## **Deriving Effective Least-Cost Policy Strategies** for Alternative Automotive Concepts and Fuels

Report on the National Workshop, Poland

# What Should Be Done to Boost the Biofuel Market in Poland?

Poswietne, 4.11.2010





#### **Authors:**

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## **Project Partner:**

KISE the Krakow Institute for Sustainable Energy

Krakow, December 2010

## A. General information

## Title of the workshop:

National What Should Be Done to Boost the Biofuel Market in Poland?

Date of the workshop: 4.11.2010

Location: Poswietne

## Organisers:

• KISE (the Krakow Institute for Sustainable Energy)

 MODR (The Regional Advisory Centre For Agriculture and Rural Development in Warsaw)

Number of Participants: 99 (+ 7 own staff)

Number of invitations sent: 400+ (including telephones and emails)

## **B.** List of participants

## Original list attached separately

	Name		Organization	Category
1	Burczy	Hanna	Instytut Energetyki	Research
2		Krzysztof	MODR Poświętne	Agr. Adv.
3	Denisiuk	Wiesław	Ekolog ZEC/POLBIOM	BMS IND/NGO
4	Kozera	Bożena	MODR Poświętne	Agr. Adv.
5	Samoraj	Marta	MODR Poświętne	Agr. Adv.
6	Mirowski	Tomasz	AGH	Academic
7	Guła	Adam	KISE	OS
8	Teliga	Karol	POLBIOM	NGO
9	Bondyra	Radosław	AGH	Academic
10	Biedrzycki	Marek	BioAcians sp. z oo	Industry
11	Dubiński	Bartosz	Mazowiecka Agencja Energetyczna	Agr. Adv.
12	Kozłowska	Karolina	Mazowiecka Agencja Energetyczna	Agr. Adv.
13	Rudnicki	Sławomir	PZD Pułtusk	Consultant
14	Postek	Czesław	PZD Pułtusk	Consultant
15	Michaliszyn	Beata	IETU, Katowice	Research
16	Bednarz	Ludwik	PROWERS, Wrocław	BMS IND
17	Kowalczyk	Krzysztof	PEC, Lubań	BMS IND
18	Blinicki	Michał	Stm Ers.Timber sp. z oo	BMS IND
19	Witkowski	Adam	TZD Zuromin	Consultant
20	Gąsiorowski	Marcin	TZD Zuromin	Consultant
21	Rogowski	Radosław	TZD Zuromin	Consultant
22	Antonowicz	Joanna	Widok-Energia sp. z oo	BMS IND
23	Cholewa	Marcin	IGSMiE PAN	Research
24	Frankiewicz	Renata	Doradztwo Powiatowe Płońsk	Agr. Adv.
25	Makowska	Daniela	MODR Poświętne	Agr. Adv.
26	Żuławski	Łukasz	ZSCKR	Consultant
27	Kowalik	Agnieszka	MODR Poświętne	Agr. Adv.
28	Podloch	Małgorzata	MODR Poświętne	Agr. Adv.
29	Kostro	Marek	MKZ	Fleet
30	Zasina	Ryszard	MODR Poświętne	Agr. Adv.
	Synogradzka	Iwona	Starostwo, Płońsk	POL
32	Giziński	Włodzimierz	Starostwo, Płońsk	POL
33	Rasztejko	Jarosław	Starostwo, Płońsk	POL
34		Ryszard	PIB	NGO
	Pyrka	Henryk	PIB	NGO
36	Dębowski	Marcin	UWM Olsztyn	Academic
37	Zieliński	Marcin	UWM Olsztyn	Academic
38		Marcin	Vattenfall Polska	Industry
39	Szymborski	Wojciech	MODR Płońsk	Agr. Adv.
40	Goździewski	Ireneusz	MODR Warszawa	Agr. Adv.
41	Pielach	Krzysztof	MODR Płońsk	Agr. Adv.
42	Lusania	Roman	MODR	Agr. Adv.
43	Pręgowska	Ewa	MODR Poświętne	Agr. Adv.

