Work package 2- Historical and recent attitude of stakeholders

Case 14:
Szelero Vep wind project

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*C*ultural Influences on *R*enewable *E*nergy *A*cceptance and *T*ools for the development of communication strategies to promot*E* ACCEPTANCE among key actor groups

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Contents

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1. Introduction

This case study describes a wind-energy project, located near the village of Vép, in Western Hungary, close to the Austrian border. One phase of the project has already been carried out, but there are two other phases, with difficulties and barriers. These are explained in this paper. The focus is on the coordination and communication of the company - called Szélerő Vép Kht. - with the different groups and representatives of stakeholders. Description of the authorization process is an important part. This research is based on documents, brochures, articles concerning the project, and on interviews as well.

2. Country-overview: Energy from wind in the Hungarian context

In Hungary the use of wind energy is traditional (windmills), but usage of wind for electricity producing was not characteristic until last years. Until the end of the twentieth century usage of wind-energy was only possible using low-power wind converters, which operated water-pumps, inductors or water-fans. But researches confirm that it is worth to build wind power plants for electricity producing, with aware place choice.

According to the European wind sorting Hungary is a moderately windy area. The windiest month is March, the less windy month is October, but the wind climate of Hungary is relatively equalized. The spatial inequality of wind is significant. The most suitable area of the country for using wind-energy are the northwest and the southeast regions (Radics, 2004). The geographical environment of Hungary is not ideal, but there are more advantages of usage of wind-energy, so Hungary has to exploit the wind-energy potential.

According to a survey (MPOMRI, 2006) made by Median for Callis Energetics in January 2006 wind is a 'popular' renewable energy-source (Figure 2.1).

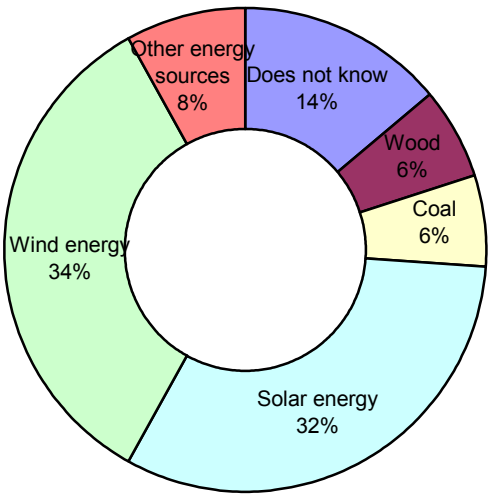

Figure 2.1 *Which energy-source should get a bigger role?*

91% of the population of Hungary support building of wind power plants, and 85% would support it even if the price of electricity would increase 1.5% (Table 2.1).

Table 2.1 *Popularity of wind power plants*

	Does not know	Would object	Would support
Should be more wind-power plants in Hungary?	5%	4%	91%
Should be more wind-power plants in Hungary, if in that case the price of the power would increase 1.5%?	7%	8%	85%

Two thirds of the population think that the reason for the fact that in Hungary there are so few wind power plants is that the politicians and owners of rival (large conventional) power plants do not support wind-energy. Only 20% says that wind does not blow strongly enough. There are significant differences in the opinion of qualified and unqualified people (Table 2.2).

Table 2.2 *Why does Hungary have so few wind-power plants?*

Qualification of the asked people	Does not know	Wind does not blow strong enough	Politicians and leaders of other power plants do not support wind energy
Less than 8 classes	23%	34%	43%
Elementary school (8 classes)	9%	26%	65%
Vocational school	14%	14%	72%
High school graduation	11%	17%	73%
College/university diploma	13%	18%	68%
Total	13%	20%	67%

According to the opinion of people the most typical attribution of wind-power plants are: environmental friendly functioning; they reduce import or centralized energy-source dependence, they are clean and they symbolize modernisation. Also, they are not held noisy. Opinions are divided about the question: are wind-power plants aesthetic, do they fit in the landscape? 69% of the population think that they fit in the landscape, but only 40% consider them aesthetic.

