

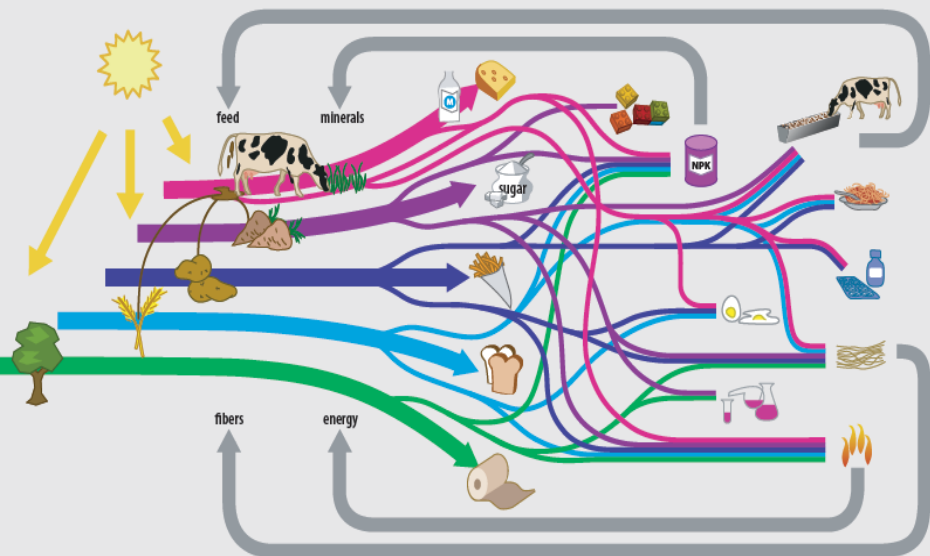


Netherlands Enterprise Agency

Policy Interventions on BioBased Economy

European Perspective

Ir. Kees W. Kwant



© Biomorf Infographics & Dutch Bioeconomy Cluster



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Content

- The bioeconomy approach
- European & Member States Approach
- Research and Development
- Cooperation within and outside EU
- Market Development
- Conclusions



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Sustainable Biobased Solutions



Integrated Food & Materials production

- Smart agriculture
- Increased production



Sustainable and Rural Development

- Local Resources and local use
- Tapping unused or abandoned land



Smart use of biomass

- Circular Economy, Cascading
- Biorefinery

Ref: http://www.sahyog-europa-india.eu/images/D2_3_Strategic_Advise_on_Biobased_Research_based_on_Sahyog_inventory_V3.pdf



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY





The Bioeconomy Strategy and Action Plan, COM(2012)11

STRATEGY

TACKLING SOCIETAL CHALLENGES

- Ensuring food security
- Managing natural resources sustainably
- Reducing dependence on non-renewable resources
- Mitigating and adapting to climate change
- Creating jobs and maintaining European competitiveness

DEVELOPING A BIOECONOMY

- Coherent policy
- Investment in knowledge, innovation and skills
- Participative governance and informed dialogue with society
- New infrastructures and instruments

