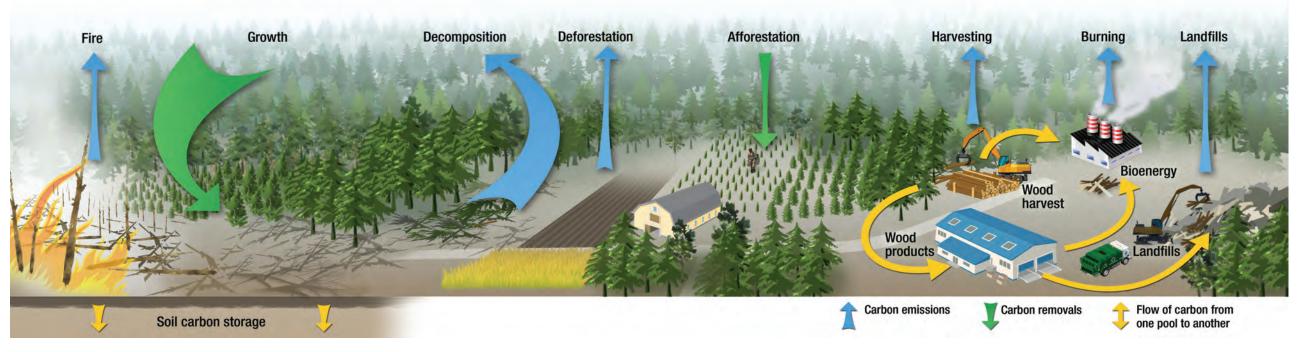
What role do forests play in the carbon cycle?

The "carbon cycle" is the movement of carbon from land and water through the atmosphere and all living things. Carbon in the atmosphere exists as CO_2 , a greenhouse gas (GHG). Trees absorb carbon during photosynthesis and store it in their stems, branches and roots, removing large amounts of carbon from the atmosphere. A large proportion of this stored carbon also ends up in forest soil through natural processes such as annual leaf fall and tree death.



Trees release carbon back into the atmosphere during respiration, when they die and decay, and if they are burned in a forest fire. This dynamic process of absorbing and releasing carbon constantly affects Earth's carbon balance.

Forests are considered to be "carbon sinks" when they absorb more carbon than they release; and "carbon sources" when they release more carbon than they absorb. How humans manage forests and use wood also affects this balance.

