



# Ghent Bio-Energy Valley supports the EU proposal for sustainability criteria for biomass

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# Ghent Bio-Energy Valley

Public Private Partnership for the promotion of sustainable bio-based activities and economic development in the Ghent region

Website: [www.gbev.org](http://www.gbev.org)



## Public organisations



## Industrial members





## Actions of Ghent Bio-Energy Valley

- Technological innovation: building Research and Development expertise in the field of bio-energy
- Cluster formation in the port of Ghent: building synergies between the industrial partners
- Sensibilisation of the public: organisation of information campaigns about bio-energy

## **Ghent has excellent conditions for building the bio-based economy**

- The port of Ghent has traditionally been very strong in the handling of agricultural commodities
- The Ghent region is a world class player in the field of biotechnology
- The starting biofuel production is laying the industrial base for building the bio-economy



**The port of Ghent wants to become the largest bio-port of Europe**



## Towards a sustainable society



### Our News

22.01.06 - 24.01.06/ **Winning, verwerking en gebruik van koolzaadolie als biobrandstof - Bedrijfsmissie naar Beieren**

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19.01.06/ **Mini-Seminarie Biobrandstoffen - Autosalon**

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## Welcome to Ghent Bio-Energy Valley

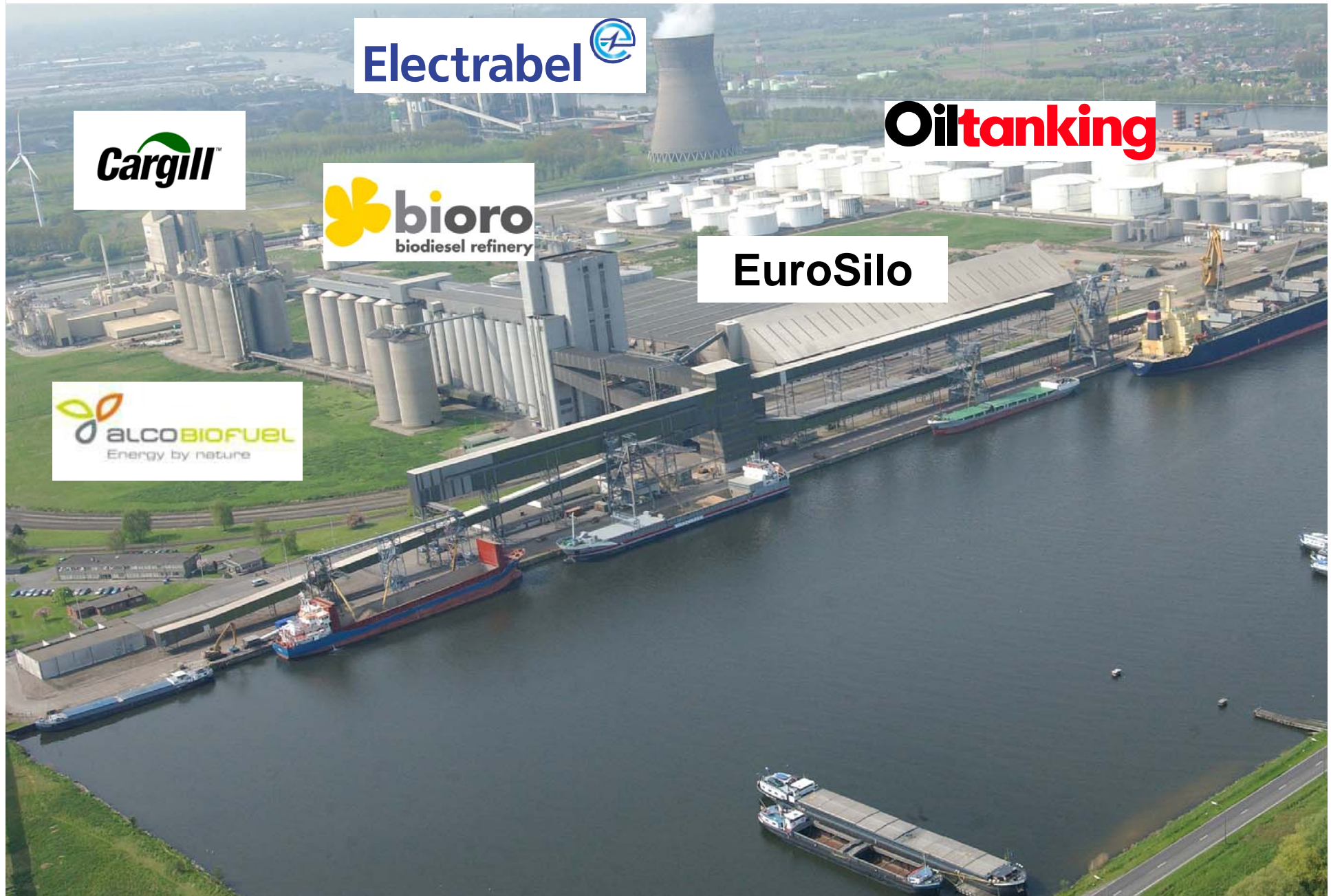
Ghent Bio-energy Valley is a Public Private Partnership aiming to support the development of sustainable bio-energy activities and resulting economic growth in the region of Ghent, Belgium.

