

FOREWORD

Mr. Philippe ROCHER, Cabinet METROL, France

(Translated from French)

This workshop is organised in the framework of the European project "WELFI" for Wind Energy Local Financing, coordinated by Hespul, with the support of ADEME and of the European Commission. This workshop is following another one that took place in this same room in March 2003, but was embracing all sources of renewable energy, while we will speak today exclusively about wind energy.

This morning, like every morning, some people living somewhere in Germany or Denmark woke up and like every morning have opened their shutters and their windows and they've looked at some wind turbines that are part of the landscape. They looked at them and they started smiling because the wind was blowing and the blades were turning over. In fact they own shares in these turbines, maybe a modest part of it, but they actually own a part of them. Why do they own these shares and why do they take part in this project? What does it mean for them? And what does it mean for the project manager? And what does it mean for the local Community? These are basically the questions we are going to talk about today in the framework of this workshop.

Through accounts from local stakeholders who are involved in such projects, we will learn what kind of financial tools may enable such practice, and we will examine methods used for this purpose. We will speak about fallout of local investment, particularly those related with wind projects acceptance. We will try to sort benefits and drawbacks.

The schedule for today has been organised around an alternation of oral presentations and round table sessions from which we expect a significant feedback from actual field experiences. We have been invited today by Hespul, the coordinator of this European project. Hespul, of which you probably heard before 2001 under the name of Phébus as a main forerunner in the field of grid-connected photovoltaic energy, had been co-founded by Mrs Maguite Chichereau-Dinguirard to whom I will now hand over for a speech.



Mrs Maguite CHICHEREAU-DINGUIRARD, Vice-President of Hespul, France

(Translated from French)

Ladies and gentlemen, this is a great pleasure for Hespul and all our European partners to welcome you for this workshop about local financing in wind energy, in fact the main public event at European scale paving the implementation of the so-called "WELFI project". WELFI has been financially supported by the European Commission in the framework of the ALTENER programme and by the French National Energy Agency ADEME. I would like to take the opportunity of having the ADEME representatives with us in order to renew our thanks on behalf of all the partners. They have always kept to their commitments and we're very grateful to them.

WELFI has been carried out by a task force made up of 8 organisations from several member States of the European Union and I will rapidly list them: the Folkecenter and OVE from Denmark, BWE from Germany, Ecoserveis from Catalonia. French partners are Axenne, the financial company La NEF, and Hespul, with the support of Energies et Territoires Développement (ETD). WELFI started in February 2002 and will end in February 2004 with the publishing of a report on the European best practices that will summarise the studies and analyses carried out all along WELFI's programme, including a report of this conference. All these documents will be available on the Internet at www.welfi.info.

The wide range of participants and speakers like representatives of local authorities, engineering and design companies, agricultural organisations, financial organisations, NGOs, industrialists, State Departments and even Members of Parliament, clearly shows that this workshop is a matter of concern for all the main stakeholders of wind energy and is quite topical for them. This is not surprising when you remember that wind energy is by nature a decentralised energy source, established directly in the heart of the local territories. In order to succeed in integrating these new electricity production equipments, we have to encourage, like our German and Danish friends, the involvement of local players and more largely of local citizens, at different stages of the projects' development. How can we do this? Basically we have to consult local people as early on as possible and throughout the entire development process of the project. In order to increase positive impact on the local territory, we need financial participation from those people who are living alongside the wind farms. This is absolutely essential to us and this is the core of the WELFI project.

If these practices are to be widespread, we need to create new link-ups and new approaches involving everybody in the development phase at local level, and this means that this development will be, as such, sustainable. Local farmers can find in wind energy a new way for diversifying their activities. Local authorities are usually ignored in a centralised energy system while they can with wind actually be fore players in their energy and economic future. Even individuals can find a safer and far more ethical alternative to the American pension funds that are often told to be a source for supplementing pensions. And for the project's developers it's a way to shore up and secure their investments thanks to local people appropriation and their feeling to be owners of this project. Some financial organisations and banks have already entered this market. They will play an essential role in mobilising the citizens in favour of wind energy.

I'm not going to go any further, but I hope that you will pass a very fruitful day and I very sincerely hope that this meeting will be another step that will help us to see the emergence and the strengthening of these new financial practices. I can also tell you that we are thinking about the follow-ups that will be given to this project and to this meeting today. So I guess that we will meet up in the near future and in the meantime I wish you well for today.