44	Kowalewska	Anna	MODR Poświętne	Agr. Adv.
	Quinini	Janusz	QUIRINEX	BMS IND
	Żyłajtus	Andrzej	WFOŚIGW Wrocław	POL
47		Wojciech	AGH	Academic
	Leszczyński	Zbigniew	Starostwo, Płońsk	POL
	Pająk	Witold	MODR Poświętne	Agr. Adv.
	Rajewski	Ryszard	Poznań	NGO
51	Szałkowska	Bożena	TZD Płońsk	Consultant
	Petrykowski	Dariusz	TZD Płońsk	Consultant
	Niemirska	Małgorzata	TZD Płońsk	Consultant
54		Magdalena	Stora Enso Timber sp z oo	Industry
55	· ·	Jacek	GRZEWMAX	Finance
56		Zofia	TZD Ciechanów	Consultant
57	, ,	Jan	top agra Polska	BMS IND
	Lewandowski	Łukasz	TZD Ciechanów	Consultant
	Malicki	Jacek	ANR Warszawa	POL
	Sajewski	Dariusz	SKS Siemiątkowo	Finance
61	Tarwacki	Wiesław	TZD Zuromin	Consultant
62	Ginalski	Zdzisław	CDRO/Radom	Consultant
63		Waldemar	CDRO/Radom	Consultant
64		Piotr	UP Lublin	Academic
	Gradziuk	Barbara	UP Lublin	Academic
	Radomski	Tomasz	MODR Poświętne	Agr. Adv
67		Maciej	Agropolgaz	BMS IND
	Wajss	Paweł	KISE	NGO
	Chądzyńska	Bożena	MODR Poświętne	Agr. Adv
	Zaremba	Dominik	Agencja Rynku Rolnego	POL
71		Jolanta	Agencja Rynku Rolnego	POL
72		Ewa	MODR Poświętne	POL
73		Bogusław	thermex	BMS IND
	Listwan	Andrzej	ALTECH Kraków	BMS IND
	Szcześniak	Paweł	UMWM Warszawa	POL
	Lewandowski	Piotr	konsultant	Consultant
	Boszko	Michał	senator RP	POL
78		Apolinary	Rada Powiatu Płockiego	POL
	Żmuda	Kazimierz	MRiRW, urzędnik państwowy	POL
80		Elżbieta	KISE	OS
81	Traczyński	krzysztof	farmer	
82	Mierzkowski	Zbigniew	farmer	
83		Urszula	farmer	
84		krzysztof	farmer	
85		Marek	farmer	
86	•	Hubert	farmer	
87	Ciarek	Paweł	farmer	
88		Łukasz	farmer	
89		Jacek	farmer	
90	Dziadok	Maciej	farmer	
91	Długołęcki	Dominik	farmer	
92		Michał	farmer	
	Siennicki	Wiesław	farmer	
95	Staniszewski	Stanisław	farmer	

97	Piekut	Mieczysław	farmer	
98	Ożarowski	Paweł	farmer	
99	Matuszewski	Tomasz	farmer	
100	Zabłocki	Florian	farmer	
101	Lewicki	Andrzej	farmer	
102	Grzelak	Jan	farmer	
103	Błaszczak	Mariusz	farmer	
104	Pawłowski	Sławomir	farmer	
105	Janiszewski	Anatoliusz	gospodarstwo rolne	Farmer
106	Mojst	Przemysław	gospodarstwo rolne	Farmer
107	Piórkowska	Anna	gospodarstwo rolne	Farmer

## C. Detailed agenda of the Workshop

11:00 - 13:00	Registration
13:00 - 14:00	Lunch
14:00 - 14:15	Conference opening, Ms. Grazyna Opolska, presentation of the welcome letter of the Marshal Mr. Adam Struzik
14:15 - 15:00	Introduction to the Alter-Motive Project (Prof. Adam Gula, KISE)
15:00 - 15:45	Long term programme of promotion of biofuels or other renewable fuels for 2008-2014 – conclusions adopted by the Council of Ministers (Director Kazimierz Zmuda, Ministry of Agriculture, Warsaw)
15:45 - 16:15	Discussion
16:15 - 16:45	Sustainable transport in the EU. Strategy and Action Plan (Prof. Adam Gula, KISE)
16:45 - 17:15	Break for filling-in the questionnaires
17:15 - 17:30	Coffee break
17:30 - 18:15	Prospects, barriers and technical conditions of biofuels in transport (Dr. Janina Wolszczak, AGH-UST Krakow)
18:15 - 18:35	Liquid biofuels – the perspective of the agricultural sector and fuel producers – panel discussion
18:35 - 19:00	Coffee break, filling-in the questionnaires continued
19:00 - 19:30	Needed and possible support mechanisms – additional presentation by Director Zmuda
19:30 - 20:15	Panel discussion on the above topic (Moderator: Prof. Adam Gula, Director Kazimierz Zmuda, Karol Teliga, president of Polbiom)
20:30	Reception / Dinner

## D. General summary

Considering the turnout of the participants (more than 100 people came) and the very vivid and, at some points, hot discussons the National Workshop should be considered as very successful. In particular the contributions from Dir. Kazimierz Zmuda from Ministry of Agriculture and Rural Development was very informative and up-to-date, as they contained information about very recent developments in shaping the Polish nREAP at the government level, which is not yet publicly available. In fact, the "center of gravity" of the Workshop, shifted from presentation to discusions, which had led to the modification of the agenda and replacement of some presentations by panel discussions.

