



### EIE-05-113

### **BIODIESEL CHAINS**

### Promoting favourable conditions to establish biodiesel market actions

### Mobilize market actors

### D19 Meeting and Action notes for each network meeting

Case studies: Belgium, Bulgaria, Cyprus, Greece, Poland, Romania

UCL – Université catholique de Louvain Place de l'Université, 1 B-1348 Louvain-la-Neuve Tel & Fax.: +32 10 47 34 55 http://www.uclouvain.be E-mail: jean-marc.jossart@uclouvain.be

Intelligent Energy 💽 Europe

### **Biodiesel Chains:**

# Promoting favourable conditions to establish biodiesel market actions

### WP 6 "Mobilise Market Actors" Final Report

Authors:

AEOLIKI LTD.: Dimitris Glekas, Nikos Kamakiotis

**CRES:** Myrsini Christou, Calliope Panoutsou, Vassilis Lychnaras

ESDB: Ilian Jeliaskov, Rayna Angelova, Dora Tomova

**INTERTERMO:** Catalin Flueraru, Liviu Dragos

KAPE: Oskar Mikucki, Joanna Ogrodniczuk, Monika Jarzemska

UCL: Jean Marc Jossart, Olivia Schoeling

#### Task leader:

UCL – Université catholique de Louvain Place de l'Université, 1 B-1348 Louvain-la-Neuve Tel & Fax.: +32 10 47 34 55 http://www.uclouvain.be E-mail: jean-marc.jossart@uclouvain.be

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# 1 Introduction

WP6 aims at creating and operating networks in the target countries (Belgium, Bulgaria, Cyprus, Greece, Poland and Romania). Each network of at least 10 representative stakeholders for the whole biodiesel chain should meet at least twice during the project. List of these national stakeholders is available on the project web site (see list of active players).

This progress report explains the activities for each country during this first year of activity, corresponding to task 6.1. It has been divided for each country into the set up of the stakeholder network, its activities and prospects for the next period.

For the second year of this project the networks will address the SWOT analysis and the strategy (task 6.2).

# 2 Belgium

#### 2.1 Stakeholders network

A network of 69 persons was established in Belgium as a Working Group (WG) on liquid biofuels. These persons represent the agriculture sector (14 persons), the production of liquid biofuels (17), the end use (10) and other issues like research, environment, etc (28). It should be noted that this WG has been established in the framework of a non profit association called Val-Biom and that all liquid biofuels are addressed and not biodiesel only.

The objective of this WG is to create a network of stakeholders for information dissemination but also to work out proposals to improve the Belgian framework for liquid biofuels.

#### 2.2 Activities

The first meeting took place on 21 April 2006 where 38 persons registered.

To prepare the meeting, a position paper was written beforehand, sent by e-mail and discussed during the meeting. The paper stressed the state of the art of liquid biofuels in Belgium and recommendations to improve their implementation. People were asked to endorse the paper by adding their name on the first page (see annex). The main remarks were the following:

- Objectives and market
  - Consider the price of (bio)fuels at the pump could be interesting for the development of biofuels in Belgium. Price at the pump is a determining factor for the end user. This kind of approach can favour the demand and increase the production of biofuels;
  - Obligation for important pump stations to make one or two biofuel pumps minimum available;
  - o Study the different factors influencing biofuel consumption.
- Fiscal policy
  - Need to establish an agreement between Belgium and Luxemburg to suppress the link on basic excises between the 2 countries;

- Some participants proposed the distribution of pure plant oil at the pump. But this
  proposition is in opposition with the short chain philosophy. Moreover, the producer of pure plant oil could support a decrease of added value. However a pure
  plant oil pump could be installed in an agricultural cooperative.
- Imports
  - The problem of competitive vegetable oils that could be massively imported and used for the biodiesel production instead of rapeseed oil has been discussed. Protection measures could favour the development of European plant productions, in particular in the Eastern part of Europe.
- Technological development
  - A proposition has been done on the potential of E100 used in fuel cells.
- Promotion
  - Obligation for public captive fleets to use biofuels and to promote biofuels on their vehicles.

A second meeting was held on 20 April 2007. 25 persons participated at the discussion.

Again, a state of the art of liquid biofuels in Belgium was prepared to support the discussion. Proposals for the development of these new chains were debated. These recommendations are relevant of different topics, such as legislation and taxes on high blends, obligation system, obligation for public captive fleets, the objective of 10% biofuel, administrative procedures costs, sustainability, R&D and communication.

The participants proposed the following suggestions:

- Taxation of fossil fuels;
- Advantage for biofuels for the CO<sub>2</sub> tax, depending to the production process;
- Development of biomethane use in captive fleets, expanding the gas separation in Belgium, and support by the way of tax advantage or green certificates.

