CARBON CAPTURE **TECHNOLOGY AND** NATURAL CLIMATE SOLUTIONS



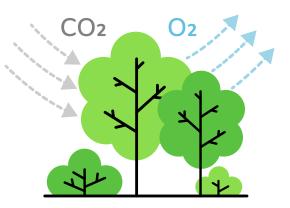
The role of the forest and wood products sector.

What is Carbon **Dioxide Removal?**



any activity that takes carbon dioxide (CO2) out of the atmosphere.

Natural CO2 **Removal Processes**



- Photosynthesis
- Adding biomass to soil
- Absorption by oceans

24 Gt CO2/year

Mechanical / Chemical CO2 Removal Methodologies



- Greenhouse gases captured at the emission source or from ambient air
- Carbon dioxide stored underground or utilized

Est. 20 Gt CO2/year by 2100*

Forest and Wood Products Sector's role:

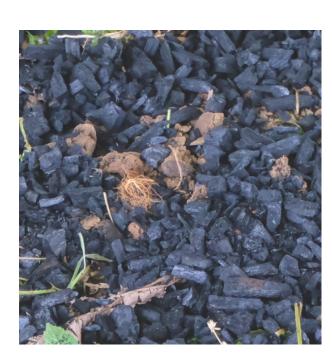
plays several important roles in both <u>natural</u> and <u>engineered</u> CDR processes

CO2 avoidance, removal and storage:



- Avoided forest conversion
- Management to reduce wildfire and increase sequestration
- Reforestation
- Bio-based products replacing fossil fuel based products
- Mass-timber in place of steel and concrete
- Biochar as soil amendment

Industrial decarbonization



- Substitution of low-carbon fuels, feedstocks and energy sources (LCFFES)
- Carbon-storing biochar used in concrete, wallboard, plastic and asphalt
- Bioenergy, biofuels, and bioenergy with carbon capture and storage (BECCS)

Co-Benefits of Natural Climate Solutions:









Improved Air Quality



Flood Control



Recreation Opportunities



^{*}engineered carbon removal methodologies are still under development and/or not fully to scale