



# **International Conference on Bioenergy Utilization and Environment Protection Technology**

***Dalian, China***

***24-26 September 2003***

***Dalian Bangchui Island Hotel***

***No. 1, Yingbin Road, Zhongshan District, Dalian City***

***Tel.: +86 411 289 3888***

***Tel. (Reception): +86 411 289 7214***

***FAX: +86 411 289 2654***

## **Preliminary Programme (15 September 2003)**

### **OBJECTIVES**

To promote the international cooperation and knowledge exchange in the field of bioenergy technology as well as to promote the development of commercial biomass energy utilization in China in order to achieve an improvement of the national and international environment and to guarantee sustainable rural development.

### **SUMMARY**

With regards to the availability of biomass resources from both agriculture and forestry, China's potential for biomass development and utilization is among the largest in the world. During the past years China has already devoted large efforts to research and development in the field of renewable energies. Thereby, biomass is regarded as a key resource for renewable energy generation and fruitful achievements have been made in biomass energy utilization.

Due to increasing concern about the environment and the security of energy supply, biomass energy attracts interests from developing as well as from developed countries worldwide.

Consequently, the **International Workshop on Bioenergy Utilization and Environment Protection Technology** will bring together for the first time 60 specialists in China from the academic, private, government and industrial sectors. An overview of the current conditions of biomass energy use in China and in the world will be presented, focusing on the availability of resources, bioenergy conversion technologies and the development of policies for the promotion and financing of bioenergy. The workshop will also arrange several technical visits to biomass and bioenergy applications in the region of Dalian.

**TUESDAY 23<sup>th</sup> SEPTEMBER 2003**

19:00 - 22:00      Conference Registration (Dalian Bangchui Island Hotel, Building No. 9)

**WEDNESDAY 24<sup>th</sup> SEPTEMBER 2003**

**Inauguration Session**

08:30 – 08:45      Conference Welcome Address  
Prof. Wang Mengjie, CAREI, China

08:45 – 09:00      Welcome Address: LAMNET – A Global Network on Bioenergy  
Dr. Rainer Janssen, WIP, Germany

09:00 – 09:20      Inauguration Address  
Prof. Zhu Junsheng, Vice President of CAREI

**Session 1: Strategy and Policy Issues on Biomass Energy Development and Utilisation**

Moderators: Wang Mengjie, CAREI, and Rainer Janssen, WIP

09:20 – 09:40      Development and Utilisation of Biomass Energy and Related Supporting Policies  
in China  
Prof. Gu Shuhua, Tsinghua University, China

09:40 – 10:00      Policies for the Promotion of New and Renewable Energies  
Prof. José Moreira, CENBIO, Brazil

10:00 – 10:30      Coffee Break

10:30 – 10:50      Bioenergy Strategy in RSA and Southern Africa  
Mr. Denis Tomlinson, Illovo Sugar, South Africa

10:50 – 11:10      Rural Energy Construction and ecology Environment Protection  
Mr. Wang Jiuchen, The Ministry of Agriculture, China

11:10 – 11:30      Colombian Biofuel Programme  
Dr. David Cala-Hederich, Corpodib, Colombia

11:30 – 11:50      to be defined  
Mr. Tord Fjällström, Energidalen, Sweden

11:50 – 12:10      Implementation of Sugar Cane Bioenergy Projects in the Cuban Sugar Cane  
Agroindustry  
Dr. Paulino Lopez, Ministry of Sugar, Cuba

12:10 – 13:00      Discussion Round: Global Bioenergy Strategy and Policy Issues  
Moderators: José Moreira, CENBIO  
Liu Ying, Chengdu Institute of Biogas, China  
Panellists: to be defined

13:00 – 14:30      Lunch Break

## **Session 2: Biomass Technology Applications and Their Market Penetration Potential**

Moderators: Wang Jiuchen, Ministry of Agriculture, China and Tord Fjällström, Energidalen