Szélerő Vép Kht. has made two surveys in Vép about the wind-energy project. These are explained more detailed later in this paper, but here it has to be mentioned that according to the results of the first survey 97% of the population of the village have heard about wind-energy. Almost 90% said that wind turbines fit in the landscape (Szélerő Vép Kht., 2005i), a much higher ratio than in the national survey of Median above.

At present the most important difficulty in the proliferation of wind-energy use is a 330 MW cap on total wind capacities, which was set by the Hungarian Energy Office, on the suggestion of the system operator in the spring of 2006. The argument justified it on the basis of imbalances and security problems that intermittent energy can cause to the electricity system as it stands now. The quota then has been distributed among applicants for wind power plant (energy) permits. There were applications for over 1100 MW, thus questions and conflicts of allocating scarce resources arose. Also, many renewable energy source stakeholders doubt the size, the validity of the justification of the quota. The quota allocation method was decided upon in late spring 2006, and instead of say, a transparent auction, it was to set a certain point in the past by which if the applicant had obtained the connection contract (Nov 11, 2005), could receive Energy Office permit for 51% of their proposed capacity (and all the then already existing 17 MW also received the permit and the quota, so 313 MW quota was eventually distributed). Those having obtained or planning to obtain connection contracts later, have not received any from the quota. Annex I shows the allocation list (HEO, 2006b). The projects take place principally on the north-west part of the country.

3. Summary

The increasing significance of renewable energy sources in Hungary, and the advantages from compulsory takeover causes that there are numerous initiatives to produce and use renewable energy, and to build renewable power plants, especially wind power plants. Szélerő Vép Kht. was founded with this purpose in 2003 by five people. They planned to build 20 turbines in three phases, and produce electricity. The company form is special, a so-called public benefit company (so not the classic limited liability company or public limited company). Some of the owners and management have strong local commitment, and roots are shown by the fact that one of the founders at the time of establishment was a local teacher. The company has a supervisory board, of which the president is the mayor of the village.

All this plans were devised before setting the 330 MW cap. These new circumstances have made the realization of the entire project complicated and uncertain.

4. STEP ONE: Possible Futures

After the idea of building a wind power plant had arisen, the project managers had to decide the place, where the plant was to be built. They analysed a territory near Hegyeshalom, which, according to several measuring institutes, was in a wind channel. The problem with this place was that it was too close to a nature reserve. Another problem was the 'popularity' of the territory. Many companies planned to build turbines here, but because of some technical difficulties (transport of electricity was difficult because of long distances) capital strong companies had better chances. Consequently the project managers decided to build the turbines near Vép, close to the city of Szombathely. For this area they had sufficient local knowledge, and the possibility to build a wind power plant was also given (Personal communication - Horváth, Szilárd). According to measurements in the neighbourhood of Szombathely, 172 days are windy in a year, of which 68 days are stormy. The prevailing wind is northerly. Figure 4.1 shows the parameters of the wind near Szombathely (Szélerő Vép Kht., 2005e).

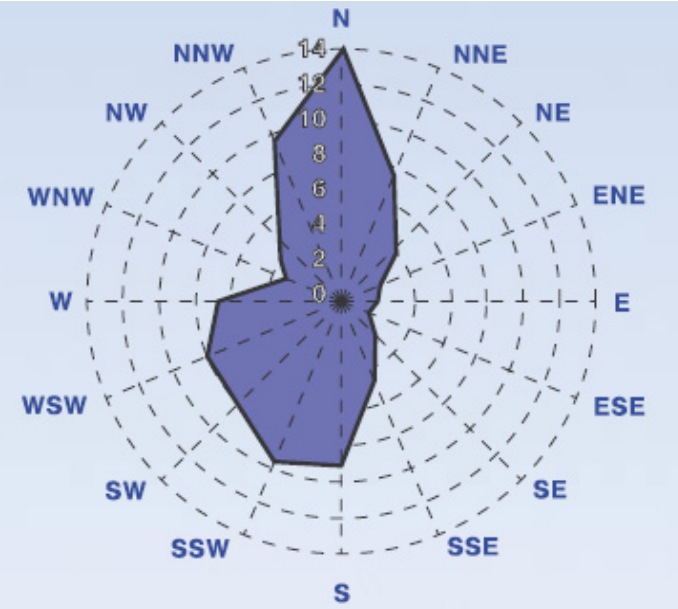

Figure 4.1 *Direction and frequency of wind (%), annual statement*

The nature protection authority did not objected to the building of the wind-power plant there. The land around the turbines can be cultivated, only the place for the crane must be kept gravelled in order to maintain and repair the turbines, if it is necessary. Landowners, who have a

turbine on their land, receive rent from Szélerő Vép Kht. Interestingly, so as to tackle probable conflicts, also the 'non-windy' landowners of the village receive 'rent'.

