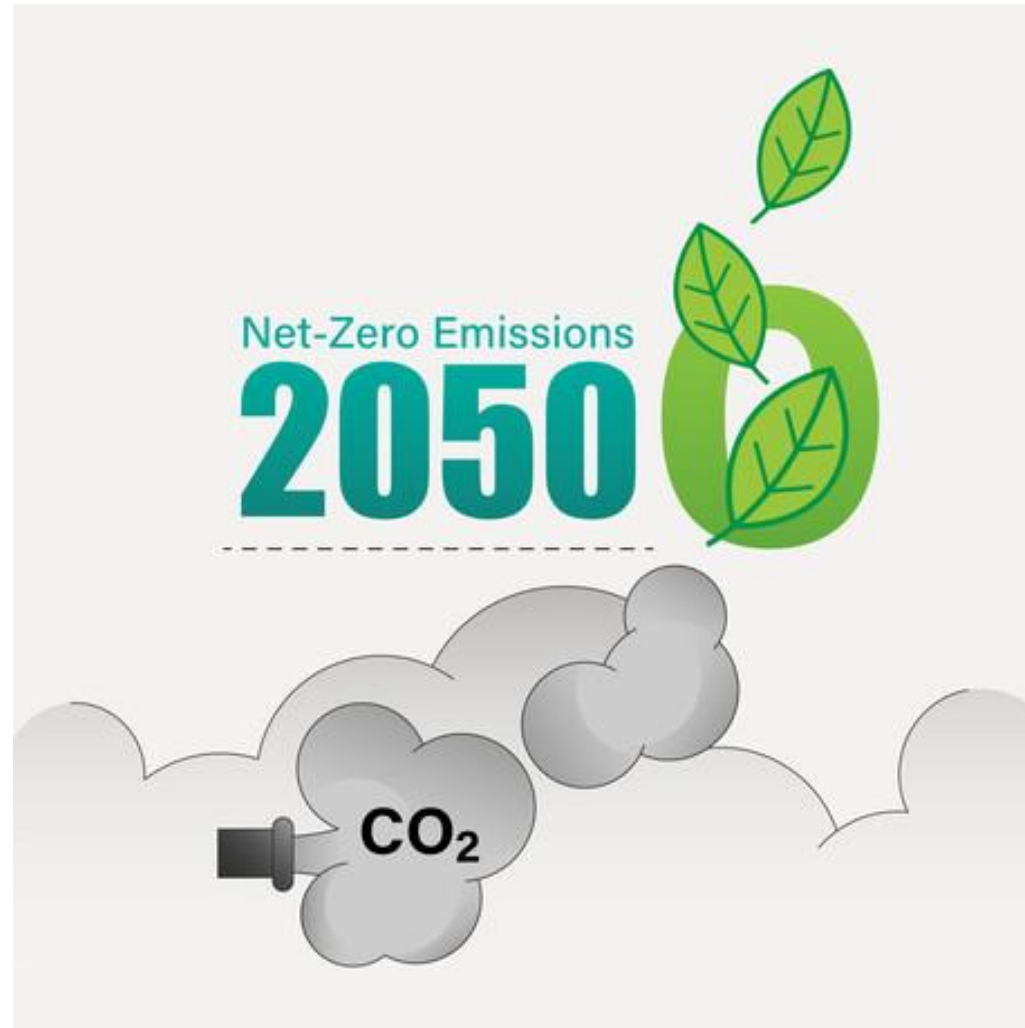


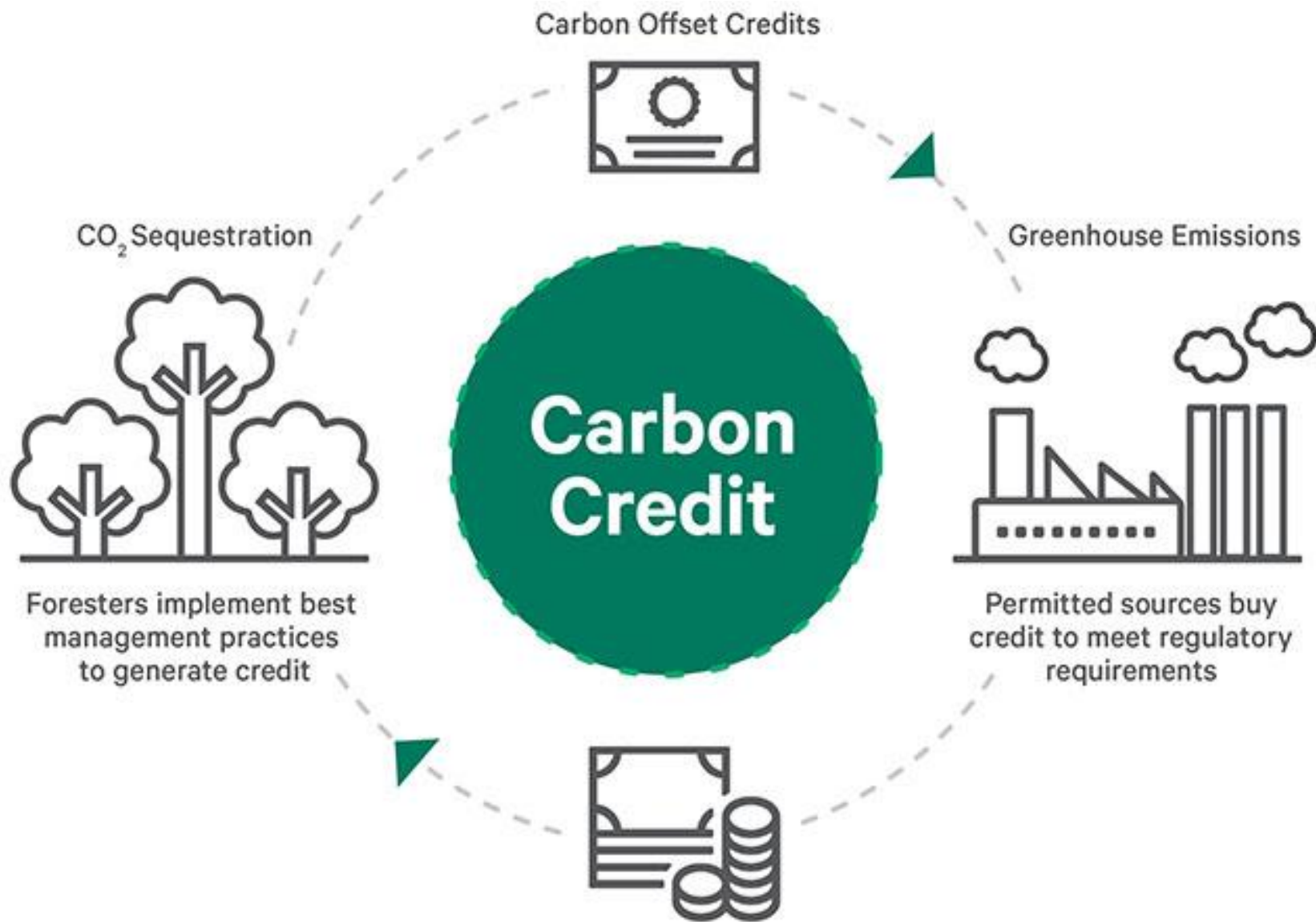
Climate mitigation potential and co-benefits of the different NCS pathways.
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Selling Timber vs. Selling Carbon

| Selling | Who Pays Landowner | For | That Go to |
|---------|---|--|--------------|
| Timber | Logger | Trees harvested | A mill |
