



International Conference on Bioenergy and Liquid Biofuel Development and Utilization

***Beijing, China
20-23 April 2004***

China-EU Centre for Agricultural Technology (CECAT)

No. 55, Nongzhan Beili, Chaoyang District, 100026 Beijing

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www.cecat.org

Conference Programme (6 April 2004)

OBJECTIVES

The aim of this conference is to promote international cooperation and knowledge exchange between actors from China, Europe, Africa and Latin America in the field of liquid biofuel and other bioenergy technologies.

Thereby, a contribution to the development of commercial biomass energy utilization in China will be provided in order to achieve an improvement of the general national and international environment situation and to offer a valuable instrument for worldwide sustainable rural development.

NEWS: This biofuels conference will include a technical tour to the **world's largest bio-ethanol production facility** implemented by Jilin Fuel Ethanol Co. Ltd. in Jilin City on 23 April 2004.

Accommodation for conference participants will be available at the China-EU Centre for Agricultural Technology (China-EU Hotel at CECAT) and will be directly booked through the conference organisers.

The conference venue and hotel is conveniently located in the international embassy area of Beijing (Chaoyang District, Eastern Beijing) which is about 5 km from the Beijing city centre. This new area within Beijing is located 20 km from Beijing Capital airport.

SUMMARY

Bioenergy and biomass based liquid fuel production is expected to play an increasingly important role in a near and distant future for a more sustainable energy supply, especially in the vital sector of transport fuels in Europe and China as well as worldwide.

During the past years China has already devoted large efforts to research and development in the field of renewable energies and currently the Chinese Government is elaborating a Renewable Energy development plan for the up-coming 10 to 15 years, in which biomass is regarded as a key resource for energy and fuel production.

This **International Conference on Bioenergy and Liquid Biofuel Development and Utilization** will bring together 50 specialists in China from the academic, private, government and industrial sectors. An overview of the current and future conditions of biomass energy use in China and in the world will be presented, focusing on the availability of resources, commercial bioenergy conversion technologies and the development of policies for the promotion and financing of bioenergy and liquid biofuels activities.

PRESENTATIONS

Participants from China intending to present papers at the conference are requested to deliver the abstract to **Mr. Xiao Mingsong**: 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 and **Dr. Giuliano Grassi**: eubia@eubia.org

LANGUAGE

Chinese and English (interpreters available)

REGISTRATION

If you are interested in attending the meeting, please register by **e-mail or FAX** to 86-10-6592 2378 or 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)

PROGRAMME (Status 6 April 2004)

TUESDAY 20th APRIL 2004

Conference Registration

Venue: China-EU Centre for Agricultural Technology (CECAT)

Timing: 10:00 – 22:00

On the 20th of April 2004 the registration for the International Conference on Bioenergy and Liquid Biofuel Development and Utilization - 7th LAMNET Project Workshop will take place at the China-EU Centre for Agricultural Technology, No. 55, Nongzhan Beili, Chaoyang District, 100026 Beijing.

The conference co-organisers are pleased to welcome all national and international conference participants and wish you a pleasant and informative stay in Beijing.

Additionally, this first day of the biofuels conference will provide the opportunity for informal information exchange meetings among participants.

WEDNESDAY 21st APRIL 2004

Inauguration Session

08:30 – 08:45	Conference Inauguration Address Mr. Wang Jiuchen, Ministry of Agriculture, China
08:45 – 09:00	Conference Inauguration Address Mr. Li Baoshan, Ministry of Science and Technology, China
09:00 – 09:15	Introductory Presentation Dr. Jurgen Sanders, European Commission Delegation to China
09:15 – 09:25	Welcome Address Prof. Wang Mengjie, CAREI, China
09:25 – 09:35	LAMNET – A Global Network on Bioenergy – Progress and Results Dr. Rainer Janssen, WIP – Renewable Energies, Germany

Session 1: Strategy and Policy Issues on Liquid Biofuel Development and Use

Moderators: Mr. Shi Guangchang, Chairman of CIASTC and Dr. Rainer Janssen, WIP

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| 09:35 – 10:00 | Chinese Legislation for Advanced Development of Renewable Energy Utilisation
Prof. Li Junfeng, Institute for Energy, China Academy of Science |
| 10:00 – 10:25 | European Vision on Biofuels
Dr. Wolfgang Palz, Board Member of World Renewable Energy Council |
| 10:25 – 11:00 | Tea/Coffee Break |
| 11:00 – 11:25 | Energy – Agriculture Strategy for China
Mr. Li Jingming, Senior Engineer at the Ministry of Agriculture, China |
| 11:25 – 11:50 | Bioenergy in FAO: Focus on Development and Environment
Dr. Gustavo Best, Food and Agriculture Organisation of the United Nations (FAO) |
| 11:50 – 12:15 | CDM Projects in China
Prof. Wang Gehua, Tsinghua University, China |
| 12:15 – 13:00 | Discussion Round:
Policies for Worldwide Liquid Biofuels Utilisation and Trade
Moderators: Mr. Zhu Junsheng, Director of CREIA
Dr. Wolfgang Palz, WREC Board Member |
| 13:00 – 14:30 | Lunch Break |

