Ministry of Development, Industry and Foreign Trade

Brazil

Strategies for the future of ethanol in Brazil - PAISS

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The disbursements to the biofuels sector over the last 10 years achieved more than **USD 23 billion**

Source: BNDES.
Innovation Support: PAISS in brief

What?
Joint plan (BNDES and FINEP) to finance innovation in the sugarcane-based biofuels and chemical sectors

Why?
To foster, select and finance initiatives (business plans) that focus on developing, producing and commercializing new industrial technologies to process the sugarcane biomass

What did it offer?
Coordination of the efforts between the BNDES and FINEP, focusing on specific research lines: BRL 1bn (~ USD 500m)

What were the focus points?
i) Cellulosic Ethanol; ii) Other Biofuels, including biojet; iii) Biochemicals

What is next?
A new edition of PAISS focused only on agricultural innovations!

Source: BNDES.
Brazilian government to double planned investment to $988M through 2014 in biobased technologies

In Brazil, the Brazilian national development bank, BNDES, and the research funding arm, FINEP, announced a plan to double propose investment in biofuels and renewable chemicals and provide up to $988 million to the sector in 2013 and 2014. Dow Chemical, DuPont and Braskem are among those who have announced projects with a cost of up to $1.5 billion – and Carlos Cavalcanti, head of biofuels at BNDES, told Business Week at World Biofuels Markets (Brazil) that the agencies are indeed likely to concentrate funding in a few projects, which all focus on developing value-add products from sugarcane.

35 Business Plans approved will result in a potential investment of BRL 3.4 bn (~USD 1.7 bn), which represents a dramatic increase.

Source: BNDES.
Due to PAISS cellulosic ethanol projects and the delay or standstill of US and EU projects, now Brazil can celebrate a quite different scenario in the race for advanced biofuels.

Source: FO Licht, Nyko et al (2010) and BNDES.

(*) Before-PAISS estimates refer to 2014.
PAISS: Promoted Initiatives

Plantas Comerciais

GranBio
- Capacidade: 82 milhões de litros/ano
- Localização: São Miguel dos Campos, AL

PETROBRAS
- Capacidade: 40 milhões de litros/ano
- Localização: Usina Boa Vista, Quirinópolis (GO)

raízen
- Capacidade: 40 milhões de litros/ano
- Localização: Usina Costa Pinto, Piracicaba (SP)

Plantas Demonstrativas

CTC
- Capacidade: 3 milhões de litros/ano
- Localização: Usina São Manoel, São Manoel (SP)

ODEBRECHT Agroindustrial
- Capacidade: 3 milhões de litros/ano
- Localização: Usina Santa Luzia, Nova Alvorada (MS)

metso

VTT
Joint plan (BNDES and FINEP) to finance agricultural-technological innovation in the sugar-based ethanol sector.

The budget will allocate R$ 1.4 billion in loans, which includes all the traditional credit lines offered by the BNDES and Finep, as well as the variable-income instruments of both institutions, including non-reimbursable resources.

The aim of the PAISS Agriculture program is to accelerate the development of new technology to increase agricultural efficiency in the sugar-based ethanol sector and, consequently, boost higher gains in productivity in the medium and long term.

- New varieties of sugarcane - Emphasis on use of transgenetic improvements
- Machinery and equipment for planting and/or harvesting as well as collecting hay and/or waste
- Integrated systems for managing, planning and controlling production and innovative biotechnological apparatus for planting

Source: BNDES.
1. With the increase of domestic demand and consolidation of ethanol as a sustainable and competitive alternative energy, investment in innovative technology is paramount to guaranteeing Brazil's leadership in the biofuel industry.

2. The success of the PAISS program can be verified by the number of commercial plants scaling up new sugarcane by-products with ready-to-go technologies.

3. Now the priority is to foster R&D investments in agricultural technologies, including genetic improvement of sugarcane varieties and new machinery/equipments dedicated to sugarcane planting & harvesting.
Innovate to compete. Compete to grow.