



Taking the Law to the People

Mobilizing community ownership for legal reed harvesting in Ukraine

Experiences with Ukrainian legislation and stakeholder consultations
for commercial reed harvesting in rural communities



Project Pellets for Power: Sustainable Biomass import from Ukraine

Sustainable Biomass Import Program – NL Agency – Netherlands

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Colophon

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- Title: **Taking the Law to the People**
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- Experiences with Ukrainian legislation and stakeholder consultations for commercial reed harvesting in rural communities
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- Date of publication: October 2013
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Abstract

Pellets for Power project

This report is an account of experiences of a Ukraine based company, Phytofuels Investments, operating in the framework of the Pellets for Power project. This project was carried out in Ukraine and funded by NL Agency under the Sustainable Biomass Import program in the Netherlands. The project aims at developing models for sustainable biomass supply chains, including production, processing and commercialization of reed, straw and biomass crops for energy purposes. So as to guarantee sustainability, all biomass operations were designed in accordance with the Dutch NTA 8080 standard. As one of five project partners, Phytofuels' tasks included the development of sustainable reed production methods. Two aspects of this endeavor are zoomed in on in this report: reed legislation and engagement with authorities issuing permits on the one hand and engagements with local reed owning communities on the other. Both aspects are strongly interlinked and cover two sets of requirements in the NTA 8080, i.e. compliance with national legislation and performing stakeholder consultations.

Studying legislation and engaging authorities

The first step was to study legislation, to find out what is regulated in Ukraine about reed. For that purpose and for other studies on sustainability issues, the Institute for Biomass and Sustainable Development was founded. This independent institute helped increase credibility of the project when engaging with authorities and rural communities. In this process, both Phytofuels and the Biomass Institute relied on methodological support and applied research conducted in the Pellets for Power project. Research topics covered legislation, biodiversity, greenhouse gas emissions and other sustainability topics. The importance of this research based approach soon became evident, when facing government officials with no clue as to on what grounds and by which procedures reed harvesting permits were to be issued. In much of current Ukrainian legislation there is no clear reference to reed as a particular category of plant, natural resource or ecosystem. So, in order for authorities to make any informed decisions about issuing permits, the project partners first had to develop a reed harvesting protocol, based on research data from this project.

Taking the Law to the People

According to Ukrainian legislation, the rightful ownership and decision power regarding natural resources lies with "Territorial Communities", i.e. villages in rural areas of Ukraine. Yet, this does not reflect reality in Ukraine. In the current situation, power is very much concentrated in Kiev and little decision power trickles down to the villages, with village councils having to collect state money from district councils. The financial situation is appalling in most villages, including with underpaid village deputies, making corruption difficult to erase. Obviously, this situation is also bad for business operations, that often depend on bribes and personal favors, affecting the continuity of such operations. The challenge for the project partners was thus clear: creating awareness among village people and setting up sustainable, socioeconomic development programs that work directly with the local population, designated by the law as the rightful owners of reed resources.

Establishing socioeconomic programs and acquiring permits

With legal ownership lying with local communities as the primary stakeholders, Phytofuels and the Biomass Institute have put a lot of effort in engagements with village people, on the street, in public meetings, visiting local leaders, local newspaper articles, educational programs held at schools and other social events. This resulted in broad support within the community, making the project at the same time less vulnerable to corruption and abuse by individual village council members and officials.



The approach by Phytofuels and the Biomass Institute proved overall successful. By September 2012, long-term reed harvesting programs were signed with thirteen villages. And with each program laying out clear responsibilities for the partners, based on legislation and research conducted in the project, the environmental authorities were keen to issue the required permits.

Setting a standard for biobased development in Ukraine

These experiences may have shed light on a potentially effective mechanism for stable biomass business development in Ukraine, by mobilizing local villages as the lawful owners of natural resources. Phytofuels and the Biomass Institute have done important pioneering work, setting a standard for current and future biobased practices in Ukraine.

Yet, still much work remains to be done after the project. It is likely that Phytofuels' business operations require adjustments before deserving the label "sustainable". Its compliance with NTA 8080 is not guaranteed until proven otherwise by an independent auditor. And given its strong ties with Phytofuels, the role of the Biomass Institute has not been truly independent so far. Moreover, in the larger institutional framework, it remains to be seen whether policies are adopted that are favorable to development of sustainable biomass based programs.

Fortunately, both organizations will continue on their chosen paths. Phytofuels intends to expand its biomass business activities, in line with NTA 8080. And the Biomass Institute has the ambition of becoming a recognized, truly independent research organization, aiming at development of research programs and the promotion of NTA 8080 in Ukraine. For this purpose, during the 8th Biomass Conference in Kyiv held in September 2012, a Memorandum of Understanding was signed between the Biomass Institute, Wageningen University Food & Biobased Research and the Dutch National Standardization Organization (NEN). In addition, the Biomass Institute seeks participation in public councils on regional and state level, advising on sustainability and legislation for development programs.

More information

More information about the project can be found at www.biomassandbioenergy.nl and www.agentschap.nl



Introduction

This report was produced in the framework of the Pellets for Power project, funded by NL Agency under the Ministry of Economics, Agriculture and Innovation (EL&I) in the Netherlands. For more information regarding this project we refer to the project website www.biomassandbioenergy.nl

Its content is an account of the experiences of a Ukraine based company, Phytofuels Investments, one of five partners in the Pellets for Power project. Phytofuels has been supported by the Institute for Biomass and Sustainable Development, a non-governmental research organization promoting biomass based sustainable development.

The project objectives include defining methods for sustainable reed harvesting in accordance with NTA 8080. A basic sustainability principle of this standard is full compliance with Ukrainian laws and regulations and it also establishes requirements for consultation of stakeholders. Hence this report, analyzing existing legislation, regulating use, management and harvesting of Ukraine's reed resources and describing engagements with authorities and communities leading up to long-term community based harvesting agreements and the required permits.

The authors trust that this report will be of value for current and future businesses, as well as for law makers, Certification Bodies and others interested. It provides insight in Ukrainian laws and regulations and in the obstacles and opportunities for obtaining permits for sustainable reed management. We refer to another project report, Poppens & Hoekstra (2013), analyzing whether the used approach and methods for legislative studies and stakeholder consultations are in line with the NTA 8080 standard.

This report is divided into five chapters, dealing respectively with identification of reed harvesting sites, research and engagements with authorities and communities, a stakeholder analysis, an analysis of legislation and conclusions and recommendations for biomass businesses.

It is important to note that this report reflects primarily the knowledge and opinion of Phytofuels and the Biomass Institute. The Pellets for Power project and its partners do not accept responsibility in case of any falsehoods or implications of information written in this document.



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1 Identifying reed harvesting sites

Introduction

Phytofuels Investments is a partner in the Dutch-Ukrainian Pellets for Power project and for over a year has been looking to acquire harvesting rights for reed areas that belong to villages in the Poltava *oblast* (region). This chapter deals with the selection of potential harvesting sites, as a first step taken by Phytofuels Investments in search for land and permits for reed harvesting. Identification of these areas (districts and villages) have formed the basis for legislative procedures and stakeholder consultations discussed in following chapters. Three area selection criteria are discussed hereafter, leading up to identification of five districts in Poltava, the region where Phytofuels is based and reed owning villages. These criteria include location and proximity of reed lands, socio-political situation and presence of sites of special interest. During the permit procedures and community engagements discussed in the next chapter, the identified potential harvesting sites were further narrowed down to municipalities and villages with whom Phytofuels would eventually sign agreements for joint implementation of community based reed harvesting operations (section 2.6).