A **large conference** was organised on 30-31 May 2006 in Louvain-la-Neuve with 22 speeches (one of them on the content of the position paper) and 2 round tables on the production of raw materials and the end use.

A **third meeting** of the WG was held on 19 October 2007. The SWOT analysis of the Belgian biodiesel market was presented at 27 persons of the WG. In the same time, the burdens and other critics encountered by biofuels for some months, like:

- energy dependency and the need of energy sources diversification;
- CO2 emissions and mitigation;
- deforestation;
- agricultural impact on environment;
- increase of agricultural prices;
- production potential of European agriculture;
- socio-economic impact; and

• Rational Use of Energy were debated.

A paper has been published on October 31st 2007 with the results of the debate. This document is available on the website of the Belgian association ValBiom <u>www.valbiom.be</u>.

The network also operates through e-mails. During 2006, 22 e-mails have been sent on various subjects like new pieces of legislation (many new papers during 2006 due to recent decisions in Belgium), reports/information available from project or from the European Commission, etc. From January to October 2007, 12 e-mails were sent to the Belgian WG Biofuels.

Such activities of networking are encouraged by the Walloon Region that is supporting a Facilitator for liquid biofuels. This person is in charge of informing and helping potential producers/users of liquid biofuels and also initiate communication activities.

#### 2.3 Future prospects

The WG will continue its work in supporting liquid biofuel development in Belgium. A conference will be organised in June 2008, as well as meetings, to boost biodiesel market and especially high blends.

# 3 Bulgaria

The initial activities of the Biodiesel Chains project coincided with a period of rapid growth of biodiesel production in Bulgaria.

This growth can be explained by the following factors:

- Availability of raw materials sunflower and rape seeds;
- Experience in biodiesel production, dating since 2001 (early production was based mostly on waste cooking oil);
- Good local expertise in manufacturing of biodiesel production equipment;
- Biodiesel and bioethanol production became in a natural way popular, both among professional circles and in
- Introduction since January 2006 of a zero excise tax rate for pure biodiesel, which made biodiesel production financially attractive.

In these conditions, the already existing from previous years associations of participants in biodiesel developments increased their activities.

Such associations are:

The National Association for Biofuels and Renewable Energy Sources

This Association exists since 2002 and groups almost all active players in Bulgaria in the sphere of biodiesel and bioethanol production and distribution. It already acts as a network of stakeholders, interested in biodiesel and bioethanol issues and represents biodiesel producers in contacts with national and regional authorities (e.g., representatives of this Association took part in discussions and work groups, concerning the development of a new draft law for renewable energy). Its president is Mr. Dimitar Zamfirov, owner of the first biodiesel production plant in Bulgaria.

The Oilseed Oil Producers Association Bulgaria

In this Association, founded in 1994, participate about 30 cooking oil producers in Bulgaria. The reason for mentioning them here is because several such companies are interested also in investment in biodiesel plants. The Chairman of the Association is Mr. Vidyo Videv.

The Bulgarian Association of Farmers

This is an association of private farmers, headed by Dr. Stefan Stefanov.

When the Biodiesel Chains Project was initiated, all these 3 associations, and in particular the National Association for Biofuels and Renewable Energy Sources, were already acting as networks of stakeholders and had their vision for biodiesel developments in Bulgaria.

In this situation, project activities were focused as follows:

- To support already existing activities of these networks;
- To create additional contacts between these associations and the national authorities;
- To initiate new international contacts of Bulgarian biodiesel stakeholders.

#### 3.1 National seminar

The first step in this respect was the organizing of a National Seminar (held on 14 July 2006). Presentations for the Seminar were prepared both by project participants and by Bulgarian stakeholders. The Seminar was attended by about 80 persons, representing:

- Farmers and agricultural research institutions;
- All Bulgarian producers of biodiesel equipment;
- Several biodiesel producing and distributing companies;
- Representatives of the national administration (the Ministry of Finances, the Ministry of Economy and Energy, the Ministry of Environment, the metrological authorities, the Customs, the Energy Efficiency Agency);
- Producers of diesel engines;
- Researchers from the technical universities in Sofia and Varna;
- Representatives of the Lukoil Neftochim (a big oil refinery in Bulgaria, producing conventional diesel oil and gasoline).

#### 3.2 Stakeholders' network

On the 18 July 2006, Work Group was established with representatives from the National Association for Biofuels and Renewable Energy Sources.

The Work Group has the following members:

- Alexander Penchev, ESD Bulgaria Ltd. Chairman of the Work Group;
- Dimitar Zamfirov, Chairman of the National Association for Biofuels and Renewable Energy Sources (NABRES);
- Miryana Evtimova, Secretary of the National Association for Biofuels and Renewable Energy Sources;
- Martin Banov, representing the Institute for Soil Science in Sofia;
- Dr. Stefan Stefanov, Chairman of the Bulgarian Association of Farmers;
- Rayna Anguelova, ESD Bulgaria Ltd.
- Ilian Jeliazkov, ESD Bulgaria Ltd.