ACTION PLAN

INVESTMENTS IN RESEARCH, INNOVATION AND SKILLS



REINFORCED POLICY INTERACTION AND STAKEHOLDER ENGAGEMENT



ENHANCEMENT OF MARKETS AND COMPETITIVENESS IN BIOECONOMY SECTORS



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY

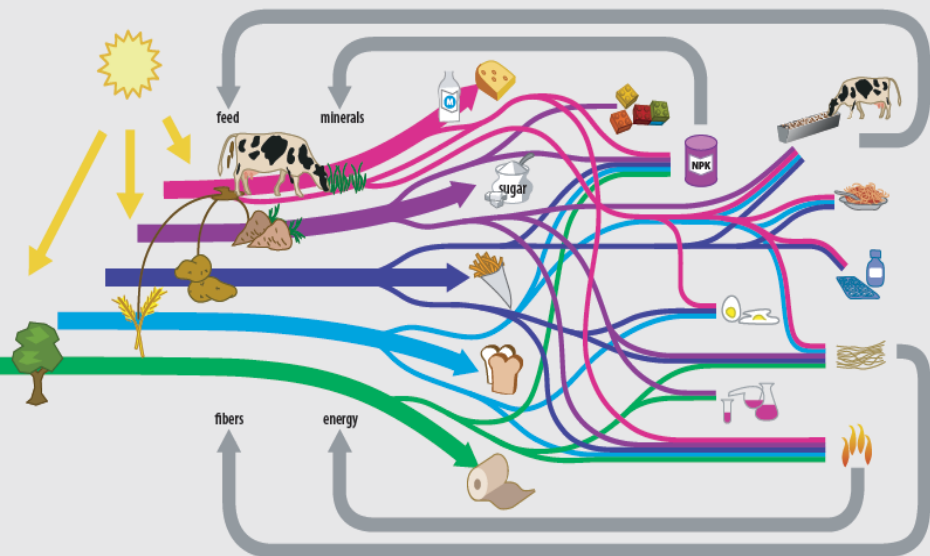


New Delhi, 3 - 4 February 2014



Netherlands Enterprise Agency

Europe and Member States



Source: Biomorf Infographics & Dutch Bioeconomy Cluster



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



1 World, 1 Europe, 28 Memberstates



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Investment in Research and Development

- FP7:
 - Support of Platforms
- Horizon2020
 - JTI Biobased industries
 - CoFund to stimulate cooperation among MS
 - Integrate national funding
- Regional Funds
 - Smart Specialisation Strategies
 - Rural Development -> Bioeconomy



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



National Research Approach



- Netherlands:
 - Topsector Approach
 - Biobased as a solution for Chemical Industry
 - > Strong Agricultural knowledge (Wageningen)
 - > Infrastructure (Rotterdam harbour)
- France:
 - Centres of Excellence
 - Regional approach as solution for Agriculture



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY

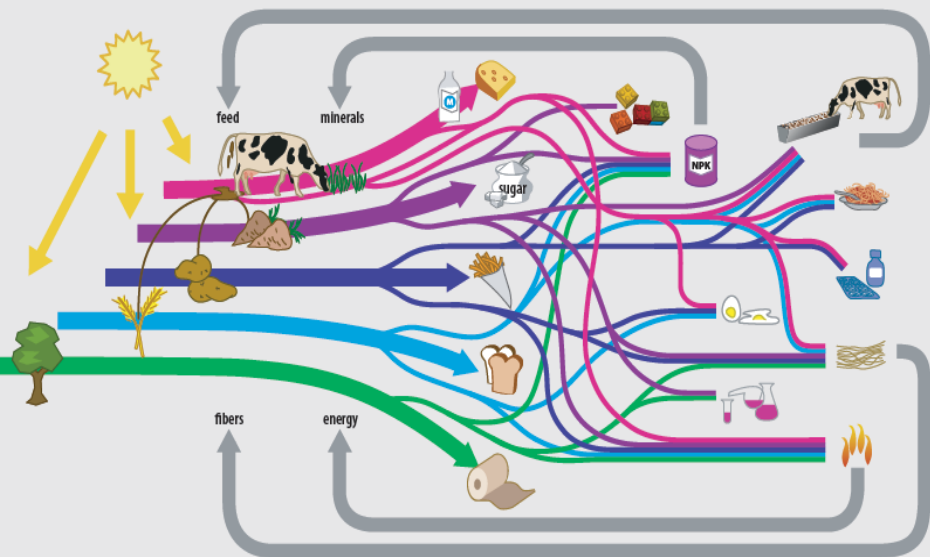


New Delhi, 3 - 4 February 2014



Netherlands Enterprise Agency

Cooperation Inside/outside EU



Source: Infographics & Dutch Bioeconomy Cluster



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Cooperation within EU

- ERANET
 - Cooperation between MemberStates
 - PLATFORM for Bioeconomy

- CoFUND in H2020
 - 50% on top of national funding from EC



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



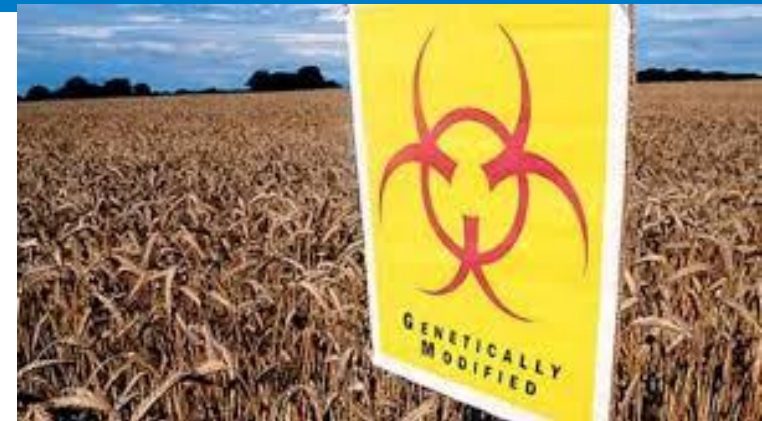
New Delhi, 3 - 4 February 2014



Cooperation outside EU

Exploitation or Cooperation:
Joint Projects:

