

# FORESTS CARBON CYCLE GROW. HARVEST. STORE...

**LEGEND**

- █ Capturing Carbon
- █ Releasing Carbon
- █ Moving carbon

The use of sustainably harvested forest biomass to generate renewable energy permanently eliminates atmospheric emissions that would otherwise have resulted from use of fossil fuels

**PHOTOSYNTHESIS**  
CO<sub>2</sub> is sequestered

Estimated 10.5 billion tonnes of carbon (excluding soil carbon) in Australian forests

**FOSSIL FUELS**

Wood products typically require less energy to make than alternative materials. Because energy rating schemes and environmental assessments are typically not based on full-life-cycle assessments, the comparative environmental advantages of sustainably harvested wood are not fully recognised

**ENERGY**

Net carbon emissions from bush fires are reduced through undertaking prescribed burns

Animal's excretion

Litter and other forest biomass

**PRESCRIBED BURNING**

**LITTER LAYER**

**TIMBER HARVESTING**

**TIMBER PROCESSING**

**TIMBER PRODUCTS**

**RECYCLING**

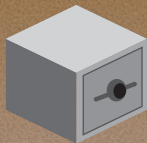
**DISPOSAL**

Decomposition respiration

Soil organic matter

In Australia wood products store an estimated 230 million tonnes of carbon, helping to mitigate climate change

Timber products in landfill represent an important long term store of carbon (estimated 70,000 tonnes per year in Australia)



Carbon store

