



Tree Carbon Tape Instructions

Background

The carbon sequestration tape measures the size of a Douglas-fir tree and can help us estimate the volume of carbon dioxide that the tree has sequestered.

Trees are great at pulling carbon dioxide (CO₂) out of the air – *sequestering* CO₂ - and *storing* or locking up that carbon by turning it into building blocks for wood. Human activities, like burning fossil fuels, release CO₂ into our planet's atmosphere. Through photosynthesis, the leaves and needles of growing trees absorb atmospheric carbon dioxide. The captured carbon fuels the tree's growth and helps build wood, while the oxygen is released back into the atmosphere. Even more exciting – that captured carbon remains locked up in the wood after the tree is harvested and turned into durable wood products. That means that trees in forests, as well as finished forest products, are important carbon storage tools. There are 700-year-old buildings in Europe whose wood is still storing the carbon it sequestered centuries ago!

How to use this carbon tape:

Wrap the tape around a Douglas-fir tree at about chest height. Hold the Port Blakely logo with the “start” arrow against the tree, and wrap the rest of the tape around the circumference of the tree until the tape overlaps itself, crossing over the “start” arrow/line. The color bar it falls within will tell you the diameter of the tree, along with its estimated carbon sequestration potential. The emission facts on the tape are based on the volume of carbon that could be stored *in a Douglas-fir tree that size*. The bigger the tree, the more carbon stored!

User guidelines: this item is for instructional purposes only, and should be used to measure the diameter of a tree for use in calculating the carbon content of the tree.

Resource for learning about trees capturing carbon

Forest Fact Break – Carbon Capture: https://www.youtube.com/watch?v=D_rRg9MPIOU

Forests Carbon and Climate Change: <https://oregonforests.org/carbon>

Carbon: <https://oregonloggers.org/page/Carbon>

Fighting Climate Change: <https://www.arborday.org/fighting-climate-change>