The Institute for Biomass and Sustainable Development

Phytofuels has received close support from the Institute for Biomass and Sustainable Development (hereinafter referred to as Biomass Institute). This organization was founded as independent expert organization, providing scientific credibility to the biomass operations of Phytofuels (and future producers) when dealing with authorities, the general public and the reed owning communities. Though it is currently difficult to separate the Biomass Institute from Phytofuels Investment, this young organization has the ambition to become a true independent research organization, promoting sustainability of biomass based operations in Ukraine. On September 24th 2012, during the 8th Biomass Conference held in Kyiv, the Biomass Institute signed a Memorandum of Understanding for the promotion of the NTA 8080 sustainability standard in Ukraine, together with Wageningen University Food & Biobased Research (also partner in the Pellets for Power project) and the Dutch National Institute for Standardization (NEN).



Biomass Institute signing MoU, 24 Sept. 2012

1.1 Location and proximity of reed lands

Villages with good potential for reed harvesting were selected with help from two maps. A topographic map with indication of marsh lands (i.e. potential reed land) and an administrative map indicating



districts and division into village councils. In this way, thirteen village councils were selected by September 2012, requiring a separate stakeholder consultation procedure for each one of them. In case reed areas covered two village councils, they held such meetings for both village councils. When checking for available reed land in villages, particularly reed areas in proximity to settlements were selected. Reed is often burned, causing problems with smoke and ash for the direct neighbors. A proposal for harvesting reed is thus helping to solve this problem, hence the positive response of this group of people.



Burning reed land producing smoke...

1.2 Socio-political situation

Much study was made of potentially relevant villages, in terms of their social structure. With data from the Department of Statistics and regional state administration, Phytofuels was able to get an understanding of the current population in terms of their employment, agricultural production, number of social objects (schools, medical centers, cultural buildings, etc), infrastructure and other aspects that may influence economic viability of biomass operations and local desire for cooperation in reed harvesting. For example, in the village of Malo Pereshepyno they found that there used to be a reed plant producing reed for thatching. Also, there is a school, the biggest in the region, which could potentially be involved in joint social programs. Understanding the socio-economics and concerns of the population by Phytofuels helped in the approach and contact stage and increased likeliness of cooperation.

1.3 Presence of sites with special interest

Through the Department of Ecology, searching on internet and through other sources, Phytofuels went looking for protected sites of special interest, whether historic, cultural or ecological. In this way they discovered a protected area in Pyratyn district (rayon), on one side of a river, with the other river side being unprotected and therefore interesting to include in the harvesting scheme.

In the village of Malo Pereshepyno they identified a historic site of the Khan culture, as well as a special kind of marshland set aside for future research. There are also excavations, in relation with World War II and villagers are dedicated to making of hand-made objects with reed.

These sites of special interest will be left out of production and as such are a reason for exclusion for Phytofuels. Yet, informing themselves about the particular historic, cultural or ecological value of sites has served Phytofuels well in establishing contacts with the local people and in gaining their trust.



Maps: Poltava oblast and five districts

Based on the criteria above, by September 2012 six districts with good potential for reed harvesting were identified. Five of them are situated in the Poltava *oblast* (region). These are Lubny, Novi Sanzhary, Chornukhy, Kobelyaky and Orzhytsya. The sixth district is Ororikhiy in the region of Zaporizhyya, in the southeast of Ukraine (Figure 1).



Figure 1: Ukraine, Poltava oblast and five districts



2 Searching for land and acquiring permits for reed harvesting

Introduction

Without any prior experience with legislation, nor with any formal methodologies for stakeholder consultations, Phytofuels Investments and the Biomass Institute had to learn by doing.

They started with reading the Law of Land, or Land Code. This law states that the district land department is the responsible authority for reed land management and that any use rights of land should be acquired through Land Auctions. Based on that, they started collecting information in Malo Pereshepyno, one of the selected villages (chapter 1). This route, however, would turn out to be a dead end and would be followed up by another route through the Ministry of Ecology. This two-phase process is described hereafter in sections 2.1 and 2.2 respectively.

These legislative procedures were closely linked with processes for engaging stakeholders in the reed communities. With the law identifying local communities as the rightful owners of reed resources, it made perfectly sense to start with involving people in these communities. This resulted in long-term harvesting programs approved by the village council (in 13 villages by September 2012). And in turn, this process of forging long-term commitments between producer (Phytofuels), NGO (Biomass Institute) and local government (village council), provided credibility to the project's sustainability, leading up to issuance of required permits by the environmental authorities. See section 2.2 for more information.



Reed fields in Malo Pereshepyno village

2.1 Phase I: Acquiring data for Land Auctions

Procedures were started in Novi Sanzhary district, by visiting the district's head of land department. It is in this district, as well as in Chernukhy district, where Phytofuels would obtain its first reed harvesting permits. See section 2.6 for an overview of obtained licenses by May 2012 and respective hectares of reed land.

The head of the district land department was not able to help them further, however, referring to the regional Land Administration (rayon) for further information. At the regional Land Administration, information was provided about the Land Code of Ukraine. Here it is stated that land can only be obtained through Land Auctions. It is through Land Auctions that (would be) producers are granted rights for renting land for agricultural and building purposes. Also the rental conditions are established through the Land Auctions, such as rental duration, type of crops, price of crops.

However, the Land Department could not provide any directions on how to conduct these Land Auctions. It was then decided to go to a village where such Land Auction was ongoing, so as gain understanding of



this legal mechanism for renting reed lands. This village turned out to be Malo Pereshepyno in Novi Sanzhary district.

In Malo Pereshepyno, data was collected about available reed land, based on available maps (section 1.1). They asked local stakeholders about the use status of the land and whether it was under some kind of protective status. Then they went to the village council, to establish ownership. Here they soon found out that the borders of the villages are not clear. At the time, the exact village limits were not established in the Cadaster. By January 1st 2012, however, it had been established in the Land Codex that the village regulates all land up to four kilometres distance of the village proper. Land beyond this four kilometre mark is regulated by the district administration.

Land Auctions not appropriate for wetlands

Soon, a major obstacle was encountered, however. Land Auctions are conducted for specific land use types, such as "agricultural land" but in the Cadastre there is no legal reference to land use types associated with reed, such as "wetlands" or "marshlands". There is a definition of wetland in the Land Code, which is based on wetland classifications by RAMSAR, defining wetlands as areas with water not deeper than 4 metres. However, since ratification of the RAMSAR treaty on 26th October 1996, only in some laws this definition has been incorporated, but not so in the Land Cadastre.

Phytofuels hired a specialist in this field, hoping to find some solution and to obtain a clear status of reed land and to be able to engage in Land Auction procedures. Apparently the specialist was asked for a bribe by officials, who could "solve the problem", but obviously this was not an option for Phytofuels and the Biomass Institute.

Unfortunately, this expert was not able to come up with a satisfactory solution. It was therefore decided to follow a new path toward acquiring reed lands for harvesting, described in the next section. Continuation of the current route would involve the risk that any granted rights for reed land rent could potentially be removed by successive administrations for lack of solid legal basis.



Reed land in Ukraine: unclear juridical status

2.2 Phase II: acquiring harvesting permit from the Ministry of Ecology

2.2.1 Conducting desk and field studies on the legislative basis of reed harvesting

With the mechanism of Land Auctions no longer an option for acquiring rental rights for reed lands, at the regional department of Environmental Protection in Poltava another possible route became evident.



This administration is a subdivision of the Ministry of Ecology. According to the Law on Environmental Protection, it is these two administrations that issue permits for reed harvesting.

