

# Algae

- 1 Unlike maize, soya beans and oilseed rape (canola), algal farms don't take up valuable farmland, so algae-based biofuels don't threaten food supplies. However, Andres Clarens at the University of Virginia in Charlottesville has modelled the environmental impacts of algal farms and concludes that they require six times as much energy as growing land plants – and emit significantly more greenhouse gases.
- 2 "You have to add a whole lot more fertilisers, and the environmental cost of producing these is the primary drawback," Clarens says.
- 3 Using waste water instead of fertilisers helps, but not enough, he says. The only trick that tipped the balance in favour of algae in his models was to use nutrient-rich household waste like concentrated urine to fertilise the algae, but this would require new infrastructure and so is no short-term fix.

adapted from *NewScientist*, 2010

## Tekst 11 Algae

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- 1p 40 Which statement(s) is/are in line with the content of the article?
- 1 Growing algae has fewer harmful side effects than growing land plants.
  - 2 In the long run, it is cheaper to produce algae-based biofuels than other so-called eco-friendly fuels.
- A** only 1 is true  
**B** only 2 is true  
**C** both 1 and 2 are true  
**D** neither 1 nor 2 is true

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### Bronvermelding

*Een opsomming van de in dit examen gebruikte bronnen, zoals teksten en afbeeldingen, is te vinden in het bij dit examen behorende correctievoorschrift, dat na afloop van het examen wordt gepubliceerd.*