- Brasil -> ALCUE
 - India -> Sahyog
 - China, Russia, Africa
- > Develop a joint Roadmap



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014

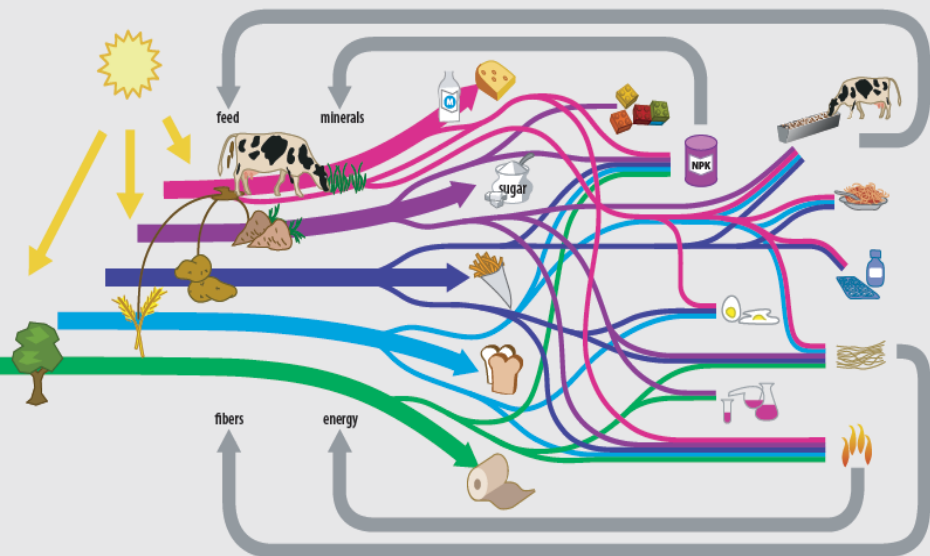


Netherlands Enterprise Agency

Industrial Cooperation in a Public Private Partnership

Biobased Industries Consortium

Proposal for a Joint Technology Initiative



Source: Biomorf Infographics & Dutch Biorefinery Cluster



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



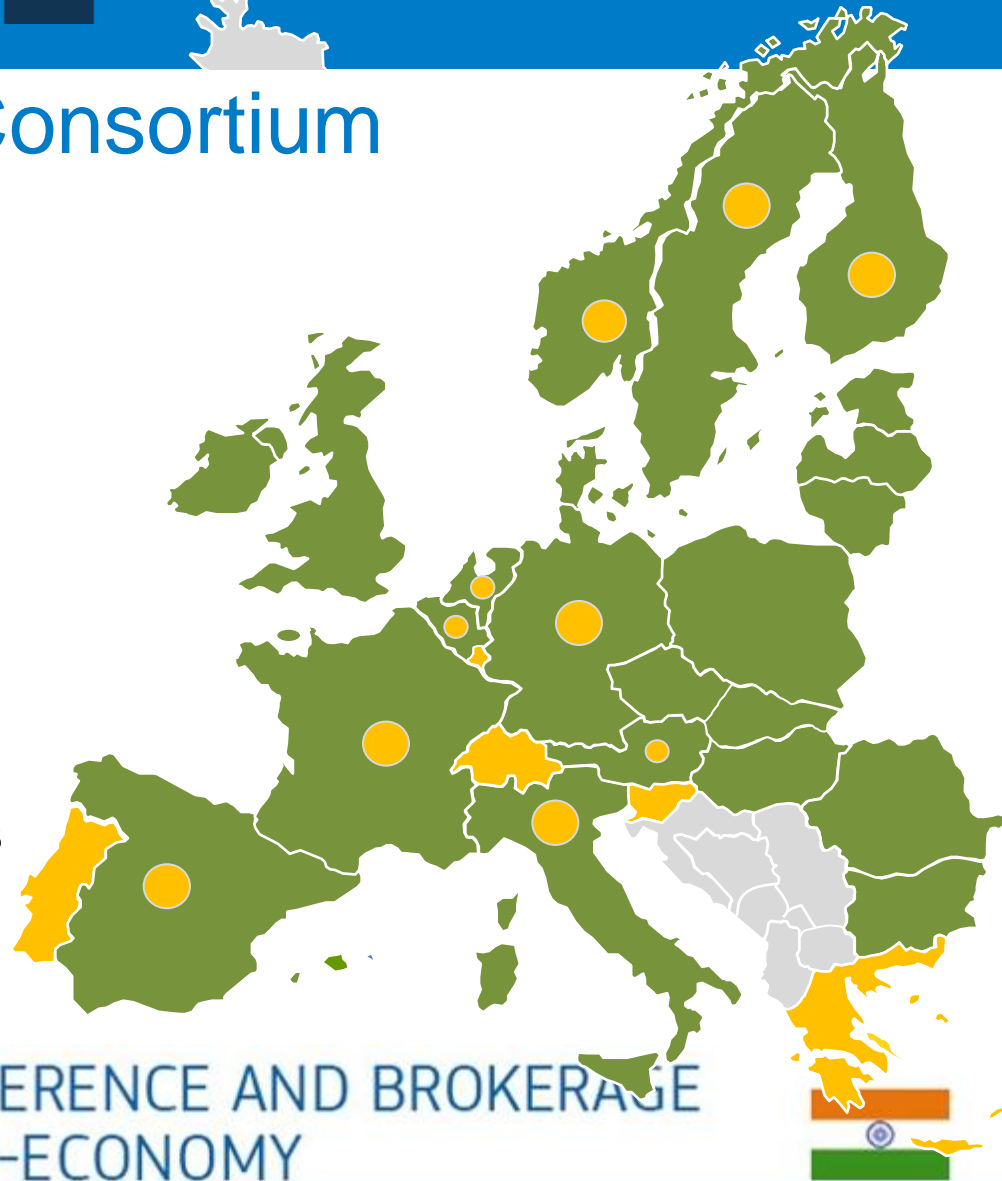
Biobased Industries Consortium

■ 59 Full members

- 35 Large industries
- 13 SMEs
- 11 Clusters

■ 79 Associated members

- 20 Universities
- 44 RTOs
- 8 European trade organisations
- 4 Associations
- 3 European Technology Platforms (ETPs)



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY