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|---------------|---|
| 14:30 – 14:50 | Status and Prospective Analysis of the Biomass Energy Industry in China<br>Dr. Yao Xiangjun, Director General of the Centre for Energy and Environment Protection – Ministry of Agriculture, China      |
| 14:50 – 15:10 | to be defined<br>Dr. Giuliano Grassi, Secretary General of the European Biomass Industry Association - EUBIA  |
| 15:10 – 15:30 | The Development of Biogas Technology and Engineering in China<br>Mr. Liu Ying, General Director of the Chengdu Institute for Biogas, China  |
| 15:30 – 16:00 | Coffee Break  |
| 16:00 – 16:20 | Innovative Ethanol Production and Gasification Technologies<br>Lennart Nilsson, Innovation Bridge Solleftea AB (ISAB), Sweden   |
| 16:20 – 16:40 | Biomass Gasification and Central Supply Plants in China<br>Mr. Nan Fang, Dalian Academy of Environment Sciences, China  |
| 16:40 – 17:00 | Power Generation with Biomass Gasification: A Case Study in Malaysia<br>Mr. Liu Yong, General Manager of Hefei Tianyan Green Energy Exploitation Ltd., China  |
| 17:00 – 17:20 | Biogas Engineering for Organic Residues Treatment<br>Mr. Cai Changda, General Manager of Hangzhou Energy and Environment Ltd., China  |
| 17:20 – 18:30 | Discussion Round:<br>International Co-operation Opportunities in the field of Bioenergy Technology<br>Moderators: Peter Grimm, WIP – Renewable Energies<br>Wu Chuangzhi, Guangzhou Institute for Energy |

### THURSDAY 25<sup>th</sup> SEPTEMBER 2003

#### Session 3: Innovative Bioenergy Technologies: Research and Application

Moderators: Yao Xiangjun, CAREI&CEEP and Giuliano Grassi, EUBIA

08:30 – 09:00	Congratulation Prof. Hong Fuzeng, Vice Chairman of China Central Committee of 93 Society
09:00 – 09:20	Properties and Treatment of Gas-washed Wastewater from Biomass Gasifier Prof. Wu Chuangzhi, Guangzhou Institute of Energy – China Academy of Sciences
09:20 – 09:40	The Technology of Bio-ethanol Production from Sweet Sorghum Prof. Fengjun, Beijing Taitiandi Energy Technology Exploitation Ltd, China
09:40 – 10:00	Synthesis of DME via Catalytic Conversion of Biomass Dr. Chang Jie / Mr. Wang Tiejun, Guangzhou Institute of Energy – China Academy of Sciences
10:00 – 10:20	Original containing water % Biomass Densification Technology at Normal Temperature Mr. Che Zhanbin, Tsinghua University, China
10:20 – 10:50	Coffee Break
10:50 – 11:10	Immobilised <i>Methanosarcina</i> and Strength Organic Wastewater Treatment Prof. Yang Xiushan, Beijing Capital Normal University, China
11:10 – 11:30	Biomass Pyrolysis and its Potential for China Prof. Zhu Xifeng, China Science and Technology University
11:30 – 11:50	The Behaviour and Properties of Biomass Fast Pyrolysis to be defined, General Director of Nanjing Institute of Forest Chemical, China
11:50 – 12:10	to be defined Dr. Hipolito Romero-Tehuiztil, Institute of Electrical Research, Mexico
12:10 – 13:00	Discussion Round: Innovative Bioenergy Technologies for Future Sustainable Development Moderator: Francesco Cariello, ETA / Panellists: to be defined
13:00 – 14:30	Lunch Break

#### **Session 4: Economics and Bioenergy Project Financing**

Moderators: Denis Tomlinson, Illovo Sugar Ltd. / Dr. Liu Wenqiang, State Committee of Development and Reform

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|---------------|---|
| 14:30 – 14:50 | Circular Economical Model using Bio-ethanol and Biogas as Core Technologies<br>Mr. Du Henan Fengguang, Tianguan Ethanol Group                     |
| 14:50 – 15:10 | Financing Large Bio-ethanol Projects in China and Italy<br>Mr. Francesco Cariello, ETA, Italy   |
| 15:10 – 15:30 | Regulatory framework of bioenergy financing and the Clean Development Mechanism (CDM)<br>Mr. Harold Wouters, Berwin Leighton Paisner, Belgium     |
| 15:30 – 16:00 | Discussion Round: Financing Opportunities Offered by the Kyoto Flexible Mechanisms<br>Moderator: Harold Wouters, Berwin Leighton Paisner, Belgium |
| 16:00 – 16:20 | Coffee Break  |

#### **Session 5: Biomass Resources and Agriculture**

Moderators: Dr. Peter Grimm, WIP / Prof. Sun Minghu, Dalian Academy of Environment Science

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|---------------|--|
| 16:20 – 16:40 | Sweet Sorghum – An important energy crop in China<br>Prof. Li Dajue, Beijing Green Energy Institute, China   |
| 16:40 – 17:00 | Bamboo as a Source for Innovative Transportation Fuels<br>Prof. Nasir El Bassam, FAL, Germany  |
| 17:00 – 17:20 | Potential of Giant Grass <i>Triarrhena lutarioriparia</i> to grow in Cold, Dry and Saline Conditions as Energy Source<br>Dr. Qingguo Xi, Beijing Academy of Agriculture and Forestry Sciences, China |
| 17:20 – 17:40 | The Fundamental Way of the Industrialisation of Stalk Utilisation<br>Mr. Sun Minghu, Vice President of Dalian Academy of Environment Science, China  |
| 17:40 – 18:10 | Discussion Round: Future Exploitation of Biomass Resources in China<br>Moderator: Yuan Zhenhong, China Center of Biomass Energy Technology   |
| 18:10 – 18:30 | Closing and Farewell   |

