<https://www.coolearth.org/cool-earth-carbon/>

Cool Earth and Climate Change Mitigation

Earth’s climate is changing as never before. We are now experiencing the unprecedented breakdown of a stable climate that is vital to life as we know it.

Climate change is already having an impact on lives around the world, particularly on those least able to adapt. Droughts are becoming more frequent and severe, rainforest is at risk, and wildlife is threatened due to a changing climate.

As the climate and natural world become unstable, so does our way of life.

The average global temperature is 1°C warmer than it was before the industrial revolution. In the Paris Agreement in 2015, nearly 200 countries agreed to prevent that increase going above 1.5°C. We’re heading rapidly towards that limit.

Scientists repeatedly warn of the impact if average global temperatures do increase beyond that 1.5°C limit.

There is still time to take action. We need to act now to make a difference. Keeping rainforest standing is the smartest climate action there is.

Protecting rainforest is one of the most effective actions we can take to tackle climate breakdown.

Deforestation releases as much carbon into the atmosphere as the global transport sector. It also destroys the best natural carbon capture and storage technology we have; forests.

It is also an essential one. The Intergovernmental Panel on Climate Change (IPCC) regard reducing rainforest loss to be a priority if emissions are to be halved by 2030 and global heating is to be kept below 1.5℃.

Cool Earth was created to develop the best ways of working alongside rainforest communities to address multiple drivers of deforestation.

Mitigating carbon emissions from deforestation is therefore central to our mission and by supporting Cool Earth you are supporting innovation in rainforest protection and emissions reduction.

This does not earn you a carbon credit or an offset because neither Cool Earth nor our partners participate in carbon trading. Rainforest protection is too complex and too important to fit rules designed for solar lanterns and flight offsets. We explain this in more detail below.

Building sustainable partnerships to halt destruction is nonetheless key to cutting emissions. So whether you are an individual, a business or a foundation, Cool Earth provides you with everything from satellite data to personal testimony to understand the good you’re investing in.

Supporting Cool Earth earns you a place alongside those who believe rainforest is best protected by the people who live there and best done hand in hand with clear sustainable development goals.

For those supporters who are focused on emission reductions from rainforest protection, Cool Earth has developed a dedicated fund. If you are a business, [click here](https://www.coolearth.org/2019/05/cool-earth-sdg-fund/) for more information about our Sustainable Development Goal Fund.

## **Role of rainforest as a carbon store.**

*Preserving rainforest is the most effective climate action anyone can take. The people best placed to protect rainforest are those that depend on it.*

Carbon capture is an experimental technology that aims to trap atmospheric carbon, reduce concentrations of planet heating CO2 and contribute to the fight against climate change.

This sequestration technology already exists as trees. They remove carbon from the atmosphere and store it in their trunks, roots and canopy. Tropical forests have the highest carbon density of all forest types, with an ability for vast carbon capture storage.

.

Alongside carbon storage, forests also provide many ecosystem services ranging from local livelihoods to food, water, health and the maintenance of biological diversity.

But it is being lost at an alarming rate and so this carbon store is becoming a carbon source. Research shows that 8% of all global emissions are from tropical deforestation alone, but that these same forests can provide 23% of the cost-effective climate mitigation needed before 2030.

If large scale action is not taken to protect rainforest over the coming decade critical thresholds will be breached that have kept the world habitable, the [Hothouse Earth](https://www.coolearth.org/2018/08/hothouse-earth/) effect.

If counted as a single entity, deforestation ranks as the third largest emitter of greenhouse gasses behind the US and China. From agriculture to urban expansion, there are an increasing number of varied and complex threats that are leading to large-scale forest loss. However, half of deforestation in tropical areas is caused by informal, small-scale livelihood activities such as shifting cultivation and slash and burn.

This is what Cool Earth is working to address. By partnering with rainforest communities, we will learn the best ways of addressing these threats and share this knowledge around the globe.