#### 3.3 Activities

On the first meeting (that took place on 18 July 2006), Mr. Zamfirov and Mrs. Evtimova informed the Work Group about their participation in the elaboration of a draft Renewable Energy Law in Bulgaria, They were invited by the Ministry of Economy and Energy to participate in another Work Group for discussion of the biofuel section of this draft law.

The second meeting of the Work Group was held on 9 December 2006 in Veliko Tirnovo. It was organized jointly with a regular session of the National Association for Biofuels and Renewable Energy Sources. During this meeting Mr. Zamfirov and Mrs. Evtimova described the draft Law and specifically what was adopted from their proposals and what additional improvements were possible. Such improvements concern mainly the following problem areas:

- A simpler procedure, needed for environmental impact assessment of biodiesel plants;
- Simpler registration of new producers under the excise law (although the excise rate for biodiesel and bioethanol in Bulgaria is zero, such registration is needed);
- Possible introduction of obligations for mixing of conventional fuel with biofuel.

Another issue that was discussed concern the iodine number in EN 14214, and the possibilities for its achieving with the raw materials in Bulgaria – predominantly sunflower seeds.

During this second meeting, there was also a presentation from ESD Bulgaria Ltd. concerning carbon trading possibilities in case of biofuel production.

A third meeting of the Work Group was held on 5 February 2007 in Sofia. This meeting took place between the first and the second vote of the Renewable Energy Law in Parliament. So, Mrs. Evtimova made a presentation, concerning what was and what was not achieved in the development of this legal text.

It was decided that experts from the national administration should be invited to participate in the Work Group – the Ministry of Economy and Energy (responsible for the national biofuel targets), the Ministry of Finances and the Customs Administration (administering the Excise Law), the Ministry of Environment and Water (administering the environmental impact assessment) and the metrological authorities (administering the quality control). Official invitations to these institutions are being prepared by ESD Bulgaria Ltd.

On the 2<sup>nd</sup> of March 2007, Framework Agreement for Cooperation between the National Association for Biofuel and Renewable Energy Sources in Bulgaria and ESD-Bulgaria was signed. The main objectives of the agreement are:

- To develop jointly plans, programs and projects, in relation to the integration of Bulgaria in the countries, utilizing Renewable Energy Sources, as well integration of biofuels in the country.
- To establish favorable conditions for unifying the efforts and coordination of the parties, focusing on the following items:
  - o Implementation of various joint projects;
  - Undertaking actions to increase the engagement of the government and the local authorities for overcoming the barriers for application RES and biofuels in Bulgaria;
  - Support in development of ideas for amending the active legislation, as well as establish contacts with the executive and legal bodies in Bulgaria and in the EU, aiming at active participation in development of proposals for normative acts and their alternative projects in the field of RES and biofuels;
  - Mutual support and cooperation in technological aspects (development of programs, projects, etc.) for application under various state and non-state organizations and business structures, aiming at receiving financial and other support for the implementation of the set objectives;

- Establishment of conditions for development of yielding of different forms of clean energy and biofuels with minimum impact on the environment;
- o Implementation of research and consultative activities;
- Exchange of information;
- Support in expansion of the partner's network and establishment of new contacts with international organizations, state organizations, NGOs and business structures.

The fourth meeting of the Working Group, round table discussion involving other interested stakeholders, was held on the 27<sup>th</sup> April 2007. The objective of the meeting was to discuss the perspectives for development of the biodiesel production in Bulgaria. Twenty seven representatives from the state administration, consultants, biodiesel producers, scientists, biodiesel producers took part in the meeting.

The representatives of ESD-Bulgaria provided a brief summary of the project progress. The participants reviewed and discussed the directions for application of the scheme for support the production of the energy crops in Bulgaria, developed by the NABF. Discussed and analyzed were the measures for stimulating the biofuel demand; environmental benefits; development of the production and supply of biofuel; expansion the supply chain with raw material; increase the commercial opportunities and support the scientific research and development activities, specified in the EC Biofuel Strategy.

The proposal prepared by the National Association of RES and Biofuels on the Act for encouragement of utilization of RES, alternative energy sources and biofuels were discussed. It was focused on the possibility for utilization of biofuels in clean or mixed forms in the transport sector, as well as in the industrial and domestic sectors for heating. The biofuels should be reviewed as mean, which can substitute the petrol as fuel for transportation and thus to increase the energy independency of the country.

#### 3.4 Prospects for next period

A principal objective for the next period is to contribute for improvement of the dialogue between the biofuel stakeholders and the national authorities.