Session 2: Recent Biofuel Developments in Key Countries

Moderators: Mr. Li Jingming, Ministry of Agriculture and Mr. Denis Tomlinson, Illovo Sugar

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| 14:30 – 15:10 | The Swedish Bioethanol Fuel Programme in a Global Perspective
Dr. Per Carstedt, BioAlcohol Fuel Foundation (BAFF), Sweden |
| 15:10 – 15:35 | Fuel Ethanol Utilisation in China
Prof. Liu Dehua, Tsinghua University, China |
| 15:35 – 16:00 | Production of Biofuels – Jilin Fuel Ethanol Co.
Ing. Joseph Modl, Vogelbusch GmbH, Austria |
| 16:00 – 16:25 | The Brazilian Bio-ethanol Experience
Prof. Arnaldo Walter, State University of Campinas, Brazil |
| 16:25 – 17:00 | Tea/Coffee Break |

- 17:00 – 17:25 Policy Dialogue on Bioenergy in Southern Africa
Mr. Denis Tomlinson, Illovo Sugar Ltd., South Africa
- 17:25 – 17:50 Analysis of the Market for Liquid Biofuels in China
Mr. Liu Yi, Jilin Fuel Ethanol Co., China
- 17:50 – 18:15 Start-up of Sweet Sorghum – Ethanol Industrialisation
Mr. Xiao Mingsong, Vice General Secretary of BCAREI, China
- 18:15 – 19:00 Discussion Round:
International Cooperation Opportunities in the field of Biofuel Technology
Moderators: Mrs. Xie Zuqi, Sichuan Acad. of Agricultural Mechanisation
Dr. Per Carstedt, BAFF

THURSDAY 22nd APRIL 2004

Session 3: Innovative Biofuel Technologies: Research and Application

Moderators: Prof. Zhang Bailiang, Henan Agriculture University and Dr. Peter Helm, WIP

- 08:30 – 08:55 Bio-oil Fuel Development and Utilisation in China
Prof. Li Changzhu, Hunan Academy of Forest Science, China
- 08:55 – 09:20 Bio-oil Fuel Technology Cooperation with Germany
Mr. Liu Yong, Hefei Tianyan Green Energy Co., China
- 09:20 – 09:45 Automotive Fuels from Flash-pyrolysis of Biomass Bio-oils
Prof. Leonetto Conti, University of Sassari – Department of Chemical Engineering, Italy
- 09:45 – 10:10 Bio-oil Fuel Production from Microalgae after Heterotrophic Growth
Prof. Wu Qingyu, Tsinghua University, China
- 10:10 – 10:45 Tea/Coffee Break
- 10:45 – 11:10 Biofuels for Transport Applications
Dr. Giuliano Grassi, European Biomass Industry Association - EUBIA
- 11:10 – 11:35 Experimental Studies on Cellulose Fuel Ethanol Production from Straw
Prof. Zhang Bailiang, Henan Agriculture University, China

- 11:35 – 12:00 Utilisation of Agricultural Residues in Biomass Boilers
Mr. Tord Fjallstrom, Energidalen, Sweden
- 12:00 – 13:00 Discussion Round:
Current Biofuel R&D Requirements and Commercialisation Strategies
Moderators: Prof. Li Junfeng, Institute for Energy of CASC
 Tord Fjallstrom, Energidalen

Session 4: Biomass for Liquid Biofuel Production

Moderators: Prof. Zhao Lixin, China Academy of Agriculture and Dr. Giuliano Grassi, EUBIA