| Carbon | Project Developer (TNC/AFF, NCX, Core Carbon, Forest Carbon Works) | Adjusting and/or limiting timber harvesting – increased carbon storage | An end buyer |

National and Corporate Commitments







Family Forest Carbon Program



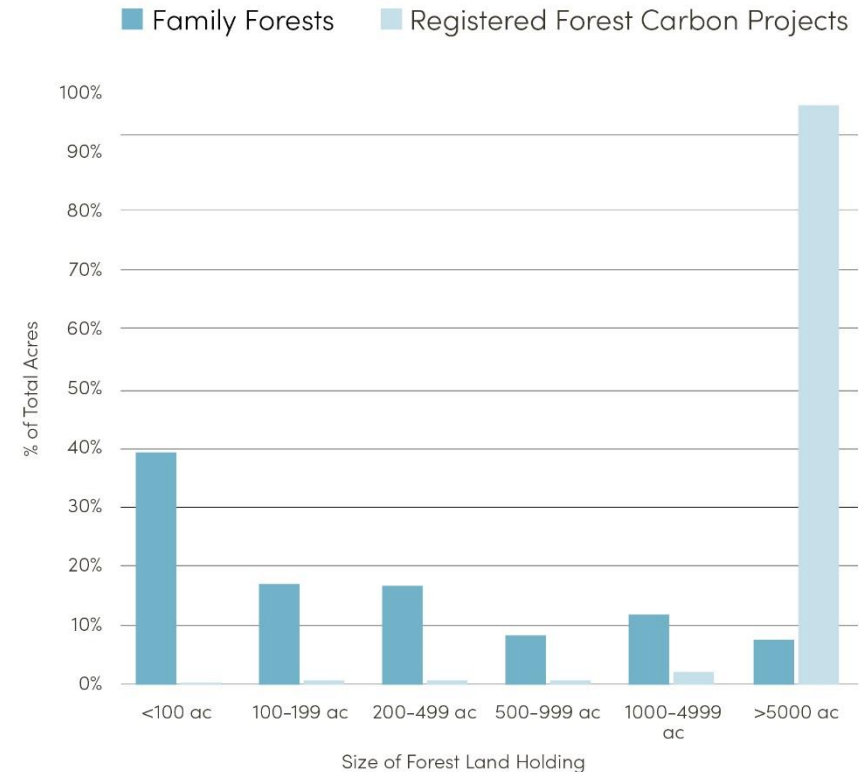
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Family Forest Carbon Program - Goals

