

On a mission in Brazil



Can sugar cane form the basis of a sustainable chemical industry? A group of Dutch researchers and companies visited Brazil, the largest sugar producer in the world, to investigate that option. Collaboration must be timely because the competition is lying in wait.

Energy production in Brazil is based on renewable sources for the largest part, including sugar cane. For more than thirty years a large part of the sugar cane has been processed into ethanol for fuel and chemical products and the rest of the plant is used to generate steam and electricity. Brazil ranks worldwide as an outstanding model in the field of renewable resources linked to an impressive infrastructure for processing and transport. Countries on the way to a more sustainable basis for their energy needs could learn a lot there because the demand for sustainable resources and alternatives to crude oil are increasing. The largest sugar producer in the world has been visited in the framework of the B-Basic programme.



Talking together

In the last few years three missions to Brazil were undertaken by representatives of the B-Basic consortium. The first visit to the South American country was aimed mainly at gaining more insight into the way biotechnological and chemical education and research is organised, and how the knowledge centres and Brazilian biotechnological industry work together. The principal destination was the university of Campinas, a town about 100 kilometres northwest of São Paulo, with whom the TU Delft runs an exchange programme. An important result of the first trip in 2004 was a cooperation agreement between NWO and its Brazilian counterpart FAPESP from São Paulo state. The second visit was part of the Dutch trade delegation from Economic Affairs, in which the emphasis lay on chances for cooperation between Dutch and Brazilian biobased industrial chemistry. The third mission was a joint venture by B-Basic and the Biobased Raw Materials Platform and was organised in collaboration with Brazilian partners. The mission with the theme of 'Biobased Economy for Sustainable Energy and Chemicals', the BEST mission in short, visited the various companies, institutes and universities who play a role in the production of biochemicals and bio-energy.

Working Together

The summit for the Dutch delegation was the 'Innovation in Biofuels' workshop, organised by the Brazilian Foundation for Innovation, UNIEMP. About fifty Brazilians working at universities, government institutions and in industry took part. As well as the necessary networking, the role of governments, legislation, finance and the transport of biomass and biofuels

were extensively discussed and, of course, cooperation in the future. The most important conclusion of the BEST mission was that there are big chances for cooperation the field of industrial biotechnology, but that urgency is called for as the competition will not wait. About ten sugar factories have already been purchased by the Japanese and Koreans and the rest of the international business world has also found the path to Brazil.



*Accompanying the Mission
TU Delft, TNO, WUR, DSM, Shell, SenterNovem (now Agentschap NL) and ECN.*



Biobased Raw Materials Platform
The Biobased Raw Materials Platform aims at replacing 30% of the fossil resources in the Netherlands with biobased raw materials by 2030 which would result in less CO₂ emissions and less dependence on crude oil, coal and natural gas. The platform has formulated five transitional paths for this aim which are routes to a biobased economy that will be actively stimulated by the platform. The first two relate to having enough biomass available, the last three relate to the processing.