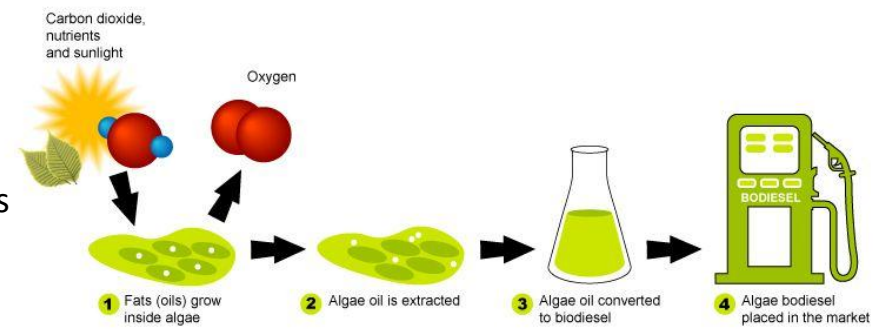




## Microalgal strain improvement

### Mutant screening and genetic engineering of microalgae for biodiesel production

One of the reason that biodiesel production from microalgae is still not commercially realized is because of its high cost. One way to reduce cost is to improve algal growth in outdoor conditions, which impose stresses on algal cells.



The main goal of this project is to improve microalgal strains for higher efficiency of biodiesel production by improving their tolerance to environmental stresses such as high light, high temperature, and high concentration of reactive oxygen species.

## Antioxidants in microalgae

### The importance of each antioxidant and its interaction with others in stress responses



The main goal of this project is to study the role of each antioxidant in fighting against stresses especially oxidative stress and to understand its interaction with other antioxidants.