

ENERGY FOREST KICK-OFF MEETING - SHORT MEMO

Date: 2002-12-16, 10 AM-6 PM

Location: Budapest IX. Ráday u. 5

Participants: Mr. HORVÁTH János, Geo-Montan, co-ordinator
 Mr. ROZSNYÓI Pál, Geo-Montan
 Dr. SOLTI Gábor, Geo-Montan
 Dr. SZOLLÁTH György, Geo-Montan

Mr. BODÓ Balázs, Geonardo
 Mr. LÁSZLÓ Ádám, Geonardo
 Mrs. DECSE Zsuzsa, Geonardo

Mr. KORÁN Petr, Geo Group a.s., VZGLS

Dr. STANCZYK Krzysztof, Central Mining Institute

Mr. KILIAS Vasilis, C.R.E.S.
 Dr. MALAMATENIOS Charalambos, C.R.E.S.

The participants briefly introduced themselves and their organisations.

Mr. Horváth of Geo-Montan Ltd. introduced the topic by pointing out that biomass as an energy source is a very old concept, which goes back to prehistoric times when man first used fire, but during the past 50 years this approach gained ground again.

In Hungary biomass has a great potential totally more than 53 million tons/year. According to some sources published recently it has a far greater potential than any other renewable energy source, i.e.:

RES type	Wind	Water	Solar	Waste	Geothermal	Bio-mass
Potential Energy Production (in Petajoule)	1,3	1,2	3,6	5,0	50,0	165,0

Since agricultural markets are saturated farmers should rather produce biomass energy wherever it is environmentally and economically sound than take on unprofitable agricultural activities. A substantial reduction in agricultural subsidies would mitigate the tax-burden on the individual citizen and help the government balance its budget.

Work Packages - short summery

WP 1 – PROJECT CO-ORDINATION

Mr. Horváth described his major co-ordination tasks. He said it was necessary to arrive at a decision regarding the scope of the project. The attendees concluded that the project would cover three reference sites, one in Hungary, Poland and the Czech Republic. Mr. Horváth and Mr. Bodó agreed that the Hungarian test-site should preferably possess 'flat plain' geographical characteristics. Mr Bodó mentioned that his company had gathered data on several potential test-sites in the Tisza River watershed region. Regarding the Polish test-site Dr. Stanczyk said he would choose an appropriate region in Poland. The Czech reference site would be the Chemutov district. Mr. Horváth suggested that the Web-site should be equipped with a Web-site chat and e-mail conference facility.

WP 2 – DISSEMINATION AND DEPLOYMENT

Mr. Bodo presented his views about operating the Web-site. The Web-site has already been set up and Mr. Horváth and Mr. Bodo suggested making all slide presentations accessible and downloadable. Mr. Bodo emphasised that it would be a must to post progress reports in order for the participants to check on the status of the overall project and individual tasks. According to Mr. Ádám because of dissemination and public awareness raising must go hand in hand, they will publish an electronic newsletter and organise a May workshop for potential end-users. Mr. Bodo said that conferences should preferably be held shortly before the date of accession in order to reach out to the public when they are in the most optimistic mood.

Mr. Bodo asked for clarifications regarding the scope of the project. Dr. Malamatenios and Mr. Kiliias suggested that Greece should not be a testing ground, since its climate, geology and plant life are very different from those in Hungary, Poland and the Czech Republic (the Central-Eastern European countries participating in the project).

Dr. Malamatenios and Mr. Kiliias raised a methodological issue. They asked Mr. Bodo and the other participants whether it will be possible to use aerial and satellite photos in an economical way in order to draw conclusions about soil quality. Mr. Bodo mentioned that such a method could be conceived based on fuzzy statistics. Finally, they concluded that soil maps would also be indispensable.

WP 3 – LAND CLASSIFICATION

Mr. Horvath, Mr. Bodo and Mr. Kiliias discussed the scope of the project and the need for base maps. Mr. Bodo and Mr. Kiliias suggested free or low cost information sources such as maps published by CORINE, UN FAO and DCW. Mr. Bodo and Mr. Kiliias mentioned that the UN FAO publishes free soil and precipitation maps. Mr. Bodo pointed out that those maps are evidentiary only on a macro scale, as they do not have enough details, nevertheless they would reflect the general picture. He then went on discussing that maps should correspond to test sites and stressed the crucial importance of choosing the right scale.

