

# PROBIO

## News

**INTEGRATED PROMOTION OF THE BIODIESEL CHAIN**

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### **THE COMMITMENT OF REGIONE ABRUZZO TO RENEWABLE ENERGY SOURCES**

A famous economist, Jeremy Rifkin once said that the third industrial revolution will start with the discovery of a new way of using renewable, clean energy. I fully agree with the American thinker. As a matter of fact, national and international news show us that “energy” is a fundamental issue that must be tackled seriously. This is the reason why Regione Abruzzo based its programs aiming at enhancing the use of renewable sources. Our objective is to fill the negative gap between production and consumption of energy within the national territory. We are also moving the first steps forward in Biodiesel chain, especially thanks to Regione Abruzzo partnership in the IEE Project, PROBIO “INTEGRATED PROMOTION OF THE BIODIESEL CHAIN”.

Moreover, the policies implemented by Regione Abruzzo allowed us to have best examples of plants for the use of renewable sources. For example a 1 MW photovoltaic plant (outstanding example on the national territory), and a plant for the production of electricity fuelled by hydrogen. It is the first example in Italy where hydrogen is produced from renewable sources and it is then used in a 5 KW pick fuel cell. Moreover, Regione Abruzzo invested on thermal energy as well, by co financing solar panels.

At the moment the regional government wants to keep on supporting the use of renewable energy sources, for this reason a Regional Energy Plan was elaborated in collaboration with L'Aquila University, taking into account recent evolutions in the national energy system in line with Kyoto Protocol.

There is no doubt that the region is doing its best to increase the use of renewable energy sources, but it is necessary to clearly spot specific objectives and legal measures that take into consideration the peculiar aspects that characterize our Region. We want to involve all the stakeholders because we believe that their ideas should be the starting point for any future program in this sector. In this sense, and due to the important role of fuels in our energy structure, the promotion of biofuels will be one of our priorities and PROBIO Project is an essential tool for this purpose in our region.

Mr. Franco Caramanico

Regional Councillor for Energy Policy  
of Regione Abruzzo (Italy)



**INFORMATION OF INTEREST**

**THE EUROPEAN REGULATION EN 14214**

The quality of the biodiesel that we use in our vehicles depends on the different parameters such as the starting oil or fat that is used as the raw material or the level of good manufacturing practices. European standard EN 14214, which was published in 2003, specifies the minimum requirements and test method for FAMES (the acronym for the methyl esters that are used to produce biodiesel - *Fatty Acid Methyl Esters*) that are marketed and distributed for use as pure automobile fuel (100% biodiesel) or to dilute diesel (in which case the blends must comply with standard EN 590). Standard EN 14214 allows the use of some additives in order to improve certain quality parameters, but in any case there is a table containing physical-chemical characteristics with the maximum values that marketed FAMES must not exceed:

Test	Units	Standard	LIMIT VALUES
Ester content	% (m/m)	EN 14103:2003	min 96.5%
Density at 15°C	kg/m <sup>3</sup>	EN ISO 3675:1999	860 - 900
Viscosity at 40°C	mm <sup>2</sup> /s	EN ISO 3104:1996	3.50 - 5.00
Flash point	°C	ISO 3679:2002	min 120
Sulphur content	mg/kg	ISO 20846:2004	10.0
Tar remnant-Micro Method(at 10% distillation remnant s/n ASTM D1160)	% (m/m)	EN ISO 10370:1996	0.30
Sulphated ash content	% (m/m)	ISO 3987:1994	0.02
Water content	mg/kg	EN ISO 12937:2001	500
Total contamination	mg/kg	EN 12662:1999	24
Copper band corrosion (3 hours at 50°C)		EN ISO 2160:1999	Class A
Oxidation stability	hours	EN 14112:2003	min 6.0
Acid value	mg KOH/g	EN 14104:2003	0.50
Iodine value	g of iodine/100 g	EN 14111:2003	120
Linolenic Acid Methylester	% (m/m)	EN 14103:2003	12.0
Polyunsaturated Methylester	% (m/m)		1.0
Methanol content	% (m/m)	EN 14110:2003	0.20
Monoglyceride content	% (m/m)	EN 14105:2003	0.80
Diglyceride content	% (m/m)	EN 14105:2003	0.20
Triglyceride content	% (m/m)	EN 14105:2003	0.20
Free glycerine	% (m/m)	EN 14105:2003	0.02
Total glycerine	% (m/m)	EN 14105:2003	0.25
Na content	mg/kg	EN 14538:2006	5
K content	mg/kg	EN 14538:2006	
Ca content	mg/kg	EN 14538:2006	
Mg content	mg/kg	EN 14538:2006	
P content	mg/kg	EN 14107:2003	10
CFOP	°C	EN 116:1998	

Thanks to these regulations, we, as biodiesel consumers, can be assured that we are acquiring a safe, quality fuel for our vehicles.

