

Network Membership

LAMNET Project Co-ordination

WIP-Munich



WIP plans, develops and monitors prototype and fullscale installations in the field of Renewable Energy System technologies and environmental engineering worldwide. WIP performs in these fields since more than two decades.

WIP provides state-of-the-art solutions in the field of:

- Energy from Biomass
- Photovoltaics
- Windenergy
- Hybrid Power Plants
- Building-Related Energy Issues
- Urban Energy and Environmental Planning
- Solar Thermal Installations
- Rational Use of Energy
- Desalination, Water Provison and Treatment

WIP's activities in the Renewable Energy sector focus on:

- Component and system development
- Service provision to industry, utilities & end-users of Renewable Energy technology
- Demonstration of state-of-the-art techniques
- Promotion of implementation schemes
- Set-up and coordination of large-scale international Cooperation networks (PV, Bioenergy, water resources)
- Organisation or joint organisation of major events aimed at advancing knowledge transfer and assisting in achieving greater market penetration of renewable energy technologies (e.g. PV Solar, Wind Energy, Biomass, Altener)

WIP offers project development, project management, technical supervision and realisation of both large- and small- scale projects which involve the co-ordination of international consortia. WIP provides expert service to private, industrial and public sector clients at national and international level.

Country: Germany (URL: www.wip-munich.de)

Contact: wip@wip-munich.de

LAMNET Co-ordination Partner

European Biomass Industry Association (EUBIA)



EUBIA is an Association with 25 Founder Members, most representing important Organisations from various EU Member States. The main goal of EUBIA is the sustainable and rapid development of European Bio-energy industries and the promotion and deployment of biomass use as an energy source through various actions and in synergy with the European Comission and national programmes.

The main activities of EUBIA are:

- Preparation and implementation of projects in the fields of R&D, demonstration production and co-operation.
- Assistance to EUBIA members in the development of strategic planning and in the penetration of existing new markets by exploring innovative or conventional technologies.

- Technical monitoring and operation of an information network of Bioenergy programmes, projects, markets and regulations at local, national and EU level
- Assistance for maximising the benefits of the 'Single Market'
- Consulting with EU institutions on Programmes, project preparation; General information on standards, regulations and financial instruments
- Assistance to EUBIA members for technology transfer activities, creation of joint-ventures, alliances and regulations. This will be achieved through economic and environmental assessment as well as through co-ordination and management activities
- Assistance in the development of education and training programmes (e.g. based on European Social Funds)
- Preparing and implementing co-operation programmes with third Countries and encouraging market penetration of European technologies in developing countries

URL: www.eubia.org

Contact: eubia@eubia.org

LAMNET Co-ordination Partner

Energia Trasporti Agricoltura (ETA)



ETA – Energy, Transport, Agriculture is a very active organisation operating for almost a decade in the development, application and implementation of Renewable Energy systems in Italy as well as throughout Europe. ETA has built up sound and wide-ranging experience during this period of intensive activity in the RE-sector.

ETA's activities focus on the following sectors, but do not exclude interfaces with neighbouring fields:

- Development of innovative concepts
- Studies and strategies on RE application in Europe and in less industrialised and developing countries
- Demonstration and dissemination activities
- Design, testing, monitoring and optimisation of RE-systems
- Development of RE training programmes and set-up of activities for integrating Renewable Energies in society
- Organisation of seminars, symposia, international conferences and exhibitions
- Promotion of the progress and highlighting the achievements in the field of RE

The major events organised or co-organised by ETA comprise among others the 1st, 2nd and 3rd European Conference: Rebuild-Shaping our Cities for the 21st Century, 10th European Conference and Exhibition on Biomass for Energy and Industry, the 1st World Conference and Exhibition on Biomass for Energy and Industry, the Altener 2000 Conference and the 12th European Conference and Technology Exhibition on Biomass for Energy, Industry and Climate Protection.

Country: Italy (URL: www.etaflorence.it)

Contact: eta.fi@etaflorence.it

Network Members from Europe

Università di Firenze – Dipartimento di Energetica



The Energetic Department is involved since fifteen years in the study of energy systems and their related equipments. The Turbomachinery Energy & Environmental Group (TEEG) is mostly working on the thermodynamic and fluidynamic point of view.

The TEEG has a long expertise in the following fields:

- Theoretical and numerical work on flows in Gas Turbine Components
- Numerical simulation of power plants, gas turbine cycles, cogeneration units
- Numerical and experimental studies of the utilisation of bio-fuel in power systems with special attention to new technologies
- New concepts of industrial equipment

Country: Italy (URL: www.ing.unifi.it)

Contact: Prof. Francesco Martelli (martelli@ing.unifi.it)

Università di Pisa – Dipartimento di Energetica



The Department of Energetics belongs to the School of Engineering of the University of Pisa, one of the oldest universities in Italy. The department staff consists of about 50 persons including professors, technicians and PhD students.