Then the attendees discussed the need for uniform software tools, maps and etc. Mr. Horváth mentioned that soil quality assessment should not be a very difficult task for Hungary because there exists a standard land classification system, '*the gold-crown system*'. Mr. Bodo and Mr. Horváth then discussed the availability and affordability of base maps and software tools. They also emphasised the importance of respecting deadlines. Mr. Bodo stressed that due to budgetary constraints setting up a national database would not be manageable. Mr. Korán mentioned that data and findings obtained in connection with the three test-sites could perhaps be generalised for a wider geographical area or eventually for a whole country.

Mr. Horváth said that in Hungary there is a wide assortment of base maps available to researchers, on which new data can be fitted. Mr. Horváth pledged that during the initial phase he would examine which of those maps are the most suitable, available in electronic format, compatible with maps used in other European countries and affordable. Maps will be used together with other types of G.I.S. tools, like aerial and satellite photos. His company is highly experienced in interpreting data based on aerial photos on various scales and satellite photos supplied by Landsat and Spot. Since Mr. Bodo the other participant conducting research under WP 3 is also from Hungary it was not difficult for them to agree on maintaining permanent contacts with each other and making further arrangements regarding land classification and G.I.S. procedures. On the part of Geonardo Ltd. Mr. Ádám will be responsible for the execution of this WP.

WP4 – ENERGY FOREST PLANTATION

Dr. Stanczyk representing the Polish Central Mining Institute emphasised that plantation of bio-mass is still in an experimental phase in Europe and scientific evidence is scarce. The main question to be addressed in WP4

is: What to plant and where? To answer this question one has to assess the soil-quality, dryness, pH values, precipitation, etc.; so it is necessary to classify the types of soil and plants alike.

Dr. Stanczyk mentioned that the Central Mining Institute had taken part in projects for local authorities of some communes that had dealt with related issues. He then discussed the economic aspects of biomass planting. He stressed the importance of researching local energy markets because energy from biomass should best be consumed where it is produced, since it is not an easily transportable form of energy. Lack of local demand for energy may limit the role of RES and hence more case-studies would be needed to prove the feasibility of biomass planting. Dr. Malamatenios mentioned that, according to relevant studies, transportation costs could come up to the 70% of the bottom line.

WP 5 – SOCIO-ECONOMIC AND AGRICULTURAL ASPECTS

Dr. Malamatenios presented a concept paper which would be discussed in greater detail at our next meeting.

< This concept paper will soon be available for downloading from www.energyforest.com →

- DECISION SUPPORT SYSTEM

Mr. Kiliadis gave a slide presentation on an existing decision support system, titled '*A Planning Tool for the Optimal RES exploitation in Greece, an example on Wind Turbines – Wind Energy exploitation*', which could serve as a prototype for similar G.I.S. systems applying to other types of RES. He described the functionality and structure of this system in a close-up.

He said that in Greece lignite is everywhere cheaper than wind energy, but this is without considering the spill-over effects and externalities arisen from the use of specific energy sources or an environmental tax. In countries though where energy prices are significantly lower, RES is always less economical, because the comparative costs of using RES are much higher – said Mr. Kiliadis. He pointed out that to avoid disruption of energy production, power plants should envisage entering into long term contracts with biomass producers.

< The slide presentation will soon be available for downloading at www.energyforest.com →

Mr. Horváth said that by Energy Forest project will be very important to discuss which basic data will be used for the decision support system.

Dr. Stanczyk said that the cost of production of biomass is sometimes negative and, in some cases, transportation costs represent the seventy percent of the bottom line. He noted that biomass production is up to the farmers and could be a part of their normal economic activity, while by no means was wind – you probably mean biomass - energy production a natural extension of farming.

Others pointed out that energy production based on biomass requires a more complex approach than that based on wind power mills.

WP 6 – ENERGETIC PLANTS FOR RE-CULTIVATION - CASE STUDIES

Mr. Korán gave a slide presentation titled '*Evaluation of Possible utilisation of Energetic Plants for Re-cultivation in the Chomutov District*'.

Mr. Korán presented the Chomutov district. The Chomutov district lies in the north western part of the Czech Republic and could be selected as a reference area, with 93 528 ha; population: 126 000. The researchers used

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CORINE, from different viewpoints corresponding the typology of energy plants, local conditions, dump sites, etc.

< The slide presentation will soon be available for downloading at www.energyforest.com →

As for the next meeting, Dr. Malamatenios suggested that the project team should convene in Greece in late September 2003.

Mr. Horváth circulated an attendance sheet before the end of the session.

We would like to thank all of our partners for their dedicated efforts.