## FRIDAY 26<sup>th</sup> SEPTEMBER 2003

### *Technical field visit*

- Gasification and gas supply stations fuelled with agricultural residues
- Organic municipal waste treatment and organic fertilizer production plant
- Plantation of energy crop – Sweet Sorghum

### PRESENTATIONS

Participants intending to present papers at the conference are requested to deliver the abstract by 30 July 2003 to **Mr. Xiao Mingsong**: [bcarei@163bj.com](mailto:bcarei@163bj.com)

Full papers including all diagrams, data tables and appendices are recommended not to exceed 3 000 words.

Contributions by members of the LAMNET global network on bioenergy are coordinated by **Dr. Rainer Janssen**: [rainer.janssen@wip-munich.de](mailto:rainer.janssen@wip-munich.de)

### LANGUAGE

Chinese and English (interpreters available)

### REGISTRATION

If you are interested in attending the meeting, please register by **e-mail or FAX**, no later than **July 30<sup>th</sup> 2003** to 86-10-6592 2378 or [bcarei@163bj.com](mailto:bcarei@163bj.com).

Members of the LAMNET global network on bioenergy, please send a copy of the registration to Dr. Rainer Janssen, WIP – Renewable Energies, Germany  
(FAX: 49-89-720 12791, [rainer.janssen@wip-munich.de](mailto:rainer.janssen@wip-munich.de))

## **ORGANIZING COMMITTEE**

### **Professor Wang Mengjie**

China Association of Rural Energy Industry

### **Professor Zhang Bailiang**

President of Henan Agricultural University

### **Professor Gu Shuhua**

Tsinghua University

### **Professor Yao Xiangjun**

Center for Energy and Environment Protection, Ministry of Agriculture

### **Dr. Rainer Janssen**

WIP – Renewable Energies

Coordinator Latin American Thematic Network on Bioenergy (LAMNET)

## **INDUSTRY AND SCIENTIFIC ADVISORS**

### **Researcher Sun Minghu**

State Center for Environment Protection and Agricultural Residues Integrated Utilisation

### **Professor Yuan Zhenhong**

China Center of Biomass Energy Technology Development

### **Researcher Zhu Junsheng**

China Association of Rural Energy Industry

### **Professor Wu Chuangzhi**

China Academy of Sciences

### **Dr. Peter Helm**

Director, WIP – Renewable Energies, Germany

### **Dr. Peter Grimm**

WIP – Renewable Energies, Germany

### **Dr. Giuliano Grassi**

Secretary General, European Biomass Industry Association (EUBIA)

### **Prof. Jose Roberto Moreira**

National Biomass Reference Center (CENBIO), Brazil

### **Dr. Omar Masera**

Director Bioenergy Laboratory, Centro de Investigaciones en Ecosistemas (CIECO), Mexico

### **Eng. Tord Fjallstrom**

Director Energidalen, Sweden

### **Eng. Francesco Cariello**

ETA-Florence, Italy

## **CONTACTS**

### **Prof. Yao Xiangjun**

Center for Energy and Environment Protection, Ministry of Agriculture  
Address: No. 41, Maizidian Street, Chaoyang District, Beijing 100026, China  
Tel: +86 - 10 - 6419 3004                      Fax: +86-10- 6592 9416  
Email: yaoxj@netchina.com.cn

### **Mr. Xiao Mingsong**

China Association on Rural Energy Industry  
Address: No. 41, Maizidian Street, Chaoyang District, Beijing 100026, China  
Tel: +86 - 10 - 6592 2378                      Fax: +86 - 10 - 6592 2378  
Email: bcarei@163bj.com

### **Dr. Rainer Janssen**

Coordinator Latin America Thematic Network on Bioenergy (LAMNET)  
WIP – Renewable Energies  
Address: Sylvensteinstr. 2, 81369 Munich, Germany  
Tel: +49 - 89 - 720 12743                      Fax: +49 - 89 - 720 12791  
Email: rainer.janssen@wip-munich.de





## **Latin America Thematic Network on Bioenergy – LAMNET**

### **Contract number: ICA4-CT-2001-10106**

The project 'Latin America Thematic Network on Bioenergy – LAMNET' is engaged in setting-up a trans-national forum for the promotion of the sustainable use of biomass in Latin America, Europe, China and Africa. Currently, the global network LAMNET consists of 48 institutions (Knowledge Centres and SMEs) from 24 countries worldwide, thereby involving a large number of members with excellent expertise in the field of biomass.

