



BACKGROUND OF THE PROJECT

Renewable energies is one of today's most relevant issues and a development of the information in this field of knowledge is strongly needed. Bioenergy is the most important among them and technologies are developing fast, but the lack of information and the lack of experts make difficult the development of the market.

It is strongly necessary to use dissemination and training tools for letting know the effective technologies that exist today, in order to reach the objectives fixed by the European White Book of Renewable Energies and Kyoto Protocole started at 2005.

OBJECTIVES

Contribute to give a solution to the lack of technical knowledge in the bio-energy sector through the use of ICT in a virtual university environment in Europe. The specific objectives are :

- ❑ Make bioenergy information cheap and allowable
- ❑ Give service to students in bioenergy technical knowledge
- ❑ Give support to companies to improve their staff skills
- ❑ Increase communication between universities and companies
- ❑ Make bioenergy information free from time and space
- ❑ Improve international communication
- ❑ Creation of european virtual groups

ENVISAGED OUTPUTS

European eLearning organization : a educational team will be created in the frame of ITEBE in which enterprises, universities et bioenergy associations will be able to share common interests. Demand levels in bioenergy matters will be evaluated and the educational targets will be set up.

Developed eLearning platform : the existing website will be improved and adapted to start the eLearning experience in english, french, italian and spanish. Every student in Europe should be able to follow a bioenergy training without travelling thanks to chats, labos, videoconferences, tests, etc.

Pilot course in english : A six months training course in English will be followed by selected students and technical executives and evaluated.

TARGET GROUPS

- ❑ Graduated students from Engineer Schools and students in their last year in the fields of agriculture, forestry, thermodynamics, industry, civil, energy, etc.
- ❑ Technical executives from enterprises dealing with forestry, thermodynamics, heating hydraulics, fumes treatment, logistic, economy or new processes will be able to train their staff.
- ❑ Bioenergy market is only developed in restricted areas. The implementation of this trainings will touch the whole bioenergy market and will contribute to globalise information and to create employment.
- ❑ Training organizations and training structures such as universities, colleges, and professional education structures will take profit from this experience.

SUMMARY OF THE PILOT COURSE

Automatic wood fired heating

CHAP 1 : Wood energy systems typology

- Conditioning equipment typology
- Handling, transport and harvesting equipment typology
- Silos, wood extracting and transfer systems typology
- Heating systems typology

CHAP 2 : Fuel and supply channels

- Definition of the resources
- Technical description of the supply
- Fuel characteristics
- Basis of commercialisation
- Automatic boilers feeding systems

CHAP 3 : Technologies

- Principles
- Engineering technical characteristics and automatic wood heating systems implementation fields
- Control process
- Fumes scrubbing
- Ash production & value enhancement
- Working automatic wood boilers control process

CHAP 4 : District heating hydraulics

- Hydraulics in boilers
- Pipe networks
- Transfer sub-stations
- User's hydraulic installation

CHAP 5 : Project study and management

- Wood energy environmental impact
- Project study
- Cost effectiveness
- Legal frame

INTEREST FOR BIOENERGY ELEARNING UNIVERSITY

Fill in your interest(s) by completing this form. Please send it by fax to CZ Biom on +420 241 734 997, or to ITEBE + 33 384 478 119. You can fill the form online at: <http://biom.cz/vu/>

Surname.....

Firstname.....

Company/Institute.....

Address.....

.....

Country.....

Phone.....Fax.....

E-Mail.....

Website.....

Your highest reached education :

- | | | |
|-------------------------------------|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> Basic | <input type="checkbox"/> High school | <input type="checkbox"/> Bachelor |
| <input type="checkbox"/> University | <input type="checkbox"/> Postgraduate | <input type="checkbox"/> Other |

Your employment :

- | | | |
|----------------------------------|------------------------------------|-----------------------------------|
| <input type="checkbox"/> Student | <input type="checkbox"/> Professor | <input type="checkbox"/> Employee |
|----------------------------------|------------------------------------|-----------------------------------|

Are you interested in taking the course ? :

- | | | |
|------------------------------|---------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> May be | <input type="checkbox"/> No |
|------------------------------|---------------------------------|-----------------------------|

In which language would you like to make the course ? :

- | | | |
|----------------------------------|----------------------------------|---------------------------------|
| <input type="checkbox"/> English | <input type="checkbox"/> French | <input type="checkbox"/> German |
| <input type="checkbox"/> Spanish | <input type="checkbox"/> Italian | <input type="checkbox"/> |

Whit wich level of services would you be interested ? :

- | |
|---|
| <input type="checkbox"/> Minimum services : subscription < 1000 € |
| <input type="checkbox"/> Maximum services : subscription > 1000 € |

In which topics are you most interested ? :

.....