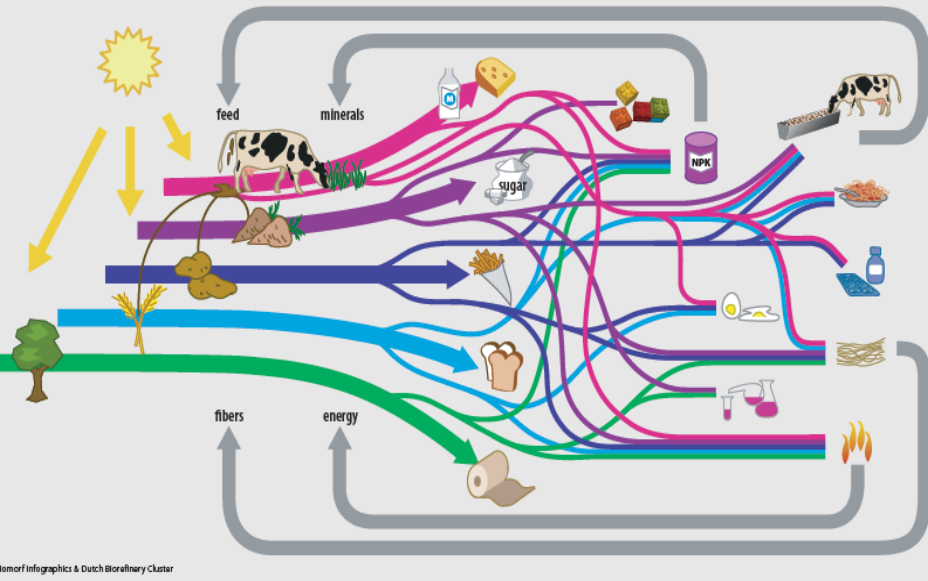


New Delhi, 3 - 4 February 2014



Netherlands Enterprise Agency

Market Introduction



OR



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Market is defined by the society

- Drivers
- Research/Technologies
- Policies
- Regulations
 - Taxes
 - Obligations
 - subsidies
- Market conditions



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Waste Directive

- Obligation on all MS
 - Reduce Landfilling to less than 50%
 - Sanitation of Landfills
 - Recycling of Waste
 - Clean incineration, no dioxins etc.
- Member state measures
 - Tax on landfilling: 80 €/ton in NL



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY





Renewable Energy Directive

- Obligation on all Member States to achieve:
 - In 2020
 - > 20% Renewable Energy
 - > 20% GHG reduction
 - > Market for biomass!