Ghent Bio-energy valley is a joint initiative of Ghent University, the city of Ghent, the port of Ghent and several industrial companies from the Ghent region that are active in the field of bio-energy generation, distribution, storage and use.

Ghent Bio-energy Valley aims to promote the development of bio-energy through collaborative programs, initiatives and synergy between the partners in the fields of Research & Development, structural measures and policy, logistics and communication towards the general public.

**! GBEV op het autosalon 2006 !**

# Biorefinery Rodenhuiszedok – Port of Ghent



Electrabel 

 Cargill™

Oil **tanking**

 **bioro**  
biodiesel refinery

EuroSilo

 **alcoBIOFUEL**  
Energy by nature

# Biorefinery Rodenhuijze docks: The largest integrated production complex for biofuels in Europa



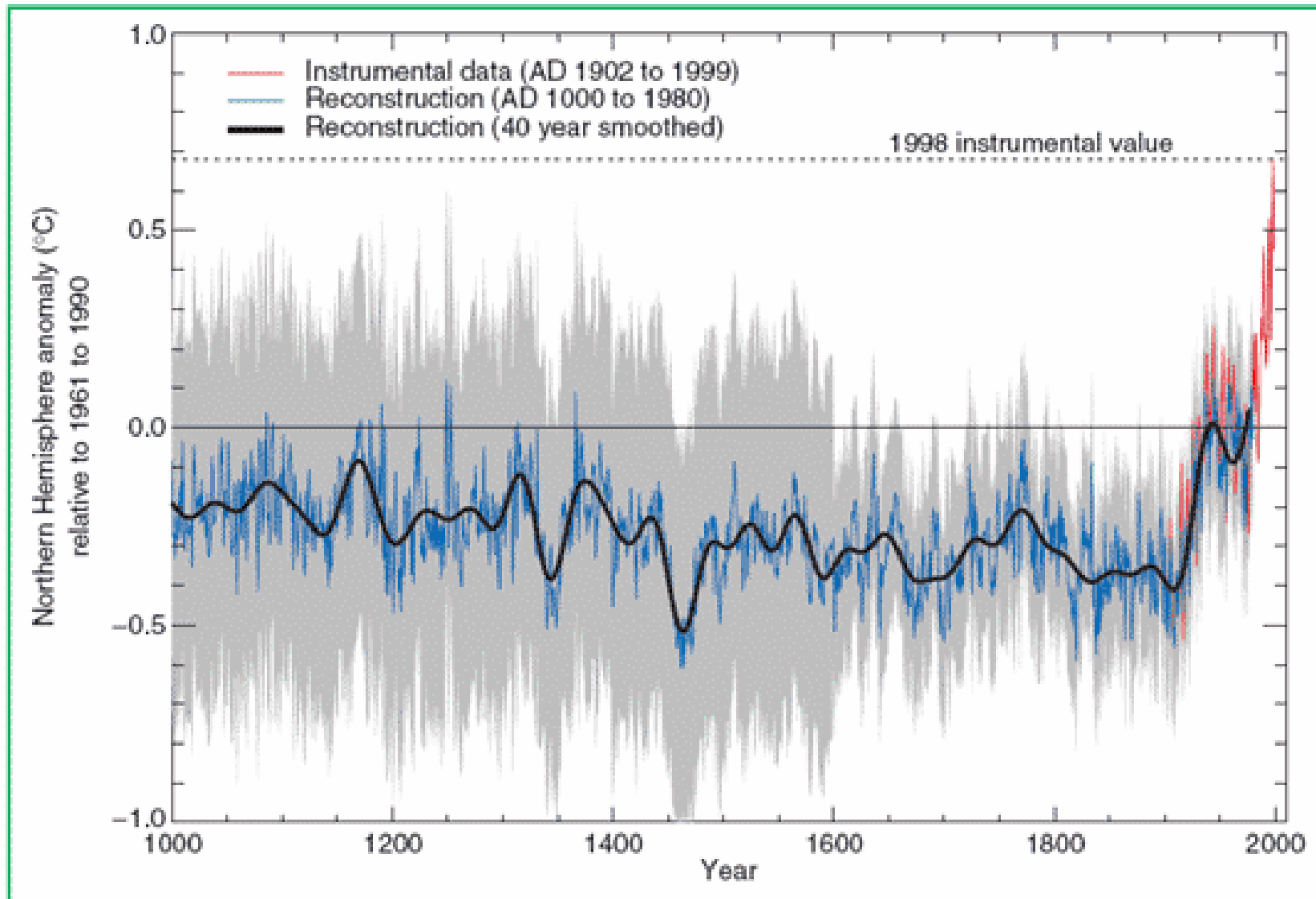
Production 250.000 ton biodiesel



Production 150.000 m<sup>3</sup> bio-ethanol

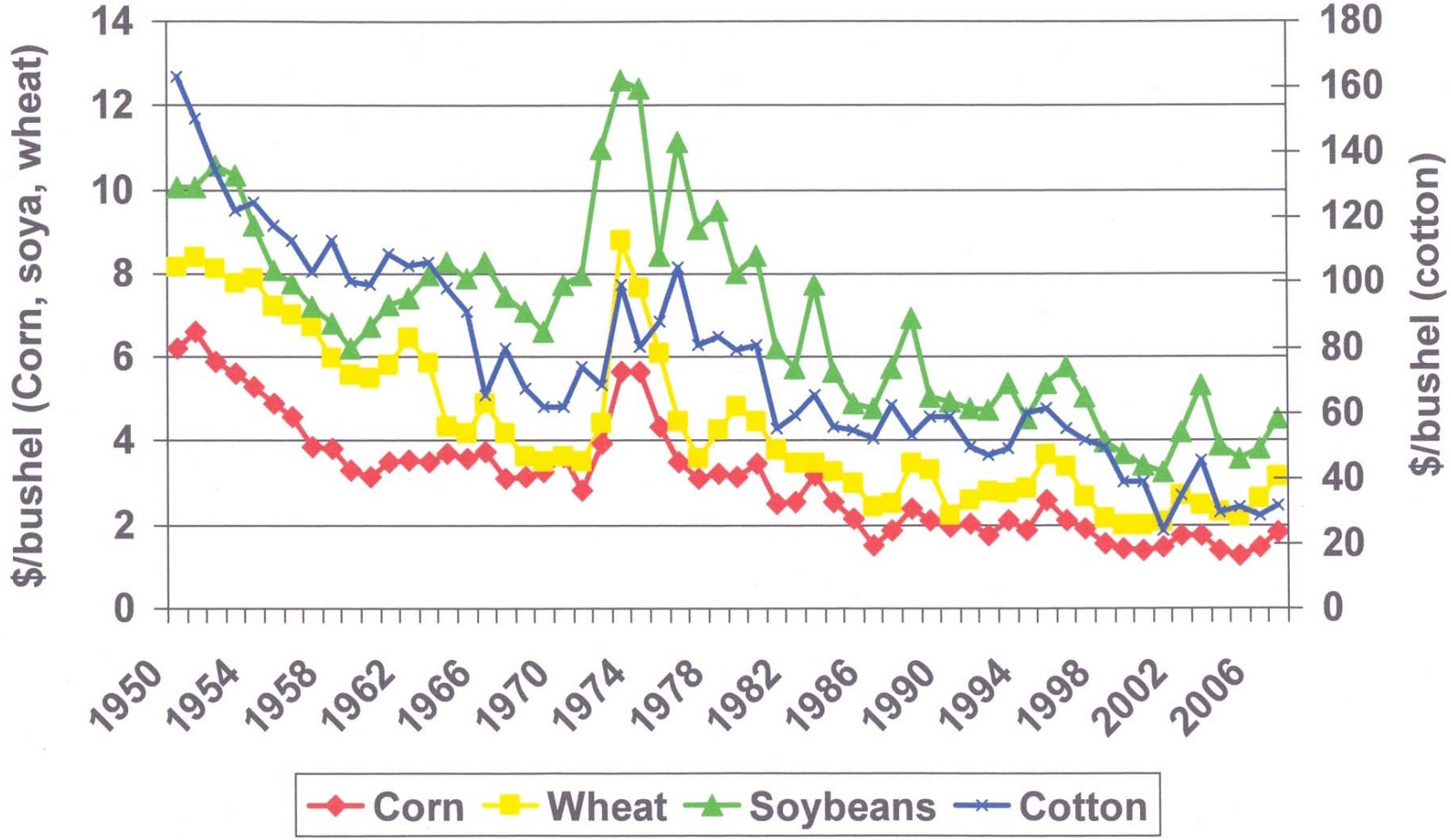


# “Hockeystick” curve of global warming





# Long term real crop prices in \$US of 1982

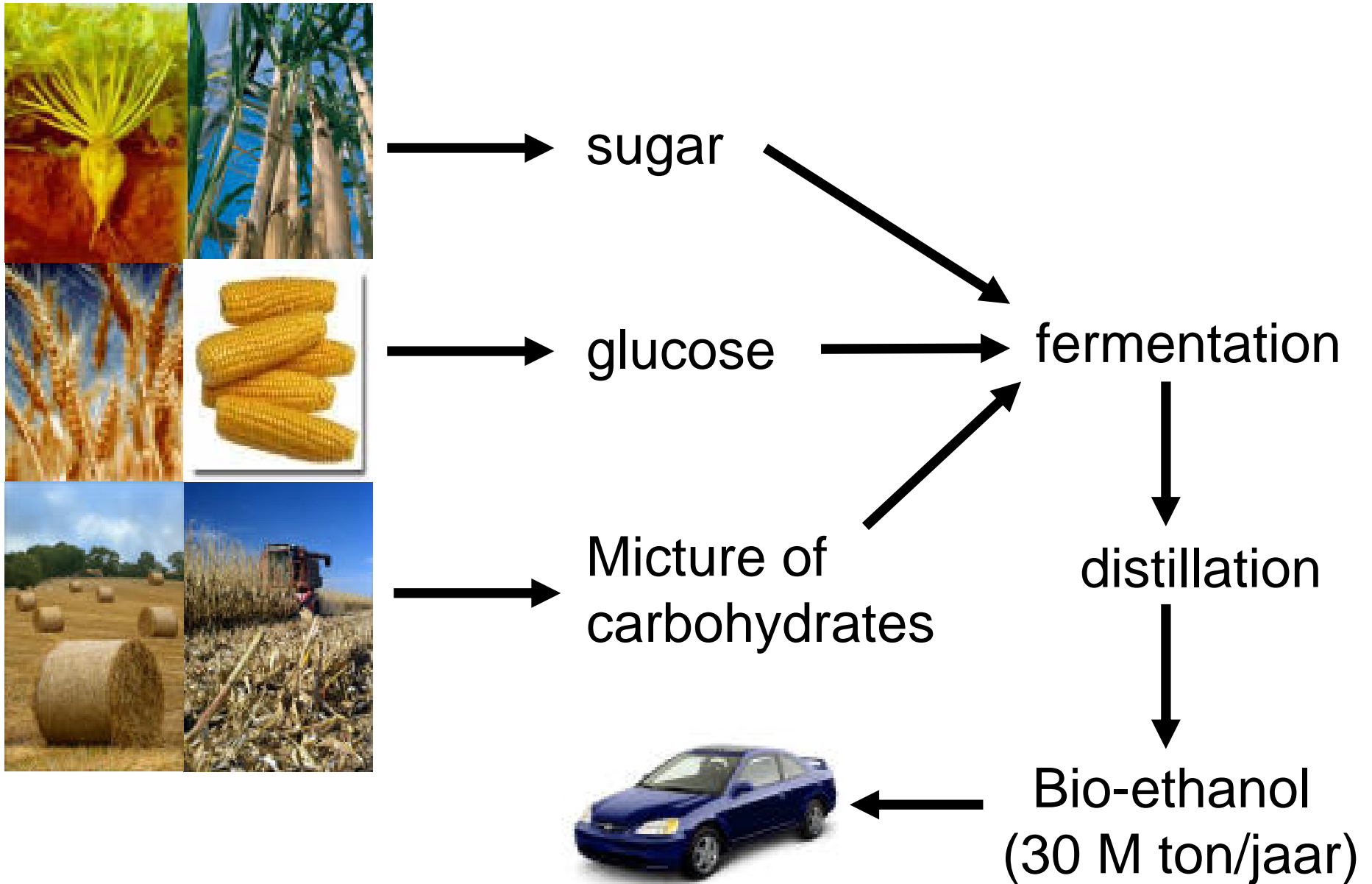


- Biofuels are NOT the main cause of increased food prices. The main reason is the increase in food consumption, particularly from developing new economies such as China
- Increased prices for agricultural resources are one of the most effective ways to reduce poverty: 80 % of the 2 billion people that earn less than 2 \$ per day live in rural areas
- Bio-energy offers excellent perspectives for many developing countries to secure their own energy requirements and to support their rural economy

- Sustainability problems with biofuels are not related to the production processes of biofuels as such, but to the supply of the biomass resources
- Sustainability problems with the production of biomass resources for biofuels are mainly situated in the tropics.
- Europe can reach the 2020 target (10 % biofuels) based on European biomass production