The profile of participants was rather homogenius as they represented the main stakeholder group in Poland, which is farmers and the consulting companies and advisory institutions (national or regional) offering ago-technical and market consultancy to farmers. Those institutions are interested in the development of Polish biofuel market, from the point of view of the potential source of the additional income for farmers, by broadening their product spectrum. It is important to emphasize that the politicians were represented at a high level, notably, by Mr. Zmuda from the Ministry of Agriculture and Rural Development who is the key political figure in Poland, regarding the use of biomass for energy purposes, and Mr. Michal Buszko, member of the Polish Senate, who represents the Polish People's Party, the main representative of farmers' interests. Unfortunately, other stakeholder groups were not adequatly represented. In particular, the representatives of the biofuel producers the board members of the Polish Biofuel Chamber, who had announced their participation did not come, despite of the telephone confirmation of participation, because the day before the Workshop they were dismissed and new managment had not yet been established.

Still the workshop attracted people who have benefited largely from the participation, both from getting the first-hand, up-to-date information from top politicians as well as getting information about the technological perspectives of the development of the biofuel market in the near and more distant future (presentation of Dr. Wolszczak from AGH) and their relevance to Polish conditions.

From the presentations of the politicians and the discussion that followed, it became aparent, that the there is still an ample room for changes towards the final shape of the policies concerning the promotion of biofuels in Poland. The most important outcome was that Mr. Zmuda

declared that he would ask the Minister of Agriculture and Rural Development to convene, in a short time, a meeting of experts working on the use of biomass for energy purposes to transfer the outcames and conclusions from the discussions and panels, to the policy makers working on the Polish Law on Renewable Energies. Such meeting took place, soon after the Workshop, on November 17<sup>th</sup>, in the Ministry of Agriculture, to which the main organizers of the National Workshop, Prof. Adam Gula and Mr. Karol Teliga (president of the Polish Biomass Association - Polbiom), were invited and participated.

## The issues addressed (suggestion):

1)	Critical review of the state of the art	<u>yes</u> / no
2)	Recent and planned policy development	<u>yes</u> / no
3)	Action plan for an EU strategy towars a sustainable transport	<u>yes</u> / no
4)	Coordination/harmonisation of the support systems	<u>yes</u> / no
5)	Specific national requirements	<u>yes</u> / no
6)	Policy integration	<u>yes</u> / no
7)	Other (please specify)	yes / <u>no</u>

## E. Specific report on the debate (try to keep it brief):

The Workshop was opened by **Ms. Grazyna Opolska**, director of MODR (The Regional Advisory Centre for Agriculture and Rural Development in Warsaw) who also presented the letter to conference participants, from the Marshal of the Mazowiecki Region (Voivodship), Mr. Adam Struzik, in which he underlined the importance for Poland of the subject of biomass as renewable source of energy.

**Prof. Gula** described introduced the participants to the Alter – Motive project. He presented the consortium, the main project tasks and outlined briefly the work done so far.

**Director Zmuda** in his presentation, entitled: "Biofuels in the Policy of the Ministry of Agriculrute and Rural Development" (see the attachment in Polish) gave a broad overview of the current Polish biofuels and cereals market as well as the relevant policies. He informed the participants that the long term biofuels promotion program for years 2008 – 2014 has been elaborated but its implementation is not satisfactory. The participants asked the question "why?" and Mr. Zmuda came to that question later (see below).

In the beginning he presented the forecast of the cereal and rape market development. The present demand is 26-27 million tonnes / year, while the projected demand is 28,5-29 million tons / year including the demand needed for biofuels and bio-components.

The assumption was that the intermediate level of 850-1280 thousand tones of rape for biodiesel production would be achieved in the period 2009-2011, while in fact, it was achieved already in 2007 and remained at that level in 2008 and 2009. The time of achieving the target value of 1700-2500 thousand tones depends on many factors but the Ministry assumes that it can be reached already in 2015.

Than he went to the description of the Government Program regarding the biofuel policies.

Its main objectives are:

- activation of rural areas through increased agricultural production for energy purposes (non-nutrition);
- growth of employment through creation of new jobs;
- development and implementation of initiatives aimed at increasing both production and use of bio-components and liquid biofuels in Poland;
- development and implementation of solutions that ensure the economic viability of the biofuels production process - starting from the acquisition of agricultural raw materials through production of bio-components and liquid biofuels and mixed liquid fuels with bio-components, as well as increasing the purchase of such fuels by the end-users;
- public support to producers of bio-components that will reduce the increased costs of production of bio-components compared to the traditional, fossilbased fuels.