INTRODUCTION

Mr. Jean-Louis BAL, Director of Building and Renewable Energy, ADEME, France

(Translated from French)

Ladies and gentlemen, I wish you a very good morning and I would like to welcome our colleagues from abroad, our European colleagues.

This workshop is taking place at a very particularly opportune time for us as French nationals. A national debate on energy has been concluded quite recently, notably by a report written by Mr. Jean Besson as Member of the Parliament, who will have an opportunity to tell you more about this later on when he takes the floor. Members of the Parliament will soon discuss this subject and then to pass a law expected to set up guidelines for the French energy policy for the coming 30 next years. A set of suggestions made by the Government has been published in a White Paper that you can find on the Ministry of Industry's Internet site. Any citizen, NGO or company is now asked to contribute to the preparation of a draft law that to be discussed and passed probably after the regional elections in May or June 2004. So I can really recommend you all to put forward proposals and in that way we will have reached our objectives today.

I would like our European partners to excuse me for talking here with a purely French viewpoint, but as French nationals, our interest today is to analyse best practices in other European countries and to see what can be transposed in our country taking into account our cultural and regulatory context and the legislation that goes along with it. Unfortunately we'll have more information to receive than to give, because we are in fact way behind our neighbouring European countries in this field.

The theme of the WELFI project – can local financing encourage these projects? – is very important in France because acceptance rates are of high significance. Throughout today we are going to look at what is legally possible in order to attract local financing. I would like to remind that the public calls for funding are under the control of the Financial Markets Authority and that the State cannot encourage or advertise the placing of personal funds. This regulation should be changed and the future energy law should be an opportunity for this. We should also explore further what is allowed by the present legal and tax regulation, particularly for farmers. I mainly think of co-operatives for agriculture machinery (CUMA). I also think of the possibilities for local authorities to invest in wind or other renewable energy in the framework of the current law on electricity passed in February 2000.

If we look at the acceptance of wind energy in France, we often observe negative reactions from minority but pro-active local opponent associations, triggering reluctance from the administration to agree building permits for these sites, resulting in a mere 120 MW of new installed capacity in 2003. This will more than double the figure from 2002, however this is very low compared with the wind potential in France and with the objectives of the RES Directive for 2010 (12 000 MW).

The capability of anti-wind associations to spread incredible rumours seems boundless. We heard about breast cancer caused by wind turbines, or about a duck breeder who feared the infrasound impact on the *foie gras*. Although such rumours cannot be under control, the public opinion nonetheless remains favourable to wind energy. ADEME recently ordered two surveys that were held with a 12 months interval throughout France with focus on areas where wind farms had been running for several years. We observed that the local opinion is very

favourable and even more favourable as people live closer to the wind turbines. A more recent survey carried out by the Languedoc Roussillon regional Government focused on the impact of wind energy on the tourist industry, which is a driving force in this area and thus a matter of concern. The conclusion is that tourists consider wind farms to be a very positive factor and foreign tourists more than others. Even large-scale wind farms would not frighten them away, although they are attracted in the area by beautiful landscapes as well as by a sunny climate.

92% of tourists consider wind farms as extremely positive, men more than women apparently, a fact already observed in previous surveys. 73% of tourists should agree with more wind farms, 56% think they're nice to look at, and 55% that it won't change anything for them. 23% say that they should visit a wind farms when having a tour, and 15 % that it could become a goal for a specific tour. Only 6% declare they will avoid those areas where wind farms are installed.

This means that public opinion is generally quite favourable to wind energy, and our Prefects and local Members of Parliament should take courage in this and the Ministry of Ecology, the Environment, Equipment and Sustainable Development should take note of the results of this survey.

ADEME will carry on providing objective information - I'm talking about objective information, not neutral information – to concerned people. We will consult them hand in hand with NGOs and with local Authorities as early on as possible to ensure the highest acceptance among local populations who are actually ready to welcome them. Thank you very much for your attention.

Mr. Jean BESSON, author of the Report on the National energy debate on behalf of the Ministry of Industry in charge of Energy, France
(Translated from French)

Ladies and Gentlemen,

I would like to talk about the personal impression I got from the National Debate on Energy during which the development of wind energy in France was among the main concerns.

