THE OCEANS IN BALANCE

Global distribution of blue carbon ecosystems

mangroves
sea grass
salt marsh

Blue carbon is the term for carbon captured by the world's ocean and coastal ecosystems. Sea grasses, mangroves, and salt marshes along our coast "capture and hold" carbon, acting as something called a carbon sink. This removes it from the atmosphere and thus provides a natural way of reducing the impact of greenhouse gases.

These coastal systems, though much smaller in size than the planet's forests, sequester carbon at a much faster rate, and can continue to do so for millions of years. Most of the carbon taken up by these ecosystems is stored below ground where we can't see it, but it is still there. The carbon found in coastal soil is often thousands of years old!

When coastal habitats are damaged, an enormous amount of carbon is emitted back into the atmosphere, where it can then contribute to climate change. So protecting and restoring coastal habitats is a good way to reduce climate change.

Coastal sinks

Coastal ecosystems like mangroves, salt marshes and seagrasses play a vital role in carbon storage and sequestration. Per unit of area, they sequester carbon faster and far more efficiently than terrestrial forests. When these ecosystems are degraded, lost or converted, massive amounts of CO_2 – an estimated 0.15–1.02 billion tons every year – are released into the atmosphere or ocean, accounting for up to 19% of global carbon emissions from deforestation.

Seagrass

500 square metres of Seagrass can sequester 40kg of carbon
The amount emitted by a car driving from Edinburgh to New Delhi

Mangroves

500 square metres of Mangrove can sequester 80kg of carbon.
The amount emitted travelling by train from Edinburgh to Barcelona.

Salt marsh

500 square metres of Salt marsh can sequester 90kg of carbon
The amount emitted by a flight from Edinburgh to London.

SAVE OUR SEAS