A new carbon program from the American Forest Foundation and The Nature Conservancy that supports family forest owners in improving forest health and addressing climate change, by helping owners of small forest parcels access carbon market opportunities.

Overcoming Barriers to Market Access

- Markets create value in keeping forests as forests and keeping them healthy
- Yet, forest ownerships of less than 1,000 acres account for 80% of the **private acres** but represent **less than 1% of forest carbon projects**
- Why? Due to complexity, high cost to participate, 100-year contracts



The Family Forest Carbon Program

The landowner signs a 20-year contract, and receives payment (~\$200/acre) in exchange for transferring carbon ownership to the project developer for 20 years.

Landowner receives payment even if carbon market prices decline.

For Landowners



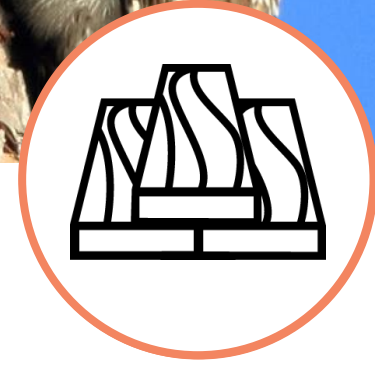
Funding

Provides **incentivizes to implement specific forest management practices** that have been scientifically enhance carbon sequestration.



Support

Connects enrollees with **natural resources professionals** to provide technical assistance during site visits and through forest management plans.



Sustainability

Balances **multiple benefits of forest management** including timber production, enhancing wildlife habitat, and protecting water resources.

Management Requirements

- Allow forest stand to mature by retaining highest quality trees
- Limited harvest or thinning allowed within sustainable guidelines
- Results in more valuable timber and improved habitat after 20 years

Requirements

- no more than 25% of the property area's basal area per acre being removed
- no more than a 10% reduction in the average stand diameter
- 50-ft buffer zones around water bodies

Technical Support from Forest Professionals

- Compatible with existing programs like EQIP, Ohio Tree Farm, *but not right for every landowner*
- Forest management plan (if needed) tailored to landowner's goals and program requirements
- Professional guidance for improving forest health



Carbon Accounting Rooted in High Integrity

- Created new forest carbon accounting methodology that increases accuracy and credibility.
 - Dynamic Baseline - approved by Verra's Verified Carbon Standard in 2022
- AFF and TNC remain committed to continual program improvement and refinement
- Carbon only sold to buyers that are already reducing emissions and have decarbonization plans