An important issue is to present in a clear way all employment and environmental benefits from biodiesel production, particularly for agricultural areas that have still high level of unemployment.

Opening of authorized liquid fuel quality laboratory has been set as a priority area. Government representatives have assured that such laboratory will be established very soon. EN 14213 "Biofuel for Heating" is also expected to be introduced.

The participants agreed that it is necessary to establish Agency for biofuel and other alternative fuels at the Ministry of Economy and Energy, as a specialized national unit for management and development of production and utilization of biofuels.

It was agreed that there is a necessity of change in the current legislation, related with the biodiesel production and utilization in Bulgaria in order to reach the set objectives and the efforts of all parties must be concentrated in this direction. The representatives of the working group are in constant communication via e-mail, telephone communication and unofficial meetings, focusing on the improvement of the entire system for yielding of raw material, production and distribution of biofuels, namely improvement of the raw material base; improve the normative framework and removal of the still existing barriers for the development of this activity; establishment of state and community structures for biofuel quality control; initiating public-private partnership for introduction of Long-Term Agreements between the national authorities and the producers/suppliers of conventional fuels, concerning obligations for mixing of conventional fuels with biofuels. Such voluntary approach is more dialogic in comparison with legal obligations and could be a way for guaranteeing the share of biofuels in the national consumption balance.

# 4 Cyprus

#### 4.1 Biodiesel Chains Cyprus National Team meeting

A national team of 11 persons was established in Cyprus as an initial team that is working on the more efficient promotion of Biodiesel in Cyprus. These persons represent the production of liquid biofuels (2), the fuel distribution companies (4), the state officers (3) and research experts (2). It should be noted that this national team has been established in the framework of the Biodiesel Chains project.

The objective of this national team is to set the initial steps toward the introduction of Biodiesel in Cyprus and to comprise the sperm for the establishment of a broader team/work group.

#### 4.1.1 Activities

The meeting took place on 30 November 2006 in Nicosia, Cyprus where 11 persons registered.

#### 4.1.2 Preparation activities

An extent invitation letter was prepared by Aeoliki Ltd. that referred to the Biodiesl Chains project, the need of a promotion national team promotion and details about the first meeting of the under establishment team meeting. Firstly, the letter was forwarded to the potential team members via email and afterwards numerous separate meetings took place in order to inform the potential members in person. The resulting comments and needs were summarised so that they would be confronted during the team meeting.

#### 4.1.3 Meeting minutes

The actions taken during the meeting were the following:

- Welcome speech, by Dimitris Glekas;
- Introductory presentation, short presentations of Biodiesel Chains project, and of Cyprus Biodiesel National Event, by Nikos Kamakiotis;
- Presentation of opinions speculations, by Giorgos Roditis, Antonis Semelidis, Christos Christofi, Dimitris Miskouridis, Thomas Sepos, Kyriakoulis Finopoulos, Michalis Evaggelidis, Michalis Chrysafis;
- Determination of the goals of the Cyprus Biodiesl Chains team;
- Determination of the manner of exploiting the Biodiesel Chains National Event (that would take place two months later).

The discussion that followed the short informative presentations focused on the following issues:

- The importance of the Biodiesel Chains project and the National team operation.
- The need of adapting the function of the team and the results of the international network to the individual conditions of Cypriot fuel market

- The participation reluctance of state departments was accented and the reasons for that were detected.
- The necessary tax system adaptations
- The evolution of regulatory actions
- The problems that may arise by the distribution of production units
- The need of importing less strict regulations as for biofules in order to introduce them in a more efficient manner (hazard of fine imposition)
- The international character and temporal variance of the market (increased sensitivity of the specific market)
- The potential domestic production (use of already cultivated crops for other uses and introduction of non-cultivated crops)
- Imposition of mandatory blending percentage on the fuel distribution companies
- Imposition of a quota system (proposed but rejected by the Energy Service)
- Quality control system and necessary apparatus

#### 4.1.4 Results

- A list of specific questions (on the abovementioned issues) was prepared that was forwarded later on to the representatives of the member states of the Biodiesel Chains project in order to prepare their response during the following National Event.
- Goals of national team:
  - o Implementation of a technical data base concerning biodiesel market
  - o Expansion of the team
  - Exploitation of the Biodiesel Chains National Event
  - o Implementation of a dissemination campaign

The rest of issues confronted during the meeting had to be dealt by the relevant governmental departments

The team members were invited to the Cyprus Biodiesel Chains National Event and their quotations were collected in order to be transferred to the Biodiesel Chains project partners in order to prepare their response.

The next meeting of the team was postponed for the mid October 2007 due to the stall of regulatory evolvement (actions critical for the elaboration of the biodiesel market in Cyprus)

#### 4.2 Cyprus Biodiesel Chains National event

A relatively large national event was organised on 18 January 2007 in Nicosia, Cyprus with 11 speeches and a 2 phase round table on the introduction of Biodiesel in the fuel market of Cyprus.

