

Minutes

Workshop on Biomass Sustainability in Ukraine

→ *production, -> assessment, -> certification, -> markets*



May 25 – 26, 2010

Kyiv, Ukraine

Location: Hotel “Ukraine”, Conference Hall (2nd floor)

4 Institutska Str., Kyiv, 01001, Ukraine

Workshop presentations are available at:
website <http://biomass.kiev.ua/index.php?page=events&lang=en>

Goal:

Training Ukraine government and institutes in setting up a system for sustainability certification of biomass and biofuels and realising sustainable production.

Introduction:

This Workshop was carried out in the framework of the G2G project between Netherlands and Ukraine on Biomass and Biofuels and also the Sustainable Biomass Import program, where 2 projects are financially supported by NL Agency to realise sustainable import chains to the Netherlands. See: <http://www.senternovem.nl/sustainablebiomass-import/index.asp> (click on projects). A new call is open now and will close on 05.08.2010 with a budget of about 4 M€.

This workshop was a follow up of the workshop in the Netherlands between 6 – 7 April 2010 where a delegation of 7 representatives from Ukraine were trained in Biofuels policy, financing, standards, sustainability and certification.

This workshop was organised in consultation with FnR, from Germany, who are organising a workshop on 29 April 2010, on the German standards and certification procedures for biofuels, that are in force by 1st July 2010 in Germany.

This workshop was carried out in the framework of the project: G2G08UA03, financed by the Dutch Ministry of Economy and carried out by NL Agency.

This workshop was organised jointly by NL Agency from the Netherlands and Ministry of Agrarian Policy of Ukraine.

Presentations:**25 May 2010**

The workshop was chaired by *Mr. Mykola Datsenko* (Ministry of Agricultural Policy of Ukraine), *Mr. Kees Kwant* (NL Agency) and *Mr. Hryhorii Kaletnik* (Committee on Agrarian Policy and Land Relations of Ukraine's Parliament)

Having opened the workshop, *Mr. Datsenko* gave cordial greetings from Mr. Mykola Prysiazhniuk, Minister of Agrarian Policy of Ukraine. He mentioned that renewable energy sources and biomass were very important for Ukraine. *Mr. Datsenko* thanked Mr. Kees Kwant and noted that bioenergy development in Ukraine was actively supported by the Netherlands. *Mr. Datsenko* emphasized on the EU Directive N 28 which was issued recently. This document specified the line for harmonization of Ukrainian bioenergy legislation system to European one. Also he reminded about active work on Biomass Action Plan for Ukraine and thanked the Dutch party for its support. *Mr. Datsenko* suggested to hold a forum for further development of bioenergy business contacts between Ukraine and the Netherlands.

After that *Mr. Hryhorii Kaletnik* was invited to make a speech. He said that cooperation which was started on governmental level was very positive not only for business and scientific relations but for Ukraine in whole taking into account dependence on imported fossil fuels. He mentioned that deep analysis of bioenergy legislation and work on its harmonization with European one is being done now in Ukraine's Parliament (Verkhovna Rada). This will allowed to establish a sustainable Ukrainian market of biomass and biofuels. Also Mr. Kaletnik noted that in his opinion decreasing feedstock export from Ukraine and increasing production and export of final products was very important for Ukraine. He told that work on creation of legislation to stimulate production/using biomass without breach of food security and sustainability are carried out in Committee on Agrarian Policy and Land Relations of Ukraine's Parliament.

After that *Mr. Kees Kwant* delivered his complimentary address in which he emphasized that the Netherlands saw good opportunities to cooperation with Ukraine on biomass and biofuels. That is why they induced G2G cooperation between the countries. He said that during this cooperation they had set up 2 projects. The first project was aimed to develop Biomass Action plan for Ukraine. Mr. Kwant showed the audience a book called BAP. This book consists of actions on how to develop the production of biomass and technologies, how to convert this biomass into biofuels and power. *Kees Kwant* said that after completing the first project they started a new one, which aim is implementation of Action Plan and development of Certification schemes for sustainable biomass. The same way they are trying to establish business contacts between Ukraine and the Netherlands within this project. Mr. Kwant noted that this workshop was meant to support developing sustainability certification scheme in Ukraine.