The research activity is divided in four main branches: Applied Thermodynamics, Heat Transfer, Thermal Appliances and Energetic Systems, particularly devoted to the study of the rational use of energy, energy savings and various transformations connected to it. In the last few years, there is a collaboration with two other departments – ‘Electric Systems and Automation’ and ‘Mechanical Constructions’ in the study of problems related to micro-cogeneration, using renewable energies and to a series of problems in the field of innovative terrestrial vehicles.

Country: Italy (URL: www.ing.unipi.it)

Contact: Prof. Luigi Martorano (l.martorano@ing.unipi.it)

Università degli Studi di Sassari – Department of Chemistry



The Department of Chemistry of the University of Sassari is active in the fields of Analytical Chemistry, Applied Chemistry, Physical Chemistry, General and Inorganic Chemistry and Organic Chemistry. The staff consists of teachers, Ph.D. students, graduates, technical and administrative staff.

The research carried out by the Department is aimed mainly at the progress of scientific knowledge by means of basic and applied studies of several aspects of Chemical Sciences: environmental chemistry, renewable energy sources, industrial chemistry, structural and surface analysis, materials chemistry, inorganic and organic synthesis, biochemistry. There is also close scientific co-operation with the Institute for the Application of Advanced Chemical Techniques to Agrobiological Problems.

Country: Italy (URL: www.uniss.it)

Contact: Prof. Leonetto Conti (conti@ssmain.uniss.it)

EcoTre Systems Srl. (ETS)



EcoTre Systems Srl. is an Italian company which produces pelleting systems according to a patented innovative technology, compacting biomass from a suitable choice of agro and forestry residues. This technology is presently the one which, on the worldwide market, can produce pellets at the lowest industrial cost.

This System by EcoTre Systems Srl. consumes the lowest amount of electric energy (i.e. about half of the consumption of other existing technologies) at comparable production rates.

Country: Italy (URL: www.ecotresystem.it)

Contact: Mr. Luigi Trenti (Ecotresystem@tiscalinet.it)

Agriconsulting S.p.A.



Agriconsulting was established as a private consulting firm in 1966 and is active abroad since 1972. The initial mission of Agriconsulting was to offer a modern approach to farm management and to promote efficient development of farms applying economic techniques and the results of scientific research and experimentation.

Agriconsulting's expertise in the Biomass field covers:

- Biomass supply identification
- Biomass Production (surveys, assessments and potential)
- Logistics (preliminary, treatment, transport and storage)
- Organisation of farmer groups for the distribution and marketing of biomass
- Marketing studies and business plans

Country: Italy (URL: www.agriconsulting.it)

Contact: Dr. Fabrizio Rossi (f.rossi@agriconsulting.it)

Instituto Tecnológico y de Energías Renovables (ITER)



In 1990 the ‘Cabildo de Tenerife’, the island's administrative authority, founded the Technological and Renewable Energies Institute (ITER). This centre was conceived as a pioneering project for the island of Tenerife, whose objectives were to encourage technological research and development related to the use of renewable energies.

The main objectives of ITER are:

- Development of technological systems
- Coordination of R&D projects
- Environmental Research
- Implementation and Promotion of RE-systems

Country: Spain (URL: www.iter.es)

Contact: Mr. Manuel Cendagorta (iter@iter.rcanaria.es)

Govern Balear



In the last years, the main aim of the Balearic Government, through the General Direction of Waste and Renewable Energies of the Ministry of Environment, has been to carry out an energy policy addressed to give support to energy saving and diversification, as well as the exploitation of renewable energy resources. Created in 1994, the Consortium for the economic development of the Balearic Islands has participated as a direct partner, or giving support in European projects, such as SESCO, aimed at the production of biodiesel and projects in the framework of the community initiative INTERREG IBB, aimed for the promotion of the Local Agenda 21.

Country: Spain

Contact: Ms. Dolores Ordóñez (dordoneyez@dgeconom.caib.es)

Universidade Nova de Lisboa



The Faculty of Science and Technology of the New University of Lisbon consists of 12 Departments, 6000 students and a teaching and research staff of 500 persons. In the field of Renewable Energies many activities are currently being developed, mainly focused on the field of Photovoltaics, Semiconductors, Thermal Conversion and Biomass.