#### 4.2.1 Activities

The informative letter that was prepared for the Biodiesel Chains Cyprus National Team meeting was updated and sent to all multiple potential workshop attendants with a special invitation leaflet prepared and the official leaflet of the project.

An invitation was sent via email.

The actions taken during the meeting were the following:

- Welcome speech, by Dimitris Glekas;
- Short greeting, by Eystathios Chamboulas (General Director of the Ministry of Commerce, Industry &Tourism);
- Introductory presentation and short presentation of Biodiesel Chains project, by Myrsini Christou;
- Presentations of National Reports, by Guido Reinhardt, Oscar Mikucki, Jean-Marc Jossart, Ilian Jezliakov, Catalin Flurearu, Myrsini Christou, Nikos Kamakiotis, Raffaello Garofalo;
- Discussion.

#### 4.2.2 Confronted issues

The discussion that followed the informative presentations (mainly concerning the national reports) focused on the following issues:

- The importance of the Biodiesel Chains project
- Various tax system adaptations
- Regulatory actions taken in other member states
- Inadequacy of the Cypriot legal framework
- Quality and financial (tax imposition) control problems that may arise due to territorial distribution of small scale production units
- The international character and temporal variance of the market (increased sensitivity of the specific market)
- The potential of domestic production (use of already cultivated crops for other uses and introduction of non-cultivated crops)
- Alternative types of energy crops that may be exploited in Cyprus
- Imposition of mandatory blending percentage
- Quotes on the imposition of various types of quota systems and the manner of confronting implications that arose
- Alternative quality control systems and necessary apparatus
- Potential of Cypriot Biodiesel small scale producers to become members of international Biodiesel associations
- Interaction between Biodiesel market actors and car manufacturers (provision of engine operation guarantee)
- Profit margins for which oil distribution companies will be interested on promoting Bio-Diesel

- Measures of supporting agricultural sector in order to promote the energy cultivations (raw material production)
- Genetically modified energy crops (perception of this issue in other network markets)
- Informative presentation of estimations of the quantities and the relevant prices of Bio-Diesel that were distributed in members states during past years
- Biodiesel promotion actions taken in member states

#### 4.2.3 Results

- The main result of this event was the dissemination of valuable pieces of information to
  potential market actors that wish to take part in this involving market
- The Cypriot market actors contacted in person experts from various EU member states and established important contact relations
- Cypriot market actors had the opportunity for meeting each other just in order to establish an initial Biodiesel market network in Cyprus
- Many problems that stall the evolvement of the Biodiesel market in Cyprus were announced and broadly and discussed extensively. This can be assessed as extremely important since the promotion of state reluctance increase the political pressure on relevant state departments.

## 5 Greece

#### 5.1 Stakeholders network

In February 2006, CRES proceeded with the formation of the network of market actors dealing with the development of the biodiesel sector in Greece covering all aspects from production to refineries and distribution networks. The team comprises of the following stakeholder groups:

- Agricultural community: representatives from farmers' cooperatives and agro-industries that will deal with resource production and supply;
- Biodiesel producers: companies currently producing biodiesel in Greece;
- Policy makers: representatives from the ministries of Agriculture and Development;
- Refineries: representatives from the main refineries that produce the biodiesel mix for the market;
- Local energy agencies;
- Consumers;
- RTD institutes.

#### 5.2 Activities

The main objective of the first meeting was to discuss the current state of the biodiesel market in Greece in terms of legal framework, financial support measures, existing and future plants, feed-stock supply issues, research on biofuels & biorefinery as well as factors that foster/ hinder further development.

**The first meeting** of the network, which was also the **national seminar** took place on 28th February 2006. 52 persons expressed interest to participate but only 20 were registered.

The meeting started with an introductory presentation made by the former coordinator of the project Dr. Calliope Panoutsou on the status of the biodiesel market in Europe and the aims of this specific project.

- Then followed presentations on the 'Status of biofuels in Greece' from policy makers, namely
  - the Ministry of Development Mr. Athanassios Zaharopoulos,
  - Ministry of Rural Development Mr. Dimitrios Babilis.
- 'Biodiesel in Greece: Market drivers, Economic Impact and investment Opportunities' were presented by Mr. John Agriomirgiarakis from the company Strategic International SA
- 'Biodiesel plants in Greece' and the new plant to be built by ELIN was presented by Dr. Nikos Liapis from ELIN.
- The 'Directive 2003/30 and the Greek National Report on Biofuels' was presented by Prof. Evripidis Lois from the National Technical University of Athens.

 'Biofuels and Biorefineries: Research work at CERTH' was presented by Dr. Stella Bezergianni from CERTH.

