# NET ZERO THE BOTTON LINE

## How effective is Carbon Offsetting through Planting Trees

Carbon offsetting is a way to reduce your carbon footprint by compensating for your emissions. One way to do this is by investing in renewable energy sources, increasing energy efficiency, and planting trees. Trees absorb carbon dioxide from the atmosphere and convert it into oxygen, helping to combat climate change and reduce  $CO_2$  from the atmosphere.



Though this may seem like a good idea at first glance as you're removing CO2 from our atmosphere and replacing them with oxygen-producing vegetation – in reality, there are some concerns worth mentioning here.

#### WHY USE CARBON OFFSETS?

As a business, you understand the importance of reducing your carbon footprint and doing your part to protect the environment. Carbon offsetting is one way to reduce your impact and become carbon neutral. Carbon offsets are a voluntary way to compensate for your emissions by investing in projects that reduce greenhouse gases. By offsetting your emissions, you can help to cancel out the environmental impact of your business activities. There are many reasons to consider carbon offsetting for your business. First, it's a great way to show your customers and clients that you're committed to sustainability. Second, it can help you save money on energy costs by reducing your reliance on fossil fuels. And finally, it can give you a competitive edge in today's economy.

So, if you're looking for a way to reduce your carbon footprint and become more sustainable, carbon offsetting is worth considering. Just be sure to do your research and choose a reputable offset provider.

#### HOW MUCH CARBON DO TREES ABSORB AND STORE?

Trees play an important role in the global carbon cycle and are estimated to be responsible for approximately one-third of the total carbon uptake by land plants. In a single year, an average tree can absorb up to 48 pounds (21.8 kg) of carbon dioxide (CO2) from the atmosphere. This means that trees can potentially offset a significant amount of human-caused emissions. The ability of trees to capture and store carbon is determined by a number of factors, including species, size, age, and growing conditions. For example, fast-growing trees tend to have higher rates of photosynthesis and therefore capture more carbon than slow-growing trees. Similarly, larger trees typically have greater leaf surface areas and longer lifespans than smaller trees and are therefore able to store more carbon over their lifetime.

### IS OFFSETTING CARBON THROUGH TREES THAT EFFECTIVE?

There are some drawbacks to carbon offsetting through planting trees. First, trees take time to grow and mature, so the benefits may not be immediate. Second, trees can be affected by factors such as disease, pests, and weather conditions, which can lead to them dying and releasing carbon back into the atmosphere. Third, planting trees requires a significant amount of land and resources. Finally, carbon offsetting through planting trees may not be permanent unless the trees are managed properly over the long term. In other words, the carbon benefits of planting trees can be offset by other factors, making carbon offsetting through planting trees less effective than it initially appears.