Szélerő Vép Kht. planned to build 20 turbines in 3 phases:

- 1st phase: In 2004 Szélerő Kht. planned to build one turbine (done), to have the second phase authorised, and to prepare the third phase.
- 2nd phase: In 2005-2006 they wanted to build three other turbines, to plan the third phase, and to prepare the involvement of the public and the local government
- 3rd phase: They planned to build 16 turbines by the end of 2008, to take the municipality and the people of Vép into the project company.

In the long term Szélerő Vép Kht. wishes to satisfy local energy-demand from renewable energy sources. The reason for using the special company form of Public Benefit Company is an 'experiment' with a new business model to involve the community: Szélerő Vép Kht. contracted with the local government of the village. The company undertook to prefer local contractors and labour force, and after the completion of the first phase undertook to cover the public lighting costs of the village. According to the agreement after the end of the 3rd phase the local government of the village receives 20% of the shares of the plant, landowners receive 5%. Citizens and companies of Vép will be sold 40% of the shares. Therefore, eventually, the community of Vép can have altogether 65% share in the wind power plant (Szélerő Vép Kht., 2005e).

According to the plans the power plant will yield significant profit after repaying the loan (6-7 years from the end of the 3rd phase). With this new business model large share of the profit is given to the community. The business model is called 'communal implementation'. The main goal of the new business solution was to make the local population committed to the wind power plant. With this solution the interest of the village and the project manager became similar (Personal communication - Horváth, Szilárd).

According to the plans the first wind turbine would be a 'pilot project' to test the preliminary measurements and calculations. The parameters of the first turbine are represented in Table 4.1 (Elinor, 2003).

Table 4.1 *Parameters of the first turbine in Vép*

Type	Enercon E-40 turbine, without torque converter, rev can be varied, blade angle can be varied
Nominal performance	600 kW
Expected yield in Vép	1.2 million kWh/year
Diameter of the rotor	44 m
Surface of the rotor	1520 m^2
Axle height	78 m
Blade	Three-bladed
Material of blades	Epoxi resin, with built-in lightning rod, and demister heating
Direction of rotation	Clockwise
Rev	It can be varied, 18-34 rotations per minute
Blade angle regulation	All blades are equipped with separate blade angle regulator engine
Generator	Direct driver synchronous generator with Enercon Rings
Voltage	440 V
Intake from the network	Through a 20 kV transformer
Braking system	3 engines to vary the blade angle, rotor emergency brake, rotor fastener
Following of the wind direction	Active following of the wind direction with an engine
Starting wind speed	2.5 m/s (9 km/h)
Nominal wind speed	12 m/s (90 km/h)
Safety standstill	25 m/s (90 km/h)
Tower	Tapered steel structure
Tower mass	90 t

The electricity produced by the wind power plant is fed into the network of E.ON North-Transdanubian Electricity Supplier (ÉDÁSZ). According to the law there is compulsory electricity takeover at a preferential feed in tariff: the price of renewable electricity is higher than the price of electricity from fossil fuels.

There were several plans to finance the project. The most important sources were EU-tender sources, bank loan and own resources (mainly work, less money). But according to the new business model, the 'communal implementation', local capital (population and local companies) was planned to involve as well. The investment has an Austrian partner, Windpark Bruck/ Leitha. The project managers and the representatives of the local authority of Vép visited this wind park in 2002 to observe the working turbines. Szélerő Vép Kht. visited Laitabruck several times. The Austrian representatives explained their experience and offered to help with the communication, as well (Personal communication - Horváth, Szilárd).