Then *Mr. Kees Kwant* delivered a presentation about purposes and expectations on this new project. He told that the Netherlands would have 4 times more bioenergy till 2012 (in comparison with the present moment) and that biomass should be produced in a sustainable way. That is why Ministry of Agriculture/Economy appropriates 7.5 M€ to develop innovative sustainable import chains. And it could be interesting for Ukraine. He said that 2 pilot projects within this programme were implemented in Ukraine: the projects were connected with wood pellets and pellets from agricultural residues and energy crops. A new call in Sustainable Biomass Import was open calling at the moment. Mr. Kwant shortly introduced the programme and told that they were looking for a new challenging proposal to develop sustainable biomass production within this programme. In conclusion he emphasized that the Netherlands were the main country which imports rapeseed oil from Ukraine, and this import should be proven and sustainably certified after 1 January 2011.

Then *Mykola Datsenko* made a presentation on “State of the art and prospects for bioenergy development in Ukraine”. He described the primary energy consumption structure and told that Ukraine depended on imported energy. He mentioned about the major components of biomass potential and noted the tendency of their changes. Mr. Datsenko focused the audience attention on the Ukrainian legislation in the field of alternative energy and pointed to its strengthening trend. He emphasized that application of law on biofuels and "green" tariff stimulate the implementation of bioenergy technologies for heat and electricity production. Enactment of the law “On amendments to some Laws of Ukraine as for support for production and the use of biofuels” was very important for the bioenergy development. The main supported measures are: exemption from import duties and value added tax for technique for reconstruction and construction of new enterprises which produce biofuels; 10 years tax holiday on profits for companies that sell their own biofuel production, etc. He noted that these actions provided significant incentives for job creation in agriculture and in rural areas.

Then *Mr. Valerii Dubrovin* (National University of Bioresources and Nature Management of Ukraine, Research Institute of Biotechnics and Biotechnology) had the floor. He made a presentation on “Ukraine’s potential. Creation of solid biofuels market”. Mr. Dubrovin told about general potential of biomass in Ukraine and its components. He emphasized the strategic directions of bioenergy development in agriculture: environmental technologies (Sustainable development, global warming, etc.); biological technologies (genetic engineering, biodiversity, biosafety, etc.); bioenergy (biological resources, biogenic fuels, their usage, etc.). Mr. Dubrovin underlined the activities of its university in the establishment of bioenergy in Ukraine. He informed that with the participation of National University of Bioresources and Nature Management of Ukraine several lines of granulation and briquetting equipment were developed. Also several types of boilers and heat generators for the solid types of biofuels were designed.

After that *Jolanda van Schaick* (CREM) delivered a presentation on the subject «How to use existing sustainability standards in biomass certification? ». She drew the audience’s attention to:

controversy around biomass, security of a certification system, biomass criteria versus existing sustainability schemes, certified wood pellets from Ukraine.

After the presentations session, *Mr. Sliman Abu Amara* (NL Agency) opened a discussion. He suggested that the participants of the seminar were to be divided into six working groups. He asked the attendees to think about different issues and tell 5 reasons why: 1) You live in the Antarctica. Why cannot your house melt because of global warming? 2) You are a famished child in Tanzania. Why must the humanity think about you (competition with food, local energy supply, medicines and building materials)? 3) You are a biologist in Argentina. You know that every day more than 50 plant species despair. What should you say to make it not to happen? 4) Tell 5 reasons to invest money into bioenergy. 5) How does bioenergy help for social well-being? 6) How does bioenergy help the environment?

After the reports of the working groups *Mr. Sliman Abu Amara* summarized the remarks from the working groups that are needed for sustainable bioenergy development:

1. We should use a biofuel as a renewable environmentally friendly fuel. But we should ensure the fulfillment of its sustainability.
2. The biofuels are secondary products of biomass, so the remaining part of biomass can be used as food or fertilizer.
3. Switch from the expensive traditional energy carriers to cheap local fuel (biomass) means providing reliable local energy supply. The use of biomass for energy purposes leads to creation of new jobs. The new jobs are connected with the biomass collection, storage, pre-treatment, delivery and operation of bioenergy equipment.
4. Growing energy crops on lands degraded with industrial activities, or polluted with heavy metals or other pollutants has a potential to decontaminate soils and increase their economic value.
5. The use of biofuels strengthens energy security of Ukraine.

Then the floor was given to *Mr. Viktor Tymoshchuk* (Ministry of Agricultural Policy of Ukraine) who made a presentation on “Certification and standardization in Ukraine”. *Mr. Tymoshchuk* present to attendees a list of existing legal framework for standardization and certification in Ukraine. After that he gave a list of normative documents projects, their compliance with international standards and time performance. He considered the main articles of the EU Directive No 28 and told the audience about the biofuels sustainable production criteria.