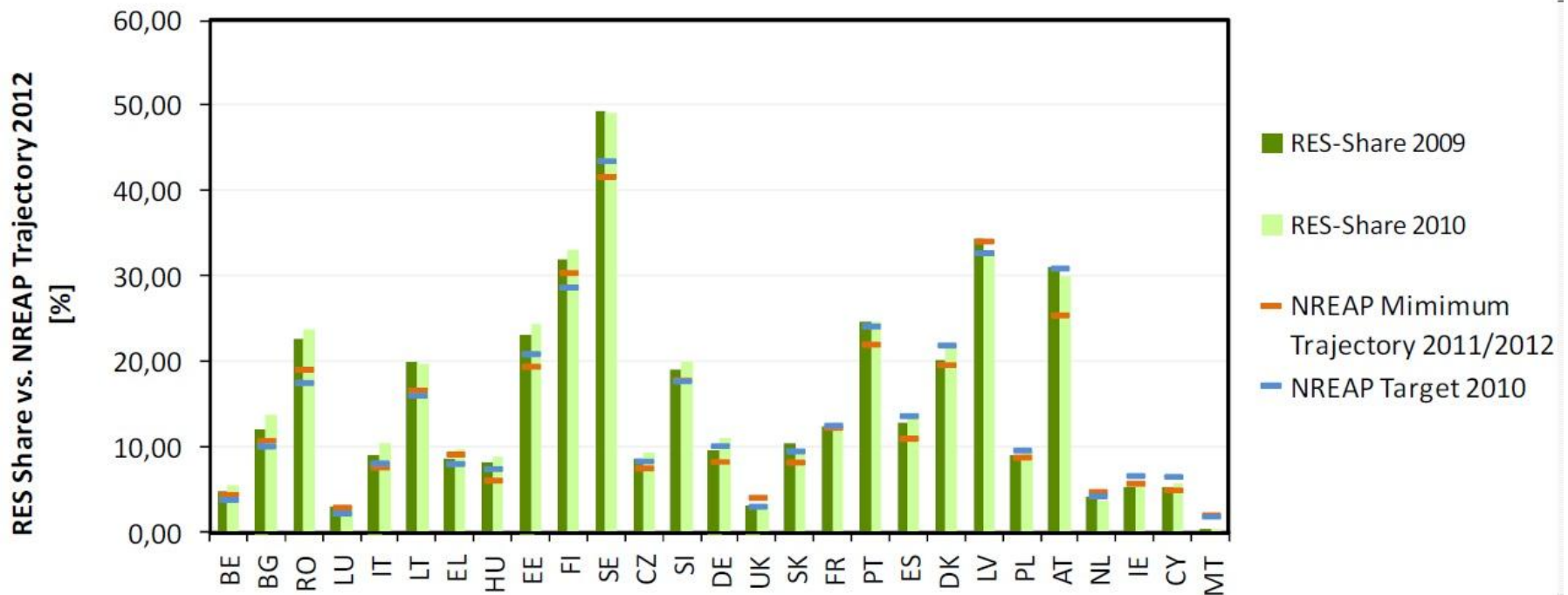
SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Renewable Energy Directive, on track



