



SOURCE

Industrial processes powered by coal, oil, or natural gas **release CO₂**.

© Sally Ride Science

SOURCE

Deforestation leads to **greater concentrations of CO₂** in the atmosphere.

© Sally Ride Science

SOURCE

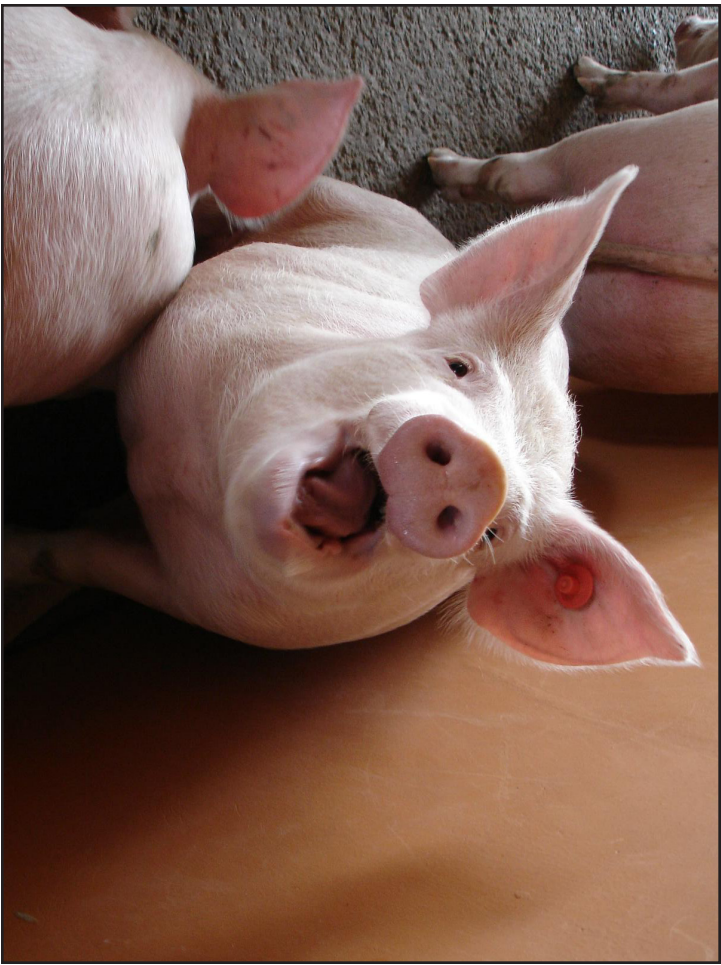
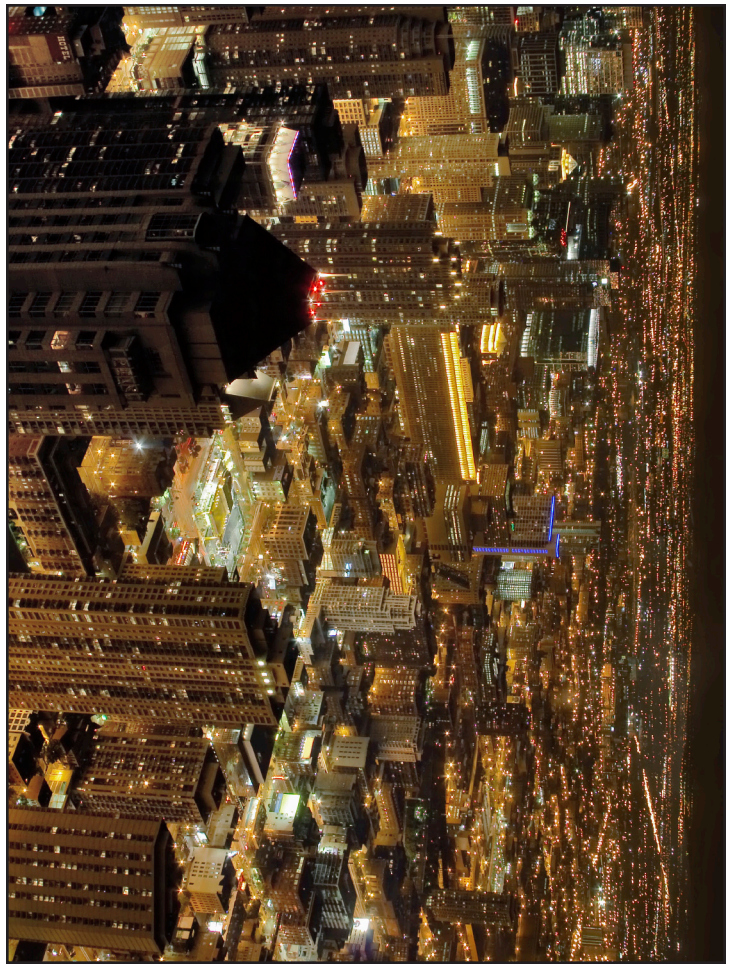
Gasoline is made from oil and **releases CO₂** when it is burned.