I think we've got to a stage where it is even wrong to ask the question of principle: "must we develop wind energy or not?" This is no longer a question, this is a necessity, an unavoidable necessity if we are to meet the objectives that we have set to ourselves and that we have signed within international agreements. It's absolutely vital, if we want to move towards more virtuous energy sources and towards greenhouse gases emission abatement. One of the main lessons that I learned from this debate is that there now is a true consensus among scientists all over the world about the climate change due to greenhouse gases emission caused by human activities. And because of this we need to decide the measures that are necessary to improve the global situation.

We should be aware not to mix up objectives and means. The objective for France is to improve our situation regarding greenhouse gas emission and in this context, wind energy is a means, not an objective in itself. However, to develop wind energy as an industrial sector is another objective, a secondary objective if you like, and there are several obstacles on our way.

The first one is the problem of acceptance among the general public, which is a concern for other sectors as well, not just for wind energy. I think that we should better inform people. We must make efforts, teaching efforts, pedagogical efforts so that the general opinion is informed, if not educated, as to the reality of wind energy. Too many people think that it's a very noisy machine, a relentless machine that slices birds into 100 different pieces, and so on. Just last week I was talking a VIP in this country that I had visited lots of wind farms and never found bits of birds lying around the turbines and he said "only migrating birds, the others, the local birds have got used to the wind turbines and they're the ones that don't get cut up into 1000 pieces." I found that quite incredible. In fact I was speechless and I can tell you I'm not often speechless. So here, you can just see how profound these preconceived ideas are. We need to inform the general public and we really need to hand on real knowledge. There's a lot of effort being made in this field.

Efforts must be made about aesthetics, about integrating the turbines and the wind farms into the landscapes. Some wind farms, even if installed in very sensitive areas are absolutely not problematic, they fit in the landscape as if they'd always been there. And I've also seen others that put my back up because I wondered how on earth they could have been placed in that particular spot. Now I have the same reaction of course when I see high voltage overhead cables and pylons and I'm sure that they are far more detrimental to the landscape here in France.

Another obstacle lies in the way that the necessary public support mechanism is set up. How can we design it for being acceptable to those people who need that type of financing, the project developers, and those who feel that we should not sponsor these means of electricity production. We have to be aware of this problem when my former colleagues will actually have to vote on a draft law and to take decisions on the subject. We have to be very careful in the way we present things so that they're being put forward in a reasonable, attractive and supportable way. Some people regards the feed-in tariff system as providing over-benefits and thus as no

longer acceptable. We know on the other hand that any emerging industrial branch needs the right economic environment that will enable them to reach industrial competitiveness otherwise the branch will not be sustainable. We have to find in this area a path to follow, and this path has to be a reasonable one.

Of course there is also an urgent need for simplifying the administrative procedures, which are currently of an extraordinary complexity and bureaucracy, all the more when compared with those applying in other countries like Germany. If bureaucracy became a new category for race during the Olympic Games, France would surely win the golden medal every time! Everybody acknowledges this fact, including the perpetrators of bureaucracy who now all agree that we have to hardily work together so that this obstacle, if not fully lifted, should be made less formidable to cross.

Another obstacle comes from land planning and territorial preservation. Many people I met told me their concern to avoid haphazard development of wind farms. We have to make sure that wind farms are not established just anywhere and all over the place. This goes beyond aesthetics that I was referring to before. It's not just the way of integrating the wind farms into the landscape, it's a classification of areas where they should or not be installed. I made the suggestion in my report to establish a national map with regional maps deriving from it that could be set up by an independent and competent organisation under the auspices of ADEME where are the most acknowledged experts in the field.

This mapping system would replace those plans that exist at the moment, most of which being incoherent because the criteria used by the Prefects tremendously differs. These wind maps would identify those areas that are suited in terms of wind resource, avoiding those where it's technically not available. And of course we have to keep in step with usual planning laws.

It would be more consistent to have this mapping, and it would make the administrative procedures much more simple. It also would mean more responsibility for the local stakeholders. With this in mind, I made a number of proposals and I think that in the future, the local authorities, generally speaking, will also have to play a great role as compared to the past in terms of energy and energy-related strategies. I wish numerous measures to be taken in order to enable regional Authorities to actually get involved in the development of those technologies for which local involvement is needed like biomass or thermal energy and others. To that extent, I made a proposal that seems to be unanimously disagreed, that the building permit should be given by the mayors rather than by the Prefect as presently in order to increase the sense of responsibility at local level, the mayor being the first representative of the population.