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY

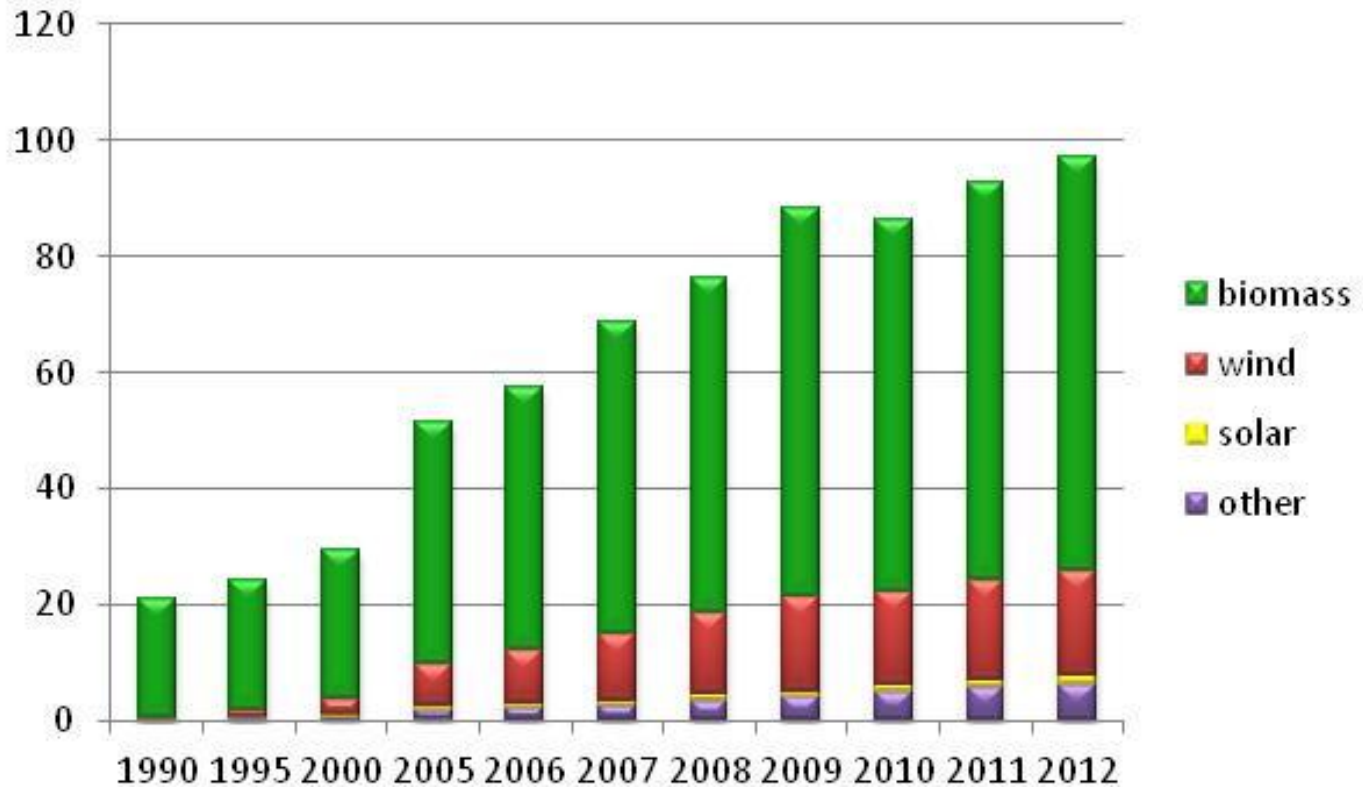


New Delhi, 3 - 4 February 2014



Netherlands: About 70% realised with Bioenergy

- PJ



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY

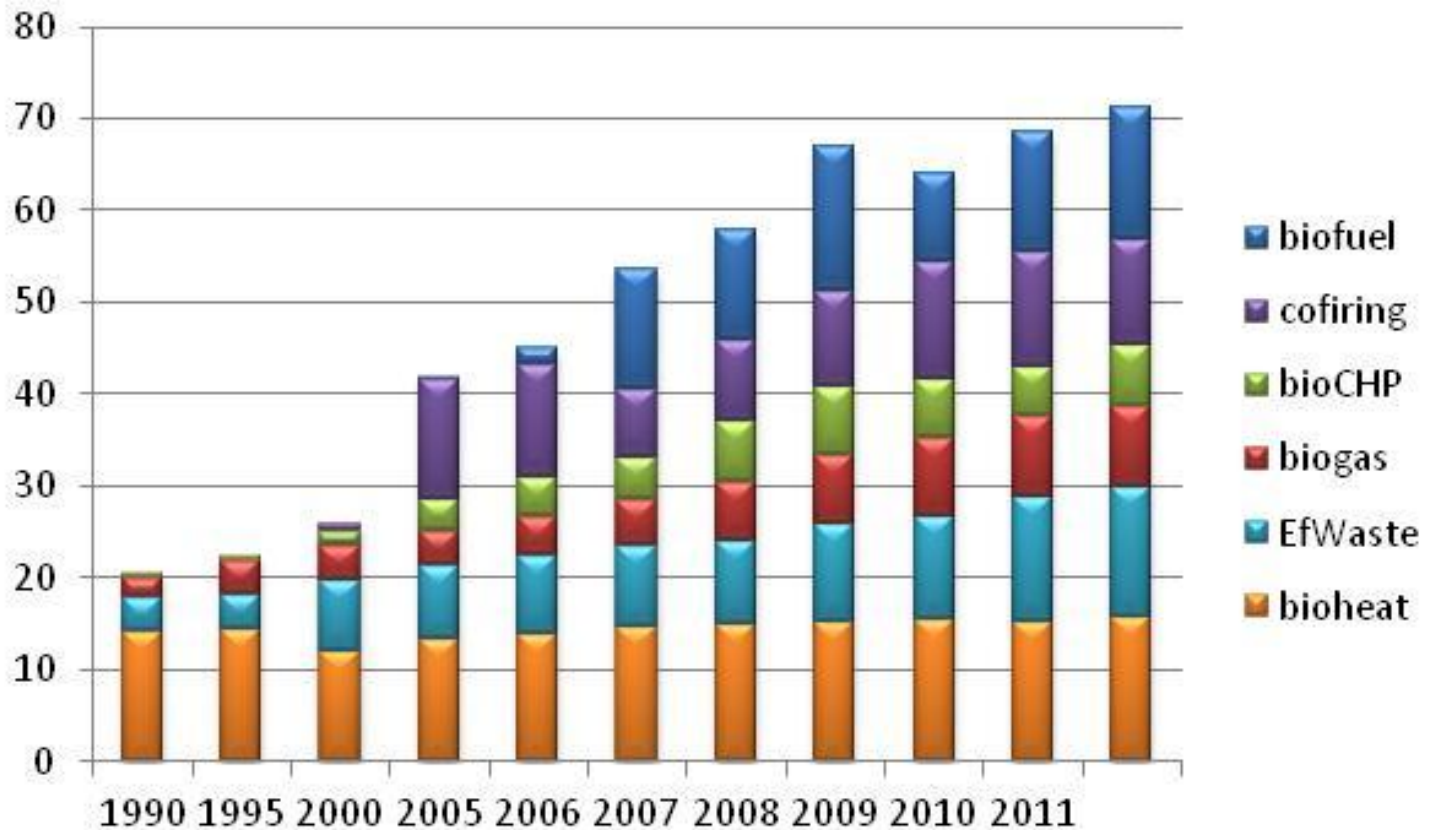


New Delhi, 3 - 4 February 2014