But, before going there Phytofuels and the Biomass Institute did a thorough research on laws regulating reed. By informing themselves well, Phytofuels and the Biomass Institute hoped to become less vulnerable to corruption and bureaucratic caprices. After checking out internet, law books and many other sources, they found that there was not much information to begin with. And, more disturbingly, there was no evidence of reed permits ever being granted. It seemed the legislative basis of reed harvesting was poorly understood and applied, by ecologists, officials and other stakeholder alike. According to Phytofuels, "permits" are usually obtained simply by bribing an official on district level who would then phone the village council to request the issuance of such permit.

It turned out, the Ministry of Ecology is the organization that issues harvesting permits, which is based on three main laws: The Law on Flora, The Law on Environmental Protection and the Law on Self-governance. These are explained in chapter 4. The Law on Flora, for example, includes important thresholds for harvesting biomass. For reed, up to 25 to 30% of the biological volume can be harvested according to this Law (Table 1).

Permit procedures differ for reed areas with and without state protection status. Malo Pereshepyno village, where Phytofuels has started its search for reed lands, has a nationally protected land area (Zapovednic). It concerns a botanic conservation area of national value, constituting marshland of 640 hectares. However, the real reed area here is much larger. Due to lack of economic land use in previous years, the reed area has been allowed to increase through natural regeneration, up to its current area of 1200 hectares. Until 1994 there was a Ukrainian state company in the village, producing reed for thatching for the domestic market. But, this company has long gone and the reed has grown back since.

Law on Flora, Art. 11, 1999 – Allowed harvesting percentages	
<i>Above ground biomass</i>	
• Annual crops	50% of biological volume
• Perennial crops	25-30 % of biological volume
<i>Below ground biomass</i>	
• Grasses	25% of biological volume
• Trees, shrubs	10% of biological volume

Table 1: allowed reed harvesting percentage (green)

2.2.2 Permit procedures for protected areas

According to the Land Code of Ukraine, the villages are the rightful owners of natural resources, so permit procedures must start at the village council. The procedures followed by Phytofuels and the Biomass Institute consist of several steps elaborated hereafter:

Decision by Territorial Community

"The territorial community of a village, settlement or city is the primary subject of local self-government and the principal bearer of its functions and powers". Territorial community refers to citizens "who permanently reside within the boundaries of a village, settlement, or city, which are independent administrative-territorial units, or voluntary associations of citizens of several villages with one administrative center". In this case, the territorial community involved is the village of Malo Pereshepyno. The first step in the permit procedures is to obtain a positive decision by the deputies of



the village council, to allocate reed land for harvesting by Phytofuels. This objective has been framed in a larger 15-year program with the village (see 2.6). We refer to section 2.3 for a description of the methods Phytofuels used to influence deputies to vote in their favour.

Preparing reed harvesting protocol

As part of the documentation required, the regional Department of Environmental Protection demanded a scientifically backed reed harvesting protocol. Currently, there are no laws governing the use of reed for economic purposes (See chapter 4). By providing a solid scientific base for sustainable reed harvesting, the project could contribute to future laws governing economic reed harvesting activities. The Biomass Institute was actually established mainly for this purpose (chapter 1).

The Ecology Department itself had no idea how to develop such protocol. Apparently, they even sent the project partners for information to the University of Aviation (!). Instead, the Biomass Institute decided to develop its own reed protocol, with help from the Pellets for Power project and biologists and other experts in Ukraine. The NTA 8080 standard provided the sustainability guidelines for the protocol.



Determining reed moisture content



Reed samples

Preparing 6ZEM form

The Land Code of Ukraine obliges village councils to prepare a so called 6Zem form and send it to the district administration. These forms include information about the size of the land, specific land use types, protective status (if any) and other. These forms formed the basis for identification of potentially available land.

Obtaining reed land map

The quality of available maps with references to land use including reed is very poor. Even protected areas do not have GPS coordinates. In 2011, the European Union supported Ukraine in developing maps and recently the Ministry of Ecology announced that protected areas were to be mapped with google maps. Yet, by May 2012, no reliable maps were available for the village of Malo Pereshepyno. Only a self-made improvised map with rough outlines of land use types, scale 1:500.

Decision by head of regional state administration

A letter had to be sent to the regional department of Environmental Protection and to the regional state administration, together with the reed protocol, the 6ZEM form and the maps. In addition, the village council had to include an approval letter of the 15-year reed harvesting program, to be signed between Phytofuels, the Biomass Institute and the village council. Based on all that, a positive decision was taken by the head of the regional state administration who then turned decision power to the village council again.

In principle, this procedure has to be repeated every year for renewal of the permit. However, given the 15-year program commitments, with clear statement of long-term responsibilities for all signatories,



Phytofuels will be allowed to apply for renewal after one year, and for the full length of the 15-year program at once. A condition is however, that Phytofuels submits every year a monitoring report to the regional department of Environmental Protection and the regional state administration. The 6ZEM form and maps only need renewal in case changes have occurred.

Permit procedures for non-protected areas

The permit procedure for reed harvesting in non-protected areas is easier. It consists of the same steps indicated in section 2.2.2, except that all documents are sent only to the regional department of Environmental Protection who issues the permit.

2.3 Stakeholder consultation processes

2.3.1 Importance of stakeholder consultations

Stakeholder consultation is an essential element in developing, implementing and operating a biomass project. It plays a critical role in raising awareness of the project's impacts and to achieve agreements on approach, management and operation of the project, whilst maximizing benefits and minimizing negative impacts (www.agentschapnl.nl/node/178155). Besides, it is also a requirement for certification in accordance with NTA 8080 and other sustainability criteria.

Stakeholder consultations proved equally important for Phytofuels and the Biomass Institute, and they are linked with the legislative procedures required for obtaining harvesting permits. It was only after well-planned engagements with communities and authorities that community-based harvesting programs were developed and approved by village councils. And in turn, this process of forging long-term commitments between producer, NGO (Biomass Institute) and local government, provided credibility to the project's sustainability, leading the environmental authorities to issue the required permits. The stakeholder consultation processes conducted by the project can be divided into several phases, discussed in the following sections.



Phytofuels engaging with village people

2.3.2 Identifying village leaders

Once adequate villages had been selected (chapter 1), it was time to identify key local stakeholders. Phytofuels' strategy has been to identify community leaders or otherwise people with a central presence, who could influence and inform public opinion in the community, so as to gain broad support for their proposed activities. The strategy purpose is to avoid too much dependence of village council leader and deputies alone, who might have personal interests in supporting or not of the project and who could easily change their minds, thus jeopardizing project continuity.



People and groups focused on include owners of selling stalls, owners of enterprises and agricultural holdings, heads of hunting and fishing organizations. Another important group are teachers, who are transmitters of information in the community. They are also knowledgeable regarding notions such as "biodiversity", could participate in research and are organizers of events such as summer camps.

The means of identifying these people was to organize public meetings, explained in 2.3.4. But first, they would contact the head of the village council. A meeting was organized with him and he was asked for a list of land owners and other people with influence. They would also get informed about fairs and markets where a lot of people gather. Also important is to know the deputies of the village council. Some deputies may be big farmers or have other influential positions in the community. But, at all times, it is of crucial importance to maintain good relations with the head of the village council and his secretary. And through them, usually, after a couple of visits of the village council leader, it was already possible to organize meetings with individual council members who could provide more information.

2.3.3 Understanding the local power balance

Right after their first visit to the head of the village council, Phytofuels started phoning deputies of the village council. Such contacts would typically reveal disputes, among deputies or between deputies and the head of village council. Also, Phytofuels would get information and contacts from local shop owners, who have a "magic book" with debtors; people with an account who have money and thus are always influential in the community. Talking to these people often revealed they are in opposition to the village council. Understanding such situations was of crucial importance for Phytofuels as they could negatively influence the program. For example, in Malo Pereshepyno, six deputies were opposing the village leader, the latter who has already agreed with the program. Phytofuels found themselves hostage of the situation, with the six deputies opposing to the program just for rivalry reasons. The solution was to bypass the village council, by getting agreements from other important local villagers and with that going to the head of district council who would eventually agree. More information on this strategy is written in section 2.4.3.

