

our food security, forests, water, land rights, farmers and indigenous peoples from the aggressive march of agrofuel developments, which are devouring our land and resources at an unbelievable scale and speed.”

The petition describes the negative impact of agrofuel programs in several African states. In Tanzania, thousands of farmers have been evicted from their land to make way for large scale jatropha farming. In Uganda, rainforest is cleared in favour of palm oil plantations. In Ethiopia, the petition claims, land belonging to a conservation area serving as a sanctuary for a rare and endangered elephant species has been handed over to agrofuel investors.

The moratorium call is specifically targeted at the monocultural agrofuel production which is encouraged by the current system of incentives and investment. The authors fear that this kind of agrofuel business will not only harm food production on a starving continent but also produce the well-known side effects of monocultures, such as erosion and decline of land quality.

At the same time, the African Biodiversity Network also expressed concern over the biofuel gold rush, as did two separate UN agencies, the World Food Programme and the Food and Agriculture Organization.

But what is the way forward, if biofuels don't offer a real solution? Acknowledging the more sustainable ways of producing biofuels, the authors make clear that when calling for a moratorium “we are not talking about the use of wood, dung or waste matter. Nor are we talking about small-scale production that is integrated into food production and used for household and local energy supplies. We wish to make clear that the agrofuels push is about large-scale fuel production on massive privatized plantations, driven by the fuel demands of export markets.” The trouble is that most “biofuel from waste” programmes are still in experimental stages, producing kilogram rather than tonne amounts, and they haven't attracted that much investment either.

Moreover, the authors point at the need for actual reductions in energy consumption, stating that “we need policies and strategies to reduce the consumption of energy and to prevent waste. Such policies and strategies already exist and are being fought for.”

Reducing consumption is of course very unpopular with our politicians, who like to keep voters happy with the promise of unlimited economic growth, which will have to be fuelled in one way or the other. So unless somebody can summon up the courage to explain to voters that they may have to drive less, fly less, and eat local produce rather than exotic produce from the other side of the world, there is no simple solution to the combined problems of climate, energy and food in sight, and it's back to the drawing board for all concerned.

Michael Gross is a science writer based at Oxford. He can be contacted via his web page at [www.michaelgross.co.uk](http://www.michaelgross.co.uk).

## Conservation threats

**Biofuels:** Europe's largest conservation charity has launched a campaign to heighten the threat to wildlife habitats and biodiversity from plantations of fuel crops. **Nigel Williams** reports.

Europe embraced the theoretical potential that biofuels might offer both in terms of climate change and renewable sources of energy, as enthusiastically as anywhere else, but the dawning reality has hit harder here than in many other areas with the realisation that it is a crowded continent with limited scope for home-grown material.

Highlighting some of the emerging problems, the Royal Society, Britain's science academy, published in January a report on biofuels produced by a group of leading experts that considered the scientific and technical prospects of delivering efficient biofuels for transport, taking into account the broader context

of environmental protection and sustainability.

The report concluded that biofuels have a potentially useful role in tackling issues of climate change and energy supply but there are many problems. Important opportunities to reduce greenhouse gas emissions from biofuels, and to ensure wider environmental and social benefits, may be missed with existing policy frameworks and targets, the report says. “Unless biofuel development is supported by appropriate policies and economic instruments there is a risk that we may become locked into inefficient biofuel supply chains that potentially create harmful environmental and social impacts.”

---

**Biofuels are often more damaging than the fossil fuels they are designed to replace**

---

The report highlights, as US plans do too, that new technologies need

to be accelerated that can help address these issues, aided by policies that provide direct incentives to invest in the most efficient biofuels.

The report was followed by the *Science* article that highlighted just how much environmental impact might result from the change of land use to biofuel production.

Nonetheless, the European Commission has backed its support for the use of biofuels by the creation of an EU research platform. The European Biofuels Technology Platform initiative brings industry and academia together to determine a long-term research and development agenda on biofuels, and to work out how to overcome technical and non-technical challenges to their use.