Bioenergy implementation Netherlands

- PJ



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Common Agricultural Policy

- Stop of Production quota
 - Sugar
 - Milk
- Open Borders
- Opportunities for increased production



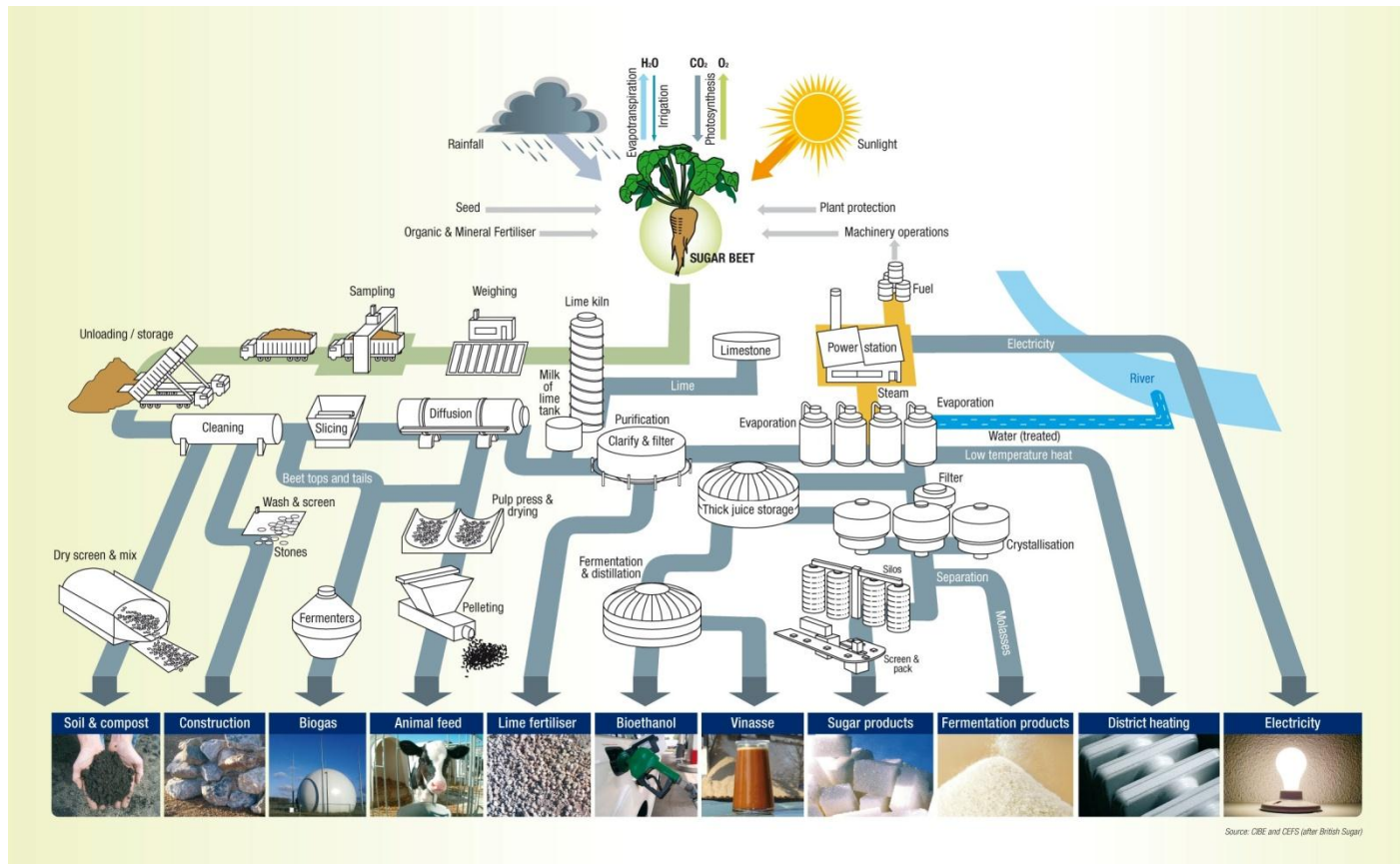
SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Sugar Beet for Biobased Economy



