

Biodiesel chains

Promoting favourable conditions to establish biodiesel market actions

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EU Biofuel production since 1993. (2004: EU25) *Source: Eurobserv'er 2005.*



Biodiesel

Biodiesel is generally produced by transesterification of vegetable oils (so-called "fatty acid methyl esters", FAME).

Currently, the predominant oils used in biodiesel production are rape and sunflower oil in Europe, and soya oil in North America.

Again, the cost of the feedstock represents the major component of total production costs of biodiesel, such that cheaper oils such as palm oil or even used frying oil could have a significant cost advantage.

Key facts on biodiesel

- World production over 2 million tonnes
- Germany over 1.8 million tonnes
- B100 fully detaxed & sold in 1500 stations
- France, Italy, Austria, Czech Republic, Poland are other EU producers
- USA uses soy bean

Biodiesel in Germany



Cost Ranges: Biodiesel

Source: Renewables 2005 Global Status Report

Typical costs: 40- 80 \$ cents/ liter diesel equivalent Cost could decline to 35-70 \$ cents/ liter diesel equivalent (sugar) post-2010 for rapeseed and soy, and remain about 25 \$ cents (currently) for biodiesel from waste oil.

Production costs & international diesel prices

	Biofuel production costs (US\$/ It of fuel)	IFP W/tax (US\$/ It of fuel)	IFP W o/tax (US\$/ It of fuel)
USA	0.549	0.570	0.373
CAN	0.455	0.680	0.391
EU-15	0.607	1.286	0.396
POL	0.725	1.090	0.382
BRA	0.568	0.490	0.384

Diesel prices for the EU-15 are weighted averages of prices in Germany, France and Italy

Goal



 understand and promote favourable conditions for the establishment of biodiesel market chains in selected member states which have had limited developments to date.



Countries on focus

- Belgium
- Bulgaria
- Cyprus
- Greece
- Poland
- Romania

WP interactions



WP2: Biodiesel market status

- Critically analyse current market developments in biodiesel in participating countries in relation to wider EU25 biofuel markets, including drivers, barriers and windows of opportunity.
- Recent existing reviews for biofuels will be carefully taken into account.

WP3: Emerging best practices

- Collate information on emerging best practices and commercialisation of biodiesel in leading European member states like Germany
 - Case studies
 - Best practice selection
- Understand how this can be adapted and transferred to participating countries.
 - Key success factors & barriers

WP4: Market structures

- Determine how to create countryspecific favourable conditions to increase penetration of biodiesel.
 - Policies, regulations
 - Raw material supply
 - Biodiesel producers
 - End users: transport & heat sectors
 - International trade

WP5: Strategy formation

- Work with market actors to agree and articulate strategies to establish biodiesel market chains in participating member states.
 - SWOT in each participating country based on findings from WP1, WP2 & WP3

 Mission, goal & strategic steps: broad mission statement and a series of major goals to develop biodiesel market chains

WP6: Mobilise market actors

 To create networks of relevant stakeholders to initiate dialogue and mobilize market actors.

WP7: Dissemination

- To actively promote the findings of this project to target stakeholder groups, including information and awareness campaigns in each participating country.
 - Publications in scientific and trade journals and presentations in international conferences
 - Questionnaire surveys (postal and telephone)
 - Umbrella Campaigns for each sector and target groups (transport, heat, farmers, etc.)
 - Use of the world wide web
 - Articles in trade journals
 - Stands/ leaflets in exhibitions, conferences
 - A range of events including an end-of-project international conference.