The University started to work on the research of PV materials since 1975 and on renewable energy-systems and social implications later in 1989. The Faculty of Science and Technology was involved in several EC-project like:

- 'Masterplan for the Regional Integration of Renewable Energies in Developing Countries'
- 'Transition Scheme through a Sustainable Energy System in Sahelian Countries'

Country: Portugal (URL: www.fct.unl.pt)

Contact: Prof. Leopoldo Guimaraes (renergy@mail.fct.unl.pt)

Companhia Comercial Jofesa / Companhia Comercial João Ferreira dos Santos



The companies are members of the Group João Ferreira dos Santos which started its activity in Mozambique more than one hundred years ago (1897). The group is composed by two enterprises in Portugal and 14 in Mozambique, giving support to more than 100.000 small farmer families in the north of Mozambique. Through these 16 enterprises the Group is engaged in the following fields:

- Agriculture and Industries: Cotton, tea, sisal, citrons, tobacco, rice
- Commerce and wholesale distribution
- Metal mechanics Industry
- Agriculture equipment, assistance, workshops

Country: Portugal (URL: www.ccpm.pt/associados.htm)

Contact: Dr. José Arlindo Borges (Jofesa@mail.telepac.pt)

Country: Mozambique

Contact: Dr. Fátima Ferreira dos Santos Pais (capital@mail.tropical.co.mz)

Agricultural University of Athens (A.U.A.)



For 20 years the Farm Structures Laboratory of the A.U.A. is active in the field of renewable energy applications in rural areas, especially in biomass activities. In the framework of these efforts, the laboratory has dealt with several activities that gave it a large experience to carry out projects in the field of Bioenergy.

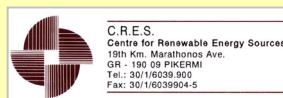
Main activities of the University of Athens:

- Biomass plantations for energy purposes
- Biomass Energy for local development
- Multiple criteria decision tools for Bioenergy
- Village-electrification, water-desalination
- Alternative land use expert system development

Country: Greece (URL: www.aua.gr)

Contact: Prof. Spyros Kyritsis (skir@aua.gr)

Centre for Renewable Energy Sources (CRES)



The Centre for Renewable Energy Sources (CRES) is the Greek national centre for Renewable Energy Sources (RES), Rational Use of Energy (RUE) and Energy Saving (ES). CRES was constituted as the national coordination centre in its areas of activity by Law 2244/94 (Production of Electricity from Renewable Energy Sources).

The main goal of CRES is the promotion of RES/RUE/ES applications at a national and international level, taking into consideration the environmental impact in the production and use of energy.

The Centre for Renewable Energy Sources is divided into different Divisions like:

- Energy Policy and Planning
- Applied Research and Technology
- Technical Support
- Energy Information Systems, R&D and Training
- Administrative Support
- Quality Assurance Office

Country: Greece (URL: www.cres.gr)

Contact: Dr. Michaelis Karagiorgas (Mkara@cres.gr)

Martezo



Martezo is a French private company specialised in mechanical engineering. In the last years Martezo has developed market technologies for the modern use of RE, focusing its attention on the gasification technology, converting hard or softer woods and agricultural wastes into a clean, combustible gas.

Martezo gasifiers are the result of more than 40 years of design and manufacturing experience. Back in the 1940's a large number of vehicles in Europe was operating with gasifiers. The developed gasifier is the result of this extensive experience and the latest innovations in metallurgy and engine manufacturing.

Country: France (URL: www.martezo.fr)

Contact: Mr. Gérard Brossard (Martezo@martezo.fr)

BioAlcohol Fuel Foundation (BAFF)



The BioAlcohol Fuel Foundation (BAFF), earlier Stiftelsen Svensk Etanolutveckling (SSEU) was founded in 1983 and is based in Örnsköldsvik, northern part of Sweden. BAFF's goal is to develop the production and use of ethanol within industry as well as transportation. Our motor fuel of the future must be based on naturally renewable resources. One of the few short-term alternatives is alcohol, either as a pure fuel for motors or as an additive for petrol and diesel. Raw material in the form of grain and in particular, forests, is available in excess in Sweden as well as in many other countries. BAFF is engaged in research and technical development aimed at refining and processing these raw materials into forms of energy adapted to the modern way of living in the society of today. With ethanol as motor fuel, along with powdered lignin and methane as fuel for electricity and heat production, energy becomes a part of the Eco-system.

Country: Sweden (URL: www.baff.info)
Contact: Mr. Jan Lindstedt (jan.lindstedt@baff.info)

Energidalen



Energidalen is a R&D organisation constituted and owned by the Municipality of Sollefteå, Sweden. The activities are focused on small and medium scale production and consumption of up-graded biofuels. Energidalen is a centre of competence within the bioenergy area. The main activities include research, development and education. Energidalen develops and markets technologies for modern use of renewable energy and focuses its attention to bioenergy and in particular on how to take care of the excess of biomass in the forests, but also how to treat, refine and use biomass. Furthermore, Energidalen works with 'Energy saving systems' and how to utilise energy efficiently in heating systems. Energidalen is acting in close co-operation with several universities in Sweden.