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



No Level Playing Field for Renewable Energy and Renewable Materials

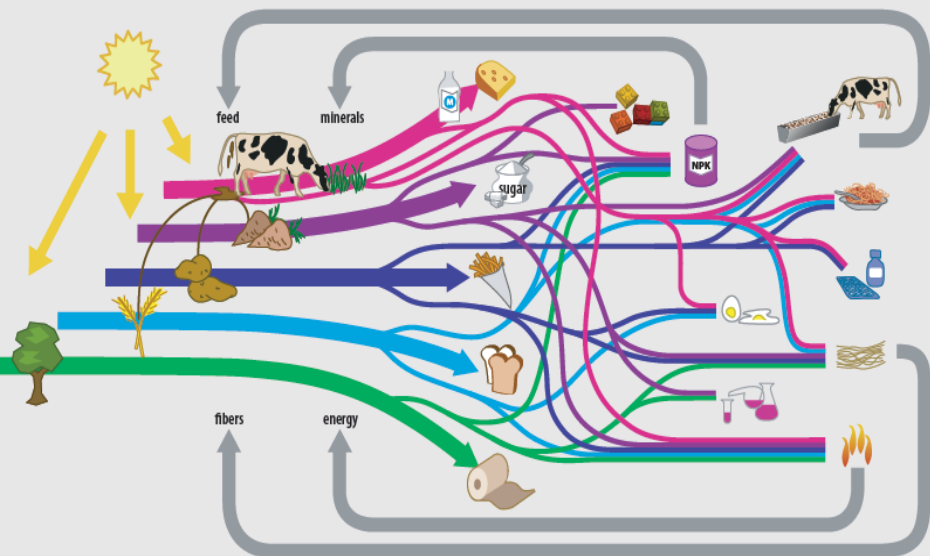
- Financial Support for
 - Renewable Energy
 - Research & Development
- No support for biobased materials and chemicals
 - > Need for action
- Public Procurement of Biobased Products





Netherlands Enterprise Agency

Conclusion



Source: Biomorf Infographics & Dutch Bio refinery Cluster



SAHYOG CONFERENCE AND BROKERAGE EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014



Conclusion

- Policy measures create economic opportunities for industry
- Integration: Energy, Waste, Agriculture, Products
- European Commission supports measures
 - Job Creation, Rural Development
 - Sustainable Development,
 - Cleaner Environment
- What Policies in India do support this?



SAHYOG CONFERENCE AND BROKERAGE
EVENT ON BIO-ECONOMY



New Delhi, 3 - 4 February 2014