5. STEP TWO: What were the various expectations of the case?

The most important actor of the project is the *project developer company*: Szélerő Vép Kht. Its main expectation was not the profit, but the development of the village Vép, and popularisation of renewable energy sources. The village is represented by the *local authority*, the *local landowners* and the wider *local population*. They all expected social and/or financial benefits and the development of the village as well. Results of first survey made in Vép reflect the expectations of the people of the village: Most of them supposed that with the use of wind energy it is possible to produce electricity in an environmental friendly way. More than half of the population of Vép expected that the wind power plant would work for the benefit of the village. For the output of the power plant more than 50% of people estimated less than 1 million kWh. (Szélerő Vép Kht., 2005i)

Another 'group' of stakeholders are the authorities. The authorization procedure of small power plants (<50MW) consists of numerous steps, the most important steps are listed below (MAVIR, 2006 and personal communication - Fehér, Mária, E.ON):

- Environmental protection permit - *Environmental Inspectorate*
- Track permit, building permit - *Hungarian Trade Licensing Office*
  Technical safety licensing and inspection
- Realization plan, Network connection plan
  - System Operator opinion - *MAVIR Hungarian Transmission System Operator Company Ltd*
- Network connection contract - *E.ON North-Transdanubian Electricity Supplier (EON-ÉDÁSZ)*
- Hungarian Energy Office permit - *Hungarian Energy Office*
  - System Operator opinion - *MAVIR Hungarian Transmission System Operator Company Ltd*

If the small power plant would like to connect to the 120 kV network, the system operator (MAVIR) has to give opinion on the project twice. First, MAVIR has to check up the network connection plan, whether it meets the requirements of the operation regulation from technical aspects. The network connection contract can only be signed after this procedure. Second, the system operator analyses if the planned small power plant can be fitted into the electricity system. This second opinion is compulsory for all planned small power plants. Concerning these questions there were misunderstandings as to why it is not enough to do this administrative procedure only once (MAVIR, 2006 and personal communication - Fehér, Mária).

The expectations of the authorities were different considering the three phases of the project. The system operator company and the Hungarian Energy Office considered the first turbine advantageous. However, now they do no agree with Szélerő Vép Kht. that it should be continued, as the project company had not been in a stage to be considered when the quota distribution closed. Thus, the company missed to receive quotas for the 2nd and third phase. Consequently, Szélerő Vép Kht. supposes that acquiring the permits from these two organisations will be difficult (Personal communication - Horváth, Szilárd). They trust that the national wind capacity quota will be increased.

E.ON ÉDÁSZ the regional distribution network operator and supplier (public retail trader utility) has problems and risks with the project, too. Not so much as a distribution network operator, as its costs are covered by connection charges. Nor is it bothered with the high feed in tariff to pay, since the renewable premium is reimbursed to it. The root of the problem is that most of the wind power plants of Hungary are (will be) built in the area of E.ON ÉDÁSZ (Table 5.1). E.ON ÉDÁSZ, as the regional electricity supplier, has to submit daily a schedule to the system operator. The high concentration of wind plants in the area entails that the weather risk is also concentrated here, and there is a high uncertainty in the schedules submitted to the system operator (HEO 2006a). This implicates extra costs to E.ON: the cost of balancing power, which it is naturally reluctant to bear. We think that negotiations would be necessary, and these costs could be shared with or passed on entirely to wind electricity producers, either individually or as a risk pool.

Table 5.1 *Allowed wind capacities*[1]

E.ON ÉDÁSZ	247 MW
MAVIR transmission network	63 MW
E.ON TITÁSZ	3 MW
	313 MW

[1] MEH, Bp, 2006 január, A szélenergiából villamos energiát termelő erőművek engedélyezése.

The main actors are listed in Table 5.2.