- 14:30 – 14:55 Biomass Activities on the Balearic Islands
Ms. Dolores Ordonez, Balearic Government, Spain
- 14:55 – 15:20 Opportunities for Biomass Applications in Venezuela
Mr. Evanan Romero, Fundacion Momento de la Gente, Venezuela
- 15:20 – 15:45 Revision of the Plantation Structure for Sweet Sorghum Production
Prof. Wang Zhaomu, Xinjiang Academy of Agricultural Science, China
- 15:45 – 16:10 Sweet Sorghum High-quality Breed – The State Plan Project 863
Mrs. Sun Hong, Beijing Taitiandi Energy Technology Co., China
- 16:10 – 16:40 Tea/Coffee Break
- 16:40 – 17:05 Evaluating Agricultural Residues as an Energy Source
Mr. Sergio Blanco-Rosete, Metropolitan University of Mexico (UAM)
- 17:05 – 17:30 Wetland Protection, Saline Land Improvement and Energy Production
Dr. Qingguo Xi, Beijing Academy of Agriculture and Forestry Sciences, China
- 17:30 – 18:10 Discussion Round:
Biomass for Liquid Biofuel Production: Opportunities and Constraints
Moderators: Mrs. Deng Keyun, Chairman of CAREI
 Dr. Gustavo Best, FAO
- 18:10 – 18:30 Closing and Farewell
Prof. Zhu Ming, President of Chinese Academy of Agricultural Engineering, Vice Chairman of CSAE
Dr. Peter Helm, Director WIP – Renewable Energies, Germany

FRIDAY 23rd APRIL 2004 – TECHNICAL FIELD VISIT (Full Day)

The world's largest bio-ethanol production facility implemented by Jilin Fuel Ethanol Co. Ltd. in Jilin City

This International Conference on Bioenergy and Liquid Biofuel Development and Utilization will include a technical tour to the world's largest bio-ethanol production facility in Jilin City (located about 800 km north-west of Beijing) on 23 April 2004. The technical tour will be organised by CAREI in collaboration with Jilin Fuel Ethanol Co. Ltd. and the Austrian company Vogelbusch.

Transportation arrangement for the participants of this technical tour are directly done by the organisers. Therefore, conference delegates who wish to join the technical tour are required to confirm their participation to the conference organisers as soon as possible.

Technical Tour Schedule:

Flight from Beijing to Changchun City – Capital of the Jilin Province (23 April):

Departure: 07:55 am – Arrival: 09:40 am

Visit to Bioethanol Production Facility: 11:00 – 15:00

Return Flight from Changchun to Beijing (23 April): Departure: 17:15 pm – Arrival: 18:50 pm

Production Start-up for Jilin's Fuel Ethanol Plant - Energy Saving Alcohol Technology by Vogelbusch

A grand opening ceremony was held in the city of Jilin in November 2003 to celebrate the production start-up of the first of two lines of a fuel ethanol project implemented by Jilin Fuel Ethanol Co. Ltd. With a final capacity of 600,000 tons per year, that is 2.3 million litres per day, the plant will be the world's largest bioethanol production facility.

Jilin Fuel Ethanol Co. Ltd is one of the largest corn processing developer and newly risen energy supplier. It is also the first large-sized fuel ethanol

production unit, which is approved by the Chinese Government. Three partners, China National Petroleum Corp., Jilin Food Stuff (Group) and China Resources Corp., established Jilin Fuel Ethanol Co. Ltd. with a registered capital of RMB 1.2 billion (USD 145 million) with 55 %, 25 % and 20 % of the capital, respectively.

As a major global supplier of advanced alcohol technology since 1921, Vogelbusch (Austria) was selected to provide the process design for the plant. Basic engineering included raw material preparation, continuous fermentation, distillation and mole sieve dehydration along with supervision services for detail design and start-up assistance. The detail design was carried out by Shanghai Design Institute and partially by the Design Institute of the Petroleum Industry. Vogelbusch also delivered the column trays for all columns in the distillation section as proprietary equipment. A special request of Jilin Fuel Ethanol was the incorporation in the design to use not only traditional milling processes, but also a newly developed Chinese wet milling technology.



CONFERENCE STEERING COMMITTEE

Professor Wang Mengjie

Vice President China Association of Rural Energy Industry, Director of Committee for Biomass Conversion Technology

Mr. Wang Jiuchen

Director Division of Renewable Energy, Ministry of Agriculture

Mr. Li Baoshan

Chief of Department for Energy and Transportation, Ministry of Science and Technology

Professor Zhu Ming

President Chinese Academy of Agricultural Engineering

Mr. Shi Guangchang

President China International Association for Science and Technology Cooperation

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Ms. Guan Xiaodong

Deputy Secretary General of Chinese Society of Agricultural Engineering

Professor Liu Dehua

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INDUSTRY AND SCIENTIFIC ADVISORS

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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. 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 12th 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

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Steering Committee

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This Thematic Network is funded by the European Commission, DG Research,
(Project No. ICA4-CT-2001-10106).