

# LAMNET – A Global Network on Bioenergy

## Progress and Results

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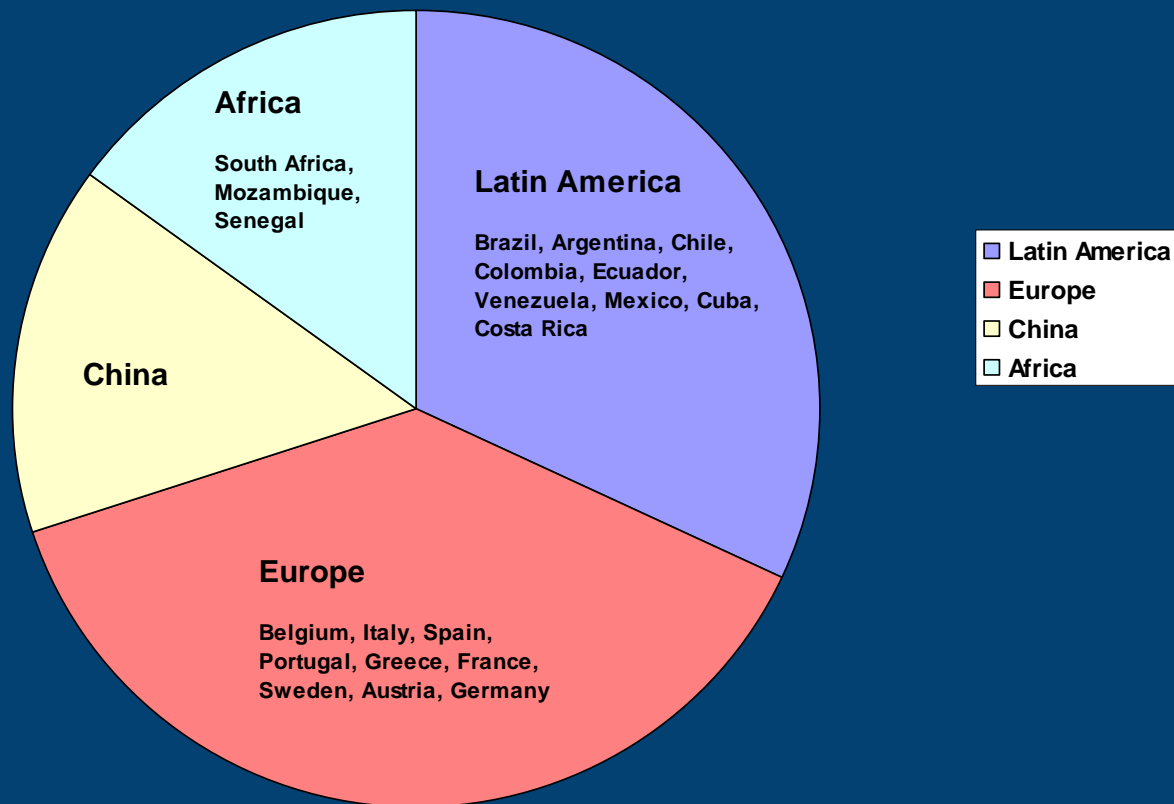
LAMNET Coordinator : Dr. Rainer Janssen, WIP

# LAMNET – Global Bioenergy Network

- Network of 48 institutions from 24 countries
- Transnational forum for the promotion of sustainable use of biomass
- Funded by the European Commission within the programme 'Confirming the International Role of Community Research' Project duration (Jan 2002 – Dec 2004)
- Coordinated by WIP, Germany, in partnership with ETA, Italy and the European Biomass Industry Association, EUBIA
- Latin American organisations CENBIO, Brazil and UNAM, Mexico act as coordination support points

# LAMNET Membership

48 Partners, more than 130 Associate Partners  
(status September 2004)

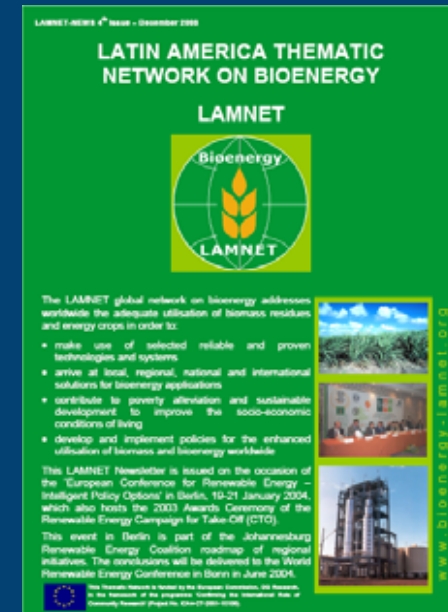


# Global Bioenergy Network - Objectives

- to address the adequate utilisation of **biomass residues and energy crops**
- to make use of selected **reliable and proven** practical **technologies and systems**
- to arrive at **local, regional, national and international solutions** for bioenergy applications
- to contribute to **poverty alleviation and sustainable development**
- to **develop and implement policies** for the enhanced utilisation of biomass and bioenergy