After that *Mr. Vasyl' Targonya* (Leonid Pogorilyy Ukrainian Scientific Research Institute of Forecasting and Testing of Machinery and Technologies for Agricultural Production (Leonid Pogorilyy UkrNDIPVT)) made a presentation on «Standardization of biomass and biofuels production in Ukraine». He informed the seminar participants about the regulations on biofuels production from rapeseed, sunflower and from wood waste. *Mr. Vasyl' Targonya* told about the condition of the regulations in terms of biofuel production in Ukraine. Speaker acquainted participants with suggestions of his institute on the development and harmonization of certain documents. Leonid Pogorilyy UkrNDIPVT through its scientific base can act as initiator and developer of relevant regulations and present their own unique methods and meter base for examination of agricultural technologies, evaluation of soils, and determination of energy costs on agricultural production.

Then *Mr. Jarno Dakhorst* (NEN Energy Resources) delivered a presentation on «Biomass and biofuels standards in the EU». He talked about standards development in Europe, biomass and biofuels standards, sustainability standards. In *Mr. Dakhorst'* opinion standards are the efficient instruments to support national and EU targets on renewables.

Then *Ms. Kateryna Kutsenko* (MEO, Germany) delivered a presentation on «Implementation of European directive into the state legislation: Germany experience». She told about ISCC

certification system, its structure and the main principles. She outlined the status of certification systems implementation for bioenergy production and consumption in Germany. *Ms. Kateryna Kutsenko* emphasized that improving the sustainability of biomass global supply through the effective international system of certification introduction was one of the most important tasks for the preparation and use of biomass for production in the future.

After the presentations *Mr. Kwant* opened a discussion on the subject “Roadmap to implement certification in Ukraine”.

“Who should be responsible for certification system in Ukraine? Government or companies which are interested in selling biomass? Does anybody have some suggestions?”

Mr. Michail Danilov (CEO Sustainable Biomass Trading Company): Both the Netherlands and Ukraine are the stakeholders, so both sides should be responsible. The Governments should create conditions which will not impede the development of bioenergy.

Selected opinions expressed during the discussion:

Mikhail Drukovanyi (Vinnitsya state agrarian university): “I would like to say that after biodiesel and bioethanol production valuable wastes such as fertilizer and biogas remain. And they should be used. After the processing of rape a valuable glycerin remains”. He emphasized that biomass production in combination with other products was a very important.

Mr. Kees Kwant: We should consider production of biomass only in the complex with feed and fertilizer usage. The chain “food-feed-fuel” cannot be broken. For sustainable biomass production realization we need to create a joint approach. This approach should connect all the sustainability factors. Then we can replicate the experience of its work on other companies. We should create the conditions without risks and then start to work.

Mr. Viktor Tymoshchuk (Ministry of Agricultural Policy of Ukraine): For practical realization of all sustainability criteria the biomass action plan (BAP) should be implemented in a state level. The government must acquaint each of ministries and departments with corresponding tasks for realization of the BAP and create a single coordinating bioenergy body.

Then *Mr. Datsenko* delivered his final speech, in which he told that BAP was not ready yet for the state implementation. It needs to be improved. After its improvement the Ministry is going to lobby it in Ukrainian Parliament with support of the Parliament’s deputy Hryhorii Kaletnik. Talking about certification and particularly about responsibility for certification system in Ukraine *Mr. Datsenko* emphasized that government and business should work in partnership. He noted that they studied the experience of other countries on standardization issues, in particular having visited Germany and the Netherlands. Also Ministry of Agricultural Policy of Ukraine collaborates with NAER on certification issues. *Mr. Datsenko* also informed the workshop participants about creation of the special bioenergy subdivision in the Ministry of Agrarian Policy and about the preparation on the certification proposal for the minister.

In conclusion *Mr. Kees Kwant* said that Ukraine was very active in all the issues concerning bioenergy and it was great. Of course a lot of work is to be done still. He emphasized that the main task by the end of the year was development of a standard for one type of biomass.

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Next day, opening the seminar, *Mr. Datsenko* noted that this event was held within the framework of Dutch-Ukrainian project "Biomass and Biofuels". The next scheduled event at the end of 2010 is a business forum on investment for biomass and biofuels in Ukraine.

Mr. Datsenko noted that the previous day the EU directive No 28 (2009) and standard NTA 8080 and 8081 of the Netherlands concerning certification of biomass had been discussed. In his opinion the adoption of these guidelines are very complicated because of the need to attract additional funds for Ukraine. But it will give an opportunity for Ukrainian producers to speed up the integration into the European space. *Mr. Datsenko* thanked all attendees and particularly *Kees Kwant* for effective work and noted that the seminar was very informative.