Table 5.2 *Actors of the wind power plant project*

Actor	Expectation	Speaking for 'publics'
Szélerő Vép Kht.	To build 20 turbines in three phases Produce renewable electricity CO_2 'savings' Development of Vép	Population of Vép, spreading of renewable energy sources
Local authority	Increasing local development sources, improving the social situation, new possibilities for the village	Local population
Land owners	Profit from the rent	Land owners
Local population	Social and financial benefit	Local population
Environmental Inspectorate	Observing the relevant rules, plans	State, politicians - social interest
Hungarian Trade Licensing Office (technical safety licensing and inspection)	Observing the relevant rules, planes	State, politicians - social interest
MAVIR (System Operator)	Observing the relevant rules, security of supply, plans 1st turbine is advantageous but the two other phases are not.	State, politicians - social interest
Hungarian Energy Office	Observing the relevant rules, plans, security of supply, clean energy production, 1st turbine is advantageous but the two other phases are not.	State, politicians - social interest
E.ON ÉDÁSZ	Compulsory takeover, security of supply, costs, weather risk	Managers and owners of the company
Competitors (other wind energy user companies)	Profit from building and operating their own wind power plant	Managers and owners of the companies, spreading of renewable energy sources

6. STEP THREE: Understanding 'participatory' decision making: negotiating expectations

Szélerő Vép Kht. prepared the communication with the stakeholders with a 'Communication draft' (Katona I, Horváth Sz., 2004). That was the main line of communication during the implementation of the project, with some specifications and supplements. The managing director and the communication manager were responsible for the communication strategy with the help of an informatics advisor and a practical mediating company (Pannon Projektum Bt.).

The communication process was built up so that its components were based upon each other. First, the target audience had to come to know and understand the whole project, and later the details of renewable and wind energy, and the power plant itself. Tools of communication of the project are listed in Table 6.1.

Table 6.1 *Forms of participation*

Type	Organisers	Involvement	Purpose
Local media campaign (News, advertising, PR)	Szélerő Vép Kht., local newspapers, local tv	Local population	Information, public participatory, sample for other communities
National media campaign (News, articles) - radio and tv	Szélerő Vép Kht., national newspaper, radio	Local population NGOs Local authority Vocational public opinion	Information, sample for other communities, preparation of decision
Web-Site	Szélerő Vép Kht.	'Internet society' Interested and less interested people as well	Information, Data, web-cam from Vép, demonstrating the new business solution, popularisation of RES
E-mail campaign	Szélerő Vép Kht.	Local and national NGOs, local authorities - office holders	Attracting attention: new business model, offering a visitation in the power plant, invitation to the conferences, popularisation of the web-site
Projector	Szélerő Vép Kht.	By-passers	Data from the power plant - traceable
Wind energy exhibition	Szélerő Vép Kht.	Population, interested people	Popularization of RES, 'communal implementation', To make people awake to do something
Informative brochures	Szélerő Vép Kht.	Population of Vép	Present business goals, answers to the earlier formed questions of the people
Giant posters	Szélerő Vép Kht.	By-passers	Information
Open classes	Szélerő Vép Kht., Schools of the neighbourhood	Elementary and high school students Indirect: parents	Popularisation of RES, environmental awareness
Visitations in the wind power plant	Szélerő Vép Kht.	Interested people	Present the functioning of the plant
Vocational and public conferences	Szélerő Vép Kht.	Technicians (engineers, meteorologists), local authorities - mayors, delegates, other RES companies, NGOs, delegates of vocational journal	Theories and practical questions about wind power, 'knowledge transmission', popularise the business model, make contacts, meet each-other
Civil Forum	Szélerő Vép Kht.	Population	Information, answer to the questions, popularise the informative brochures
Phone customer service	Szélerő Vép Kht.	Interested people	Answer to the questions, explaining the experiences, reporting data, information about visitations

The press played a very important role in the communication of Szélerő Vép Kht, it has inquired from the beginning of the project. To illustrate the turbine on press conferences a small model (1:70) were built (Szélerő Vép Kht., 2004a).

The wind energy exhibition was set up in July 2005. It consisted of five large boards (2*1 m) besides the power plants. The topics presented on the boards were: the sponsors of the project, technological data, environmental protection advantages and dangers of the turbines (Szélerő Vép Kht., 2005a).

There were two important 'wind-conferences' organized in Vép in September and in October of 2005. The mayors from Vas County were introduced specially, but members of the local government, NGOs, entrepreneurs were welcomed on the conference as well. It was open for the wider public, too. Specialists held numerous interesting presentations. The main topics were: renewable energy sources, wind energy in Hungary, Austrian wind-park models, environmental aspects, financing issues and the wind power plant project of Vép. The second conference ended with the official initiation of the wind power plant (Szélerő Vép Kht., 2005d).