Corruption is an ever present factor in Ukraine, as illustrated by the following anecdote from Phytofuels. One day, Phytofuels had agreed to meet up with the head of a village council to talk about the program. But unexpectedly the head of village council turned up with two more people, an ecological inspector and a local individual of "questionable reputation". The ecological inspector then told Phytofuels they could "make arrangements" with him directly... Obviously this offer was declined by Phytofuels, and apparently the village council leader felt rather uncomfortable with the situation fearing the possibility of going to prison.

2.3.4 Organizing public meetings

Phytofuels and the Biomass Institute have organized multiple public meetings in villages. Usually these meetings are held nearby the local shop for easy access by people. These meetings enable them to learn about the public opinion regarding the program, to discuss potential concerns and questions and to identify potential leaders and individuals capable of informing and educating fellow citizens. For this purpose, announcements were placed near the shop, which is the main social center. Before that deputies were phoned and asked to come and bring people from their street. Approximately 25 to 30 people turn up at such events, with many pensioners among them. Pensioners are the most active group of people in the villages. There are usually also people representing fishing or hunting enterprises and



people making reed objects by hand. Very few young people attend the meeting, simply because they are scarce in the communities.

The meetings start with a presentation of Phytofuels and the Biomass Institute, the latter providing credibility to the program as independent organization, by implementing activities in accordance with Dutch sustainability standard NTA 8080. Then a presentation is given about the contents and purpose of the program, regarding e.g. ecological issues and also the role of the community. This would include discussing the formation of a public ecological inspection team.

At the start of the meeting questionnaires are handed out, specially prepared with simple wording, big letters so as to reach everyone. The questionnaire had five main questions, to be answered with "yes", "no", "maybe" and "I don't know". These five questions address important issues in the community and serve as starting point for discussions. Political questions are avoided as much as possible and people are not asked for their surnames to fill in, as many have a problem with that. Around 30 percent of participants refuse to fill in the questionnaire. This is usually due to doubts about what happens with the information provided, despite having pointed out that the information is treated with confidentiality and only serves to improve cooperation with the community.



Project information classes

Discussion topics addressed in a questionnaire:

1. Do you think burning reed is harmful for the ecology of your settlement?

The background of this question is that currently reed is often burned, for access to fishing grounds or for unting birds. The smoke development is considered a problem by many villagers, which obviously provides arguments in favor of any program that proposes alternatives to burning. Discussions would usually focus on the negative influence of burning on wildlife and for agricultural holdings.

2. Would you like to get more information about employment generated by the reed enterprise?

In villages as poor as the ones engaged, employment is obviously of great concern. The project team would explain that the enterprise is not seeking quick profits, but long-term cooperation with the community, to be established in a 15-year program. This would generate long-term employment with social benefits, generated from reed harvesting and pelletizing, all in agreement with the NTA 8080 standard. This question would trigger questions from the audience and discussions, such as about how the project will affect access to hunting or fishing grounds. Also hand-made reed objects are made in some villages, by families who typically use the same reed plot every year. People were assured that that patches under use will be left untouched and there will be areas left for local use and for protection of biodiversity.

Other concerns addressed included potential damage to the roads by big trucks transporting reed and pellets. Apparently, for the last 10 years no new roads had been constructed which is a big issue for the



community. People were promised that their concerns would be taken into account and at least the harvesting program would guarantee that the reed supply route would be kept snow-free in winter. As expected, some villagers would simply ask what the program could do for them personally, even if they had no interest in participating themselves directly. Here the answers would revolve around the social and educational programs in kindergartens and schools. Yet, actual employment would be the main contribution.

Another reoccurring question that needed addressing was whether the Dutch would make claims on lands in the community given the Dutch certification system.. The people were reassured that this was not the case.

3. Would you like to be employed in the local reed production enterprise?

This question is of course related to question 2. Stealing by employees is a big threat to businesses in Ukraine. Apparently, in Soviet times employees would see no choice but to steal from the collective farms given that "everyone else would be doing that". This mentality is still present in the communities. On more than one occasion has Phytofuels itself been confronted with this problem, with employees stealing materials, tools or machinery. When asked to take responsibility for that, these people would suggest to better accept it or else they would oppose to the program.



Taking reed samples in the field..

4. What needs to be done in your settlement in the social sphere?

As natives to this region of Ukraine, Phytofuels and the Biomass Institute were well aware of the importance to connect well with the real concerns of people, even if those concerns do not relate with the program itself. Such concerns could include many different things, e.g. the need for a bridge to cross the river. In fact, in four different villages it turned out street lighting was considered of major importance. Hence, the decision by Phytofuels to include that public service into the reed harvesting programs signed with with these four villages.

5. How do local citizens dispose of their garbage and waste?

Some villages have large heaps of thrash in their reed lands. This is an important issue in most villages and was used as an entry point for discussing the role of the company and the need for ecological monitoring. Another reason to bring this issue up is to prevent people accusing the project company/reed producer of polluting the reed lands. By offering support in solving this issue, it was hoped that the people would support the program.



Meeting closure and follow up

The meetings were closed by writing down the results in a protocol, mentioning the number of participants, topics of discussion and inputs given. The protocol is signed by the head of the village meeting and the secretary of the village. A stack of copies of the protocol and the questionnaire is left behind for people who were not present. The signed protocol, the filled in questionnaires, including those following after the meeting, are taken as input for meetings held with the village council deputies (next section). In the local newspaper (if available), contact information is provided, in case people have questions. Some people do make phone calls, usually about job opportunities but also sometimes parents ask for the opportunity to have their children involved in school events focusing on ecological issues.

2.3.5 Attending deputy sessions

Whereas public village meetings serve to influence the public opinion in favor of the project, it is the village council where actual decisions are taken regarding the future of the program. With the public meeting still fresh in the minds, a session with the village council is requested. This session serves to get approval from the village council deputies, on the proposed program and on an action plan for its implementation. On both occasions there will be a voting procedure among the deputies, with the majority of votes required for approval. A third voting procedure is about having the head of village council sign the three-party agreement, together with Phytofuels and the Biomass Center. After signing, an official letter of approval of the program is submitted to the regional (oblast) department of ecology, together with other required documentation discussed in section 2.2.2. If approved, this program has effectively become a four-party program (village council, oblast ecological department, Phytofuels, Biomass Institute), resulting in issuance of the harvesting permit. The program will be renewed by session of village council on a yearly basis.



Presentation held with head of village council

Before the session, the following documents are prepared:

- Letter of the head of the village council introducing the program
- A description of the four-party program (Village, Oblast Ecology Department, Phytofuels and the Biomass Center).
- A description of the action plan for implementation of the program.
- Draft of the four-party program (village, oblast ecological department, Phytofuels, Biomass Institute).



Influencing village deputies

Prior to the actual deputy session, contact has been sought already with the deputies to try to gain their support. Those in favor are usually present during the session so they can influence the remaining deputies. Phytofuels has not been afraid of applying moderately manipulative tactics. Those deputies opposed are often asked to fulfill a specific task such as proof-reading of an ecological text so as to please their ego's with, possibly, a positive change in attitude toward the program. In one village, this was the case with a deputy who is also a biologist and teacher. She was asked to participate as an expert in several events held at schools.

During the session, the proposed reed harvesting program is discussed, with details about productivity, plots of production and people involved. Also business topics are addressed, such as tax obligations by the company to the village. The program itself plus the action plan for implementation are both voted on in separate procedures.