In his turn, *Mr. Kees Kwant* said that the aim of the previous day's part of the workshop was to acquaint the Ukrainian side with the state of certification in the EU, particularly in the Netherlands and Germany as an example for Ukraine.

Mr. Kees Kwant noted that this day's attendees would obtain more detailed information on sustainable forestry, production of sustainable liquid biofuels and specific pilot projects that have been implemented or are under preparation for implementation in Ukraine.

All the attendees were invited by the Chairmen of the workshop to participate in discussions.

After that *Mr. Olexiy Pristaya* (State Forestry Committee of Ukraine) delivered a presentation on sustainable Forestry in Ukraine. *Mr. Pristaya* believes that using wood instead of gas for heatgeneration is inevitable in Ukraine. The main task of the state is to make this process systematic, manageable and effective. With this aim Forestry Committee proposes to develop, adopt and implement "The state or national target program for substitution of imported natural gas by wood biofuels for 2010-2020". He described basic points of this program. *Mr. Pristaya* mentioned basic economic conditions that can stimulate the biomass using in Ukraine: market prices for natural gas for all consumers, lending, public compensation for biofuels usage; public funding for conversion of municipal boiler to biofuel.

Mr. Kees Kwan's question: In your opinion, what is the main point of forestry sustainability development in Ukraine?

Mr. Olexiy Pristaya's answer: The main problem of Ukraine is absence of forest roads. Forest is not only habitat but also the main work subject for people who lives in the region. They must be given the possibility to earn not only by forest as the resources of nature, but also by a forest as an ecosystem. And the main possibility of this by creating the work place through the construction of forest roads.

After that *Mr. Pavlo Kravets* (FSC Ukraine) made a presentation on Forestry Sustainable Certification (FSC). *Mr. Pavlo Kravets* told about forestry certification and its main advantages, components and procedures. He said that the greatest benefits of forest certification for forestry companies were: sometimes a higher price, access to new markets, forming a long-term partnership, improving the image and the management system. In turn, introducing certification for other stakeholders is also expedient because of following factors: the security of forests with high appreciated value, ,conservation of rare and endangered species, prevention of selling the illegal wood, ensuring the rights of workers and local communities. *Mr. Kravets* briefed on FSC certification scheme and its basic requirements. He called the difference with other schemes, common in Europe.

Then the floor was given to *Mr. Glushko* (Eco-Gran LLC (Ukraine)) who made a presentation on Sustainable wood pellets. In his report *Mr. Glushko* presented Malyn factory producing wood pellets which is being built and almost ready for commissioning. He described the criteria for choosing the plant location. He told that the main raw material for wood pellets production was

fuelwood and wastewood from enterprises in Zhytomyr region within 30 km from the factory. *Mr. Glushko* described the basic parameters of pellets and invited for plant opening in September of 2010.

After that *Ms. Alisa van den Nagel* and *Mr. Gyevorg Gabrielyan* made a presentation on “Sustainable wood pellets for export to the Netherlands”. *Mrs. Van der Nagel* presented her company and its profile. She explained why they had chosen Ukraine to develop their businesses: they are interested in buying/producing biomass; the Netherlands has a limited potential to produce biomass; Ukraine has a big potential to produce certified sustainable biomass. *Mrs. Van der Nagel* noted that the overall objective of their activity was to work towards sustainably produced wood pellets for export to the Netherlands that complies with Dutch sustainability demands set up for biomass – thus developing a concept that can be copied to other places in Ukraine to create significant flows of biomass.

After that *Mr. Kapshuk* (“Ukroliyprom”) delivered a presentation on Ukrainian market of oilseeds and by-products: current state and opportunities. He presented pictures about production and consumption of sunflower seed, sunflower oil and rapeseed in Ukraine. He has shown that Ukraine exports majority of produced sunflower and rapeseed oil to European countries. *Mr. Kapshuk* emphasized that Ukraine owned enough scientific and technical bases for biodiesel production organization. He asked participants to pay attention to this factor and invited to cooperation.

After that *Mr. Olynychuk* (Research Institute on Alcohol Products) delivered a presentation on Sustainable vegetable oil. He gave review about distilleries which are currently operating in Ukraine and the general characteristics of molasses distillery dregs and its use for biogas production. Also gave examples of similar projects.

