Scientists are attempting to mimic the way plants harness energy from the sun in order to make a more efficient renewable fuel.

Researchers at the University of East Anglia (UEA) are embarking on an £800,000 project to replicate photosynthesis, the process by which plants convert sunlight into sugars to help them grow.

The process will be used to create hydrogen, which can be used as a zero-emission fuel for cars, or converted into green electricity.

It is hoped the method, which involves placing tiny solar panels on microbes to harness sunlight and drive the production of hydrogen, will be a more efficient way of converting the sun's energy than currently exists.

Lead researcher Prof Julea Butt, from UEA, said: "Reserves of fossil fuels are dwindling and fuel prices are rising, so it's really vital that we look to renewable energy supplies.

"Many renewable energy supplies such as sunlight, wind and the waves remain largely untapped resources.

"This is mainly due to the challenges that exist in converting these energy forms into fuels from which energy can be released on demand - for example when we want to switch on a light, boil

water, play computer games or drive a car."

The University of Cambridge and the University of Leeds are also involved in the project, which is funded by the Biotechnology and Biological Sciences research council.