The meeting was concluded by Dr. Calliope Panoutsou and Dr. Vladimir Hecl, representive of the European Intelligent Energy Agency (EIEA, now called EACI) and Technical Manager of the project. Dr Hecl made a comprehensive presentation on the Intelligent Energy Programme and provided directions towards future actions that would enable a faster growth of the biodiesel market in the foreseeable future.

The questions and discussions of this first meeting were focused on the following topics:

- Cost effectiveness of the existing technologies profitability of the investment
- Availability of local raw material supplies
- Possibilities for growing rape seed in the country under the local soil and climate conditions.
- Supporting financial mechanisms for investments in biodiesel producing plants

It was concluded that:

- Biomass can be produced locally by traditional crops (sunflower, rape seed, cotton seeds) and using conventional growing methods and equipment.
- There are diverse resource options, i.e. sunflower, rapeseed, soy, cotton and potential for good yields from other oil crops (rapeseed) that are not traditionally grown.
- Current agricultural industries potential suppliers of raw material (cotton industry).
- The supply chain of biodiesel can be characterized by relatively short transport distances, in case of domestically produced and locally used feedstock.
- Feedstock production for energy purposes creates jobs especially in rural areas and can be coupled with local production of biodiesel that creates an additional distribution channel for agricultural products and raises the income for farmers.

**The second meeting** of stakeholders was carried out the 20<sup>th</sup> June 2007, in coordination with the Greek Regional Technology Platform of Thessaly on Biofuels with 21 participants. In that meeting, the European Technology Platform for Biofuels was presented by Dr Calliope Panoutsou, the Vice-President of the Working Group 1 on the Biomass resources.

Then, Dr Nikos Liapis, Director in ELIN OIL referred to the challenges and specificities that have to be taken into account for the successful introduction of the biofuels in the Greek market, as is the feedstock supplies, the low consumption of diesel compared to gasoline, etc. as well as the necessity of close interactions between the industry and the academia in order to promote technological excellence and assure a smooth integration of all stages of the biodiesel production chain. The potential of the biodiesel market in Greece, the perspectives for further development as well as the biodiesel standards were discussed, and the necessity for testing higher than B5 blends –up to B100- in pilot/demonstration fleets was stressed out.

Dr Nikos Danalatos, Prof in the University of Thessaly presented his research work on several energy crops, traditionally grown as well as new ones, their energy input-output and yielding performances on a number of soil conditions.

The discussions that followed were mainly focused on the following issues:

- The high prices of the vegetable oils locally produced, which is due to the equally high biomass production costs, in comparison to the lower prices of imported seed oils, i.e from the neighbouring Balkan countries.
- Land shortage and obligation of high imports of feedstock.
- The quantities of biodiesel that can be marketed are not flexible.
- The need for long term contracts with the farmers was pointed out by biodiesel producers, whereas the perspective of holding contracts with a high number of farmers, because of the small farm size, was not very appealing for them.
- The price of rapeseed is rising and influences highly the feedstock production.
- The main motive for market development is the full detaxation of the biodiesel produced. However, the officially announced quantities of biodiesel that will be tax exempted refer only up to year 2007.
- Oilseeds have established markets. Therefore competition with food, feed & fiber markets is highly expected

The **third meeting** was held the 9<sup>th</sup> of October, with 15 stakeholders, again in coordination with the Greek Regional Technology Platform of Thessaly on Biofuels.

- A key issue was again the feedstock supplies and the inability of the locally produced oils (sunflower oils, soya oils, cottonseed oils) to meet the target of the 5,75% biofuels penetration; leading thus to extensive imports. The role of biotechnology was strongly pointed out in this meeting, as it could provide higher yielding crops, better seed oil characteristics and could contribute thus to fulfil the increased need for biofuels without affecting the food market.
- The biodiesel standards were extensively discussed and the necessity for flexibility in certain characteristics that do not affect the performance of biofuels in the vehicles, like the iodine number of the CFPP, was stressed out. On the other hand it was noted that the testing of the biodiesel quality is also rather costly and the small plants in particular do not have the financial means to run the whole set of tests frequently.
- The use of glycerine was also addressed, as its refinery to pure glycerine is very costly. So far glycerine is sold to the cement industry for direct burning, or is exported, whereas there are possibilities for its use for biogas production.
- The energy cropping premium of 45 €/ha is too low to be considered as a motive for farmers in countries with low farming size, such is Greece. Biomass production for energy purposes does not reduce agricultural premiums and subsidies. In a Greek survey it was calculated that equal premiums and subsidies are required in order farmers to grow biodiesel profitably.
- Farmers also stated that they should have guidance by the Ministry of Rural Development and Food as to which traditional agricultural crops they have to replace with energy crops –and which energy crops. Specific information on crop species, growing techniques etc are hard to find; only certain Universities and CRES have a substantial knowledge on these issues.
- The quota system and the annual calls of interest create insecure investment conditions and competition among the investors. Calls of interest are announced only until 2007 and the tax exempted quantities are not flexible.