# LAMNET Dissemination Activities

- LAMNET Project Web site: [www.bioenergy-lamnet.org](http://www.bioenergy-lamnet.org)
- LAMNET Project Newsletter (2 issues per year)
- Bioenergy Thematic Leaflets
  - Bioenergy Village Complex
  - Pellets and Briquettes; Biomass Gas Generators
  - Liquid Biofuels
- Organisation of LAMNET Project Workshops
  - In 2002: The Netherlands, South Africa, Brazil
  - In 2003: Mexico, China, Cuba
  - In 2004: China, Italy, Brazil, Venezuela, Chile



# Bioenergy Case Study – Brazil

## Proalcool – Brazilian Alcohol Program

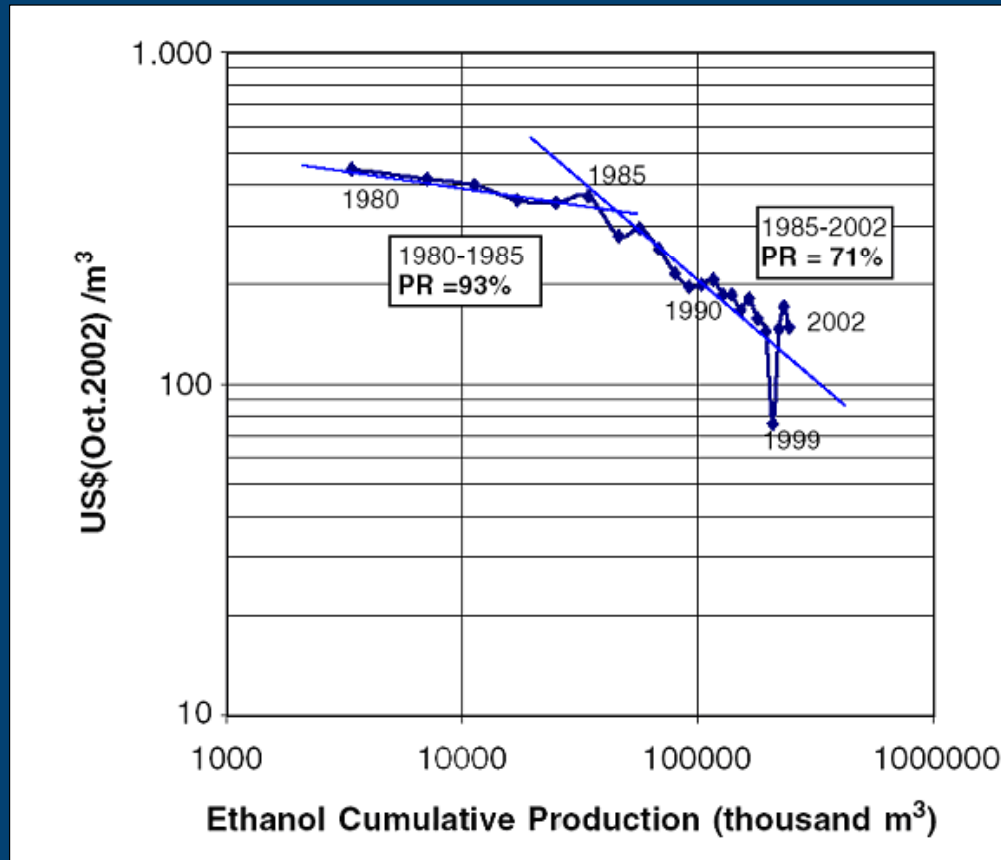
- Created in 1975 (first oil crisis)
- Gasoline contains 20-26% of anhydrous ethanol
- Ethanol production in Brazil: 14.7 billion l/a (03/04)
- Ethanol export: 1.1 billion l/a (2003/2004)
- Hydrated ethanol: 60-70% of gasoline price (2004)
- CO<sub>2</sub> Abatement (1996): 12,7 million t/a
- Total employment in sugar/ethanol sector: 3.6 million
- New Development: Flex Fuel Vehicles