In order to evaluate and develop the communication strategy Szélerő Vép Kht. has made two surveys at two different dates (Szélerő Vép Kht., 2005g, h, i, j). The first survey was made in May 2005, the second in October 2005. At the first time the interviewers could reach 57% of the adult population of Vép, the second time this proportion increased to 68%. The most important events between the two surveys were:

- The turbine was built up, and the trial run began.
- The active 'loud' communication began in May 2005.
- Open classes, visitations of the wind power plant, forums, wind conference were organised, news, advertising, giant posters, brochures were issued.

Considering the results of the first survey Szélerő Vép Kht. has set some objectives to make the communication better. An important point was that the idea of 'communal implementation' has to be explained more detailed. in the questionnaire there were two questions about this idea, and the answers did not completely match each other:

- Should wind power plant investments be implemented as a communal investment?
  Yes: 58.4% No: 41.6%
- Should wind power plant investments be implemented as private investment?
  Yes: 31.3% No: 68.7%

There is some 10% discrepancy between the two answers, unless there is some other type of investment in people's mind.

The reason may be that people did not exactly understand what 'communal implementation' means. It is difficult to clarify this idea, because before the change of the political system (1989) 'communal implementation' had a different meaning, and people, who were asked in the survey, have grown up in the previous system. In the second survey the proportion of people who answered that wind power plant investments has to be implemented as communal investment increased to 67.3%, and thus the contrast decreased.

Another objective was to make the method of participation clear. 37.8% of population of Vép did not know how he/she could participate in the building of the power plant, and only 11.2% would contribute with money. In the second survey the proportion of people who would participate increased a little, the proportion of those who did not know decreased, and proportion of those who would contribute with money increased to 19.8%. The next objective is to develop the system how people can participate in practice. The personal example of people involved in the company can play an important role. The expansion of the company should be carried out in several phases, so the personal example can make the joining the company attractive for others.

Another significant point is that the threshold to get into the company has to be determined on a low level to make the ownership of the wind power plant for everybody accessible.

Very important was the question about the number of turbines. 90.6% of the population of Vép said he/she would continue the project, but 43.1% considered only five turbines conceivable. The 43.1% with the 9.2% of those, who would stop after the first turbine, together are more than the half of the population. The objective was to convince the people that the wind power plant with more turbines is advantageous and would not cause any problems. In the second survey the proportion turned around, 56% considered more than five turbines advantageous (Table 6.2).

Table 6.2 *How many turbines should be erected near Vép?*

	1	5	20	As many as it is possible	Does not know
May 2005	9.2%	43.1%	33%	14.5%	0.2%
October 2005	5.4%	38.6%	39%	17%	-

The reason for the opinion change beside the communication of Szélerő Vép Kht was that the first turbine had by then been built up, people had some first hand experience and could better imagine how the turbines would look like.

There was a question in the survey about the communication tools. It was proven that the local newspaper (Vépi Krónika) was the most important information source for the population. In the second survey it became clear that the new tools (giant posters, brochures) were effective as well. The last interesting finding of the survey was that 69.4% of people said that they did not know enough about the wind power plants. In the second survey this proportion decreased to 62,3%, but it was still too high.

Another important part of the communication of Szélerő Vép Kht. were the negotiations with different authorities, and E.ON ÉDÁSZ. The communication with E.ON ÉDÁSZ has to be mentioned, because it is problematic. Szélerő Vép Kht. is now (October 2006) waiting for the network connection permit of the 2nd phase (three turbines). But E.ON does not answer the letters. The representative of Szélerő Vép Kht. said that the co-operation on the vocational level is quite good, more meetings were organised, but it is complicated (almost impossible) to communicate with decision makers of E.ON. Szélerő Vép Kht does not know the reason, why they do not get the connection permit (Personal communication - Horváth Szilárd).

