

New and emerging issues: biofuels

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Recommendations

IUCN recommends that COP9:

- √ **Further acknowledges** as a cross-cutting issue and as a result, **urges** the Executive Secretary to invite discussions on biofuels to be conducted in the context of the relevant Programmes of Work of the Convention, and with appropriate sectors, e.g. agriculture, forestry and energy;
- √ **Collects** and **reviews** case studies, policies, and relevant information from country focal points; and establish a process to demonstrate the relationships between biomass production, energy, biodiversity and ecosystems, and conservation and sustainable use of biological resources and fair and equitable benefit sharing;
- √ **Broadens** the scope of the discussions beyond biofuels to bioenergy;
- √ **Considers** the overall energy context and recognise the small contribution biofuels can make for energy security and climate change mitigation on a global scale, compared to the potential for modern bioenergy production and use on a local scale;
- √ **Supports** the development and application of biofuel production guidelines and standards, as part of a strategic environment and social impact assessment;
- √ **Supports** on-going processes, such as the Roundtable on Sustainable Biofuels (led by École Polytechnique Fédérale de Lausanne (EPFL)) and the International Risk Governance Council's work on Governing the Risks and Opportunities of Bioenergy;
- √ **Engages** in discussions on high conservation value areas and degraded lands to ensure that the values of local communities are incorporated and that appropriate incentives are developed to reflect the extra costs and foregone profits associated with developing such land; and
- √ **Urges** that any policy work relating to bioenergy and biofuels should build on relevant conventions and intergovernmental processes including the Ramsar Convention, the Commission on Sustainable Development (CSD), the UNFCCC and the United Nations Convention to Combat Desertification (UNCCD)¹.

¹ See also IUCN position paper on cooperation with other conventions –synergies for COP9, 2008

IUCN welcomes the compilation of the background paper on the impacts on biodiversity along the full life cycle of the production and use of biofuel and related sustainable-use issues, as recommended by SBSTTA at its twelfth meeting (XII/7). IUCN welcomed the opportunity to contribute to this process through the German Federal Agency for Nature Conservation (BfN), which convened a meeting in Vilm.

Biofuels in the overall energy context

Biofuels are forecast to represent between 4% and 7% world road-fuel use by 2030 (compared to 1% in 2005) according to the International Energy Agency (2005). Biofuels are not a green solution; they represent a green *trade off* and, as such, are potentially very costly in terms of land and water use and, ultimately, ecosystems and livelihoods.

The overall potential of biofuels in terms of access to energy is greater for local rather than global markets. IUCN wishes to encourage Parties to the Convention to consider biofuels as one small element of an appropriate future energy mix. Still, policies that promote energy conservation and improved energy efficiencies should also take priority.

IUCN is also concerned that biofuel policies are ahead of the science: well-informed policy decisions are needed to provide guidance towards overall objectives. Infrastructure and R&D “lock-in” into inefficient, unsustainable and inequitable biofuels should be avoided. Rather, further promotion of investment in more sustainable energy production and consumption that enhance, rather than degrade, ecosystems and livelihoods should be the focus of discussions and work.

IUCN believes that biofuels should be considered within the wider context of biomass use for energy, given that biomass is used around the world primarily for power and electricity, heating and cooking rather than to replace fossil fuels in transport, which has implications for ecosystems and livelihoods. Notably, sub-Saharan Africa depends on biomass for 84% of their energy needs. Within the EU’s energy portfolio of 6% renewables, biomass makes up 66%, of which only 5% is currently biofuels.

In this context, **IUCN recommends that COP9:**

- √ **Broadens** the scope of the discussions beyond biofuels to bioenergy; and
- √ **Considers** the overall energy context and recognise the small contribution biofuels can make for energy security and climate change mitigation on a global scale, compared to the potential for modern bioenergy production and use on a local scale.

