# Carbon Offsetting policy (2021-2030)



# Why care about carbon?

Our collective failure to reduce the level of atmospheric carbon is a major driver of global warming, and without massive changes we are headed towards the collapse of systems that support life on earth. Those changes include both reducing emissions and sequestering carbon. In recognition of this businesses are taking action to reduce and offset emissions.

#### All our projects sequestrate carbon

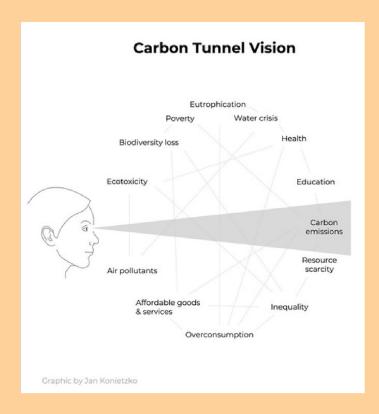
RAIN projects can support your business to reduce and offset your emissions. As trees grow much faster in tropical regions, planting in Brazil absorbs carbon faster than in the UK and most other biomes.

The A of RAIN is 'agroforestry', a style of agriculture where trees and other diverse species are planted together to support each other, with each contributing in their own way: by fixing nitrogen, providing shade or protection from the wind, attracting pest predators, organic material to break down into topsoil etc. This man-made forest is heavily pruned to keep it in a high growth phase, rapidly building up the carbon content of the soil. It also provides wider benefits to the community

#### Beyond carbon

Forests are much more than carbon stores. They are complex beyond our understanding, dynamic systems that bind together the fates of millions of species, many of which are yet to be discovered. To survive and thrive in an uncertain future, we must respect the web of life and our place in it.





Simply reducing CO2 levels will not solve our problems. In fact, we believe that this simplistic focus on measurable outcomes led us into our environmental catastrophe in the first place. Human activity has degraded every aspect of natural systems: our rivers, biodiversity, the balance of our atmosphere.

Humans are clearly powerful ecosystem engineers; we believe that we can engineer things in a positive direction rather, to regenerate our beautiful world, and that businesses are an integral part of this movement.

Our projects bring benefits that cascade through the system by working with frontline communities to restore springs and forests, provide agroforestry training, build sustainable systems in the slums, among other things. In the socio-economic sphere, this leads to better food security, community cohesion and economic security, while also supporting biodiversity, hydrological systems, soil health and flood mitigation. We believe that well considered interventions generate abundance all through the system, from organic content of the soil to trade in the local market. All the ideas and skills are already there, waiting for the resources to bring our shared dreams to life.

# RAIN's carbon offsetting methodology

Carbon offsetting, whether certified or not, is an imprecise science. Many factors influence the carbon capture potential of a project, including the variety of species, the region and climate, previous land use and rainfall in a given year. Sequestration rates vary considerably:

| Example                                     | C02 tons/yr |
|---|-------------|
| Hectare of oak trees<br>(800 in the UK)     | 2.8         |
| Hectare of pernambuco trees (800 in Brazil) | 4.8         |
| Hectare of agroforestry in Brazil           | 50          |

For each project, we take into account the climate of the region, tree species and their predicted growth pattern, previous land use and intervention type (e.g. agroecology or wild habitat). We make conservative estimations on success rates, survivability and CO2 sequestered based on the best data available. Our partners can feel confident that our projects are delivering as promised, and we are always happy to talk through our calculations.

For example, most trees grow fastest between 10 to 35 years of age, depending on the species. We undertake C02 projections up to 20 years into the future, meaning that the trees will offset far more than what is accounted for. For simplicity, RAIN uses an annual average rate taken over a 20-year period, even though the growth rate of trees will vary depending on the type of tree and age.



For every £100 invested in RAIN projects RAIN will on average plant 60 trees. These 60 trees will have an annual sequestration rate of 0.36 tons of C02 per annum. This means for every year that passes, more carbon is sequestered. For 60 trees:

| Years       | 1    | 5   | 10  | 20  |
|-------------|------|-----|-----|-----|
| Tons of C02 | 0.36 | 1.8 | 3.6 | 7.2 |

# Limitations of offsetting schemes

Many businesses refer to their offsetting programs and claim that they have achieved carbon neutrality based on sequestration that will happen in the future; in our case we calculate CO2 sequestration data for up to 20 years. The maths works out over time, and eventually the gasses produced and absorbed will balance (assuming the trees grow to maturity); but this model is severely limited. For example, a business producing 7 tons of CO2 in a year can plant 60 trees to sequestrate it, but the CO2 will not be stored until 20 years have passed. In the meantime those gasses contribute to global warming.

We encourage our corporate partners to do as much as they can to reduce their emissions now, and we advise them on strategies to do so. We can also calculate sequestration rates over shorter periods. For many businesses this is not such a great burden, even if the time period is as short as a year or two, as the cost of sequestration is minimal compared to other costs of doing business. In the final calculation, such business will be massively carbon negative rather than natural. Furthermore, consumers who are increasingly wise to the limitations of the carbon economy will appreciate the honesty and genuine efforts made to mitigate and reverse the impacts of their business practices.



Another factor that cannot be ignored is the impacts of an uncertain climate. For example, BP purchased \$100million of carbon credits in the Colville forest, but that didn't stop a forest fire from causing considerable damage, and nor did the fact that the project was overseen by a well established regulatory body.



We believe that better security is offered by working with communities that are invested in the survival of their tree plantations because they make marked improvements on their lives in social and economic as well as environmental terms. The best example of this is agroforestry, where intensively managed land employs people and provides food, while maximizing moisture in the soil and the plantation, cooling the earth, and removing one of the chief factors that make fires more likely - the dead and dry organic matter that builds up and provides fuel. In a study of wildfires in France, Spain, Italy, Portugal, Greece and Cyprus "the lowest proportion of fires (ranging from 0 to 12.5%) occurred in agroforestry points in all countries, except Greece where the proportion of fires was lowest in forest areas... The highest numbers of fires occurred in shrubland (40.6%) and forest (37.1%)"

Though we are working towards it, RAIN cannot at present offer oversight by a regulatory scheme. Our projects are designed to distribute tens of thousands of trees to hundreds of smallholder farmers and restoration projects, rather than plant swathes of trees in one area that can be easily monitored. We are developing our monitoring systems, and are happy to discuss our progress in the area with corporate partners.

### Greenwashing and how to do better

As most businesspeople are aware, greenwashing is very common. Green credentials can bring massive branding and marketing benefits to an organisation, and organisations seeking to identify opportunities to market themselves as green without any serious reflection or commitment to greening their business practices. For people serious about sustainable business, ecology is not a marketing strategy. It is the foundation upon which everything we care about rests.

It is important to us that the organisations with whom we choose to partner demonstrate that they are taking sincere steps towards developing and progressing sustainability and environmental strategy. In practice, this means working towards or undertaking to reduce NET CO2, energy consumption, water, waste and materials.

At RAIN, we are happy to partner with organisations taking their first steps on this journey or those with a maturing history. You just need to be committed to (and over time, to demonstrate) meaningful material change. Contact RAIN for a chat about how you can both meet your carbon sequestration goals and support food security, biodiversity, hydrology of local environments in Brazil.

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