2.3.6 Follow-up and costs

After signing and during implementation of the reed harvesting programs, Phytofuels and the Biomass Institute will continue organizing public meetings on a regular basis. Some will be used to present results so far, others will focus on educational topics e.g. regarding ecology of reed harvesting. But also informal talks with local people is continuously undertaken, such as in the local shop. Events in the villages are usually widely discussed and form an important source of information for the project team. Before harvesting season starts (winter 2012), at least one more meeting is planned to discuss what has been done in terms of preparations so far.

All available types of media are being used, to promote program activities in the villages. These include district and local newspapers, radio and websites of administrations. The purpose is to inform people about results of interviews, harvesting activities, updates on seminars and other events organized. This helps to acquire general public project ownership and helps reduce risks of corruption and abuse by officials. Also charity events are organized by Phytofuels and publically announced, such as the buying of Christmas presents for children in the village.

The permit procedures have cost around 4000 Euros per village council, amounting to 20.000 Euros for five village councils Phytofuels has been working with. This includes costs for gasoline, food, presents and other. There are also other costs for donations, charity and social programs, such as the street lighting in five villages, costing 1000 Euros per village.

According to Phytofuels, doing things the legal way costs more time as compared to customary procedures depending on bribes. However, initial costs may be lower when depending on bribes, its cost in the long run is probably higher as well as highly unpredictable and reoccurring (through changes in leadership) and of course detrimental to the social fabric of society.

2.4 Solution strategies for encountered obstacles

Several obstacles have been encountered by Phytofuels and the Biomass Institute, which were met with adequate strategies, discussed hereafter:



2.4.1 Legislation training for officials

The biggest obstacle in obtaining legal harvesting rights is the fact that responsible officials have no experience in applying the law. On local and even on district level officials are often unaware of the legislative basis for harvesting of natural resources. Or if they are, it is custom to handle issues through bribes. If a company wants to harvest reed, the common practice would be to bribe a district official and ask him to make a phone call to the village council to make things happen.

Apart from the ethical side of things, legal compliance will make Phytofuels and other producers less vulnerable to abuse by officials, especially when leadership is subject to frequent changes. This is why the Biomass Institute has spent much time and effort on informing officials on village level about the legislative basis of reed harvesting. And through research carried out in the Pellets for Power project, the available laws and regulations are backed up with methodologies for biodiversity inventories, harvesting volume estimations, soil impact analysis and other ways for testing reed based practices for compliance with existing laws and regulations. All these aspects are included in the reed harvesting protocol.

2.4.2 Participation in public councils

In a bid to consolidate the results obtained, the Biomass Institute has become member of a public council, advising the regional state administration. As such, this young NGO has influence on project approvals, as the council sends proposals to the head of regional administration (Poltava).

Similar requests for membership in public councils on state level were made to the Ministries of Ecology, Economics and Agriculture. In the latter Ministry, a working group was formed, working on preparations for a concept law for sustainable development of village territorial communities. If granted the opportunity, the Biomass Institute would be able to introduce newly learned sustainability and legality principles from the Pellets for Power project in development of this new law. In a tactical move to become member of this working group, a seminar on sustainable development (NTA 8080) of territorial communities was co-organized together with the Dutch Embassy, in Kyiv, May 2012.

A common fear expressed by Ukrainians is that somebody may claim ownership over knowledge "borrowed" from somebody else (see also 2.4.3). Interestingly, the Biomass Institute was asked by the regional administration not to pass any information on to state level, for fears of abuse by corrupt state officials...

2.4.3 Mobilizing bottom-up decision power in villages

In the villages the project partners have had to deal with unwilling council deputies on a regular basis. These deputies would try to use the program initiative for their own personal benefits, or perhaps would only support it in return for a bribe. To neutralize this factor, the project partners developed an effective strategy based on dissemination and awareness raising. Questionnaires were handed out to the general public and public meetings were organized. People were allowed to express their concerns and their wishes should the program become reality. In one village, a deputy asked money from the project to help build a church. But in public meetings it turned out the villagers were more interested in street lighting. This was also the wish of people in three other villages of the Chornukhy district. Subsequently, Phytofuels promised to finance street lighting in these villages, by signing a memorandum with the district council, effectively blocking power of the obstructive village deputies. For more details about these village meetings, we refer to section 2.3.4.

The project partners also write articles in local newspaper in five villages, to inform the public about the program activities. This is true for five villages: Malo Pereshepyno, Melechi, Postavnoke, Mochiivka and



Kurinka. Village leaders sometimes ask not to write anything “bad”, or to give some good publicity for a particular political cause. But their request is always declined, for the reed harvesting program is meant to be complete a-political.

2.4.4 Unsolved question: how to find qualified workers and fight theft?

It may be very difficult to solve the problem of theft and lack of qualified labor in the villages, as already mentioned in 2.3.4. Some people have already threatened Phytofuels with obstructing the program if their stealing is not tolerated. For any company, it is hard to find qualified people willing to work in the villages. Even someone without proper driving skills may ask for a job as tractor driver. Turning people down may actually increase chances of theft and sabotage. Probably the only way of minimizing this risk is by what Phytofuels and the Biomass Institute have done all along; building community wide trust and support for the project. Yet, this may just not be sufficient. At least in one village, for the upcoming winter harvest, Phytofuels may have to hire workers in a neighboring village. There is a risk that such measure may turn against the program, as it goes against feelings of project ownership in the community.

2.5 Permit procedures for acquiring land for reed processing

Apart from obtaining reed land for harvesting, there is a separate procedure for legally obtaining land for reed processing. This procedure consists of four steps:

1. Agreement by village council

The expected productivity is set at around 15000 tons of reed processed each year, equaling 2 tons of reed pellets per hour. The exact location of the pelletizing equipment was still under consideration by May 2012. This decision process was likely to be met with rivalry among villages about the exact placement of the pelletizer. By May 2012, one plot was made available in Churnykhy district, positioned strategically to cover reed areas belonging to four different villages.

In Novi Sanzhyry district another plot was proposed, located outside the 4 kilometer perimeter of Malo Pereshepyyno village, and thus outside jurisdiction of the village council. Here the district council would issue the permit and the village councils were ok with that.

2. Preparing technical documentation

A request is sent to the district state administration, to approve the supply of technical documentation for approval of the reed processing facility. Once granted, the documentation is prepared, including maps and other information regarding the selected land plots. It involves getting stamps and approval of various administrations, such as the Energy department.

3. Design the project and submit documentation to the land committee

Based on the prepared technical documentation, the project is designed and the project documentation is submitted to the land committee, which is functioning within the district state administration. This committee prepares the right documents for signing by the head of district state administration. The plot is given a Cadaster number by the department of Land Resources and an official Land Act is issued for the selected land plot. By May 2012, the decision about the Land Act was due in one month (June). After issuance of the Land Act, work on the processing plant could be started.



Time and costs for procedures

This procedure for Malo Pereshepyno had cost Phytofuels approximately 450 to 500 Euros for all required documentation, plus 1000 Euros for each land plot. This does not include additional costs for infrastructure. For example, a transformer will cost 20.000 Euros, or perhaps 8000 when on friendly terms with the district energy department...

The first meeting held in Malo Peresehapano was on May 6th 2011; on May 25th the reed harvesting program was confirmed and August 25th harvesting permission was obtained for this village. This has taken approximately 5 months, similar for the other villages.

2.6 15-year reed harvesting programs

By May 2012, Phytofuels had signed reed harvesting programs with five village councils. Table 2 provides a list of the village councils, the villages that form part of each and the respective hectares of reed land (officially claimed). By September 2012, the total number of villages had increased to 30, the total village councils to 13 and the combined reed area had increased to over 8000 hectares.