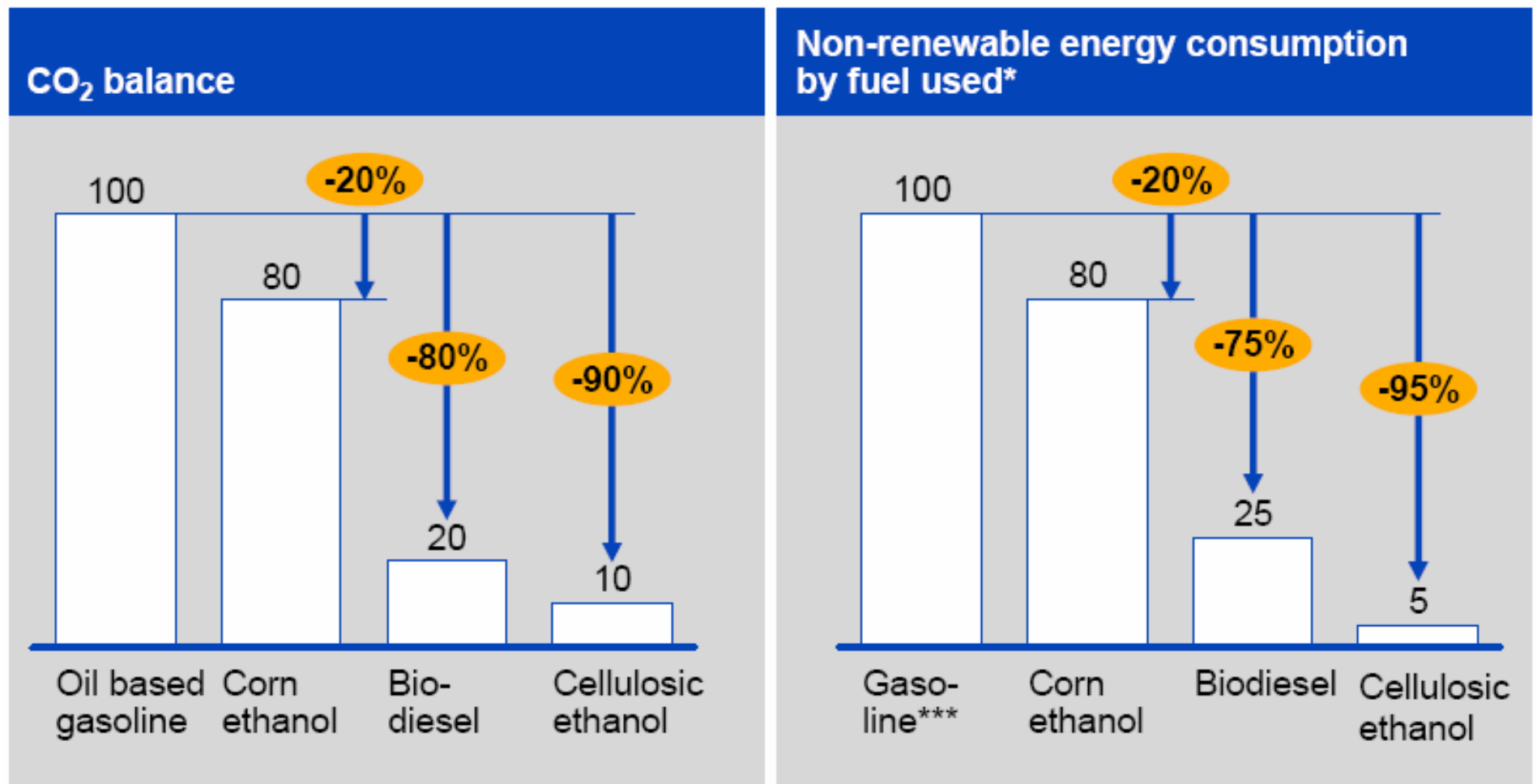
- Ghent Bio-Energy Valley supports the EU proposal for sustainability criteria for biofuel production and considers these measures to be in the interest of both the bio-energy industry and the planet
- Sustainability criteria must apply to ALL uses of biomass resources, not only for biofuels but also for food, feed, cosmetics, wood,.....
- Sustainability criteria that apply only for biofuels are not workable in practice and do not support the global sustainability goals aimed for

# Research & Development: bio-ethanol



# Eco-efficiency advantages of second generation biofuels

Percent





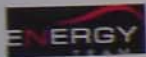


GHENT BIO-ENERGY VALLEY

### Deze Eco-car rijdt op biobrandstof

- De Eco-car is een voorbeeld van energie-efficiëntie
- De Eco-car rijdt zowaar evenveel 1400 km op één liter biobrandstof
- De Eco-car met één bestuurder rijdt aan 50 à 60 km/u
- De Eco-car doet mee aan internationale wedstrijden zoals bv. de Eco-Shell marathon wedstrijd, competition Michalee en Belgian trophy

- Het "Energyteam" van de Hogeschool Gent streeft via onderzoek naar een optimalisatie en perfectie van technieken en technologieën.
- optimale verhouding materiaal-gewicht-sterkte
  - optimale wielgeometrie
  - wijzigingsloze koppeling
  - optimale aerodynamica van het koetswerk



# GHENT BIO-ENERGY VALLEY

## Towards a sustainable society



ERNEST CALLENBACH

# Ecotopia

land met welvaart, vrijheid en veiligheid, maar ook met een verbijsterende traditie: het rituele oorlogsspel . . . . .

*een futuristische Roman*

1980 - Het noordwestelijk deel van Amerika scheidt zich af van de Verenigde Staten en vormt, hermetisch afgesloten van de omringende wereld, een ecologisch utopia.  
1999 - Will Weston krijgt, als eerste verslaggever, toestemming om Ecotopia te bezoeken, en vindt een

In 1975, Ernest Callenbach wrote a science fiction novel called **ECOTOPIA** in which he describes the bio-based society of the year 1999.

Today, more than 30 years later, we can say:

- ✓ His timing was wrong but nevertheless,
- ✓ His prediction of where this is heading proved surprisingly accurate.



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