



Bioenergy and biodiversity

The global increase in land put aside for growing crops that can be processed for the production of bioenergy has become a topic of intense discussion amongst the press and media, politicians, researchers, nature conservationists and environmentalists and the interested public. Initially the general perception created in the public mind was that the production of biofuels could become a crucial, if not the main, solution to the problem of non carbon emitting energy and fuel creation. Although bioenergy may have a significant role to play, the situation is much more complicated than that.

There are serious implications for food production and prices, and also for the main goal of ECNC – the conservation of nature and its biodiversity. In Europe, for example, extensively managed or 'non-productive land', whose main current use is for wildlife conservation, may become the target for food or energy crop production. In addition, the side-effects of intensification of land use (for food or energy crops) can have significant consequences for ecosystem services, ecosystems and their related biodiversity.

In ECNC we are resolved to tackle this challenge, and we will utilize our expertise and our networks to provide pan-European guidance on the impacts and actions for biodiversity and sustainable development to practitioners and policymakers.

Background

During recent years the quest for new energy sources has increased rapidly and, within this context, energy from biomass has been presented as a promising replacement for fossil fuels. Using bioenergy from renewable sources seems to be an attractive means for potentially reducing greenhouse gas emissions, ensuring energy security and providing support to rural development objectives.

The EU is currently framing its support for bioenergy production by contributing to objectives such as meeting climate change commitments, securing environmentally-friendly energy supply and to the promotion of renewable energy sources. However, there is increasing evidence that the carbon off-set by 1st generation biofuels is not as positive as expected. A trade-off exists between lower greenhouse gas emissions and the adverse effects of this expansion and intensification in terms of, for example, biodiversity. The contribution of biofuels to climate change mitigation seems not to be as positive as hoped for, although the impacts of 2nd and 3rd generation biofuels are still to be explored.

What is clear in relation to the policy, is that the current challenge is to maintain the balance between the two policy targets, one primarily aimed at combating climate change and securing energy supply, the other aimed at safeguarding nature protection interests.

ECNC:

- gives active recognition to the major global challenge presented by bioenergy connected to climate change;
- believes that the search for renewable energy resources requires a balanced overview and consideration of all the potential opportunities and threats. The policies should be framed to include environmental criteria. A part of these environmental criteria should particularly take into consideration the importance of habitats and species when converting land into bioenergy crop land. Furthermore any policy frameworks should take account of the impacts of bioenergy crops on biodiversity and, specifically, provide measures for biodiversity protection and management that contribute to halting the loss of biodiversity by 2010, which has been set as one of the key biodiversity targets of the EU, and well beyond.
- will actively seek partnerships to propose and to deliver programmes and projects that address the issues raised by biofuels for biodiversity and sustainable development and which are linked to our core business;
- is resolved to tackle this challenge, and will utilize its expertise and its networks to provide pan-European guidance on the impacts and actions for biodiversity and sustainable development to practitioners and policymakers.

Key actions and recommendations

ECNC will support and promote the following key actions and recommendations:

- The current situation in relation to bioenergy production in Europe should be urgently reviewed; the lack of data and understanding may contribute to the controversy of the subject.
- It is recommended to be very cautious with 1st generation bioenergy and emphasize the opportunities 2nd generation bioenergy (perennial biomass crops) could bring for biodiversity.
- It is necessary to make a proper inventory of the possible impacts of 2nd generation bioenergy crop production on biodiversity, since the commercial application of these is currently under development.
- There is urgent need for an extension of the existing policy frameworks at key decision-making levels (EU, national, regional) in order to provide the basis for integrating decisions about biodiversity and bioenergy production. These issues need to be fed in to the general reform of Common Agricultural Policy (CAP) and the European Commission's recently adopted Communication on the CAP 'Health Check'.
- Establish strategic position (within the CAP, but also within DG Environment and Transport) that acknowledges and address the challenges of bioenergy production.
- Maintain the second pillar compensation scheme within the CAP and use it to fully support and promote the development of 2nd generation biofuels in a sustainable way.
- The current policy frameworks, in particular at national and regional level, that govern the conversion of land for bioenergy crop production should be subject to Strategic Environmental Assessment to establish their potential effect on biodiversity.

More about ECNC

ECNC-European Centre for Nature Conservation is a Pan-European expertise centre for biodiversity and sustainability. ECNC stimulates cooperation between science, policy and economy for the sake of biodiversity and people in Europe. It provides sound scientific expertise in support of governmental policies and promotes the integration of biodiversity considerations into other sectors of society. In its approach, ECNC combines vision with practical approaches and applicable expertise.

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