© Sally Ride Science

SOURCE

Burning organic matter, like wood, **releases CO₂**.

© Sally Ride Science



SOURCE

As once-living things decay,
CO₂ is released.

© Sally Ride Science

SOURCE

Burning fossil fuels, a process
that **releases CO₂**, produces
most electricity.

© Sally Ride Science

SOURCE

Animals **release CO₂**
when they exhale.

© Sally Ride Science

SOURCE

Volcanoes **release CO₂**
when they erupt.

© Sally Ride Science



SOURCE

Fossil fuels are burned both to grow and transport food to stores.

This **releases CO₂**.

© Sally Ride Science

SOURCE

Heating and air conditioning use fossil fuel-based energy.

Burning fossil fuels **releases CO₂**.

© Sally Ride Science

SINK

Plants **use CO₂** from the air to make carbon-based food for growth during photosynthesis.

© Sally Ride Science

SOURCE

Appliances use electricity, most of which is produced by burning fossil fuels.

This **releases CO₂**.

© Sally Ride Science

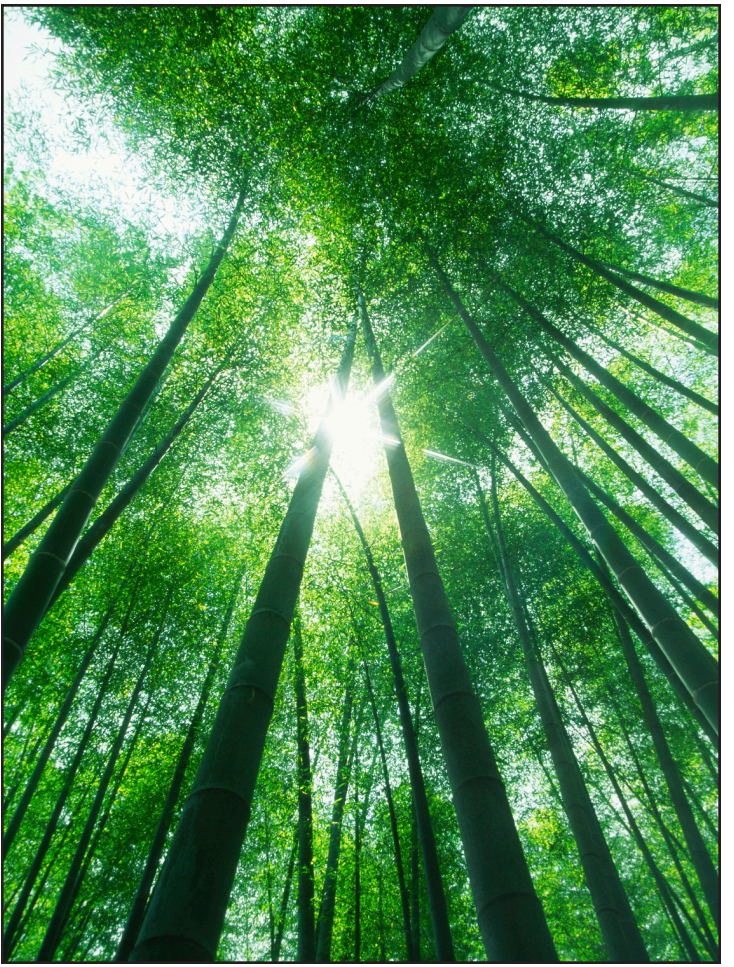
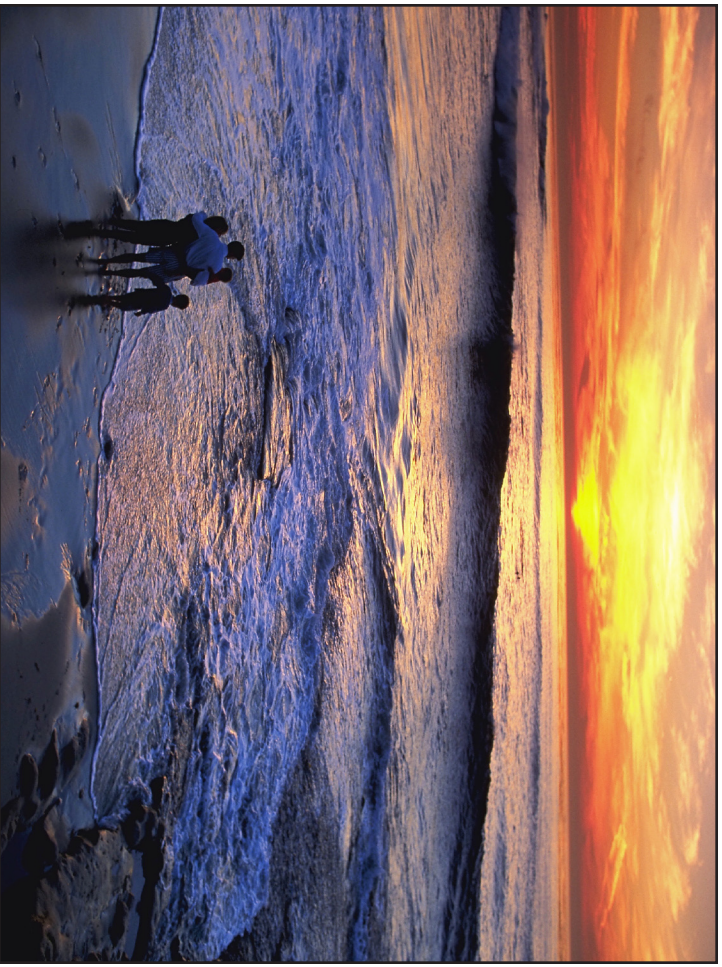