After that *Mr. Wim van den Elshout* (“SBTC Sustainable Biomass Trading Company”) delivered a presentation on “Sustainable oil trading”. He acquainted the participants with the main goals of the Directive 2009/28/EC of the European Parliament and the council. He announced SBTC Trading policy and governance model which consisted in harmonizing and balancing the food, feed and bio-fuel production; providing a new best practice standard for a carbon neutral, sustainable and renewable economy with respect to the need for food, feed, fuel and energy; applying a transparent and controllable fair trade concept based on the above principles. In *Mr. Wim van den Elshout*’ opinion the most important issue is to address all the national and international requirements. SBTC will organize and monitor this process in close corporation with independent third parties, which will take care of an authorized certification of the intended biomass stream. Depending on biomass (waste) stream and local situation SBTC will apply appropriate biomass conversion technologies, among others Torrefaction (bio-coal), Pyrolysis (bio-oil) and gasification. *Mr. Wim van den Elshout* told about SBTC’s basic concept for corporation invited for cooperation. “SBTC will be happy to work with you and support the concepts of sustainability”.

Then the floor was given to *Mr. Ronald Poppens* (F&BR) who made a presentation on biomass pellets for power: making sustainable pellets from reed, straw and switchgrass. *Mr. Poppens* told that together with Poltava agrarian academy his company opened experimental laboratory where they develop a sustainable business model for pelletizing biomass residues, reed and biomass crops in Ukraine for domestic and Dutch energy markets; test sustainability of underutilized biomass and energy crop production on marginal land while avoiding iLUC. *Mr. Ronald Poppens* also commented sustainability questions. In his opinion sustainability is achieved by: certification (NTA/RED, GHG balance, Biodiversity, soil, water, air); taking into account social impact; stakeholder consultations; avoiding indirect effects (by using under-utilized biomass and using under-utilized land); minimizing competition (i.e. avoid food price increase, additional land conversion, GHG emissions). *Mr. Ronald Poppens* gave recommendation to Ukrainian

government. “You need to develop policies for using straw and reed (what is allowed, what is recommended?)”.

In continuation of the presentation made by the previous speaker, *Mr. Loic Lerminiaux* (Phytofuels) spoke about his company's experience in establishing a research enterprise in Poltava oblast. The main criterion for choosing the region was not the most profitable location in terms of logistics but understanding the importance of replacing fossil fuels by biomass by the region administration. The important factor is that they leave 25% of the biomass for needs of the region, so the proposal is attractive for the management and they are willing to cooperate. Also *Mr. Loic Lerminiaux* told about production of reeds for energy. He focused on transportation and sites suitable for growing the energy crop in Ukraine. He emphasized that Ukraine had a significant potential for energy usage of reeds.

After that *Ms. Natalia Makarenko* (Institute of agroecology of Ukrainian Agrarian Academy of Sciences) delivered a presentation on “Environmentally appropriate agricultural production in the context of sustainable biomass import”. According to *Ms. Makarenko*, agricultural production including growing crops may be environmentally feasible based on a high level of potential and effective fertility of soils. *Ms. Makarenko* said that recently soils in Ukraine had been characterized by depletion and a single criterion of sustainable development for Ukraine was recovery of soil fertility and, consequently, sustainable harvest. Currently, agriculture is characterized by non-compliance and violation of structure of crop rotation that is not a sign of sustainable development. We must create feedstock areas and ensure full utilization of the areas’ bioclimatic potential.

After that *Mr. Jan Peter Lesschen* delivered a presentation on GHG emissions in relation to environmental conditions and crop management.

After the presentation session *Mr. Kees Kwant* opened a discussion. “I would like to open a final discussion on actions to realise sustainable production and export of Ukraine’s biomass and biofuels to the EU. Yesterday we learned about different certification systems which are used in Europe (ISCC, NTA 8080, 8081). And the first question is: how could they be implemented in Ukraine?. Also today we talked about wood pellet production, export of oil crops from Ukraine to Europe, looked on pilot projects working on trade and export out of Ukraine. So the question is: how could we do all of this sustainable? We have also seen that agriculture can do a lot of things for improving sustainable production. It can be done by using less fertilizer for instance. So there is also a question: what can we do in this area? So I would like to ask you all these questions. Does anybody have a suggestion what must be done by Ukrainian government, companies or associations to make all this possible?”

Selected opinions expressed during the discussion:

Mr. Wim van den Elshout (Sustainable Biomass Trading Company): This is a good beginning and it is great that both countries understand the importance of certification for sustainable development. I think that the next step in cooperation should be a business meeting between companies of both countries.

Mr. Kees Kwant: Today we are discussing sustainability and certification. We understand the importance of all of this. And the question is how all the farmers and agricultural communities outside the room can do all of this? How can they learn about it? There is still a big step between this room and farmers. So how can we get rid of this chasm? How will the farmers know that all that rapeseed is produced in a sustainable way?