Country: Sweden (URL: www.energidalen.se)
Contact: Mr. Tord Fjällström (Energidalen@solleftea.se)

Berwin Leighton Paisner



Berwin Leighton Paisner is a leading law firm based in the City of London and is well known for its success in developing market leadership positions within the real estate, corporate and finance areas. Berwin Leighton Paisner represents UK and multinational institutions and companies across a wide range of industry sectors. The sixteen practice groups are organised into integrated teams specifically designed to match individual client requirements. A significant amount of their work is international and have been established relationships with professional firms in many countries around the world.

Country: Belgium (URL: www.berwinleightonpaisner.com)
Contact: Mr. Harold Wouters
(harold.wouters@berwinleightonpaisner.com)

Institut für Solare Energieversorgungstechnik (ISET)



The 'Institute für Solare Energieversorgungstechnik e.V.' was founded in 1988 as a non-profit research institute, associated with the 'Universität Gesamthochschule Kassel'.

Approximately 70 employees are working in the R&D division 'Water & Biomass'. The goals of the institute are to promote and execute applied research and pre-industrial development in the areas of RE sources, efficient energy conversion and decentralised water treatment. ISET concentrates on the electrical and systems engineering aspects which arise in scientific projects and industrial co-operations. The main fields include energetic use of biomass, energy storage systems, wind energy, photovoltaics, fuel cells, power conditioning and electronics, hybrid systems, efficient use of energy, water supply and waste water treatment.

Country: Germany (URL: www.iset.uni-kassel.de)
Contact: Ms. Susanne Kimmich (skimmich@iset.uni-kassel.de)

Federal Agricultural Research Centre (FAL)



The Federal Agricultural Research Centre (FAL) conducts research in the areas of agriculture and related disciplines, publishes research results and cultivates national and international co-operation with scientists and research centres around the world.

The purpose of FAL is to obtain basic scientific knowledge to assist in political decisions on nutrition, agriculture, forestry and consumer issues and to put the results to use for the common good. The environmentally conserving production of low cost, high quality food products is one task for agriculture. Others include the production of renewable resources, the conservation of natural resources and the preservation of cultivated landscapes. FAL makes use of the most current scientific information, particularly in the field of biotechnology, information technology and ecological systems research in an interdisciplinary approach.

Country: Germany (URL: www.fal.de)
Contact: Dr. Nasir El Bassam (Nasir.bassam@fal.de)

Institute for Sustainable Solutions and Innovations



ISUSI is specialized in the provision of sustainable solutions, innovations and technologies.

The spectrum of activities ranges from research for possible solutions for specific problems to eco-evaluation of new technologies and the project management of the research and development of sustainable innovations. Furthermore, research regarding social, political and economic scenarios and conditions are integrated into the proposed solution. Our work focuses on ecologically sustainable energy systems, on sustainable buildings and solutions and innovations significantly increasing the material productivity. Working closely together with other institutes, external consultants and companies we offer a flexible operating structure.

Country: Germany (URL: www.susi-con.com)
Contact: Mr. Harry Lehmann (hl@susi-con.com)

Vogelbusch GmbH



Vogelbusch is a major global player in the engineering and construction of alcohol plants and has been designing plants for bioethanol production in the USA and Canada for over 20 years. With a current base of 14 alcohol plants with a combined annual capacity of over 1.5 million tons of alcohol, Vogelbusch is the leading supplier of technology to the US alcohol industry. It operates on a global turn-key basis with offices in Austria, Hong Kong and USA.

The 'Vogelbusch Multicont' continuous fermentation process was introduced as early as 1980 with resounding success. A further innovation introduced by Vogelbusch is the integration of distillation, evaporation and molecular sieve dehydration. This system offers minimal energy requirements with low capital costs.

Country: Austria (URL: www.vogelbusch.com)

Contact: Dr. Wolfgang Krenn (krw@vienna.vogelbusch.com)

Network Members from Latin America

CENBIO

LAMNET Co-ordination Support Point South America



CENBIO, the Brazilian National Reference Centre on Biomass created in 1996, is a joint effort of the Ministry of Science and Technology (Forum of Renewable Energy), the Secretariat of Energy of São Paulo State, the University of São Paulo and the Biomass Users Network of Brazil (BUN).

The mission of CENBIO is to implement Biomass as Energy source in Brazil, under technological, environmental, economic, institutional and social aspects.

The main activities of CENBIO comprise:

- Research and development of processes using biomass
- Collection and distribution of studies
- Formation of human resources on bioenergy: seminars, courses, workshops.
- Databases on bioenergy

Country: Brazil (URL: www.cenbio.org.br)

Contact: Prof. José Roberto Moreira (Bun2@tsp.com.br)

Federal University of Rio de Janeiro / Fundação Coppetec



The Center for Integrated Studies on Climate Change and the Environment (Centroclima) was created in 2000, on the initiative of the Brazilian Ministry of Environment.

