

ROADS TO REMOVAL | FORESTS

OPTIONS FOR CARBON DIOXIDE REMOVAL IN THE UNITED STATES

Forests and Carbon Management

- Forests capture and store carbon dioxide through photosynthesis and plant growth.
- Climate change stressors like droughts, fires, and disease decrease forests' carbon-absorbing capacity. Without intervention, forests in the United States may capture a third less carbon by 2050.
- Targeted forest management can increase the CO₂ storage capacity of forests while maintaining other critical services like providing habitat for biodiversity, cleaning air and water, and providing fuel and fiber products for humans.

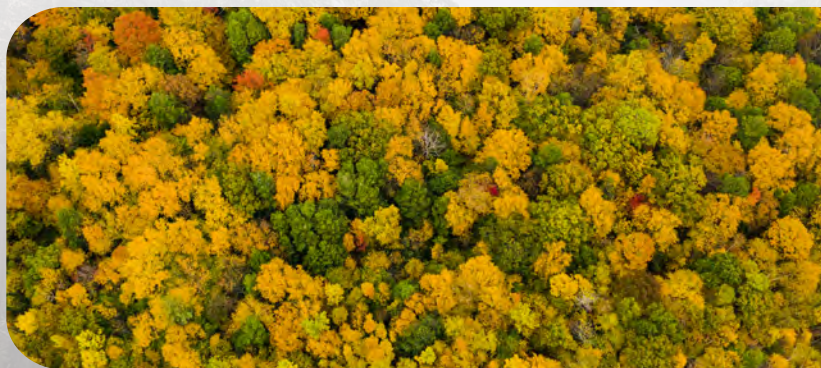
“Forests are a critical part of our nation’s carbon budget. [They] are living carbon capture machines that remove carbon dioxide from the atmosphere and store that carbon in a long-lived, ecologically active pool.”

Dr. Sara Kuebbing
*Lead Author, Forest Management
Yale School of the Environment*

Roads to Removal uses three case studies to explore the potential for increasing CO₂ removal in forests in the United States:

Western US

Fire-resilience forest management of ~1.2 million acres of dry forests near human settlements in the West could reduce wildfire risk, abating up to **16 million metric tonnes** of CO₂-equivalent between 2025-2050 while helping protect homes, communities, and habitats.



Southern New England

Sustainable harvest and regeneration-focused forest management of ~6.4 million acres of hardwood forests in southern New England could abate up to **68 million metric tonnes** of CO₂-equivalent between 2025-2050, and reduce forest susceptibility to drought, wind, pests, and disease.

Southeast US

Planting 5.2 million acres of new pine forests in the Southeast could remove **1.5 to 1.8 billion metric tonnes** of CO₂-equivalent from the atmosphere between 2025-2050, while potentially providing a source of revenue to landowners.



Every region has a story. Every region has an opportunity.

To learn more about each carbon dioxide removal pathway, go to **Roads2Removal.org**