Answer by Mr. Wim van den Elshout (Sustainable Biomass Trading Company): I think that the best way is to work with non government organizations. If we work in this area there will be an example. Farmers will see what they can do in this area. And also they should participate in meetings of such kind in the future.

Mr. Kees Kwant: There is something I also have learned today. This is about logistics. We are talking about transportation of wood pellets, rapeseed oil. It has to be done by train, ships. I was wondering if Ukraine was ready for biofuels exports increase. Or is there something which can be done here?

Answer by *Mr. Roman Yuskiv:* The problem of biomass transportation in Ukraine is very important. Only one port is currently available in Ukraine. And this port is overloaded. The alternative method is transportation by river Dnipro. But the biomass production geography is limited by usage of Dnipro River. Problem number two: Polish traders who carry out policy of “scorched earth”. They purchase the biomass in the Ukraine is not at market prices. In turn, Ukrainian farmers do not work out. This leads to depletion of soil.

Then *Mr. Datsenko* delivered his final speech. He emphasized that this seminar was not just nationwide and it was held within the G2G Dutch-Ukrainian project "Biomass and biofuels". He stressed that the subject of the workshop was very topical and in general the workshop gave a lot of valuable information on sustainable development to the participants. Regarding the EU Directive No 28, the Ministry did not receive it officially. On the Ministry's own initiative the Directive was translated and passed to managers at regional level. Ministry of Agricultural policy developed a draft law and submitted it for consideration to the Cabinet of Ministers, In the law, they proposed concrete figures for obligatory consumption of bioethanol in Ukraine. Also a new state program on biofuels production with consideration of European experience is under development now. *Mr. Datsenko* underlined the necessity to harmonise Ukrainian legislation system (regulatory basis, certification and tax system, standards, price formation mechanisms, etc.) as a whole with the EU one. He also mentioned that access to the biofuel market should be simplified. Finalizing his speech *Mr. Datsenko* emphasized that for effective bioenergy development there should be fruitful cooperation between Ministry of Agricultural policy of Ukraine, NAER and Ministry of Fuel and Energy. For successful solving the problematic issues Ukraine should not be considered only as a source of feedstock. And there must be a balance between exporting feedstock and energy.

Next step of our cooperation should be assisting Ukrainian companies in finding business partners. Therefore, I propose to conduct year-end Business Forum with Dutch side's support. We want modern equipment and advanced technologies to come to Ukraine. In my opinion Ukraine has all the resources for green energy production. And it could become the largest export potential for the country.

Then *Mr. Datsenko* thanked all the attendees and closed the workshop

Presentations are available at: website <http://biomass.kiev.ua/index.php?page=events&lang=en>

Annex I: List of participants

N	Name	Organization, position	E-mail, Tel.
1.	Mykola Datsenko	Ministry of Agricultural Policy of Ukraine, Director of Technical-Engineering Department	Datsenko@minapk.gov.ua 380 44 226-30-62
2.	Hryhorii Kaletnik	Head of Committee on Agrarian Policy and Land Relations of Ukraine's Parliament (Verkhovna Rada)	Kaletnik.Hryhorii@rada.gov.ua +38(044)255-28-40
3.	Kees Kwant	NL Agency (the Netherlands) Senior Bioenergy Expert, Project leader	kees.kwant@agentschapnl.nl +31 (0)88 602 24 58
4.	Sliman Abu Amara	NL Agency (the Netherlands), Advisor on Bioenergy	sliman.abuamara@agentschapnl.nl
5.	Viktor Tymoshchuk	Ministry of Agricultural Policy of Ukraine, chief specialist	timoschuk@minapk.gov.ua +38 044 278 58 37
6.	Vladimir Zablotsky	Ministry of Agricultural Policy of Ukraine, adviser of Minister	zvlat.kiev@mail.ru +380 44 279-60-78
7.	Olexiy Prystaya	State Forestry Committee of Ukraine, Deputy Head	prystaia@dklg.gov.ua +380 44 235-49-15
8.	Oleksandr Matviychuk	Committee on fuel-energy complex, nuclear policy and nuclear safety attached to Ukraine's Parliament, Deputy Secretary	matviychuk@rada.gov.ua +380 44 255-26-50
9.	Vitaliy Gorichko	Ministry of fuel and energy of Ukraine	horichko@mintop.energy.gov.ua +380 44 206 37 51
10.	Hlib Strygunenko	Ministry of fuel and energy of Ukraine	
11.	Yulia Naumenko	National Agency of Ukraine for Effective Energy Use (NAER)	
12.	Mykola Zarytskiy	National Agency of Ukraine for Effective Energy Use (NAER)	
13.	Jarno Dakhorst	NEN Energy Resources (the Netherlands)	Jarno.dakhorst@nen.nl +31 15 2 690 245
14.	Jolanda van Schaick	CREM (the Netherlands)	j.vanschaik@crem.nl 020 627 49 69
15.	Wim van den Elshout	CEO Sustainable Biomass Trading Company (the Netherlands)	wvdelshout@sbtrading.nl +31(0) 6 23 36 76 03
16.	Michail Danilov	CEO Sustainable Biomass Trading Company (the Netherlands)	damiva2@hotmail.com +31 (0) 6 19 28 88 20
17.	Alisa van den Nagel	Van den Nagel Bio-energy (the Netherlands)	alissa@vandennagel.nl +31-517-492-403
18.	Bram van den Nagel	Van den Nagel Bio-energy (the Netherlands)	bram@vandennagel.nl +31-653-690-411
19.	Gyevorg Gabrielyan	Van den Nagel Bio-energy (the Netherlands)	ggevorg@list.ru
20.	Kateryna Kutsenko	MEO (Germany)	kutsenko@ier.kiev.ua (+38044) 278-6360, 278-6342