The fields of activity of Centroclima comprise:

- Studies and research in the area of climate change
- Identifying the priority areas for action by the Ministry in the field of Climate Change and CDM
- Establishing assessment criteria and sustainability indicators for the identification of projects that may be eligible for the CDM
- Providing assistance to non-governmental organisations

Country: Brazil (URL: www.coppetec.coppe.ufrj.br)

Contact: Prof. Emílio Lèbre La Rovere (emilio@ppe.ufrj.br)

Copersucar



Created on July 1st, 1959, Copersucar currently has 93 associates, in the sugar cane business including 33 sugar and ethanol mills. With the exception of three agroindustrial units located in the states of Minas Gerais and Paraná, all the associates are located in the state of São Paulo. The Cooperativa de Produtores de Cana, Açúcar e Alcool do Estado de São Paulo - COPERSUCAR is a private association whose basic objective is the competitive development of the sugar cane agrobusiness of its associates, covering the following activities:

- Commercialising the sugar and ethanol production
- Running and operating the logistics of these products
- Developing, adapting, transferring and aiding new sugar cane production and transformation technologies
- Opening new markets, businesses and developments

Country: Brazil (URL: www.copersucar.com.br)

Contact: Dr. Manoel Regis Leal (Regis@copersucar.com.br)

UNICA



UNICA is the managerial entity that represents the totality of the 146 agricultural-industrial units that act in the largest sugar cane biomass producing area in Brazil (2.8 million hectares). The State of São Paulo producers, led by UNICA, produces 70% of the Brazilian ethanol fuel extracted from sugar cane (8.4 billion liters from a total of 12.7 billion liters per year produced in Brazil). The activities generated by the UNICA associates creates 600.000 direct jobs and corresponds to 32% of the total income generated by agricultural activities in the São Paulo State. The agricultural and industrial activities of the UNICA associates turn financial resources close to US\$ 3.7 billion annually, 32% of those funds go to the agricultural production, 21% to the industrial production, 16% to distribution and sales and 24% are collected as taxes. The remaining 7% are utilised in research and development programs to modernise the sector and improve productivity.

Country: Brazil (URL: www.unica.com.br)

Contact: Mr. Luiz Carlos Correa Carvalho (Caio@unica.com.br)

Universidade Federal da Paraíba



The University of Paraíba was created in 1955 by the State Government and transferred to Federal control five years later when it became known as the Federal University of Paraíba (UFPB). The University is based on a multi-campus structure with campi situated strategically in different regions of the State. Paraíba has a population of 3.5 million and covers 56.500 square-kilometers. Two thirds of its territory is included in the area known as the Northeast Drought Polygon. The University is structured around 15 Centres (Faculties) which house 88 academic departments offering a broad range of undergraduate and graduate courses. At present UFPB offers 39 Master's Degree Courses and 15 doctoral programmes with 158 research groups and 928 individual researchers registered with the National Research Council (CNPq).

Country: Brazil (URL: www.ufpb.br)

Contact: Prof. Joseph Miller (Millerjo@ltf.ufpb.br)

JZL Consultoria Ltda.



JZL CONSULTORIA is a small consulting company, founded in 1988, focused on energy projects support and analysis as well as environmental impacts evaluation. The main Areas of Concern are:

- Energy projects formulation
- Power and cogeneration projects in rural regions
- Renewable fuels production
- Natural gas power production projects
- Environmental impact assessments
- Energy and / or environment surveys and studies

Some Recent Clients:

Ministry of Environment, São Paulo State Sugar Alcohol Industry Association, São Paulo State Pulp and Paper Industry Association, DESVIT – Centro per lo Sviluppo della Ricerca Tecnologica (Florence, Italy), BG – British Gas, BHP Petroleum, El Paso Energy, CSN/Vicunha Group.

Country: Brazil

Contact: Dr. José Zatz (jzatz@amcham.com.br)

Instituto de Desarrollo y Diseño (INGAR)



INGAR is an institute that belongs to the National Council for Scientific Research of Argentina. Most of the members of the research staff are professors at two Universities in Santa Fe: Universidad Nacional del Litoral and Universidad Tecnológica Nacional. Two full time Professors and Research Members of INGAR and one full time PhD student are currently working on the subjects concerning to this project. INGAR is an expert in the fields of Bioethanol and the production of Biogas. Furthermore, they can provide knowledge in feasibility studies, energy optimisation, process engineering and small scale production of bioenergy.

Country: Argentina

Contact: Prof. Pio Antonio Aguirre (paguir@arcrde.edu.ar)

Universidad Católica de Valparaíso



The School of Biochemical Engineering (SBE) was founded in 1969 at the Catholic University of Valparaíso, Valparaíso, Chile. The role of the biochemical engineer is concerned with the design, evaluation, planning and management of bioprocesses in fields such as food, health, energy and environment.