image credit: Shane Anderson



SINK

Phytoplankton in oceans and lakes **use CO₂** dissolved in the water to conduct photosynthesis.

© Sally Ride Science

SINK

Trees **absorb CO₂** from the atmosphere during photosynthesis.

© Sally Ride Science

SINK

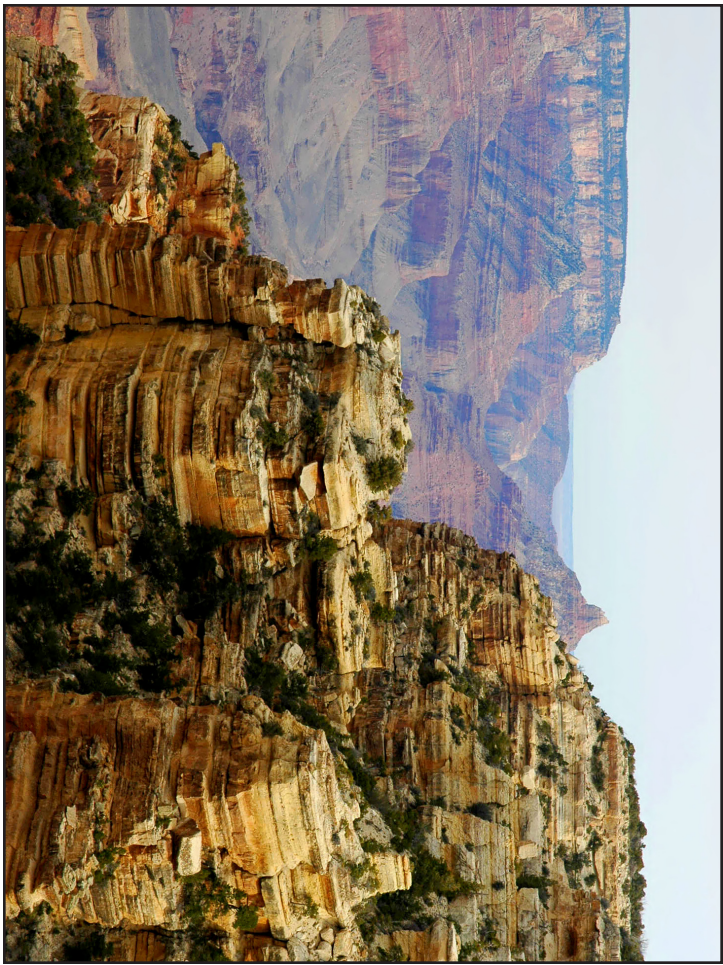
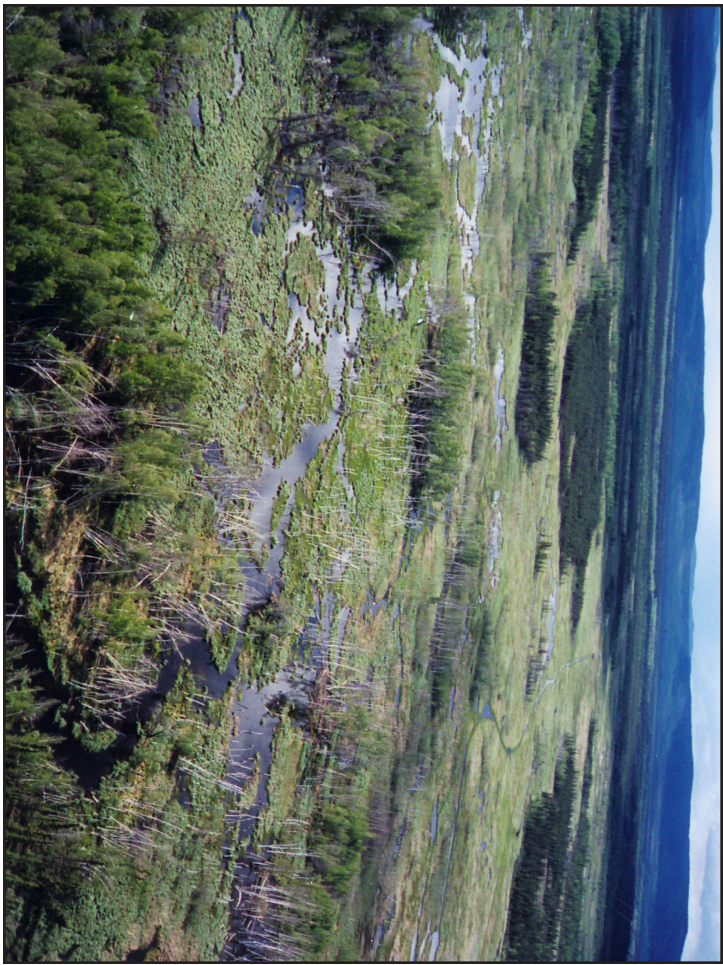
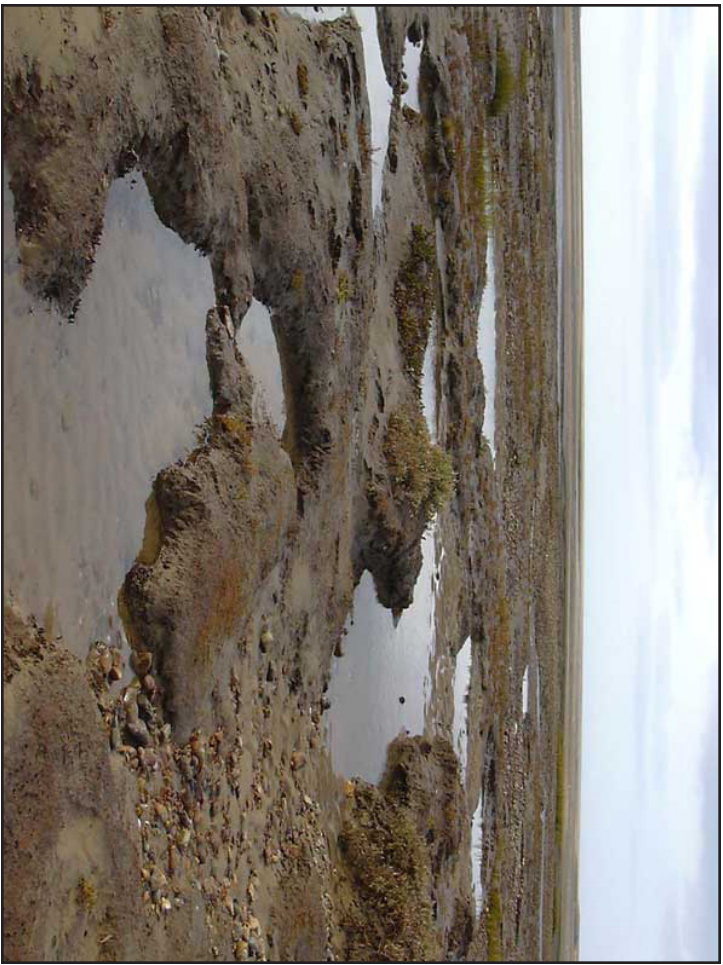
Oceans **absorb CO₂** directly from the atmosphere.