- Biomass trade –oils, biodiesel, blends- is killing the biodiesel business nowadays, stated the biodiesel producers.
- There is lack of incentives for the use of high blends of biodiesel in captive fleets other than public transport companies.

From all these meetings, it was concluded that it was the tax exempted biodiesel production that gave the strongest boost to the development of the biodiesel market in the country; from 1 biodiesel plant in 2005 and the 420 tons of biodiesel production, the actual numbers in 2007 raised to 10 biodiesel plants of total annual capacity amounting to 575,000 tons. That number exceeds by far the 140,000 tons, which target of the 5,75% of diesel substitution with biodiesel. Under these conditions and if the plants are working at full capacity, significant exports of biodiesel could be also feasible.

This conclusion was also evident during the first stakeholders meeting and national seminar, where the discussions were focused mostly on the 'positive' side of biofuels in all stages of their production chain.

On the other hand, the main obstacle that was continuously posed by the stakeholders for the deployment of the biodiesel market in Greece is the low availability of domestically produced feedstock related to its high production costs. The market for diesel driven vehicles is also restricted in Greece and according to the information received from the Ministry of Development, the diesel consumption is much less than the gasoline consumption for transportation. That is mainly due to the prohibition of the circulation of private diesel cars in the centre of Athens and Thessaloniki. Measures towards the increase of demand in diesel couls simultaneously give a boost to the further biodiesel market deployment

In between the meetings, the cooperation between the members of the network will be continued via emails and phone calls. The main topics for discussion were the recent developments in the field and the development of a national strategy for future biodiesel penetration.

#### 5.3 Prospects for next period

The stakeholders meetings are expected to continue, ion the occasion of workshops on biofuels that are frequently organised in the country as well as in targeted national meetings on biomass resources/technologies/ market development, held in local/regional level, in order to promote the biofuels market development in relation to the regional development.

# 6 Poland

#### 6.1 Stakeholders network

In the beginning of the year 2006, the Polish National Energy Conservation Agency started the creation of the network of market actors dealing with biodiesel issues. It is worth to point out that until that time there was no formal network which linked different market actors from plant producers to biodiesel producers. There were only organisations which linked for example plant producers like Polish Association of Rapeseed Producers (KZPR).

#### 6.2 Activities

To ensure the high quality of the network and invitation of the main market actors we worked closely with Andrzej Pietak, professor of the Warsaw University of Technology.

At the beginning the list of relevant stakeholders was created. For the cooperation we invited the representative of agriculture sector, mainly from agricultural associations (5), research institutes and universities (21), biofuels producers (5), motor industry (1), local authorities (5), related ministries (4), users associations (3).

The main objectives of the created stakeholders' network are:

- to discuss the main problems of biodiesel and biofuel sector development as lack of legislation and,
- to initiate the activities resulting in change of current market situation as well as to inform market actors about BIODIESEL CHAINS project.

The **first meeting** of the network took place on 11 December 2006. 29 persons were registered. Finally 18 people took part in the meeting.

During the first part of the event two introduction lectures were presented. The first one was dedicated to biofuels market support mechanisms in Poland and the second one to biofuels risk and prospect factors. A discussion about the main biofuel market problems moderated by Andrzej Pietak was the second part of the meeting. Finally the main topic was the new Act of 25 August 2006 on biocomponents and liquid biofuels, which implements the resolutions of the Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels and other renewable fuels for transport.

The **2**<sup>nd</sup> **meeting** of the Working Group established within the BIODIESEL CHAINS was held on 25 September 2007 in the KAPE S.A. office in Warsaw. It was attended by 44 participants including 7 project team members. Participants came from a different background so there was a good representation of the biofuels market actors and stakeholders including:

- government representatives;
- biofuels producers;
- technical universities and research institutes;
- agricultural associations;

- associations related to biofuels;
- private companies;
- press and other institutions.

It is worth mentioning that the experts from the national administration participated very actively at this meeting increasing its significance and role in the public dialog on biofuels. There were representatives of:

- The Ministry of Agriculture (responsible for raw material for biofuel market),
- The Ministry of Environment (the environmental aspect of biofuel use).

The main objective of the meeting was to disseminate the outcomes of the project and discuss the perspectives for more development of the biodiesel production in Poland and other EU countries.

Meeting participants were welcomed by the Vice-President of KAPE S.A. Andrzej Wójtowicz, project coordinator Myrsini Christou and the workshop organizer Oskar Mikucki.