7. STEP FOUR: From visions to actualities

The 1st phase began in 2002 with continuous measuring of the wind and analysing the wind data. The Hungarian Meteorological Service was helping to carry out this preparation phase. The company was founded in 2003. In this year the plans of the wind power plant were prepared. The population of Vép could voice its opinion on a public hearing, the agreement with the local authority was also made in 2003. Szélerő Vép Kht. won EUR 860,000 support on PHARE CBC Program, environmental protecting infrastructure network tender. This amount was 90% of the costs of building the firs turbine and of the communication campaign (Szélerő Vép Kht.. 2005e).

There were difficulties with the pubic procurement procedure. The new Hungarian Act on Public Procurement entered into force on 1 May 2004, on the day of Hungary's EU accession. Those parts of the new Act, which regulate contract award procedures for public procurement with support from European Union structural funds and Cohesion Fund entered into force on 1 January 2004. Szélerő Vép Kht. had the problem, that there was no such company on the market, which had already transacted a pubic procurement procedure according to the new regulation. Another difficulty was that pubic procurement procedure had never been adapted to a wind

power plant in Hungary. Consequently Szélerő Vép Kht. had to carry out the procedure as a 'pioneer'. The complications caused some delay in the realization of the 1st phase of the project, but this delay could be corrected (Szélerő Vép Kht.. 2004ab; 2005a-d).

The authorization procedure took a long time and it was very expensive. Szélerő Vép Kht. had and has many problems concerning the authorities. The Administrative Office annulled the building permit of the first, already existing turbine, because the permit was issued by the local government, not by the Hungarian Trade Licensing Office. Therefore Szélerő Vép Kht. had to claim the subsistence permit. The company received it without any problems. The remarkable point of the procedure was that both permits (the annulled building permit and the subsistence permit) were issued with the involvement of the same authorities. The Hungarian Trade Licensing Office took part in the first authorization process as well, but only as a consulting authority. The building permit of the second phase was annulled with the same reason as well (Personal communication - Horváth Szilárd).

According to opinion of some RES connected people and to articles there were irregularities during the authorization procedures of numerous wind plants. It is claimed that several wind-companies could enter into a contract irregularly with E.ON ÉDÁSZ, because from these companies E.ON had not required the existence of building and environmental permit. Szélerő Vép Kht. was among these underprivileged companies. On the other hand, E.ON is on the opposite opinion: these rumours are false. Only press has blown up the problems, which occurred only due to misunderstandings. The authorization procedure was not defined, the regulation was not obvious (Personal communication - Fehér Mária).

The construction began on 14 April 2005 with constructiong the road. The first turbine was finished in June 2005. The trial period ended successfully, the turbine is working. Compulsory takeover is guaranteed until 08 July 2007 because the pay back time is very short.

The first turbine produced in the first year only 900,000 kWh electricity, instead of the estimated 1-1.2 million kWh. But we cannot draw any conclusion from this data, because wind is changeable, the average of four-five years may show more realistic picture (Personal communication - Horváth Szilárd).

The new business model seems to be successful up to now, there were only a few sceptical people, who were afraid of the turbines because of the birds or the noise. But they were calmed down with the communication campaign. Many groups visited the wind power plant, for example: Energy Club, Hungarian Development Bank (MFB), Corvinus University of Budapest, more elementary schools, secondary schools. Between 1 September 2005 and 15 September 2006 54 groups of 2200 visitors went to Vép to see the turbine. Beside the groups there were many individual visitors as well (Szélerő Vép Kht., 2004ab; 2005a-d).

The continuation is questionable. While local population and the local government would support it, the lack of quotas and the resistance of the authorities are obstructive factors. Despite all these circumstances, Szélerő Vép Kht. is carrying on the project. The company wants to get the permit from Hungarian Energy Office, and is optimistic. It is preparing a new brochure about the model of Vép. Using the brochure the company plans to contact the Ministry of Environmental Protection and Water Management, the Ministry of Economy and Transport, the Hungarian Energy Office and some NGOs as well.

Another idea of the company was to analyse if the wind power plant of Vép could join the Austrian electricity network. However, Szélerő Vép Kht. would stay principally in Hungary.

The internal deadlines for the 2nd and 3rd phases were modified: The second phase should be ready in 2008, the third in 2010. In addition the plans were completed with a new 'communications tool': the lobby (Personal communication - Horváth Szilárd).