Villages	Council	Area (ha)	District	Oblast
<ul style="list-style-type: none">• Malo Pereshepyno• Prystantsiine• Velyke Boloto	Malo Pereshchepyno	550	Novi Sanzhary	Poltava
<ul style="list-style-type: none">• Postav-Myky• Lisova Slobidka	Postav-muky	680	Chornykhy	Poltava
<ul style="list-style-type: none">• Gorodyshche	Melekhy	720	Chornykhy	Poltava
<ul style="list-style-type: none">• Kurinka• Netrativka	Kyrinka	460	Chornykhy	Poltava
<ul style="list-style-type: none">• Piski-udalski	Mokiivka	470	Chornykhy	Poltava

Table 2: villages signed up for harvesting programs by May 2012

Unclear reed area mapping

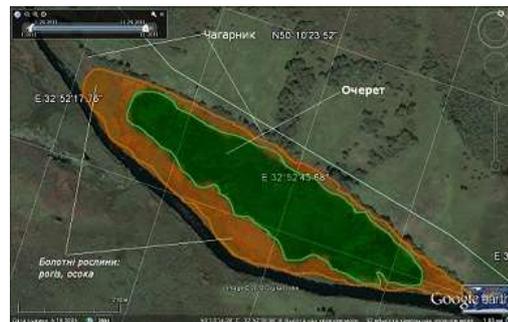
The very first village council to sign a program with Phytofuels and the Biomass Institute was Malo Pereshepyno, which consists of three villages (table 2). This case has proven how difficult it is to establish the exact area of reed, which is important for monitoring and verification in accordance with both legislation and the NTA 8080 standard. The Pellets for Power project therefore had to produce its own maps.

Despite the number given in Table 2, the total reed area in Malo Pereshepyno was determined to be 1200 hectares, according to the only available map from 1960 (!). And of this area, 650 hectares is officially protected as *Zapovednic*. Problem: there is no indication of the border between the protected and unprotected reed land. A similar verification problem emerges when considering that from 1960 on, the total reed area has increased to around 1500 hectares. Yet, the additional 300 hectares cannot be verified in official documents or maps. So how has Phytofuels dealt with this situation?



Harvesting area included in the program

Phytofuels and the village council have agreed on including approximately 1000 hectares for reed harvesting. This includes the 550 hectares without protective status, plus 25% of the protected Zapovednic (allowed by the Law on Flora – Table 1), plus the 300 hectares of reed land that has grown back naturally since 1960. It will be important to know if this is compliant with the NTA 8080 standard, especially with the inclusion of a protected area with unknown borders. The plan may also be in conflict with NTA 8080 for lack of a buffer zone (10%) in the non-protected area designated for harvesting.



Map showing one of the project reed fields



3 Stakeholder Analysis

Definition of stakeholders

In this chapter we describe the different types of stakeholders that were engaged by Phytofuels and the Biomass Institute. The importance of each group for Phytofuels is described, as well as their current and potential role in the reed harvesting program and any opportunities and obstacles expected in their involvement. But first a definition of the notion of stakeholders is provided, according to the NTA 8080 standard:

Definition of stakeholders:

organization and persons, not being the manager and/or owner of the production unit, who have interest in the management of an area, like the local population, indigenous people or organizations representing their interest as well as local or national environmental organizations and labour unions.

3.1 Direct Stakeholders

According to the NTA 8080, direct stakeholders of the producer of primary biomass include at least:

- a) landowner(s) and land user(s);
- b) local residents.

For NTA 8080 compliance it is important that “producers of primary biomass and the certifying body shall consult the above mentioned stakeholders”.

Village head and deputies of the village council

This group of stakeholders is obviously important for their decision power. Their backing is necessary for the programs to start and to run, even though we have seen that the deputies can be bypassed sometimes through the district council (section 2.4.3). Deputies are often leaders on different levels in the community, including heads of college, land managers and local officials. As such they have much influence on public opinion and should therefore be closely involved in the program. In a typical situation there may be 15 deputies in a village, with five supportive of the village leader and 3 to 5 taking the position of independent leaders. The village head is always the most important person; they figure as village leader and their back-up is needed to acquire permits. Other leaders in the community, that may be deputies, are important to get things done but usually they respond to the village head. As described in section 2.3.3. it is important to take into account potential conflicts and cross-interests of deputies and administration of the village council. Through permanent, well planned and methodical contacts with village leaders and the general public, Phytofuels and the Biomass Institute have succeeded in building trust among the general population and at the same time reduced the risks of obstruction from individual leaders and corruption of regional and national officials. And whilst counting with the support of the population and officials of the territorial community (the village), it became possible to promote the program and influence decisions on regional and national levels.



Hunters and fishermen

Several meetings were held with heads of hunting and fishing organizations. Most of them are deputies of village councils and usually they are active people within the community. Hunters are interested in the reed harvesting program because the harvesting sites are attractive for nesting by birds. Previously hunters had to open up reed areas to attract birds, but now the program could be useful for them in opening up patches through harvesting. In the current situation, hunters have their own patches that they do not share with other hunters. In this respect, the program could provide this service to all hunters.

After reed has been harvested in certain territories, it is custom that some people burn down the reed field. Patch harvesting will prevent too much spreading of reed fires, which would lead to mass killing of reed and of wildlife in it. Fishermen were explained that reed harvesting will provide improved access to water and that by harvesting in winter there will not be any negative influence on the wetlands nor on the water quality, so conditions for fish will remain good.

Children, schools, orphanages

This group is of particular interest to the project in its community contributions. Helping children, schools and orphanages is good for social development at relatively low expenses and generates a positive image for the project. It gives the possibility to help educate children, with potentially positive effects on society in the future and also enables spreading of information about the program.

Phytofuels and the Biomass Institute have organized school events for children at different levels of education. In Chornykhy district and in Malo Pereshepyno, two school events have been organized, in collaboration with the head of the village council and teachers. In Chornykhy even the head of district council was involved. They held a presentation for the children and explained about biodiversity and sustainable development. Different types of local animals were presented and children made paintings about these topics. In Malo Pereshepyno a contest was organized in the school, with children making pictures of local biodiversity. A price was given to the child with the nicest picture taken. In Chornykhy, other contributions included a dvd player, dvd's with ecological topics and an atlas of local flora and fauna, prepared by the Biomass Institute. Attention to these events was given through internet and newspapers on local, district and even regional level. There have also been events with kindergartens, where presents were given to the children.

Local families producing hand-made reed objects

There are no commercial reed based activities in the villages at this moment. But in some villages there is an old tradition of families producing hand-made reed products, such as sunhats, shoes and bags, mostly for local use. For example, in Gorodyshche village (Chornykhy district), there are fifteen to twenty families involved in this activity. Each family has its own reed patch, which they cut every year in December, using a hooked knife (tarpan). They will not go to new patches. Everyone in the village knows which patch belongs to which family.



School class learning about sustainability

There is no risk that the program will affect these families in any way, as their patches are in deep water by the river, which are not of interest to the reed harvesting program. They harvest their reed in December, on ice thick enough for hand cutting. In the program, reed will be harvested on thick ice with machinery, but on land which is dry in summer, thus further away from the river. And even if Phytofuels stumbles upon family patches, these will already have been harvested and thus are clearly visible.



Women

In the villages women do the household activities and take care of livestock and many of them are engaged in additional part time jobs. Women usually play an active role in the community, having positions such as teachers, post deliverers and shop keepers. For Phytofuels women in these roles have been important for passing on information about the program. In Soviet times, in reed fields women were doing the bundling of the reed which was before them done by their mothers and grandmothers. During meetings about the program, old ladies were happy to tell about their experiences. In terms of labour required for the reed harvesting program, reed bundling and loading bundles for transport could be a job carried out by women. Women could also be mobilized as operators of the pelletizer and in management.