LAMNET supports the elaboration of recommendations for the development and implementation of policy options for the promotion of biomass and bioenergy as well as the identification of commercially available and reliable biomass technologies worldwide.

The web site of this global network on bioenergy was established early in 2002 under [www.bioenergy-lamnet.org](http://www.bioenergy-lamnet.org). It provides detailed information on the objectives, activities and scientific publications of this trans-national forum as well as the contact details of all network members. Further dissemination activities of the LAMNET project include the publication of a periodic newsletter (2 issues per year), a project database providing information on the energy demand and the energy resources in Latin America and other selected emerging economies as well as the organisation of several bioenergy workshops.

LAMNET project workshops organised in 2002 include a Conference Related Event on the occasion of the 12<sup>th</sup> European Conference and Technology Exhibition on Biomass for Energy, Industry and Climate Protection in Amsterdam on 19 June 2002, a workshop on 'Biomass, Rural Energy and the Environment' in Durban organised one week prior to the WSSD in Johannesburg (August 2002) as a joint event of the three Thematic Networks CARENSA, SPARKNET and LAMNET and a workshop on 'Bioenergy Policies and Innovative Bioenergy Technologies' in São Paulo and Brasília, 2-4 December 2002.

With respect to bioenergy technologies and systems it is the main objective of the LAMNET project to identify currently available, efficient, cost-competitive and reliable bioenergy technologies which provide opportunities for the conversion of biomass to energy services in Latin America, Europe, Africa and China. Relevant technologies and systems are selected on the basis of maturity of the technology, cost-effectiveness, simplicity of maintenance, social acceptability and the impact on development. Moreover, opportunities for international co-operation, technology transfer and joint-ventures in the field of bioenergy technologies are identified and promoted by the LAMNET network.

Finally, the analysis of the current energy policy framework and support for the elaboration of policy options for the promotion of the sustainable use of biomass follows three main lines within the framework of this global network on bioenergy:

- Involvement in major international events and initiatives focussing on Renewable Energies and Sustainable Development
- Monitoring of the national/regional policy frameworks and the elaboration of advice and recommendations for the development and implementation of policy options for the promotion of bioenergy in close cooperation with the national network members
- Active networking with other organisations, institutions and multilateral initiatives engaged in the field of Renewable Energies and Sustainable Development

### LAMNET Project Coordination

WIP

Sylvensteinstr. 2  
81369 Munich

Germany

Coordinator: **Dr. Rainer Janssen**

Phone: +49 89 720 12 743

Fax: +49 89 720 12 791

**E-mail:** rainer.janssen@wip-munich.de

**Web:** www.wip-munich.de

### LAMNET Coordination Partner

ETA – Energia Trasporti Agricoltura

Piazza Savonarola, 10

50132 Florence

Italy

Contact: **Ms. Angela Grassi**

Phone: +39 055 500 2174

Fax: +39 055 573 425

**E-mail:** angela.grassi@etaflorence.it

**Web:** www.etaflorence.it

### LAMNET Coordination Partner

EUBIA – European Biomass Industry Association

Rond Point Schuman, 6

1040 Brussels

Belgium

Contact: **Dr. Giuliano Grassi**

Phone: +32 2 28 28 420

Fax: +32 2 28 28 424

**E-mail:** eubia@eubia.org

**Web:** www.eubia.org

### LAMNET Coordination Support Point South America

CENBIO – Centro Nacional de Referência em  
Biomassa

Avenida Prof. Luciano Gualberto 1289

05508-900 São Paulo

Brazil

Contact: **Prof. Dr. José Roberto Moreira**

Phone: +55 115 531 1844

Fax: +55 115 535 3077

**E-mail:** Bun2@tsp.com.br

**Web:** www.cenbio.org.br

### LAMNET Coordination Support Point Central America

Universidad Nacional Autónoma de México

Instituto de Ecología

AP 27-3 Xangari

58089 Morelia, Michoacán, México

Contact: **Dr. Omar Masera**

Phone: +52 55 5623 2709

Fax: +52 55 5623 2719

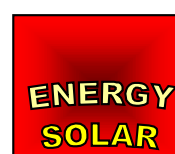
**E-mail:** omasera@oikos.unam.mx

**Web:** www.oikos.unam.mx

### Steering Committee

Contact: **Dr. Peter Helm**

**E-mail:** peter.helm@wip-munich.de



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