

# CO<sub>2</sub> compensation by use of algae

**Theme: Engineering and technology**

**Team: Team 2**

**School, Country: Maurick College, The Netherlands**

**Students: Pien Mannaerts, Jorik Franken, Julia van Ravenswaaij, Robert Weber**

Globally, the enhanced greenhouse effect is a large problem. The next generation is concerned about the future of our planet. If humanity does not slow down the emission of greenhouse gases, the temperature on earth will keep rising at alarming rates.

Planes produce a large amount of CO<sub>2</sub>. Students from Maurick College (Vught, the Netherlands) travel a lot by plane. The increase in CO<sub>2</sub> in the atmosphere has major consequences for the Netherlands: a rising sea level, the extinction of several species and even food and water shortages. Therefore it is important to limit the contribution to global warming of our school. Global warming should be prevented by removing CO<sub>2</sub> from the atmosphere. Plants seem to be a good solution because of their ability to take CO<sub>2</sub> from the air and convert it into oxygen and sugars. Algae are single-celled plants that are easy to grow and use and therefore ideal.

In our research, the amount of CO<sub>2</sub> uptake of algae will be investigated; how quickly is CO<sub>2</sub> absorbed by algae and what is the role of the temperature? With the generated data, the amount of algae needed to compensate our flight to Florida will be calculated.