Research is a key issue in SBE. Currently the School holds several research lines, as follows:

- Fermentation
- Enzyme biotechnology
- Bacterial leaching
- Environmental biotechnology

Country: Chile (URL: www.ucv.cl)

Contact: Dr. German Aroca (garoca@ucv.cl)

CORPODIB



CORPODIB, a non profit organization, created in 1995 within the framework of the Science and Technology Law (29), 1990. Its strategy is aimed at generating new products and processes, technology adaptation, advanced training and adopting change in the business culture. It is focused on increasing business and production sector productivity and competitiveness in the *Biotechnology and Clean Production Area*.

CORPODIB is pioneering the use of bio-fuel products– bioethanol and biodiesel – resulting from energy producing crops in Colombia. CORPODIB's main objective is to promote the application of biotechnological processes and clean technology in key areas relating to Colombia's production sector development and its competitiveness in local and international markets. It also aims to promote the use of biotechnology in improving the quality of life and protecting the environment.

Activities:

- Research and Development
- Renewable fuel products / Energy producing crops
- Climate change and Kyoto protocol studies
- Process engineering
- Technical support for companies
- Consultation services

Country: Colombia

Contact: Mr. David Cala-Hederich (Corpodib@cable.net.co)

Ministerio de Energía y Minas



The Ministry of Energy and Mines is responsible for the policy framework and the regulation in the field of Energy and Mining of Ecuador. The promotion of concepts for the increased use of sustainable energy resources, the protection of the nature and the reduction of air-pollution are just some of the extended responsibilities of the Ministry of Energy and Mines.

Country: Ecuador (URL: www.menergia.gov.ec)

Contact: Mr. Milton Balseca (mbalseca@uio.satnet.net)

Fundacion Momento de la Gente



MOMENTO DE LA GENTE is a citizen foundation whose mission is to defend and to promote the democratic interests of the society, rising people capacities and demanding responsibility from governors and representatives. The Foundation develops projects of support for the present democratic institutionalism and to respond assertive, efficiently and effectively to the social, economic and political demands of the citizens. Furthermore this Foundation is working on some policy frameworks for the promotion of sustainable energy sources in Venezuela.

Country: Venezuela (URL: www.tsj.gov.ve)

Contact: Dr. Evanan Romero-Gutierrez (maromeros@aol.com)

Central Motzorongo

Central Motzorongo, founded in 1940, is a sugar mill producing white and raw sugar with a capacity of 7500 Mt of sugar cane per day.

Sales are equivalent to 150.000 Mt of sugar per year for the domestic market and for export.

Central Mozzorongo is member of the Mexican Sugar and Alcohol Chamber and the person participating in this project, Ing. Manuel Enriquez Poy, is Vice-President of research and development in this association.

The staff of the factory has sufficient experience for a fruitful collaboration within the LAMNET project.

Country: México

Contact: Prof. Manuel Enriquez
(enriquezpoymanuel@prodigy.net.mx)

Universidad Nacional Autonoma de Mexico (UNAM)



UNAM is the largest and most important public University in Mexico. It accounts for 50% of total scientific research conducted in the country. Specifically, researchers at the Institute of Ecology and Engineering, have been working for more than two decades on the dynamics of biofuel use in the rural sector and its environmental implications. Since 1995, the Institute has carried out studies on bioenergy resource assessment, bioenergy demand, dissemination of small-scale technologies for efficient use in households and small rural enterprises, and the implications of bioenergy use for climate change mitigation. UNAM is involved in numerous EU-funded collaborative research projects, and the University staff is experienced and well equipped to support the administration and management of the project.

Country: México (URL: www.ecologia.unam.mx)

Contact: Dr. Omar Masera (Omasera@ate.oikos.unam.mx)

Centro de Investigaciones de la Economia Munal (CIEM)



The Centre for World Economy Studies (CIEM) was created in November 1979 as an academic institution recognised and supported by the Cuban government and it is recognised as a centre of reference for the Latin America and Caribbean region. During the last 20 years, CIEM has studied the main trends in the world economy, with particular reference to the problems affecting developing countries. The main topics of research of CIEM include:

- international trade
- international finance
- regional economic integration
- main economic trends by regions (North America, Latin America, Europe, Africa and Asia)
- international co-operation for development
- science and technology
- sustainable human development
- energy, environment and development

Country: Cuba

Contact: Dr. Ramón Pichs (rpichs@ciem.cu)

Ministerio del Azúcar, Cuba

The Science and Technology Division of the Cuban Ministry of Sugar has set-up a Bioenergy Development Programme aiming at the unproved exploitation of sugar cane bagasse.

