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The International Industrial Biotechnology Network (IIBN)

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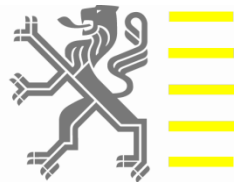
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What?

A *South-South / North-South* Cooperation **Network** for the promotion of industrial biotechnology for sustainable development

Mission

Assist **sustainable industrial development** of emerging economies and developing countries through advanced biotechnologies and related techniques

Activities

- Develop **demonstration projects** in DC's or emerging economies involving North-South collaboration (role of Flemish institutions/Companies as technology provider)
- **Networking**: brokering N/S linkages

Use science based solutions to address global challenges

Food



Health



Natural & Environmental Challenges



Broader context

- The Knowledge-Based Bio-Economy (KBBE)
 - envisions a future society no longer wholly dependent on fossil fuels for energy & industrial materials;
 - emphasizes renewable resources & sustainability
 - global trend
- Trends to 'domesticate' (bio)technologies in South, esp in health sector
- *South-South entrepreneurial collaboration in health biotech. Nature Biotechnology 28:407-416. 2010*
 - market access – primary reason for initiating collaboration
 - 'definitely scope for third parties to take a more proactive role in initiating collaborations..'

Examples of KBBE *today*

Energy:

Production of biofuels from renewable resources to complement fossil fuels:
All major oil companies now invest in biofuel production; eg ExxonMobil
\$US 600 M to produce biofuels from algae (Science 2009. 325: 379)

Primary production (food/feed):

Suite of modern biotechnologies are now used in plant and animal
breeding/protection forestry and fisheries (GM, MAS, diagnostics, etc)

Industry:

Production of plastics, enzymes via biotechnological processes from
renewable sources

Health:

Production of recombinant vaccines, diagnostics using modern biotechnologies

Marine biotechnology:

- Eg use of algae for industrial applications in bio-fuel, biomaterials & feed sectors (major R&D area globally)
- TransAlgae (Israel):
 - Company involved in development of algae for fish feed
 - Member of IIBN



Thank you



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