21	Serhii Kandul	MEO (Germany)	kandul@ier.kiev.ua +38(044)278-63-60
22	Wolter Elbersen	F&BR (the Netherlands)	
23	Ronald Poppens	Food & Biobased Research (the Netherlands)	Ronald.poppens@wur.nl +31 (0)317-48-01-74
24	Loic Lerminiaux	Phytofuels Investments Ltd., founder	lerminiaux@amstercapital.com +38(067)235 0309
25	Jan Peter Lesschen	Wageningen UR Alterra	Janpeter.lesschen@wur.nl +31 317-484687
26	Ruud Marinus Gelten	University Utrecht, Master Student	r.m.gelten@students.uu.nl +31 6 11197764
27	F. Archypenko	National Scientific Center “Institute of Agriculture, Ukrainian Agrarian Academy of Sciences”	
28	Andriy Balanyuk	Tebodin Ukraine CFI	a.balanyuk@tebodin.kiev.ua +38(044)426 49 40/41/42/43
29	Serhii Bernadzikovskiy	Vinnitsa state agrarian university, Head of Department	agro@enzim.biz 068-340-15-56
30	Tetiana Blystiv	Ukraine’s Parliament (Verkhovna Rada), assistant deputy Pashynsyi Serhii	pashynskiy.serhii@rada.gov.ua (044)255-29-05
31	Oleksandr Vivchar	Association of agrarian producers Malovyskiivskiy region Kirovogradskaya oblast, executive director	aleksandr_008@ua.fm 099-507-42-91
32	Mikhail Viriovka	National Scientific Center “Institute for Agricultural Engineering and Electrification”, Ukraine Agrarian Academy of Sciences, senior scientist	vermish@ukr.net 066-340-10-38
33	Tetiana Gavrylyuk	«ATP-15101», Ltd.	096-99-12-993
34	Viktor Glabets	Ministry of Agricultural Policy of Ukraine	
35	Yevgen Glushko	Eco-Gran LLC (Ukraine), Director	evgeny@reef.com.ua +38(050)423-89-88
36	Gennadiy Golub	National Scientific Center “Institute for Agricultural Engineering and Electrification”, Ukraine Agrarian Academy of Sciences, Head of Department	gagolub@mail.ru 066 245 65 53
37	Aleksander Gontar	«ATP-15101», Ltd., director	wood.gontar@gmail.ru +3(067)363-07-74
38	Andriy Davydenko	Main agrarian department of Kyivs’ka oblast, specialist	067-225-20-11
39	Olga Drozdova	SEC „Biomass” (Ukraine), junior consultant	drozdova@biomass.kiev.ua 453-28-56
40	Mikhail Drukovanyi	Vinnitsa state agrarian university, professor	067-367-55-68
41	Valerii Dubrovin	National University of Bioresources and Nature	dubrovin@nauu.kiev.ua +(38 044) 527 85 62