It was a full day meeting divided into two sessions. During the morning session four lectures were given by the following speakers:

- Mr. Kazimierz Żmuda from The Polish Ministry of Agriculture in his presentation "Solutions concerning usage of biodiesel in Poland " discussed availability of raw materials such as energy crops and other plants in the aspect of reaching the Polish national targets for biofuels use;
- Mr. Daniel Ruciński from The Polish National Chamber of Biofuels described biofuels market support mechanisms and barriers in Polnad;
- Mr. Stanisław Mrozik from KAPE S.A. who presented the subject of opportunities of using alternative fuels in transport basing on the preliminary outcomes of the STAR BUS and PROCURA projects;
- Mr. Oskar Mikucki presented outcomes of BIODIESEL CHAINS project including biofuels SWOT analysis and ThERRA project.

The afternoon session gave state of the art regarding liquid biofuels in different countries. Biodiesel project participants gave an overview of the situation in their countries:

- Mrs. Myrsini Christou for Greece;
- Mr. Guido Reinhardt for Germany;
- Mrs. Olivia Schoeling for Belgium;
- Mr Nikos Kamakiotis for Cyprus and
- Mr. Catalin Flurearu for Romania.

Summing up main issues that were debated during the meeting regarded the latest law on excise duty exemptions approved by the President on May 30, 2007, and Regulation of the Minister of Economy of July 6, 2007 on biofuels Indicatory National Targets for 2007 – 2013, supply

side of raw materials rape seeds and other plants. The new European target of 10% biofuel in Polish market in 2020 was also discussed and biofuels SWOT analysis was presented.

Final discussion ending the event was moderated by Oskar Mikucki from KAPE and Myrsini Christou from CRES and led to the following conclusions.

There will be a strong growth in biofuel crops demand and biodiesel production. The Polish producers will have to increase their production significantly in order to comply with EU regulations. It is expected that the biofuels will be supported in Poland through an obligation on the fuel traders. A recent reduction of the tax exemption resulted in uncertainty on the market, but simultaneously it also created a set of incentives and the results are expected to become clear soon. It was numerously said that it is necessary to introduce changes to the present Polish legislation. The participants of the meeting agreed that there's a need for establishing the main body for biofuels in Poland as a specialized national institution. It would be responsible for management and development of production and utilization of biofuels as well as administration and coordination of the activities of all Ministries and other institutions involved in biofuels action.

The benefits of the meeting:

- disseminating outcomes of the BIODIESEL CHAINS project;
- presenting an overview of the biodiesel development in the EU countries;
- using the information for direct input to BIODIESEL CHAINS project;
- exchange of biofuels information;
- starting discussion on the current problems and future possibilities in the presence of the decision makers representing the ministries;
- creating additional contacts between the national authorities and the biofuels associations;
- establishing good contacts for present and future co-operation beyond the BIODIESEL CHAINS project.

Members of the Working Group are in constant communication via e-mail, telephone and during bilateral meetings. Their activities are focused on improving production and distribution of biofuels, namely improvement of the raw material base; development of the biofuels framework and removal of the still existing barriers for the development of biodiesel market.

# 7 Romania

#### 7.1 Stakeholders network

In order to create networks of relevant stakeholders to initiate dialogue and mobilize market actors Partner no. 5 ITC made a review on all relevant stakeholders from private and public sectors. Two lists were formed, one with national actors in Romania and one with national events. All the information was uploaded in the project website.

The Romanian partner has conceived and opened a forum Biodiesel at http address: http://intertermo.conceptforum.net for the on-line information of stakeholders with reference to national news and opportunities, information on national policies and financial mechanisms in supporting and enhancing the use of biodiesel in Romania.

All interested Romanian organizations, and relevant research or market actors, were kindly invited to the formation of the national team and to participate to the activities and to contribute to the exchange of opinion process by submitting their views to the forum Biodiesel.

The Romanian partner prepared the development of national biodiesel network, which will bring together all relevant stakeholders from private and public sectors that appears to be a key step in promoting biodiesel for local transportation sector to increase the chances for biodiesel development.

#### 7.2 Activities

The project activities were directed to create further contacts between the stakeholders and the national authorities.

#### 7.3 Prospects for next period

Within the network meetings scheduled in the 2nd year of project (June 2007), the members will be invited to review the draft of the national strategy for biodiesel in current preparation by the government, and to achieve the SWOT, agree the mission and goals of the strategy and to contribute to the consultation process by submitting their views to the forum Biodiesel and to discuss their analyse during the meetings.

The national biodiesel network will develop action plans aiming at regional market development by assisting the Government in developing and implementing a strategy for the production and use of biodiesel, in particular for transport applications. Major Romanian biodiesel stakeholders will be represented, including the agricultural and forestry sectors, food industry, biodiesel industry, oil companies and fuel distributors, car manufacturers and research institutes.