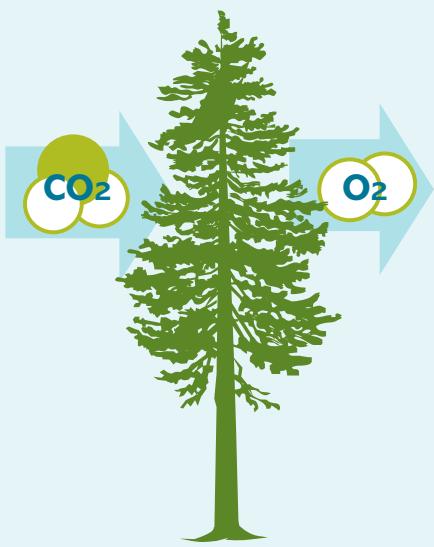


# HOW ARE FORESTS, CARBON AND CLIMATE CHANGE RELATED?

Increased amounts of carbon dioxide in the atmosphere result in warmer global temperatures. Carbon dioxide, a greenhouse gas, is released through natural events such as volcanic eruptions and forest fires. But human activities such as burning fossil fuels are a major contributor to climate change, which has led to melting polar ice caps, rising sea levels, extreme weather and worsening wildfire seasons, among other effects. By capturing and storing carbon, forests, as well as the wood products sourced from them, can help mitigate the impacts of climate change.

**Trees and wood products store carbon and reduce its presence in the atmosphere.**



## TREES USE ATMOSPHERIC CARBON TO GROW

Through the process of photosynthesis, trees absorb carbon dioxide and reduce its presence in the atmosphere. As trees grow, they turn water, sunlight and atmospheric carbon dioxide into wood and release oxygen as a byproduct. This means forests store significant amounts of carbon, sequestering it from the atmosphere.

## WOOD PRODUCTS STORE CARBON LONG-TERM

When a tree is harvested and milled into lumber or plywood and used to build a house, cabinetry or furniture, the wood continues to store the carbon that was sequestered by the tree. So, the carbon remains stored outside the atmosphere for as long as the wood product is in use.

## FOREST FIRES AND CLIMATE

In many parts of Oregon, decades of fire suppression and other management decisions have led to dense, overstocked forests. These forests are more vulnerable to large, high-severity wildfires that release large amounts of stored carbon into the atmosphere, and this vulnerability to catastrophic fires is made even worse by climate change.

## RETAINING FORESTS IS IMPORTANT

Keeping forestland in forest uses is crucial to capturing and storing atmospheric carbon in the future. Oregon's land use and forestry laws have helped keep forests as forests across the state, preserving their important role in fighting climate change.

### About the Oregon Forest Resources Institute

The Oregon Forest Resources Institute supports the forest sector and the stewardship of natural resources by advancing Oregonians' understanding of the social, environmental and economic benefits of our forests.

Learn more at  
[OregonForests.org](http://OregonForests.org)



## FORESTRY CAN REDUCE ATMOSPHERIC CARBON

Thinning forests for fire resilience.



Retaining forestland by preventing its conversion to other land uses.



Using wood products instead of alternative carbon-intensive materials.



Planting and growing healthy forests.



Allowing trees to grow to peak carbon-storage age before harvesting



**Oregon Forest Resources Institute**