LAMNET Partners: CENBIO, Copersucar, UNICA



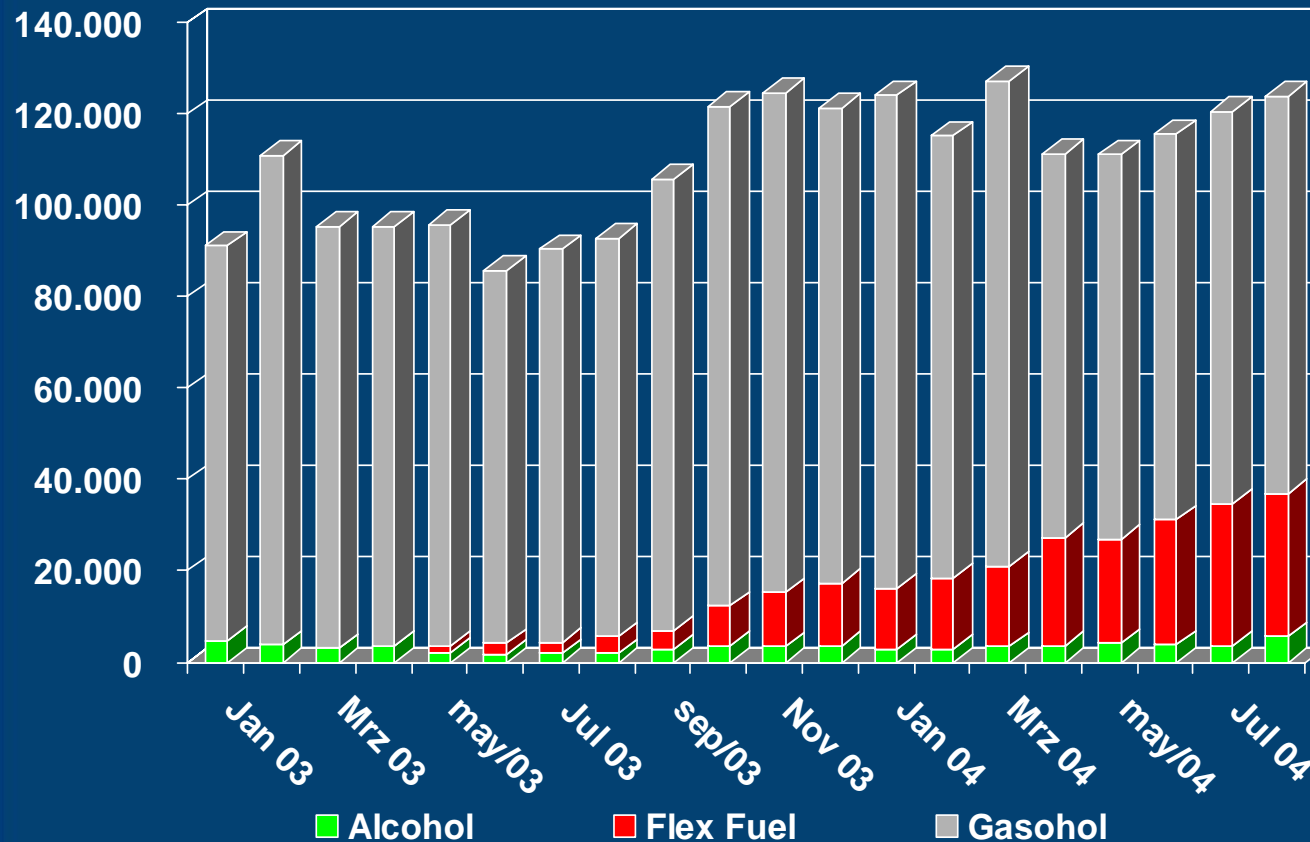
# Brazil – Ethanol Learning Curve (Proalcool)



- **Total Investment 1975-1989**  
**5 billion US\$**
- **Total Oil Import Savings 1975-2002**  
**50 billion US\$**

Source: CENBIO,  
Sao Paulo State  
Environmental Secretariat

# Brazil – Flex Fuel Vehicle Sales



## Manufacturers

- FIAT, Ford
- GM, VW
- DC, Audi, Honda, Toyota, Volvo, Nissan, Renault, Skoda, Peugeot

## Forecast:

- 67% Market Share (> 2007)

Source: ANFAVEA

# Bioenergy Case Study – Colombia



## National Alcohol Program for Colombian Gasolines

New law (2001) mandating the blend of bioethanol (10% volume) with gasoline and diesel fuel by 2006

- Increase in harvested sugar cane: 150.000 ha
- Construction of 9 bio-refineries (each 200.000 – 250.000 l/day)
- Employment Impact: Creation of 170.000 new jobs

Invitation to private investors (national and int.) to participate in the production of fuel ethanol in an open market

- Investment: 400 million US\$; Tax exemption for bioethanol
- CER's through CDM

# International Cooperation – China

Opportunities for Industrial Cooperation Activities, Technology Transfer and Joint-Ventures in partnership with the European Biomass Industry Association (EUBIA)

## Biomass Technology Applications

- Bio-gas Plants for Rural Development
- Straw Gasification Technology
- Pelleting Technologies
- Ethanol Production from Lignocellulose



LAMNET Partners: CAREI, CREIA, Beijing Green Energy Institute, Shenyang Agricultural University, CEEP, Ministry of Science and Technology

# THANK YOU

For more information:



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