© Sally Ride Science

SINK

Reef-building corals **use carbonate made from CO₂** dissolved in seawater to make their exoskeletons.

© Sally Ride Science



SINK

Carbon is **fixed into rocks** over millions of years through organic processes on land and on the seafloor.

© Sally Ride Science

SINK

Organic matter builds up at the bottom of ponds providing **long-term storage of carbon**.

© Sally Ride Science

SINK

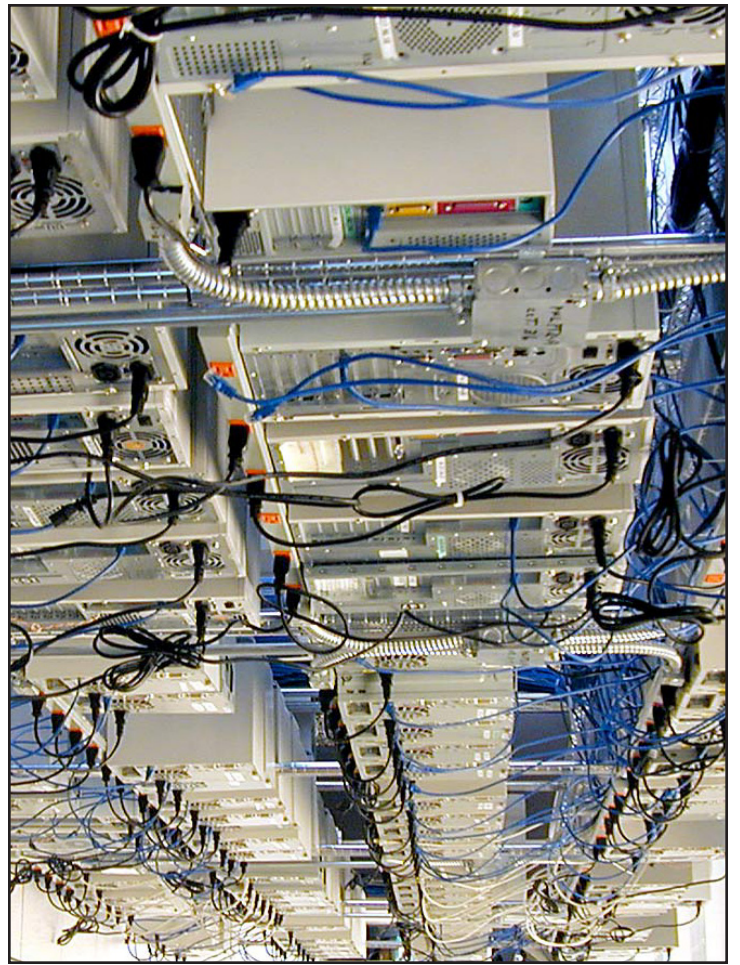
Many marine organisms **extract CO₂** from the ocean to build shells.

© Sally Ride Science

SINK

Peat lands **absorb CO₂ from the air and store carbon** from decaying plants and other organisms.

© Sally Ride Science



SOURCE

Diesel fuel is made from oil and **releases CO₂** when burned.

© Sally Ride Science

SOURCE

Burning fossil fuels produces most of the energy that powers our electrical devices.
This **releases CO₂**.

© Sally Ride Science

SINK

Soil **traps carbon left behind after plants decay and can lock it away** from the atmosphere for thousands of years.

© Sally Ride Science

SURPRISE

Wind-powered energy generation is “carbon neutral,” neither a source nor a sink.
No CO₂ is produced or consumed.

© Sally Ride Science