To achieve the goals of the Program it is needed to:

- support the production of bio-components in the tax system and fuel charges;
- support investments in energy crops;

- support investments in production of biofuels / bio-comoponents facilities;
- support to research in the field of biofuels;
- support the education activities in the related areas;

Concerning the latter point, professor Gula informed the participants that currently a syllabus for an academic course: "Clean, Effective and Renewable Energies" is developed within the Polish-Icelandic Programme, which includes a vast section devoted to bioenergy. This section is divided into three main segments: solid, liquid and gaseous fuels derived from biomass, where adequate attention is given to transport biofuels. He also noted that information will be given in the presentation by Dr Janina Wolszczak, later in the conference.

Dir Zmuda stated that the Ministry of Agricultural and Rural Development after, revising the Program concluded that the progress in the development of biofuels market is not satisfactory. The assumed intermediate targets have not been achieved, and it is likely that the final goal may also not be reached.

The production capacity of biofuels, as reported by the producers, is used only in about 17 - 23%. This may lead to the conclusion that the funds invested in biofuels production capacity have been wasted.

In order to develop a coherent plan for promotion of biofuels, cooperation between different Ministries (Ministry of Economy, Ministry of Finance, Ministry of Agricuture and Rural Development) has to be improved. Considering the Polish conditions, there are always problems with such cooperation. For example, obtaining information and commitments from the Minister of Finance is difficult.

Another problem Mr Zmuda had raised was that it is very important to verify whether the imported bio-components have already been subsidized in the country, in which they were produced, so that the same fuel would not receive a double support.

According to the current EU's trade law, the imported fuel becomes an EU product ones it is distributed among Member States by European companies. He said that it is very important to remember that the relief from excise duty on biofuels is valid only till 30 April 2011.

An important information, which was new to the participants was that it should be expected that from 1st of May new mechanisms of support will enter into force. At this point, one of the participants expressed his concern that the cancellation of the tax relief may greatly jeopardize the providers of the plant material (farmers) and producers of biofuels, who have invested or planned to invest in the bio-component production.

Dir Zmuda, responded that the Ministries intention is that the new amendments should be design in such a way that they would promote and support the domestic origin of bio-components. He admitted that the public support to bio-components imported to Poland, which has been given a support in the country of origin (where it was produced) seriously decreases the competitive position for the domestic actors. The changes should promote the development of the domestic market of the bio-components. This statement was received by the participants with great satisfaction, because it would mean that Polish farmers may benefit from the changes. Dir Zmuda added that also supporting the system by public money should be made conditional on fulfilling the realization all assumed goals of the Program. The key condition is that the price of fuel with biocomponents must be lower or, at most, equal to the price of fuel without bio-admixtures.

Any change of policy concerning biofuels should be preceded by a careful analysis of the conditions at the time they will be made. There should be new measures to promote and support biofuels, such as the "Fund for the promotion of bio-

components and liquid biofuels" that will use instruments other than relief in excise duty to support the development of the biofuels-market. The level of the Fund would be established on the annual basis by the Council of Ministries and would amount to 80% of the sum that will be saved in the budget due to cancellation of the relief on excise duty on the normative mixes of fuels with bio-components. He explained that once a certain fraction of bio-component is obligatory, there should be no financial support given to it, meaning eg. that pure biofuels will still be eligible for the relief. Another important issue is to introduce a verification/certification system to meet the criteria of sustainable biofuels production at each stage: the farmer - broker (if any) and producer.

The proposed regulations concerning the support for environmental actions will be targeted to:

- biofuels' producers and actors producing semiproducts for them;
- fleets of vehicles running on biofuels, including biogas purified to natural gas;
- biogas service station dispensers (bio-CNG);

#### They should also incled:

- rules to allow for a flat-rate support for the purchase of new vehicles adapted to use biofuels (such as E-85 and B-100) on the condition of scrapping the old vehicle using fossil fuel
- provisions to allow local governments to provide flat-rate support for the purchase of new vehicles adapted to use biofuels (such as E-85 and B-100).
- provisions empowering the owners of vehicles adapted to use biofuels (such as E-85 and B-100) free parking in the so-called "ecological zones" and proper labeling of those vehicles.

After the presentation there have been many questions regarding the government plans to support biofuels production in Poland, based on the planned material, produced by Polish farmers. Some participants complained about the uncertainties regarding the tax policies and support mechanisms. Some of the discussing participants presented the problems, which should be solved by the government, if the biofuels market is to grow.

