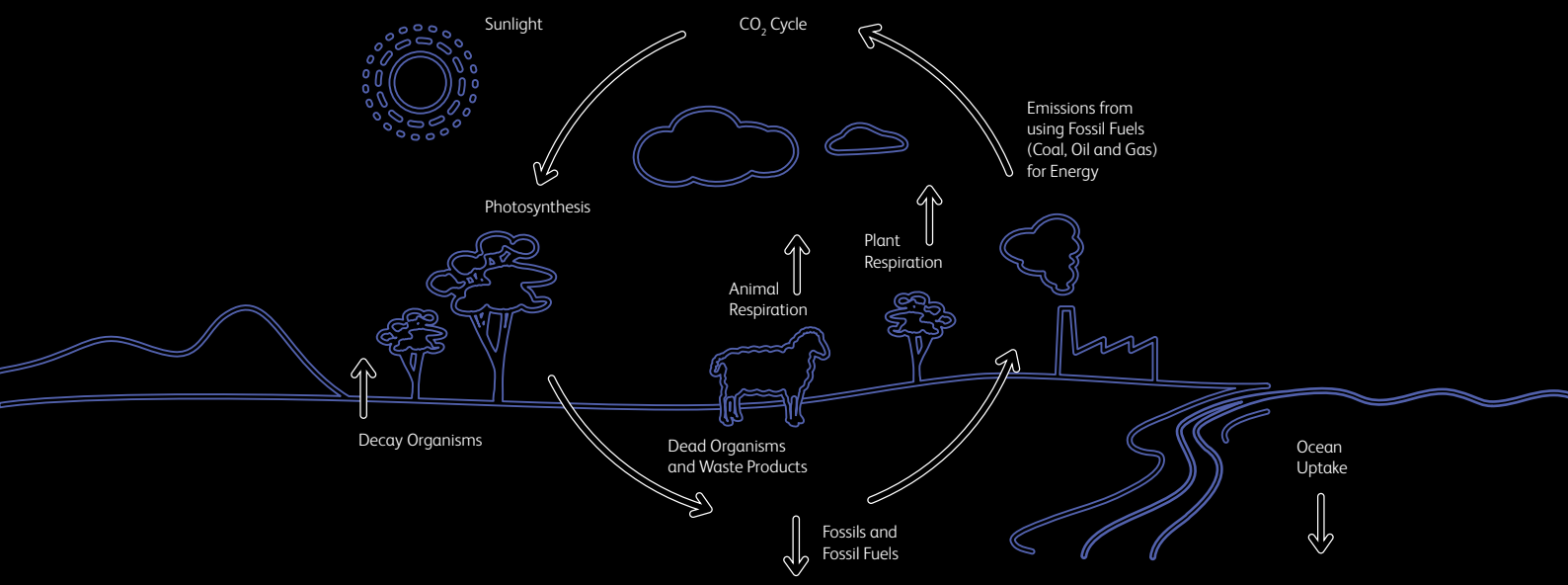
Carbon

A tree is a column of carbon – as it grows, it captures carbon from the atmosphere and locks it away in its trunk, branches, roots and leaves.



The Carbon Cycle

The Earth is a planet of carbon-based lifeforms – the element carbon is the basis of all life on this planet, because carbon atoms can bind with each other and with other atoms, forming the complex molecules that are the building blocks of all living things.

Carbon moves through the global environment in a never-ending process of recycling.

All green plants take carbon from the atmosphere, processing it with water and sunlight to create molecules that store energy and molecules that become the building blocks of wood, bark, roots and leaves as the plant grows.

As they grow, plants release oxygen and store carbon. Huge amounts of carbon are stored in the world's 'carbon sinks' – forests, oceans and soil; and in reserves of coal, oil and gas.

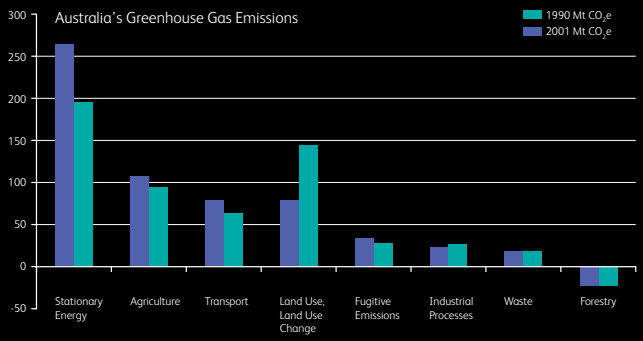
Plant-eating animals take in carbon as food (flesh-eaters get it from the plant-eating animals they consume). As animals breathe, and when their bodies decay, carbon dioxide returns to the atmosphere.

Carbon is also released when fossil fuels (oil, gas and goal) are burned; and through volcanic activity.

The burning of these fuels to power industry and generate electricity is the main factor in the phenomenon of global warming, which is the result of increasing concentrations of greenhouse gases, including carbon dioxide, in the Earth's atmosphere. Increasing levels of greenhouse gases are widely believed to be a factor in global warming and climate change.

That's why the role of forests is so important in the fight against global warming – the carbon they capture in the trees and in the soil stays out of the atmosphere.

When trees are harvested and processed into timber products or paper, carbon continues to be stored – often, long after the forest stops growing.



Source: Australian Greenhouse Office, 2001

Carbon Capture In Forests

Australia's forest industries store more carbon than they emit. That's partly because wood products such as timber framing, building cladding and furniture lock away carbon for a long time; and also because the young forests that flourish when they are regenerated after harvesting absorb large amounts of carbon. It's true that harvesting operations and timber processing are activities that release carbon – but this is more than balanced by the carbon that is stored by well-planned, sustainable forestry practices.

Forest Education Foundation
The stories behind our trees

79 Melville Street
Hobart Tasmania
Australia 7000

Phone: 03 6235 8240
Email: info@forest-education.com
Web: www.forest-education.com