3.2 Government officials and regulators

Local and district officials

State officials dealt with in the project include members of village councils and district councils and administrations on local and district level. For smooth operations and practical results, it is important to have these officials involved in some way. The best way is by signing memoranda and agreements (section 2.6) for long-term cooperation (i.e. 15-year reed harvesting program) through an independent, research oriented civic organization which is the Biomass Institute. Sometimes obstructive local officials can be bypassed, however, by dealing directly with the head of district council.

Regional officials

Regional officials are important as communicators with national officials and for spreading a positive image of the project. Sometimes they are used to inform local officials, and together with public organization they are controllers of local officials. They also distribute state budget to village level and through them it is possible to regulate the costs for social and ecological programs in territorial communities. On regional state administration level, officials directly and permanently dealt with include those with the Department of Environmental Protection who issue reed harvesting permits. Other officials on regional level are only indirectly dealt with, for example for obtaining statistical data.

National officials

According to Phytofuels, contact with national officials should be avoided whenever possible, allegedly for being the most corrupted. In order to neutralize their potential negative influence on the program, they are dealt with exclusively through the independent Biomass Institute and with activities focusing on improved legislation (section 2.4.2).

Phytofuels and the Biomass Institute's standpoint has always been to implement development from the bottom-up, starting at the village level. Since the beginning of the Pellets for Power project, their position has been that Dutch programs should never directly deal with Ukrainian state officials in Ministries and Agencies for they have no influence on anything. Supposedly, they lack knowledge and only perform roles for opportunistic reasons. This is exactly why the Biomass Institute is lobbying for participation in working groups on state level (section 2.4.2), so as to influence the agenda for sustainable development.

3.3 Public and non-governmental stakeholders

For broad public support and credibility toward officials on local, district, regional and national level, it is important for any project to work with civil, independent organizations. This is the reason why the



Biomass Institute was established (chapter 1). Such organizations are instrumental in controlling corruption by officials and for generating broad public acceptance of programs. However, there are only few public organizations in Ukraine that are more or less independent and they are working for European projects. One of them is the Ukrainian Association of Ornithologists. Some international NGO's also have an office in Ukraine, for example Birdlife International, with which the Pellets for Power project has had good contacts regarding reed research.



Taking reed samples from the field

However, the project has dealt with several ecological organizations that turned out to exist on paper only. Their "experts" have limited knowledge and few resources and are willing to write down anything you tell them to write down. It is true that the development of non-governmental organization is still in its infancy in Ukraine. This is the reason why the Biomass Institute was established, to develop its own expertise on reed research with support from the Pellets for Power project.

Affiliation to the Pellets for Power project and the NTA 8080 standard has been instrumental in promoting reed harvesting programs, gaining support from village people and officials alike. To such extent, that apparently the Dutch NTA 8080 standard has become a household brand among locals and officials as new standard for sustainability. And even on state level is the Biomass Institute trying to make this standard the new guideline for sustainable biomass programs (section 2.4.2).

3.4 Industry and customers

Currently there is only a small domestic market for reed biomass, which explains why by May 2012 there were only 2 or 3 reed biomass producers known to Phytofuels, producing reed pellets and briquettes for the domestic market. However, this number has been increasing. Participation in the Pellets for Power project gives Phytofuels a competitive advantage, of producing pellets in accordance with international sustainability standards NTA 8080 and RED. At this moment there is hardly any legislation covering social and ecological sustainability issues.

As discussed in section 2.4.2, however, Phytofuels and the Biomass Institute have been involved in projects aiming to include these international standards in Ukrainian legislation.

Biomass producers

It is specifically addressed in the three-party program with the villages that local companies be involved in sustainable reed harvesting, in accordance with these standards. In May 2012, the Biomass Institute prepared guidelines for sustainable reed harvesting for a company called *Nova Energia* which intends to exploit 2500 hectares of reed in the Semenivka district. A similar job they did for a private company in the Zaporizhya region. They also help both companies with acquiring permits. Instead of considering this as a risk for losing their competitive edge, Phytofuels is offering these services with a strategic purpose.



Phytofuels is well aware it cannot cover the entire biomass market as a small player alone, and only with other suppliers combined, enough leverage can be generated to transform the biomass market for compliance with NTA 8080. And with the advantage of scale, also export to the Netherlands may become possible. One of the objectives behind organizing the seminar held in Poltava in May 2012, on sustainable development of Territorial Communities, was to generate interest among Ukrainian companies in NTA 8080 compliance. The second objective was to involve state authorities (section 2.4.2).

Customers

Phytofuels has become a well-established company in Ukraine, for example through good contacts with the National Agency for Investments and Regulation of National Projects, which apparently is controlled by the country's president himself. In the spring of 2012, they sent Phytofuels a letter with the request to take responsibility for implementation of bio-energy projects in Ukraine's Zaporizhya region. The Dutch NTA 8080 standard will be established as basis for sustainability. This involves among other projects for building thermo-electric biomass plants. Phytofuels will coordinate these programs and supply the energy plants with biomass pellets.

3.5 Minorities

There are sometimes groups of wandering gypsy communities in the Poltava region, but by May 2012 none of these groups were present in the villages covered by Phytofuels. Usually these groups enter a village and stay for some time and then move on. It seems unlikely that the reed harvesting programs in any way will interfere in the life of these people and vice versa.

3.6 Company employees

As discussed in 2.4.4, it is very difficult for Phytofuels to find qualified and motivated employees in the villages. Similar experiences to those of Phytofuels, involving theft, have been shared by Tuzetka, another partner in the Pellets for Power project.

In dealing with the lack of qualified employees, Phytofuels uses machinery that is simple and economic.

Handling the mentality of workers may be even a bigger challenge. Phytofuels had recently experienced how a special connector from the tractor to the reed mower got stolen in a village. They had it investigated by the police and it turned out to be stolen by two tractor drivers in the village. When they were asked why they did it, they simply said they wanted a job as tractor driver, and, "there are only three tractor drivers in the village, so you have no choice". Phytofuels did not press charges...



4 Analysis of Ukrainian legislation

Introduction

With often not even government authorities well informed about Ukrainian legislation, it has been a real challenge for Phytofuels and the Biomass Institute to come to grips with permit procedures for reed harvesting. This has taken a lot of study of Ukrainian legislation, the fruit of which is written down in this chapter. Three Ukrainian laws resulted important in the permit process, described hereafter.

4.1 Law on Environmental Protection

This law is the most important for obtaining harvesting permits and has the following objective:

“To regulate relations in the sphere of protecting nature, utilization and regeneration of natural resources, maintenance of ecological safety, prevention and mitigation of the negative effects of economic and other activity on the environment, conservation of natural resources, the genetic pool of animate nature, landscapes and other natural complexes, unique territories and natural objects related to the historical and cultural heritage”. <http://www.elaw.org/node/2659>

Article 15 is of particular importance, stating that deputies of local councils bear the responsibility for the condition of the local environment. Its sub-articles confirm legal compliance with pretty much every single aspect of the signed three-party reed harvesting programs with the villages. The sub-articles include the following duties and rights of village council deputies:

- Ensure the implementation of ecological policy
- Give consent to the siting of enterprises on their territory
- Issue and revoke permits for individual utilization of natural resources of local importance
- Approve local ecological programs
- Organize the study of the environment
- When needed, organize necessary ecological examinations by experts*
- Inform the population about the condition of the environment
- Adopt decisions on organizing territories and objects of nature conservation of local importance and other territories that are subject to special protection
- Exercise control over compliance with legislation on environmental protection
- Coordinate the activity of respective authorized state bodies of administration in the field of environmental protection and utilization of natural resources on the territory of the local Council of People`s Deputies.

