



Project Fact Sheet

Updated: October 2007

Biofuels in Motion (BioMotion)

Programme area:	ALTENER, alternative fuels
Status:	ongoing
Coordinator:	Dr. Marie-Luise Rottmann-Meyer Lower Saxony Network for Renewable Resources 3N (Germany) E-mail: info@3-n.info Tel: +49-5951-9893-10
Partners:	LWK NRW - Chamber of Agriculture North Rhine-Westphalia (Germany) ITP - Institute of Technology and Life Science for (Poland) UASVM - University of Agronomic Sciences and Veterinary Medicine Bucharest (Romania) CA 02 - Chambre d'Agriculture de l'Aisne (France) NYME MÉL SZTI - University of West-Hungary, Faculty of Agricultural and Food Sciences, Centre of Agricultural Science DLG - Dienst Landelijk Gebied voor ontwikkeling beheer Groningen (The Netherlands)
Website:	www.biomotion-project.eu
Objective:	Information, Motivation and Conversion strategies for biofuels with consideration of the special regional structure
Benefits:	Establishing sustainable value-added biofuel chains 'from field to tank'
Keywords:	Agriculture, Clean Vehicles, Biofuels
Duration:	09/2007 – 04/2010 Revised date: 27/07/2009 to August 2010
Budget:	€ 986,418,00 (EU contribution: 50%)
Contract number:	EIE/07/121/SI2.467615



Short description

The central objectives of BioMotion are to increase use, knowledge and acceptance of biofuels by information, motivation, cluster building and supporting regional implementation strategies.

BioMotion takes into account not just the first-generation fuels (plant oils and biodiesel), but also biogas, ethanol and BTL.

The project will:

- create and establish an expert cluster to bring the results acquired in the regions to the transnational Biofuel Network
- create and establish 7 Biofuel Information Centres, one in each participating region
- support and initiate best practise examples (beacons)
- motivate users with special campaigns BioMotion-Tour
- establish value-added chains for rural areas 'from field to tank', in which producers, farmers, traders, plant processors and consumers can have profit.

The BioMotion-Tour with vehicles powered by different biofuels will demonstrate the possibilities of using biofuels. In order to support the specialist information service, examples of best practice will be given.

Expected and/or achieved results

The project will create conditions to accelerate the introduction of biofuel production and use processes in Europe. This will be done along three lines:

Knowledge development

BioMotion creates a solid and extensive centralised knowledge and experience platform on production, distribution and application of different biofuels.

Beacons

A number of beacons will show and demonstrate innovative technologies, processes and the use of different raw materials for the production and application of different biofuels on a commercial scale.

Market development

Increased awareness of the biofuel market by informing and educating the various stakeholders in this field.

BioMotion will offer new solutions to current problems and create innovative possibilities to optimise the use of biofuels.

The BioMotion project will stimulate enterprises and consumers in using biofuels.

It is expected that the biofuel consumption, the number of filling stations and the quantity of biofuel production capacity will increase in the participating regions.

Lessons learnt

The 3 main preliminary lessons learned emerging from our project:

- Lack of information and training about the use of the different types of biofuels is a major obstacle and the acceptance of biofuels is heavily influenced by the very emotional FOOD or FUEL debate.
- There is a need to organize the international multilingual and native language biofuel information platform for the optimization of the information provision and communication between biofuel producers and users.
- The formal interest in biofuels is highly dependent on the prices of crude-oil based fuels and the national legislation and tax system.

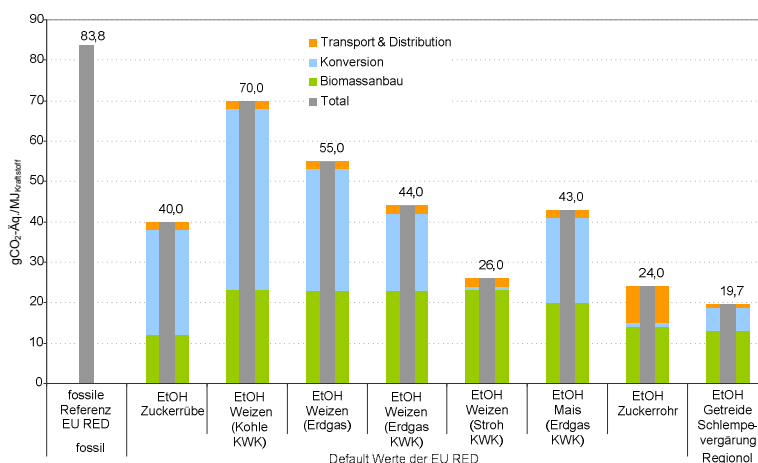
Also we learned that decentralized production systems are characterized by a very high efficiency regarding energy utilization and gain as well as GHG emissions (bioethanol, biogas as well as rapeseed oil), which means in detail:

- closed cycles of materials are possible
- short transportation distances
- low input of fossil energy sources (by cogeneration of heat and power of renewable raw materials)
- maximum energy output (best ratio of input : output)

Biomass/ agrifuels are essential tools as complementary energy instruments, as well as an essential element in supporting energy self-sufficiency. At the same time emissions of greenhouse gases from biomass/agrifuels may show significant reductions in comparison with the use of fossil fuels. Particularly decentralized production systems (PPO and ethanol) have showed high energy efficiency and a high reduction of GHGs.

Mapping/surveying biomass flows and making assessments as to how to structure sustainability criteria can be both useful and desirable.

However, proposing binding sustainability criteria for biomass/agrifuels cannot be separated from the role of fossil fuels. Fossil fuels apparently do not apply these criteria, but will nevertheless serve as a benchmark in the case of sustainability certification for agrifuels. Basically, for fossil fuels, there are no binding criteria whatsoever regarding sustainability or environmental issues.



These kinds of high-efficiency systems still receive little consideration in the current political discussions about the sustainability of biofuels both at EU and federal level (playing a small part in the overall production capacity; lobbying of the big players of the sector). However, the greenhouse gas saving potential was calculated in cooperation with Dr. Thomas Senn, assistant professor at the University of Hohenheim/Germany. This calculation was audited by the German Biomass Research Centre (DBFZ) and they confirmed a GHG saving potential of 76.5% for the decentralized production pathway combined with biogas.

- Default values were calculated only for industrial production plants and for biofuels from alternative waste materials, which are not available at the moment;
- Small-sized production plants have to join forces to prepare and to publish a GHG balance if there is no adequate default value
- The production of biofuels from cereals, sugar beets and corn in high-efficiency production systems makes sense up to a certain level; in this way the agricultural surplus production could be counteracted and thus a stabilization of prices is possible; other effects could include the reduction of subsidies in Europe and perhaps an increasing attractiveness of agricultural production in third countries;
- The production of biomass has to be in a sustainable manner; the utilization of raw materials from local production ensures sustainability due to compliance with social and ecological compatibility (Cross Compliance);
- Political support measures are not reliable; the gradual increase in taxation (Germany) of biodiesel and pure plant oil led to a major market collapse
- Consumers choose biofuels mostly on the basis of economic factors; the environmental awareness and the willingness to pay more for biofuels varies a lot – also in the French, Dutch and German economies where there is a comparatively high income.

These effects are similar to the case of products which are produced according to ecological principles.

The nonobjective discussion on biofuels in the media led to a considerable uncertainty among the broad public; particularly the issues “food or fuel” as well as the issue of tropical deforestation were discussed and discredited, as was the subject of locally and sustainably produced biofuels.

The development of a regional label could counteract this uncertainty. But only a small share of the population could be converted by such an instrument because most people would only choose biofuels if they could gain an economic advantage compared to fossil fuels;

Information, motivation and education of the consumer about the use and effectiveness of biofuels were / are very difficult because of the failing interest and - in some cases – misunderstandings. Although we used different methods of public relations work, we had little success.

An important impact of the action was the extension of the network. On the one hand the BioMotion project resulted in a closer networking of the industry stakeholders (particularly producers, stakeholders in the biofuel infrastructure, other institutions which support the use of biofuels) especially regarding the beacons with regard to pure plant oil, biogas and bioethanol. On the other hand we were able to extend the network through the BioMotion partners.

It should not be forgotten that a number of significant contacts were made during the course of the project. For example, the Romanian partner was able to form a direct contact with the Romanian Environment Minister, László Borbély, through its project work, and can expect support for further bioenergy activities.

Important success

We live and breathe partnership

Within the BioMotion project we intensified the contacts to Dutch, Polish and Romanian network partners who also work on the topic “biorefinery”. Furthermore they propose the production and the refinement of algae by the aid of other co-products from ethanol and biogas production.

Another impact after the end of the action is closes cooperation between the German Polish and the Romanian partner. Hereby we are evaluating and establishing a standardized transnational consulting net for regions”.