But, in the meantime, opposition has been growing. A row broke out at the end of January after a report from British MPs on the parliamentary environment audit committee warned that biofuels were too expensive, environmentally damaging and made a negative contribution to cutting greenhouse

gases. The report suggested that British government and EU plans to increase the use of biofuels should be rethought.

The EU's energy commissioner, Andris Piebalgs, responded: "The commission strongly disagrees with the conclusion of the environment audit committee's report, where it says that the overall environmental effect of existing biofuel policy is negative. On the contrary, it is delivering significant greenhouse gas reductions, compared with its alternative, oil."

But the concerns of the British government continued. Last month, government ministers announced a review of the environmental and economic damage caused by growing biofuels. They cite the number of recent studies that have questioned the environmental benefit of biofuels, and they want to check that UK and European biofuel targets will not cause more problems than they solve.

But the UK government will press ahead with plans to force oil suppliers to include 2.5 per cent biofuel in transport fuel by next month, rising to 5 per cent by 2010.

Ruth Kelly, the British transport secretary, said: "We are not prepared to go beyond current UK target levels for biofuels until we are satisfied it can be done sustainably. The review will ensure that the full economic and environmental impacts of biofuel production are taken into account in the formation of UK policy beyond 2010."

John Sauven, executive director of Greenpeace UK, said; "The scientific evidence is mounting: biofuels are often more damaging to the climate than the fossil fuels they are designed to replace. The government needs to introduce a moratorium on the UK's biofuel targets until this review has been published."

Just days later, Europe's largest wildlife conservation charity, the Royal Society for the Protection of Birds, placed full-page adverts in British newspapers warning of the potential damage biofuel production could create. 'Don't put wildlife in your tank' was the message emphasising that whatever research might be carried out, biofuels in Europe are likely to be largely imported, and their creation

## Don't put wildlife in your tank



The Government plans to put biofuels in the UK's transport fuel from April. Sounds like a good idea, right? **Wrong.**

The drive for biofuels is wiping out precious wildlife habitats. And some biofuels are causing more problems for the climate than they solve.

A deal in Europe to force us to increase the amount we use could make things even worse.

Why wreck our planet while pretending to save it? It makes no sense.

## Speak up

before it's too late

Visit [www.rspb.org.uk/biofuelsaction](http://www.rspb.org.uk/biofuelsaction) to urge Transport Secretary Ruth Kelly to ditch this misguided policy.



a million voices for nature

Butterflies by Nature PL, FLPA and Alamy.  
All other creatures by Dorling Kindersley.  
The Royal Society for the Protection of Birds (RSPB) is a registered charity.  
England and Wales no. 207076, Scotland no. SC037654 350-2081-07-08

**Rethink:** Britain's Royal Society for the Protection of Birds is keen to warn of the potential environmental damage from growing biofuel crops. (Picture: RSPB.)

threatens clearance of key wildlife habitats in developing countries to plant the fuel crops.

"Rainforest is being felled rapidly in Indonesia and Malaysia to clear land for palm and soya, for biofuel, food and other products," the charity says.

"Under the UK's renewable transport fuel obligation, biofuels must make up at least 2.5 per cent of transport fuel from next month and 5 per cent by 2010, costing taxpayers up to £500 million in subsidies."

But, the charity warns, "Strict rules on how and where the biofuel is produced will not be in place for three years. And there will be no proof that biofuels emit fewer

greenhouse gases than fossil fuel equivalents until 2010. The production of some biofuels already emits more."

Graham Wynne, chief executive of the RSPB, said: "The government is forcing oil companies to sell fuels that could be making climate change worse and making us buy fuel that could be responsible for the loss of wildlife across the world".

"This legislation should be delayed until it includes greenhouse gas measures that show the emissions savings of every biofuel are at least 60 per cent above their fossil fuel equivalent. That is what the government must do if it is serious about tackling climate change."