**Prof. Gula**, in his second speech, presented the 10 hypotheses formulated by the Alter – Motive project addressing the strategies towards sustainable transport system in the European Union. He went consecutively through each of them, explaining its importance and key issue and encouraged the participating stakeholders to give their opinion. The translated theses were distributed among participants in a printed form and they were asked to provide their input either by e-mail or by traditional surface mail at the address of KISE, so that those could be later-on inserted on the website. For those who speak English, instructions about login and system were given. Prof. Gula also presented the questionnaire, which had been distributed among the participants.

**Dr Janina Wolszczak** gave an detailed presentation on different biofuel types and production processes, as well as the technological and other barriers to their wide implementation in Poland. She also described the current research the current research and development plans in the field of biofuels, giving introduction to the audience about biofuels of the second and third generation.

**Panel discussion** on Liquid biofuels – the perspective of the agricultural sector and fuel producers. The farmers participating in the Workshop expressed limited interest in the higher generation biofuels technologies. The perspective of second generation for biofuels was accepted with some scepticism. Namely some stakeholders pointed out, that materials, such as straw or wood residues, should be rather used for heating purposes in Poland, because heating needs in our country are such that may use all solid biomass available for energy purposes. However and unexpected result was the interested expressed by a big Polish company (Europolgas) who expressed interest in establishing a pilot algae plantation in Poland for biogas/biodiesel purposes. The talks have been continued with Prof. Gula after the Workshop and other interesting research units expressed interest.

**Director Zmuda** took floor again after the panel, because he wanted to make comments concerning the discussion after the previous presentation. He explained that the present proposal for the amendment of the Act concerning the biocomponents includes:

- adaptation to the European directives to the Polish conditions
- inclusion of even the smallest producers of biocomponents in the common registry, so that there are no more gaps in the system.
- abolition of relief from excise duty for normative fuels, which contains biocomponents.
- implementation of the additional holograms on licence plates, which would be given during registration, for cars using biofuels

Panel discussion on "Needed and Possible Support Mechanisms".

The panellists included Director Kazimierz Zmuda, Prof. Adam Gula, President Karol Teliga and Senator Michal Buszko.

Senator Michal Buszko in his speech underlined the importance of biofuels and sustainable transport in Poland and Europe as a whole. He put special emphasis on the importance of a wide use biofuels for Polish farmers for whom production of input material for biofuels will create an additional source of income. In this context, he addressed the question of certification of biofuels, which has to be given a special attention because certification of the organic material used in biofuels production and problems which may appear for the related Polish stakeholders (farmers and production companies). If this is not properly organized, the biocomponents needed for biofuels produced in Poland may have to be bought abroad. As a representative of the Polish Peoples Party, he assured the participants of his support for the development of the biofuels market in Poland.

**Mr Karol Teliga** raised topic of greatly misuse of public money to support renewable energies. He compared the different renewable energies in Poland, where biomass is a dominating source, while – for instance – wind is practically negligible compared to the sum of the potential of the solar and biomass energy. Moreover, the unit cost of investment in 1 MW of wind power are several times higher that the corresponding costs of investment in biomass heating or solar heating of domestic hot water. He has also said that after those needs, biofuels should come next. At the same time most of the support money goes for promotion of wind energy and practically no projects in biomass heating have been qualified for founding by the money from the structural funds and support of biofuels in not certain and not sufficient. He asked Mr

Zmuda to ask the Polish government to re-evaluate those policies. In his answer Director Zmuda said that he would ask Minister of Agriculture and Rural Developments, Mr. Marek Sawicki, to organize in a possibly near future, a meeting of experts devoted to this problem. In fact, such meeting was organized already on November 17<sup>th</sup> at Ministry in Warsaw. Mr Karol Teliga and Prof. Adam Gula were invited to this meeting and participate.

### F. Overall conclusions

Taking into account the above meeting at the Ministry, which will be followed by other meetings, one should conclude that the Polish Alter – Motive Workshop may have a significant indirect impact on the Polish policies regarding the promotion of the use of biomass for energy purposes. In fact, as a result of the Workshop Mr. Zmuda organised a meeting at the ministry of Agriculture and Rural Development devoted largely to subject of the Workshop. Prof. Gula and Mr. Teliga were invited to the meeting with invitation to make presentations. The meeting took place on November 17, 2010.

### G. Recommendations

It is suggested that the effort spent on soliciting answers to questionnaires and participation in discussion forms should be reduced, because it is a very difficult and time consuming work, while the results are not necessarily adequate to the time invested. Much better results are obtained in direct discussions like those in the Alter–Motive Workshops organizes so far.