Legislative justification of the Biomass Institute

Article 30 of this law states that ecological examinations referred to above (sixth bullet point from above), shall be carried out by “independent groups of specialists on the initiative of non-governmental associations as well as local bodies of power at the expense of their own resources or on a voluntary basis. Public ecological examination shall be conducted independently from state ecological examination”. This article is the ground for establishing the Biomass Institute, as independent research oriented and consultation organization to operate alongside with state organizations.



4.2 Law on Flora

This law “regulates social relations in the sphere of protection, use and restoration of wild and other non-agricultural vascular plants, anophyte, algae, lichens, fungi, their communities and habitats”.

Article 11 defines the limits of harvesting volumes for above ground and below ground biomass. See Table 1, chapter 2. This law allows harvesting of up to 25% of above ground perennial biomass. This includes reed dealt with in the reed harvesting programs.

Article 12 regulates the height of land fees, to be paid to the local communities per ton of biomass. In 2006, this was 5 grivnas (50 euro cents) per ton of reed. This money is not directly paid to the community but to the Tax Administration.

Article 40 deals with law enforcement and refers to a separate Codex. District inspectors come to check local producers and make report on any irregularities. Depending on the scale, the producer gets fined or his case is passed on to the environmental prosecutor. Also the range of fines is defined in the law.



Emerging reed shoots

Law on Fauna

The Ukrainian Law on Fauna is very similar to the Law on Flora, except for its focus on animal life. It also states that biodiversity should be protected and there should be special maps indicating migratory routes of certain animals.

Law on Red Book

This Law deals with the preservation and protection of rare, threatened and endangered species of plants and animals. Ukraine’s protected areas such as on state level (Zapovednic), for example the ecological reserve in Malo Pereshepyno (section 2.6), serve to protect Red Book species. The Pellets for Power project has conducted inventories of species, with the aim of identifying any Red Book species too. Results of these studies are found in Van der Sluis *et al* (2013). However, the law does not forbid harvesting in reed areas with presence of Red Book species. Instead, harvesting volume limitations are defined in the Law on Flora as described above.

4.3 Law on Self-governance

This Law, in accordance with the Constitution of Ukraine, “determines the system and guarantees of local self-government of Ukraine, provisions of organization and activity, the legal status and responsibilities of bodies and officials of local self-government”. http://www.urban.org/PDF/ukr_locgov.pdf

Whereas local self-government body is defined as:

“an elected body (council) consisting of deputies and which is granted, in accordance with the law, the right to represent the interests of the territorial community and to adopt decisions on its behalf”.



This law makes clear that local development should really start at the village level. Other articles go deeper into the responsibilities of the village council.

Article 26 covers competence of the village council, including approval programs of socio-economic and cultural development.

Article 27: entry point for the village-based reed harvesting programs

Article 27 would become the entry point for Phytofuels and the Biomass Institute to develop reed harvesting programs with the villages. This article guarantees the right of village councils to “prepare socio-economic and cultural development programs of villages, settlements, and cities, and also target programs on other issues of self-government, to submit these programs for the council’s approval, and to organize their implementation; to submit to the council reports on the course and results of implementing these programs”.



Taking soil sample in reed field



5 Conclusions and recommendations for biomass companies

5.1 Is there a future for biobased business in rural Ukraine?

So, is it possible for a company to successfully set up a legal biomass based business in rural Ukraine?

Phytofuels Investments has an affirmative answer, with at least thirteen permits and development programs for legal reed harvesting under its belt, signed with villages in nine districts, under auspices of the environmental authorities. Phytofuels, with help from the Biomass Institute, has shown that in Ukraine a company can make a difference by studying and implementing the law, even in the face of legislative ignorance and a culture of bribery among officials. With the law on its side, identifying the villages as rightful owners of reed resources, government officials as well as communities could be dealt with in a successful way.

This has been a very lengthy and difficult process, however, dealing with people who are still conditioned by Soviet times. People's expectations of the "Dutch project" were sky-high in the beginning, but when change did not come quickly – and it never does – people began to lose their interest and returned to their common mode of apathy. It will require continuous efforts to maintain a good spirit of cooperation, despite already having signed agreements. Real change is only possible when starting with educating children, hence the educational programs at schools and other events. And in many years you hope this effort will pay off, with a new generation of village leaders and government officials who feel apt and responsible to make change happen.

In the meantime, still a lot of work remains to be done. Phytofuels is likely required to make plenty adjustments to its operations, if it is to obtain certification in accordance with NTA 8080. And even then, it remains to be seen whether there is a market for certified biomass, willing to pay for the additional cost. And in the larger institutional framework, success depends on defining policies that favour sustainable biomass programs in Ukraine. Nevertheless, a standard has been set in this project and both organizations intend to continue and expand their activities, for the promotion of NTA 8080 based business development, research programs and participation in state and regional councils for advise on legislation and sustainable biomass programs.

5.2 Recommendation: Investing in long-term community relations

Given how hard this is for a Ukrainian organization, run by people born and raised in the region, it may seem virtually impossible for outsiders to start projects in Ukraine. It takes profound knowledge of the culture and history of a particular place, as well as intelligent tactics for playing out village leaders and administrations on different levels so as to escape the constant threat of corruption and apathy.

As demonstrated in this project, there may only be one way of achieving positive changes in the long run, through slow building of trust and cooperation through active and frequent engagements with local communities. These efforts should be translated into socioeconomic programs that work directly with the community and address real concerns, that often go beyond the core business of the company.

When asked what aspect in its approach could still improve Phytofuels answered that even more attention should go out to the daily concerns of people in the villages. Instead of starting with activities that are directly linked to the proposed business, such as electrification, it would be much more effective to start with activities focusing on revival of the community as a whole. An example may be making flower beds or programs with elderly to play the harmonica. Such type of activity has great impact on



the general well-being of the community, making people “feel” change instantly. Also the common issue of garbage disposal could be addressed. People would be triggered to place garbage bins and punish those who dump trash elsewhere. Supporting the community in this way is everything according to Phytofuels. It can induce positive changes quickly, but without big investments. Rather than focusing on adults and elderly, so far Phytofuels has focussed much on social and educational programs with children. This has been very rewarding, as children are eager to learn and represent future leaders. But, Phytofuels is now acknowledging the limited impact in the short term. There are only few children in the villages and from now on much more effort should go out to adults and the elderly.



Preparing leaders of the future..



References

Brinkman, A.J.F. (2011). How to execute a stakeholder consultation? A guidance note. Agentschap NL – Ministry of Economic Affairs, Agriculture and Innovation

NEN (2009). *Netherlands Technical Agreement (NTA 8080)*, Sustainability criteria for biomass for energy purposes.

NEN (2010). *Netherlands Technical Agreement (NTA 8081:2010) informative copy*. Certification scheme for sustainably produced biomass for energy purposes.

Poppens R, Hoekstra T (2013) Ukrainian biomass sustainability. Assessing the feasibility of NTA 8080 implementation and producer compliance in Ukraine. Pellets for Power project. Wageningen UR Food & Biobased Research.

Poppens, R (2011). NTA 8080 Analysis of the JaLo pellet chain. An integrated framework to assess spatial and related implications of biomass delivery chains. Climate Change Spatial Planning Program. Wageningen UR Food & Biobased Research.

Sluis, T van der, Poppens R, Krajsvitnii P, Rii O, Lesschen J.P., Galytska M. Reed Harvesting from Wetlands for Bioenergy. Sustainability and economic viability of reed harvesting in Ukraine. Pellets for Power project. Wageningen UR Alterra.

<http://www.agentschapnl.nl/node/178155>

<http://www.biomassandbioenergy.nl/>

http://www.urban.org/PDF/ukr_locgov.pdf

<http://www.elaw.org/node/2659>