Many people think that mayors will not be able to withstand the pressure coming from the lobbies. Well, as a former local elected representative my view is different. The main difficulty does not come from the pressure of the lobbies, but from disputes between local inhabitants concerning their rights to build on their land, a pressure that is much more difficult to resist as opposed to resisting pressure coming from the lobbies. But the law gives the mayor the right to manage the land planning in his Community and therefore he should be allowed to deliver the building permit for wind turbines.

In the field of land planning, the right approach should be rather based on offer than on supply, i.e. on the general interest as opposed to the financial interest, should it be public or individual. Many opponents attack the financial interest that seems to be one of the main drivers for wind farms development and for some land owners and even maybe local authorities as well. This could be one additional argument, but in our development strategy this cannot be considered to be a major argument for not building wind farms. The main argument

would be to build the wind farms where they are needed. One has to be very careful because opponents to wind energy often use this kind of argument.

We also have to face the rationale followed by the utility operators whether it be EDF or others. Quite logically, they prefer to support solar thermal expected to match the peaks of electricity consumption as opposed to wind energy that means for them additional constraints. This must be taken into account when defining any strategy.

I tried in my report not to just repeat what professionals in wind power energy explained during the debate, I did try to put into perspective some of the major proposals that might contribute to the smooth development of this technology that is at the same time a source of clean energy and a source of industrial activity and job creation on which we put great hopes.

Well I don't know whether all these measures or proposals or suggestions would be agreeable to you, I'm prepared to discuss of course. But if that were to be the case, or if you think that there are missing proposals or measures in this draft project, draft law get involved in this national debate so that we improve the draft before it is submitted to the parliament as quickly as possible. Thank you for your attention.

Mr. Didier LENOIR, Chairman of CLER (Comité de Liaison des Energies Renouvelables), France

(Translated from French)

We all here are Europeans citizen whereas wind belongs to everybody. It is not the property of a particular State or of any particular organisation. It's nobody's property.

Wind energy can thus be exploited quite differently depending on our cultural background as Europeans, and the way one exploits wind power or the manner wind farms are built does reflect the various European people consider their own democracy, their own public organisation. This should be a marvellous subject for a doctorate student in political science. We all know that having a common culture and heritage is the basis on which we have been able to establish the European Union as a driver for peace and prosperity. Our day-to-day activity however clearly shows that behaviour and methods are quite various, and this diversity is a wealth that must be preserved and highlighted. The world is worried about the damage done by the uncontrolled use of fossil energy and everybody expresses these concerns with regard to the climatic change and the future of our earth. Several European countries are at the cutting edge when it comes to the development of renewable energies as a whole and particularly wind power – Spain, Denmark, Germany.

Unfortunately France is lagging far behind them, and WELFI was launched by Hespul as a member of the CLER as a contribution for increasing acceptance of wind energy. As stressed by Jean-Louis Bal and Jean Besson, local initiative is a major concern for wind energy development and this means that farmers, companies, the inhabitants and local authorities have to take their part in these initiatives. In France however the approach concerning the way democracy should operate is usually very theoretical. We do like major declarations that may be accepted worldwide or at a European level regarding equality of rights, equality between citizens, freedom, brotherhood and so on. But when it comes to practice, then it rather look like what would happen in a “republican monarchy”, where the State is the owner of the wind and decides the conditions under which citizens or their organisations are allowed to make use of that wind.

In this field, the changes underway since the law on decentralisation passed in 1982 give back responsibility to local authorities, and they actually made efforts in the fields for which they obtained new competence. And if Mr Besson can suggest mayors should deliver building permits, the reason is that urban planning has been taken over by local authorities. Until 1982 only the State delivered all building permits after having processed alone the entire dossiers on technical and regulatory aspects. In the field of energy, we are at the dawn of a time when everybody, from the citizens to the companies, local authorities and of course the State are all involved and they need to come up with new rules for the game. This is the main purpose of the future orientation law to define the rules of this new game. We must say in these prospects that the draft of the law made public by the government in its White Paper available on the website do not match our expectations. Nothing in that White Paper deals with the way responsibility should be shared in the field of energy. And we rely on the support of Jean Besson and many parliamentarians to make sure that the sharing of responsibility could be changed.

Comparative studies such as made inside WELFI will show how giving more responsibility to local authorities and citizens can lead to create new sources of energy. These examples will undoubtedly pave the way so I'm convinced that within a decade we shall see wind energy developed in all European countries at the same extent as it is today in the most advanced parts of Europe..