.....

How many hours are you able to study weekly ? :

- | | | |
|-----------------------------------|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 2 hours | <input type="checkbox"/> 5 hours |
| <input type="checkbox"/> 10 hours | <input type="checkbox"/> 15 hours | <input type="checkbox"/> > 15 hours |

Would be your employer interested to be a partner/sponsor ? :

- | | | |
|------------------------------|---------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> May be | <input type="checkbox"/> No |
|------------------------------|---------------------------------|-----------------------------|

PARTNERSHIPS

Coordinating institution

International Association of Bioenergy Professionals – ITEBE (France)
28, boulevard Gambetta Lons le Saunier 39000 France
Tel + 33 384 47 81 00, Fax +33 384 47 81 19, e-mail : info@itebe.org

Partner institutions

Czech Biomass Association – CZ BIOM (Czech Republic)
Drnovská 507, 161 06 Prague, Czech Republic
Tel +420 603 113 312, Fax +420 241 734 997, e-mail : slejska@biom.cz

Development, promotion and analyse from Extremadura – DEPAEX, (Spain)
Plaza de España 15 - 1º B, Badajoz, 35020, Spain
Tel +34 924 224 801, Fax +34 924 223 545, e-mail : international@depaex.es

Finnish Bioenergy Association – FINBIO, (Finland)
P.O. BOX 27, 40101 Jyväskylä, Finland
Tel +358 14 4451 115, Fax +358 14 4451 199, e-mail : pekka-juhani.kuitto@jisp.fi

Jyväskylä Polytechnic – JYPOLY, (Finland)
P.O. Box 207, FIN-40101 Jyväskylä, Finland
Tel + 358 14 444 6611, Fax + 358 14 444 6600, e-mail : tero.vesisenaho@jypoly.fi

Italian Wood Energy Association – AIEL, (Italy)
Agripolis, Viale dell'Università 14 35020 Legnaro, Italy
Tel +39 049 8830722, Fax +39 049 8839122, e-mail : convegna.riel@infinito.it

Polish Biomass Association – POLBIOM (Poland)
Rakowiecka 32, 02-532 WARSAW, Poland
Tel +48 22 849 09 74, Fax +48 22 849 17 37, e-mail : grzybek@ibmer.waw.pl

Slovak Biomass Association – SK-BIO (Slovakia)
Technical University, T. G. Masaryka Zvolen 24, 960 53, Slovakia
Tel +421 45 5206 875, Fax +421 45 5206 875, e-mail : viglasky@vsld.tuzvo.sk

Swedish Bioenergy Association – SVEBIO, (Sweden)
Torsgatan 12, 11123 Stockholm, Sweden
Tel +46 8 441 70 80, Fax +46 8 441 70 89, e-mail : jakob.hirsmark@svebio.se

Pedagogical committee

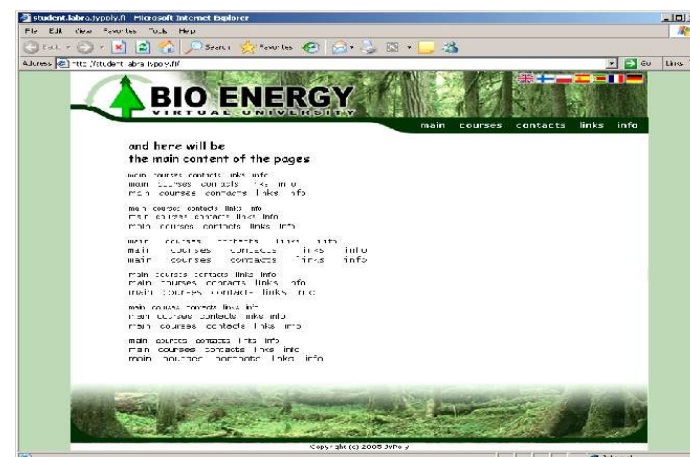
- Université de La Rochelle (France)
- École des Mines de Douai (France)
- The Swedish Royal Institute of Technology (Sweden)
- Växjö University (Sweden)
- University of Vigo (Spain)
- Imperial College of London (United Kingdom)
- Università degli Studi di Padova (Italy)
- Politecnico di Torino - Dipartimento di Energetica (Italy)
- Technical University in Zvolen (Slovakia)



Socrates



IMPLEMENTATION OF AN ELEARNING UNIVERSITY FOR BIOENERGY BIO-eTRAIN



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