Enrolling Land in the Family Forest Carbon Program

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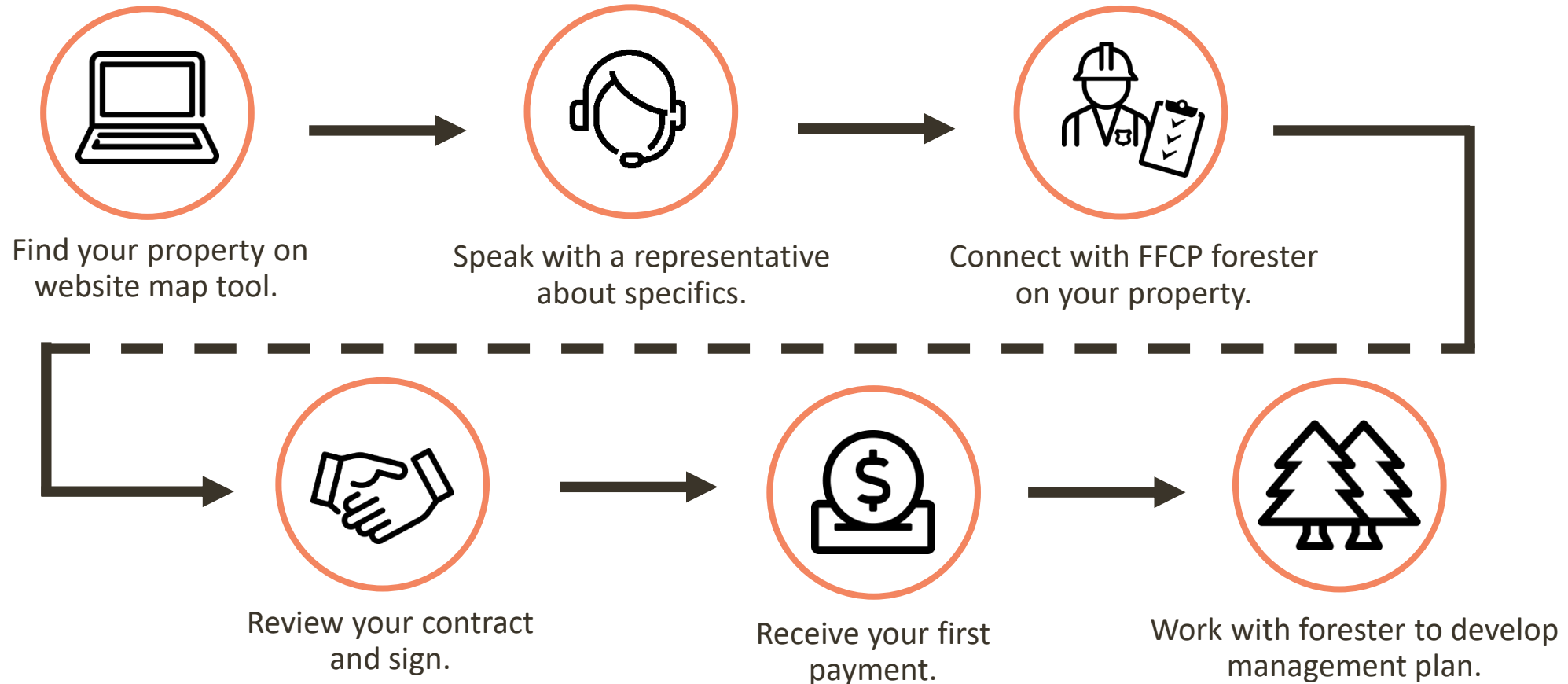
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Landowner Eligibility

- Private landowners with at least 30+ contiguous forested acres within an eligible county (Appalachian Plateau Region) **in early 2023**
- Forests originating from natural regeneration (plantations are ineligible)
- No existing legal restrictions on timber harvest activity (local ordinances, conservation easement, designated no harvest areas)



How to Enroll



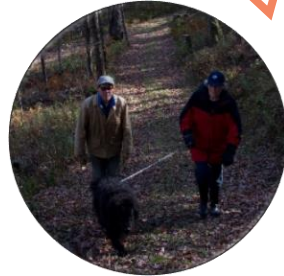
Get started at www.familyforestcarbon.org

What are landowners saying about the program?

"I'm finding the expertise and support I have needed."



"We would have had to cut more trees to pay our taxes and keep the land without this program."



"I wanted to be a good steward of the land, and this program is helping me do so."



"Our farm is our business, and we are finding our trees are a valuable asset."



Other Carbon Project Developers in Ohio

| Developer | contact | Notes |
|---------------------|--|--|
| NCX | www.ncx.com | 1 year contact, harvest deferral, |
| Forest Carbon Works | Forestcarbonworks.org | 100 year contracts, 40 acre minimum, harvest limits |
| Core Carbon | Corecarbon.com | 25 year contract, 40 acre minimum, not yet enrolling |

Questions to Ask

1. How long is the contract?
2. What can I do and what can't I do with my land while the contract is in place? If I have questions, who do I call?

Questions to Ask

3. What happens if I sell the land or transfer the land to my heirs before the end of the contract?
4. How much will I be paid, and what is the schedule of payments?



Questions to Ask

5. Will people need to come on my property? If so, how often, for how long, and what will they be doing?

6. What happens if there is a catastrophic event that kills trees on my land that is not my fault?



Questions to Ask

7. What happens if I am the victim of timber theft?
8. What happens if conditions change unexpectedly and I need to manage my forest in ways that violate the contract?



Questions to Ask

9. What happens if you (the project developer) or the carbon market goes away/goes bankrupt in the middle of my contract?



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Questions to Ask

10. If I enroll in this carbon project, can I later switch to a different carbon project with a different project developer?