New technologies with advanced and more efficient performance, focusing on combustion and gasification systems offer great benefits for the Cuban sugar industry. Currently, 80% of the available agriculture land in Cuba is cultivated with sugar cane.

Country: Cuba

Contact: Dr. Paulino Lopez Guzmán (paulino@ocentral.minaz.cu)

Universidad Nacional / CINPE



Research and education together are the academic pillars of the International Center for Political Economy and Sustainable Development (CINPE). There is given an interdisciplinary approach to research, with sustainable development and its challenges as the central axis, and the focus centered in the Central American region. Research is organized in thematic fields that represent areas of scientific interest, around which researchers are grouped and organized. There are the following topics: Environmental services and valuation, Innovation systems, Trade, Structural changes and Public sector economy.

The efforts done by the CINPE in the research area aim to contribute towards the improvement of the quality of life and sustainability of each of the countries and of the Central American region as a whole, presenting elements for decision making and contributing to a better understanding of the different problems and opportunities of the region.

Country: Costa Rica (URL: www.una.ac.cr)

Contact: Mr. Leiner Vargas (lvargas@una.ac.cr)

Network Members from China

China Association of Rural Energy Industry (CAREI)

The Chinese Association for Rural Energy Industry (CAREI) is a non-governmental organisation of different regions, departments and disciplines for the whole rural energy industry after examination and approval by the Ministry of Civil Affairs for registration. AREI is under the professional guidance of the State Planning Committee, the State Commission of Economy and Trade, the State Commission of Science and Technology as well as the Ministry of Agriculture and the Ministry of Electricity. CAREI has already established priorities areas and action plans with Europe in the biomass sector in the framework of a project supported by the EU Commission DG1 (EU-China Local Authority Link).

Examples of projects performed by the Chinese Association of Rural Energy Industry comprise:

- Study on the design for rural energy systems
- Design of an integrated high energy crop plant
- Improvement of rural energy engineering

Country: China

Contact: Prof. Wang Mengjie (wangmengjie@hotmail.com)

Chinese Renewable Energy Industries Association (CREIA)



The Chinese Renewable Energy Industries Association (CREIA) is to be a business-led, independent, and self-financed association, working in the interests of its industry members. In maintaining an open information network, CREIA will share the latest technology developments and market information nationwide, and provide an effective channel for industry training programmes. CREIA will also link investment-grade projects with potential sources of financing (national and international) through an investment opportunity facility (IOF). In the context of limited in-country investment information, CREIA aims to raise awareness of renewable energy investment opportunities, to provide a business network for professionals in the renewable energy industry, and to provide key policy advice to the Government. The financing for CREIA's activities will be increasingly provided by membership fees and other independent funding mechanisms.

Country: China (URL: www.ccre.com.cn/English/CR.htm)
Contact: Prof. Li Junfeng (Lijf@public.bta.net.cn)

Ministry of Agriculture, China



The Ministry of Agriculture (MOA) is a function body under the State Council, which is responsible for the administration of agricultural economy and comprehensive management of crop planting, animal husbandry, agricultural land reclamation, township enterprises, animal feed industry and agricultural mechanization. The main issues of the Centre for Energy and Environment Protection (CEEP) of the MOA are:

- Development of strategies on the development of agriculture and rural economy
- Creating policies for agriculture, and to give guidance in the rational restructuring of the agricultural industry
- Creating policies on commercializing the operation of agriculture

Country: China (URL: www.agri.gov.cn/english/moaenglish.htm)
Contact: Dr. Yao Xiangjun (yaoxj@netchina.com.cn)

Beijing Green Energy Institute



The research focus of the Beijing Green Energy Institute is to find new crops and breed new cultivars of energy crops. Experiments showed that, sweet sorghum is the most promising crop for China due to its high photosynthetic efficiency.

The unique characteristics of sweet sorghum comprise:

- Short growing season – it can be harvested up to three times a year
- Sweet sorghum can be sown with only 5kg per ha
- The quantity of water needed by sweet sorghum is only 1/3 of that by sugarcane

Country: China
Contact: Prof. Li Dajue (Dajueli@hotmail.com)

Ministry of Science and Technology, China



The Ministry of Science and Technology (MOST) is the central government agency under the State Council, responsible for the nation's science and technology activities. Some major activities are the research on important issues of science and technology for promoting the development of economy and society, promotion of national scientific and technological innovation system and upgrading the national capacity of innovation. Another main target is the establishment of science and technology innovation mechanisms which adapts itself to the socialist market economy and the inherent law of development of science and technology.