		Management of Ukraine, Research Institute of Biotechnics and Biotechnology, Director	
42	Vitalii Zubenko	SEC „Biomass” (Ukraine), consultant	zubenko@biomass.kiev.ua 453-28-56
43	Stepan Kapshuk	“Oliyaprom” (Ukraine), Head of Board	admin@ukroilprom.kiev.ua +38(044)226-31-38
44	Olena Karpenko	Ministry of Agricultural Policy of Ukraine	
45	Mykola Kobets	UNDP Blue Ribbon Analytical and Advisory Centre, Senior Expert	kobets@agpol.kiev.ua (044)253-5866
46	Kravets Pavlo	FSC Ukraine	Pavlo.kravets@nauu.kiev.ua +38(044)527-88-00
47	Lesya Kravchuk	Public administration of Kyivs’ka oblast	Lesya_kravchuk@lan.com.ua 067-40-40-506
48	Volodymyr Kurhak	National Scientific Center “Institute of Agriculture, Ukrainian Agrarian Academy of Sciences”, head of laboratory	Kurgak_Luki@ukr.net 044-526-71-26
49	Tetiana Kuts	National University of Life and Environmental Sciences of Ukraine, Research Institute of quality and management, scientist	stdkuts@ukr.net (044)527-87-93
50	T. Kuchik	National University of Life and Environmental Sciences of Ukraine, Research Institute of quality and management, aspirant	
51	Oleksandr Lenda	Krypton NK, deputy director	lendaoo@yahoo.com (044)422-83-60
52	Yuriy Len’	ODPTC of Kiev, head of department, urban village Chabany	526-31-80
53	Vitaliy Lvov	Ukrainian association of farmers and private landowners, First Vice-President	farmasuk1@ukr.net (044)501-78-73
54	Natalia Makarenko	Institute of agroecology of Ukrainian Agrarian Academy of Sciences, deputy director	n-mak@ukr.net 097-238-43-46, 522-62-70
55	Anatoliy Mameenko	MVF Geleya, president	067-51444-58
56	Oleh Marchuk	Ministry of Agricultural Policy of Ukraine, chief specialist	097-241-44-81
57	Ivan Oleksievets	“Ecoinko” Ltd., director	067-44-94-45-7
58	Serhii Oliynychuk	Research Institute on Alcohol Products (Ukraine), Deputy Director	+38(044)443-35-04, 400-02-32
59	Mykola Omel’chenko	Industrial and Leasing Company «Ukragropostach», Director general	ukragropostach@bigmir.net +38(044)390-30-84
60	Mykola Ostapchuk	Vinnitsa state agrarian university, associate professor	093-930-49-11
61	Vitaliy Palionko	NSC «Ukragroleasing», director of	palionko@ukragroleasing.com.u

		technical policy department	a +38(044)545-73-65
62	Viacheslav Pereverzev	«ATP-15101», Ltd., deputy director	063-075-37-93
63	Volodymyr Rudyk	Industrial and Leasing Company «Ukragropostach», Deputy director general	v_rudyk@mail.ru +38(044)390-30-85
64	Viacheslav Samsonenko	Ukraine's Parliament (Verkhovna Rada), assistant deputy Hryhorii Kaletnik	
65	Oleksandr Sokyrin	Ukrainian independent trade union “Sady Ukrainy”, deputy head	sokirin@gmail.ru +38 0522 35 00 44
66	Mykola Starychenko	Petroltechservice, general representative “Altons Haar” in Ukraine, director general	petroltechservice@ukr.net (04595)5-13-64, (050)311-22-45
67	Illya Starikov	NUSEP, authorized agent	illya.starikov@nusep.org +38(044)492-70-75
68	Yuriy Styranivsky	State Forestry Committee of Ukraine	
69	Olexiy Stoyanovsky	Journal “International Bioenergy”	ukraine@newc.ru +38(0612)95-26-43
70	Tetiana Suprun	SEC „Biomass” (Ukraine), consultant	suprun@biomass.kiev.ua 453-28-56
71	Vasyl' Targonya	Leonid Pogorilyy Ukrainian Scientific Research Institute of Forecasting and Testing of Machinery and Technologies for Agricultural Production (Leonid Pogorilyy UkrNDIPVT), head of laboratory	targonva@ukr.net +38(04471)3 30 62
72	Yuriy Tereschenko	State Committee of Ukraine for Land Resources (Derzhkomzem), Chief of Department in Borispol (Kyivs'ka oblast)	067-497-15-23
73	Vasyl' Tom'yuk	L'vov national agrarian university, assistant	2-242-954
74	Bogdan Khan'ko	Biopalyva Podillya, director	universalservice@mail.ru 067-507-01-83
75	Tamara Tsema	Leonid Pogorilyy Ukrainian Scientific Research Institute of Forecasting and Testing of Machinery and Technologies for Agricultural Production (Leonid Pogorilyy UkrNDIPVT), head of standardization department	tvsema@mail.ru +38(04471) 3 35 40
76	Leonid Tsentylo	“Rasava » Ltd., Scientific production selection enterprise	arosa50@ukr.net (04568)2-21-40
77	Roman Yuskiv	CEO Sustainable Biomass Trading Company	