Questions to Ask

11. What information (data) about my land will become public information? What will remain private? At the end of the project, what will happen to the public data/information? Can I take any additional steps to protect my privacy?

Questions? Interest in enrolling?

**Tom Rooney, Sustainable Forestry Director,
The Nature Conservancy - Ohio**

Tom.Rooney@tnc.org

Establish Baseline

Baseline established by matching enrolled plots to highly similar plots outside of program.



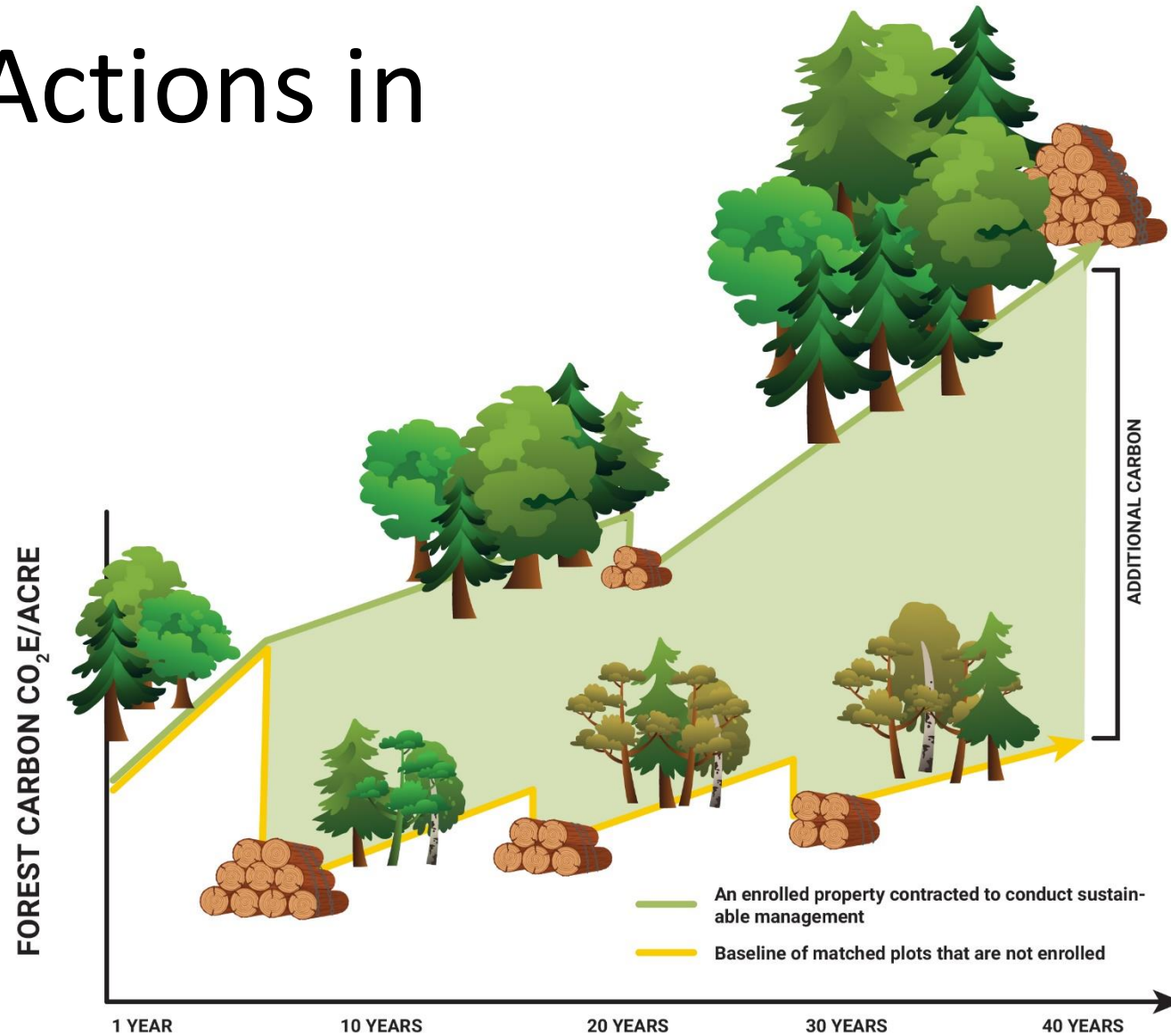
 = enrolled property  = enrolled property plots  = available plots  = matched plots used to form the baseline



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Compare Actions in Real Time

Carbon benefit calculated by comparing enrolled properties that are employing improved forest management to properties outside the program.



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Carbon Benefit of Program

Carbon benefit
calculated at a
landscape scale.