Country: China (URL: www.most.gov.cn/English/index.htm)
Contact: Mr. Li Baoshan (Libs@mail.most.gov.cn)

Network Members from Africa

Services de l'Énergie en Milieu Sahélien (SEMIS)



Founded in 1987, Semis is a Senegalese consulting firm involved in the implementation of services in relation with energy, environment and local development. The major services executed by SEMIS are:

- water supply
- household electrification and energy
- software tools and database systems
- geographical information systems
- analysis of hydraulic and electrical networks

The capabilities are based on the mobilization of confirmed national and international expertise, the use of powerful software tools and a regional standing through solid external partnerships.

Country: Senegal (URL: www.semis.sn)
Contact: Mr. Bocar Sada Sy (Semis@metissacana.sn)

Shenyang Agricultural University

Shenyang Agricultural University (SAU) was founded in 1952. SAU is one of the key universities in China built jointly by the Ministry of Agriculture and Liaoning Provincial Government and operates directly under the Ministry. In the university, there are eight colleges, one separate department and three divisions. The university offers twenty-six undergraduate programs, twenty-six master's degree programs and seven doctorate programs. Since 1978, SAU has undertaken 1,819 research projects and achieved ideal results in 596 items. Among them, 251 items attained advanced international and domestic levels. The Department of Energy and Environment Engineering at the Agricultural Engineering College of Shenyang Agricultural University was founded in 1984. It can offer undergraduate, master, and doctorate degree programmes. In addition, it has worked on biomass energy research for twenty years, including many international research projects.

Country: China
Contact: Prof. Liu Ronghu (liurhou@hotmail.com)

Millenium BioFuel Corporation



Millennium Biofuels Corporation (MBF) was formed in 2000 as a vehicle to bring together a small body of those parties in Southern Africa who were endeavouring to bring the production and usage of ethanol, ethanol gelfuel and biodiesel to the marketplace, independent of the corporate sugar industry. This effort has been directed towards expanding both public and government awareness of sustainable, renewable clean fuels, as well as completing feasibility studies and business plans for the production of ethanol, gelfuel and biodiesel.

Currently the company has completed the Business Plans, and MBF is now in the process of negotiating for the establishment of a \$150 million refinery and ethanol distillery in the province of KwaZulu Natal, and a R7 million biodiesel plant in the province of Mphumalanga. In addition MBF is looking to expand the production of ethanol and biodiesel into Mozambique.

MBF has added the area of fuel cells to its portfolio, with specific reference to the utilisation of 0.5kW to 10kW specifically for use as a power supply for isolated rural areas that do not have, and are unlikely to ever have, electrical supply from the national Grid. The Millenium Fuel Group is able to provide component sourcing, component manufacture, and potentially competitive pricing for bulk manufacturing. In addition we are well connected with the marketplace as well as the concessionaries for the provision of power to these areas.

Country: Republic of South Africa

Contact: Mr. Thomas Harvey (thtechnologies@mweb.co.za)

Illovo Sugar Ltd.



Illovo Sugar is a leading, global, low cost sugar producer and a significant manufacturer of high-value downstream products. The group has extensive agricultural and manufacturing operations in six African countries and also operates a Beet sugar manufacturing plant in the United States. Downstream products include syrup, furfural, furfuryl alcohol, diacetyl, acetoin, 2,3 Pentanedione, ethyl alcohol and lactulose. Significant progress has been made with the development of furfural as an agricultural chemical which holds potential for substantial increased production.

The group owns and manages agricultural estates in South Africa, Malawi, Swaziland, Zambia, Tanzania and Mozambique. Collectively they produce approximately 5,4 million tons of cane, which is cultivated predominately under irrigation from secure water supplies and also benefits from above average growing conditions due to their geographical location. As a result cane yields and sucrose content are good and this is confirmed by independent international surveys showing cane production costs from these operations to be amongst the lowest in the world.

Country: Republic of South Africa (URL: www.illovosugar.com)

Contact: Mr. Denis Tomlinson (dtomlinson@illovo.co.za)

KEMYX S.p.A.



KEMYX S.p.A. is a new company operating in the field of renewable energies and a subsidiary of FB AMBIENTE S.p.A, member of the Franco Bernabè Group. Kemyx has recently acquired a new technology for the transformation of biomasses into pellets. The Kemyx technology is extremely versatile. The Kemyx approach dehumidifies and densifies in a single step not only all biomasses, but other waste products too. The process is vastly different from the conventional one. Its simplicity, the size of the equipment, its mobility and very low energy requirements make it vastly superior to the fixed, energy hungry and complex multi-step process presently used. This represents drastic production costs savings when compared to the conventional process.

The fields of application of Kemyx technology are:

- agricultural, forest and animal waste
- wood industry
- food industry
- paper and plastic industry
- municipal waste
- waste treatment

Kemyx conducts research and development; it designs, markets, manufactures and sells the pelletizing machinery and its accessories.

Country: Italy

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EDITORIAL

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