Biofuels and agriculture

If poorly managed, biofuel feedstock developments can exacerbate existing agricultural impacts, which are already a leading cause of biodiversity loss. These include: land conversion, habitat fragmentation, soil degradation; water pollution and scarcity; potential invasive tendencies of alien plant species introduced for biofuel production; deforestation and habitat loss; and higher GHG emissions, linked to land-use change as well as the application of fertilizers or damaging farming practices and the use of fossil-fuel powered machinery.

On the other hand, biofuel markets may create incentives for landscape restoration, such as developing abandoned lands. Any promotion for the use of so-called degraded lands has to be accompanied by community participation to determine the local value of the land and establish what incentives can be put in place to rehabilitate the land and compensate for profits forgone.

Landscape and ecosystem management approaches such as those promoted under the Convention, including the Precautionary Approach for risk assessment and the Ecosystem Approach, can help ensure that biofuels contribute positively to ecosystems and livelihoods rather than undermine them.

IUCN recommends that COP9:

- √ **Acknowledges** bioenergy as a cross-cutting issue and as a result, urge the Executive Secretary to invite discussions on bioenergy and biofuels to be conducted in the context of the relevant Programmes of Work of the Convention, and with appropriate sectors, e.g. agriculture, forestry and energy;
- √ **Engages** in discussions on high conservation value areas and degraded

lands to ensure that the values of local communities are incorporated and that appropriate incentives are developed to reflect the extra costs and foregone profits associated with developing such land;

- √ **Urges** that any policy work relating to bioenergy and biofuels should build on relevant conventions and intergovernmental processes including the Ramsar Convention, the Commission on Sustainable Development (CSD), the UNFCCC and the United Nations Convention to Combat Desertification (UNCCD).

Biofuels and socio-economic issues

Two billion people do not have access to modern energy supplies. If planned and managed well, in conjunction with community stakeholders, biofuels may have positive impacts on ecosystem and livelihood. Women – who both secure household energy and produce crops in many developing countries – may benefit from “food-fuel” intercropping systems, which can enable rural communities to meet their own energy needs, improve agricultural efficiency and diversify income generation. Rural communities could also benefit from higher income resulting from local, regional and global biofuel markets. This could be so only if consideration is given to issues such as weak tenure, access regimes and gender inequities.

IUCN recommends that COP9:

- √ **Collects** and **reviews** case studies, policies, and relevant information from country focal points; and establish a process to demonstrate the relationships between biomass production, energy, biodiversity and ecosystems, and conservation and sustainable use of biological resources and fair and equitable benefit sharing.

Biofuel and food prices

While biofuel production has some influence on food prices, they are not wholly to blame for the current food security crisis. Biofuel markets have served to expose underlying weaknesses in the world’s agricultural systems. This hype runs the risk of diverting attention away from addressing critical issues associated with food production and agricultural systems. Biofuel should remain an option, particularly for local

communities and under specific circumstances, as described above.

IUCN recommends that COP9:

- √ **Supports** the development and application of biofuel production guidelines and standards, as part of a strategic environment and social impact assessment, alongside other measures such as biodiversity offsets where appropriate, to not only reduce the negative risks of biofuel production on biodiversity but also to promote biofuel feedstock production that enhances ecosystems and livelihoods.

There are ongoing discussions on the costs and benefits of biofuels that are sources of valuable knowledge for decision making on the issue. IUCN has been participating in some of them, namely the round-tables organized by École Polytechnique Fédérale de Lausanne (EPFL) and the International Risk Governance Council’s work on Governing the Risks and Opportunities of Bioenergy.

These discussions are helpful in further elucidating the cost and benefits of biofuels in given circumstances.

IUCN recommends that COP9:

- √ **Supports** on-going processes, such as the Roundtable on Sustainable Biofuels (led by École Polytechnique Fédérale de Lausanne (EPFL)) and the International Risk Governance Council’s work on Governing the Risks and Opportunities of Bioenergy.