Mr. Preben MAEGAARD, president of the World Wind Energy Association, Denmark (by video)

WWEA is a worldwide organisation gathering 150 members on the 5 continents, among which China, Japan, Korea, Egypt, Libya, Morocco, Tunisia, Algeria, South Africa, Argentina and Brazil, Russia, Poland, Germany and many more. We are supporting our members to promote the most successful solutions for implementation of wind energy and for this purpose we are doing consultation, we are making contacts at political level and we are also organising conferences. We are raising awareness of the possibilities and the advantages and potential of wind energy where in the world there are wind resources for the use of clean energy supply.

Only few countries in the world have a successful wind energy development, with Germany as number one and Spain as second, then comes United States, Denmark, Italy and so on. If the rest of the world had the same level of development, wind energy would already now represent a really significant share of the global supply of electricity. Such success in these few countries can undoubtedly be referred to proper legal frameworks that must fulfil 3 basic criteria. The first primary factor must be a fair access to the grid and the right to connect. Secondly, there must be a purchase obligation from the power utility to buy the electricity from the wind turbines. Third, there must be fair tariffs, which is of course a crucial point since the guaranteed minimum price system that has proved especially successful. Wherever this price principle applies and the price is fair, the development of wind energy will begin. If these conditions are not fulfilled, irrespective of other factors, the development is very slow.

To have a strong wind energy development, local involvement is very important. The local ownership is a condition for obtaining local acceptance also. We have seen some countries where they let financial investors from the outside take the role of investments. In such cases it has actually been very difficult to obtain the acceptance of local people. Well, if we go to Brazil, Australia, the United States, where you have vast areas, they have no neighbour problems, they have no objections from the neighbours. But in Europe, which is generally very densely populated, we must find way of having local acceptance, and ownership models are part of it. Local acceptance is obtained when you let people participate in the ownership of wind mills. Our long experience in Denmark shows that in areas where we have local participation, we may find up to 85% of the population giving support to the wind power. And the closer people live to the wind mills, the more they will support them. And why is it so? Because local ownership also improves the local economy, particularly in remote rural areas where the economy is declining. We have seen in several countries that marginalized regions have really flourished economically by having wind energy installed. So this is one more good reason to have it installed there, but you must involve the local population in the ownership, otherwise the local population has no interest in it, they only have the more or less negative impact of the wind turbines without having the benefits. This is one point we have to focus very strongly on. Through legislation we have to do whatever is possible to give access to local people to participate in the ownership of the wind turbines.

We will also see various models of ownership of course. In the Danish experience, we developed an ownership model where individuals in the community could participate in the wind mills. For a long time it was limited so that they could own 9,000 kilowatt-hours of annual production. This means that a wind mill that would produce 450,000 kilowatt-hours per year could have maybe 50 families participating in it. And they would all have to come from the same municipality. And that in itself created a new spirit of community. Because people gather, they were supporting the project. They were meeting every year to discuss the annual results of the wind mills, and if it was a good year with good winds, they were celebrating it by eating a good meal together.

We can find other models of financing, like local cooperatives, farmers but also urban citizens participating in it. People living in big cities have this opportunity, especially for big wind farms. We have seen several offshore wind farms financed by citizens' participation, and I can mention some very interesting examples in Germany, where they are presently organising the construction of huge wind farms. We have seen that for the city of Copenhagen, where several thousands inhabitants became owners of a very interesting big wind farm with 40 megawatts wind turbines at Middelgrunden. Now they can say that they are supplying their city with clean energy, otherwise the electricity used is mostly coming from coal or gas.

Our duty is now to switch from fossil fuels to renewable energy. This is a very important step to give people this opportunity to supply their city with clean power. This is a serious problem in most European countries where a large share of energy is coming from the fossil fuels and this share will increase in the coming years. But here we have the wind energy growing out of the initiative of people that can limit dependence on imported fuels and increase self-supply. This is in accordance with local interest, with national interest and with the interest of Europe as a whole. It will give us a more peaceful world.

Fossil fuel power plants with coal and especially nuclear power are usually very big and it's a top-down solution. In contrast the renewable energy forms that are by nature decentralised, they are bottom-up solutions. And this makes it possible for the population to participate in the development of the projects. This makes it possible for the citizens to finance them, to become actors of the future. And besides that, people have the satisfaction of saying "now we supply ourselves with clean energy".

Well, I have come to the conclusion of my presentation. I wish you a very good meeting that I hope will benefit to wind power. It has been a pleasure to participate in the WELFI project, which I am sure will be very important for the future development of wind power in France.