



## Five ethical principles to guide biofuels policy

**A new report** on biofuels by the UK's Nuffield Council on Bioethics has produced a set of five ethical principles to guide the development of biofuels technology and policy. It recommends applying these principles to create comprehensive standards to ensure that biofuels address, rather than exacerbate, global problems.

**When biofuels first came to policy** and public attention, they promised to be a renewable source of energy, a new source of income and a means of mitigating climate change. As such, a number of policy and regulatory mechanisms around the world were established to encourage the production and use of biofuels. For example, the EU passed the Renewable Energy Directive (RED)<sup>1</sup> in 2009 which effectively established that biofuels should account for 10 per cent of transport petrol and diesel by 2020.

However, as large-scale production of biofuels developed some serious problems started to emerge, ranging from deforestation to displacement of indigenous people. One of the most contentious issues was indirect land use change (ILUC). This can occur when the growth of biofuel crops on existing farmland – previously used for food crops – results in new cultivation of land for food crops elsewhere. If land such as forest, peatland and wetland is converted, greenhouse gas (GHG) emissions are produced, therefore potentially contributing to climate change.

In response to these concerns, a report has been published following an independent 18-month inquiry by the Nuffield Council on Bioethics, which sets out an ethical framework to guide policymaking for biofuels. This consists of five principles:

1. Biofuel development should not be at the expense of human rights
2. Biofuels should be environmentally sustainable
3. Biofuels should contribute to a net reduction in GHGs
4. Biofuel development should comply with trade principles that are fair and recognise the right to just reward
5. Any costs and benefits of biofuels should be distributed evenly

The report also puts forward a sixth principle, which states that if the above five principles are respected and biofuels can help mitigate climate change, then – depending on certain key considerations – there is a duty to develop them. Key considerations include, for example, whether there are opportunity costs and other energy sources that might be better placed to mitigate climate change.

The report makes several policy recommendations to apply these principles. It calls for European biofuel targets to be replaced with a more sophisticated target-based strategy which takes into account the wider consequences of biofuels production. This strategy, the report suggests, should include an ethical standard that incorporates the five principles and should be enforced through a mandatory certification scheme for all biofuels supplied in Europe.

The report makes further recommendation with regards to each of the ethical principles. For example, the European Commission is urged to establish monitoring systems so that sanctions can be enforced swiftly if human rights abuses are detected, and to use a single international standard for assessing life cycle GHG emissions for biofuels. In addition, the report suggests that EU trade principles developed as part of biofuels certification should be proportionate and considerate of different countries' requirements for protecting vulnerable populations.

1. See: [http://ec.europa.eu/energy/renewables/index\\_en.htm](http://ec.europa.eu/energy/renewables/index_en.htm)

**Source:** Nuffield Council on Bioethics.(2011) Biofuels: ethical issues. Downloadable from <http://www.nuffieldbioethics.org/biofuels>

**Contact:** [bioethics@nuffieldbioethics.org](mailto:bioethics@nuffieldbioethics.org)

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