**ACTIONS DEVELOPED DURING THE SECOND SEMESTER OF THE PROJECT**

**BIOFUEL PROJECT MEETING IN BRUSSELS**

The Agencia Provincial de la Energía de Burgos, as the PROBIO Project coordinator, participated last July in the "Intelligent Energy" biofuel projects meeting which was held in Brussels. During this meeting, participants informed European Commission representatives of the progress of their projects and exchanged ideas and experiences with people who are working on other similar projects. The main conclusions taken away from the meeting were the need to develop reference standards and sustainability criteria for biofuels, as well as national support plans which help develop the clean fuel market.



**ACTIONS DEVELOPED DURING THE SECOND SEMESTER OF THE PROJECT**

**ENERGY CROPS SEMINAR IN MARIBOR (SLOVENIA)**

As a build-up to the courses for farmers which are going to be held during the Project, the University of Maribor organized a seminar entitled “*From oil raps to biodiesel*” on 14 September 2007. The event, which was held within the framework of the PROBIO Project, was aimed at farmers and researchers who are interested in energy crops. Sinergija representatives were also present at the seminar and made a general presentation of the Project. This activity gathered more than seventy participants from all over Slovenia.



**TOWARDS A STRATEGY FOR THE INTEGRATED PROMOTION OF THE BIODIESEL SUPPLY CHAIN IN OUR REGIONS**

Once the current biodiesel situation in the provinces and regions that are participating in the Project (Burgos, Ávila, Huelva, Pomurje and Abruzzo) was analysed through the studies and analyses that determined the current consumption ratios and the main barriers were detected in the supply chain, the panels of experts have worked in these regions and provinces to *establish specific strategies* in each one of them for the purpose of developing an integrated production, distribution and consumption chain in the next few months. The three principal focus points of these strategies are training farmers, developing the biodiesel market and promotional activities.



The main actions captured in the local strategies are based on holding training courses for farmers, conducting studies on energy crops, signing commercial agreements and carrying out promotional activities (exhibitions, informational material, promotional campaigns, etc.).

**THE PROBIO PROJECT, PRESENT AT A NUMBER OF EVENTS AND CONFERENCES**

Since PROBIO activities began in early 2007, the different Project partners have actively worked on issues related to promoting it, spreading its objectives and activities and disseminating other issues related to the production, distribution and consumption of biodiesel. To this regard, the PROBIO Project has been present at several *congresses, seminars and conferences* which have been held in participating countries, and in other international events which have been held in other European countries. The European Congress “Ávila Energy” and Ávila Renewable Energy Days (Ávila, Spain), the Abruzzo Regional Energy Conference (Pescara, Italy), the European Biomass Conference and Exhibition (Berlin, Germany), the Expobioenergy International Fair (Valladolid, Spain), the International Gornja Razgona Agrofood Show (Slovenia) as well as other conferences, seminars and round tables have included the active participation of the PROBIO Project.



**NEWS*****BURGOS: Castrojeriz will begin producing in 2008***

The new biodiesel plant that the company Biocom Pisuegra is developing in Castrojeriz (Burgos) has already received environmental authorization from the Regional Government (Junta de Castilla y León) and the expectation is to conclude the final administrative processes so that it may start operations in the first few months of the year. One of the advantages of this plant is that since it is being developed by an agricultural cooperative, the local farmers themselves will benefit from the complete raw material procurement, production and biodiesel consumption chain.

***HUELVA: Bio-Oils Energy S.L. and CEPSA are building a new biodiesel plant***

One of the major Spanish oil companies, CEPSA, and the company Bio-Oils Energy S.L. signed an agreement in 2006 to build a new biodiesel plant on the "La Rábida" refinery land in Palos de la Frontera (Huelva). With a capacity for 200,000 annual tons, this facility is expected to favour the diversification of the CEPSA refinery supply as of 2008.

***First absolute biofuel filling station in SLOVENIA***

The Unes Company Koper has opened the first absolute biofuel filling station in Slovenia on 9th January 2008. The investment was of 1,2 mil €. In this biofuel filling station pure biofuel for lorries will be sold, which is used 10% less in comparison to regular biodiesel. The manager of the company Unes explains that the advantage of their product is related to the vegetal oil, which gives 3% more energy than diesel. The company has foreseen to open few more biofuel filling stations during this year, with the intention of covering all centers in the country.

Summarized article from Delo (<http://www.delo.si>)

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