8. Lessons learned

The wind power plan project of Szélerő Vép Kht. is special, because the primary goal is not making profit from the project, but to develop the village and also to make for the population of Vép possible to directly benefit from the investment. This is the basic conception of the new business model. According to the plans the success of the wind power plant will be in the interest of the community of Vép. This idea seems to be favourable, but the company did not have the possibility to try it in practice, because the project was interrupted after the 1st phase by the lack of wind capacity quotas set due to the weakness of the electricity system.

The Communication Campaign of the company was well organized, it was successful. The surveys made before and after building the turbine were very helpful. Szélerő Vép Kht. managed its communication strategy very flexible: a draft were developed and adapted according to the results of the surveys. External conditions also affected the communication strategy, for example the increasing interest of the press. Szélerő Vép Kht. tried to benefit from the interest of the press. Flexibility of the communication strategy is very important and very fruitful to be effective.

Gradual realization is characteristic of the project. According to the results of the two surveys the opinion of the population has changed after the first turbine was erected. If Szélerő Vép Kht. would start with the 5 or the 20 turbines, population may protest against the project. With this gradual method people have experience about the turbine, for example: it is not noisy, it does not impair the landscape. Consequently they agree the continuation.

The main difficulties of the project were/are due to the public procurement and the authorization procedure. The communication with the authorities was complicated. The most important reason may be that this project was among the first wind power plant projects, and the procedure was not worked out in practice. This problem caused misunderstandings, and may be irregularities as well.

Szélerő Vép Kht. planned the first turbine to be a prototype for the other 19 turbines. Now it is doubtful: will the company receive possibility to build them or not. The lobby can be effective, but it requires allies, forums, time, competence and relationships.

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Personal Communication:

Fehér Mária, E.ON E.ON North-Transdanubian Electricity Supplier

Horváth, Szilárd, Szélerő Vép Kht.

Appendix A Wind power plants -capacity quota allocation list

Investor	Project	Requested MW	Allocated MW
B-S Energia	Levél	49.9	25
CLEAN ENERGY Kft.	Ács	1.5	1.5
CLEAN ENERGY Kft.	Hegyeshalom	0.85	0.85
CLEAN ENERGY Kft.	Pápakovács	1.8	1.8
Euro Green Energy	Zirc-Olaszfalu	49.9	25
e-Wind Kft	Csősz	0.8	0.8
e-Wind Kft	Felpéc	0.8	0.8
e-Wind Kft	Dáka	0.8	0.8
Hungarowind	Sopronkövesd	45	23
Kaptár	Kisigmánd II	4.6	2
Kaptár	Ikervár I	48	24
Kaptár	Kisigmánd I	48	24
Kaptár	Tét I. park	46	23
Kaptár B	Károlyháza II	20	10
Kaptár B	Károlyháza I	4.6	2
Mistral	Nagyigmánd	36	18
Mistral	Ikervár II	32	16
MOV-R H1 Szélerőmű Kft.	Mosonszolnok-Levél	48	24
Pannon Szélerőmű Kft.	Bábolna	30	15
Precíz Építőipari és Kereskedelmi Kft.	Csetény 1.	2	2
Precíz Építőipari és Kereskedelmi Kft.	Bakonycsernye	1.8	1.8
Precíz Építőipari és Kereskedelmi Kft.	Csetény 1.	1.8	1.8
Renerwind Kft.	kapuvár	4	2
Renerwind Kft.	Jánossomorja J4 J5	4	2
Renerwind Kft.	Kemenessömjén	4	2
Renerwind Kft.	Jánossomorja J2 J3	4	2
Renerwind Kft.	Jánossomorja J6	2	2
Tritom Kft.	Vönöck 064/25	0.85	0.85
Vento Kft.	Ács	38	19
Vento Kft.	Tét II. park	46	23
VILL-KORR Energiatermelő és Befektetési Kft.	Mosonszolnok	0.8	0.8
VILL-KORR Energiatermelő és Befektetési Kft.	Csorna	0.8	0.8
VILL-KORR Energiatermelő és Befektetési Kft.	Veszkény	1.6	0
Windpower	Ostffyasszonyfa	0.6	0.6
WPSS	Jánossomorja J1	1.8	1.8