## **CO2 - Resource or Waste?**

Carbon emissions is one of the most painful problems we humankind are facing and is greatly affecting our ecosystem. Direct emissions from industries account to 23% of total carbon emissions. Industries have adopted innovative technologies to decrease the emissions but it doesn't seem to fall significantly.

## What if Carbon Dioxide can be used as a resource and NOT waste?

It has been proven that CO2 can be used a a resource to make products such as fuel, construction materials, chemicals, plastics through process such as carbon sequestration, carbon capturing and carbon recycling. One interesting path of carbon conversion is biological conversion using Algae. Scientists claim algae is up to 400 times more efficient than a tree at removing CO2 from the atmosphere. Trees and algae sequester carbon naturally but interestingly algae absorb carbon in the form of more algae. Icing on the cake that algae again has multiple use cases and is very cost effective.

The main goal of this project is to develop a carbon sequestering product to capture CO2 from the industries or environment with the help of microalgae and photoreactors. Product scalability, product fit to industrial plants and design for sustainability is what we aim to achieve through this product development.

## Microalgae



