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Bioeconomía en América Latina y el Caribe 2015

Latin America and the Caribbean Bioeconomy 2015



Santiago 7 y 8 octubre de 2015

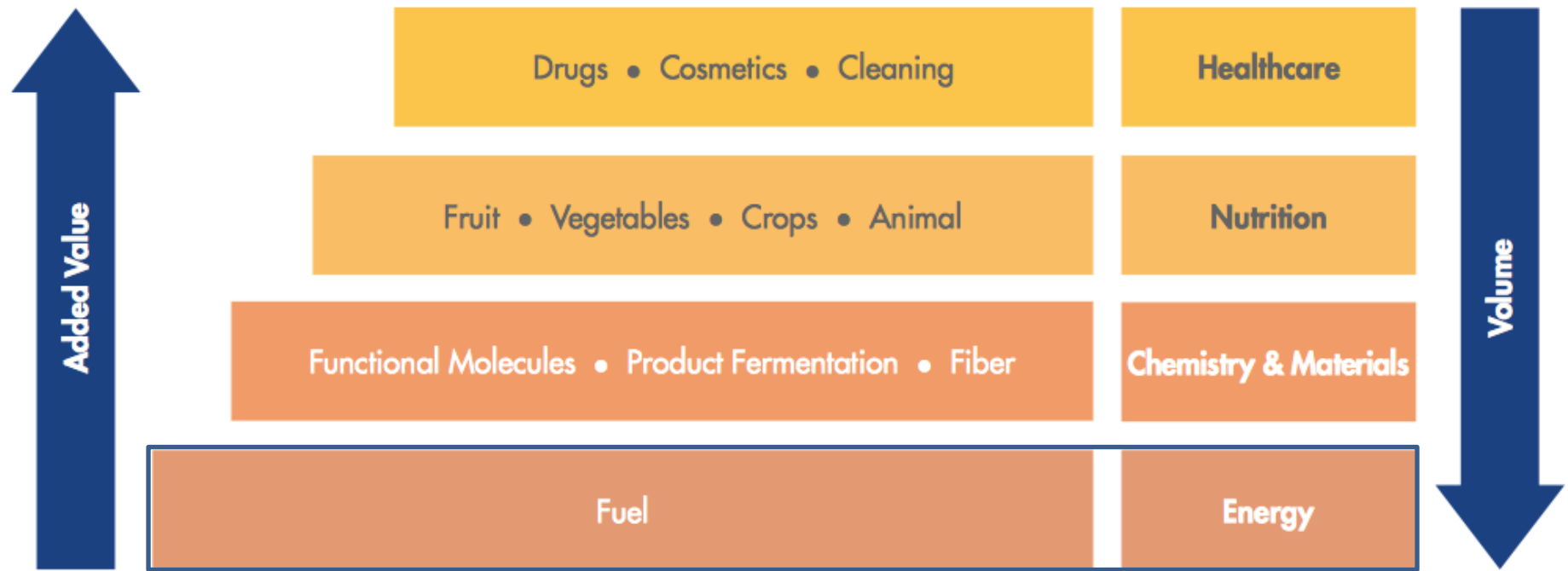


Session 2 / Sesión 2

State of the bioeconomy in LAC : a public policy perspective.



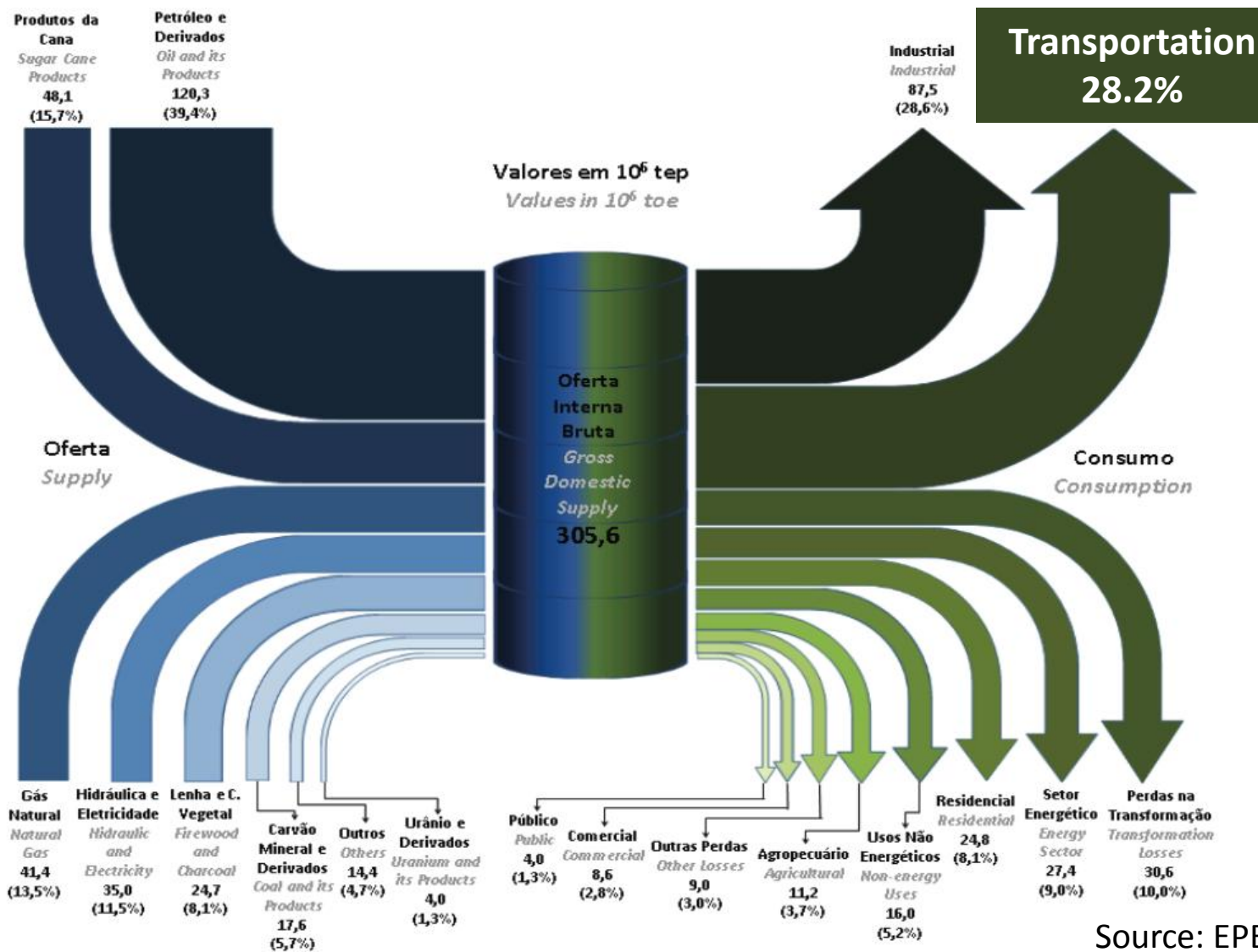
Context - The Strategy



Source: Harvard Business Review-Brasil, Confederação Nacional da Indústria. (2013).



Context - Brazil's Energy Flux



Source: EPE. (2015)

Policy Families

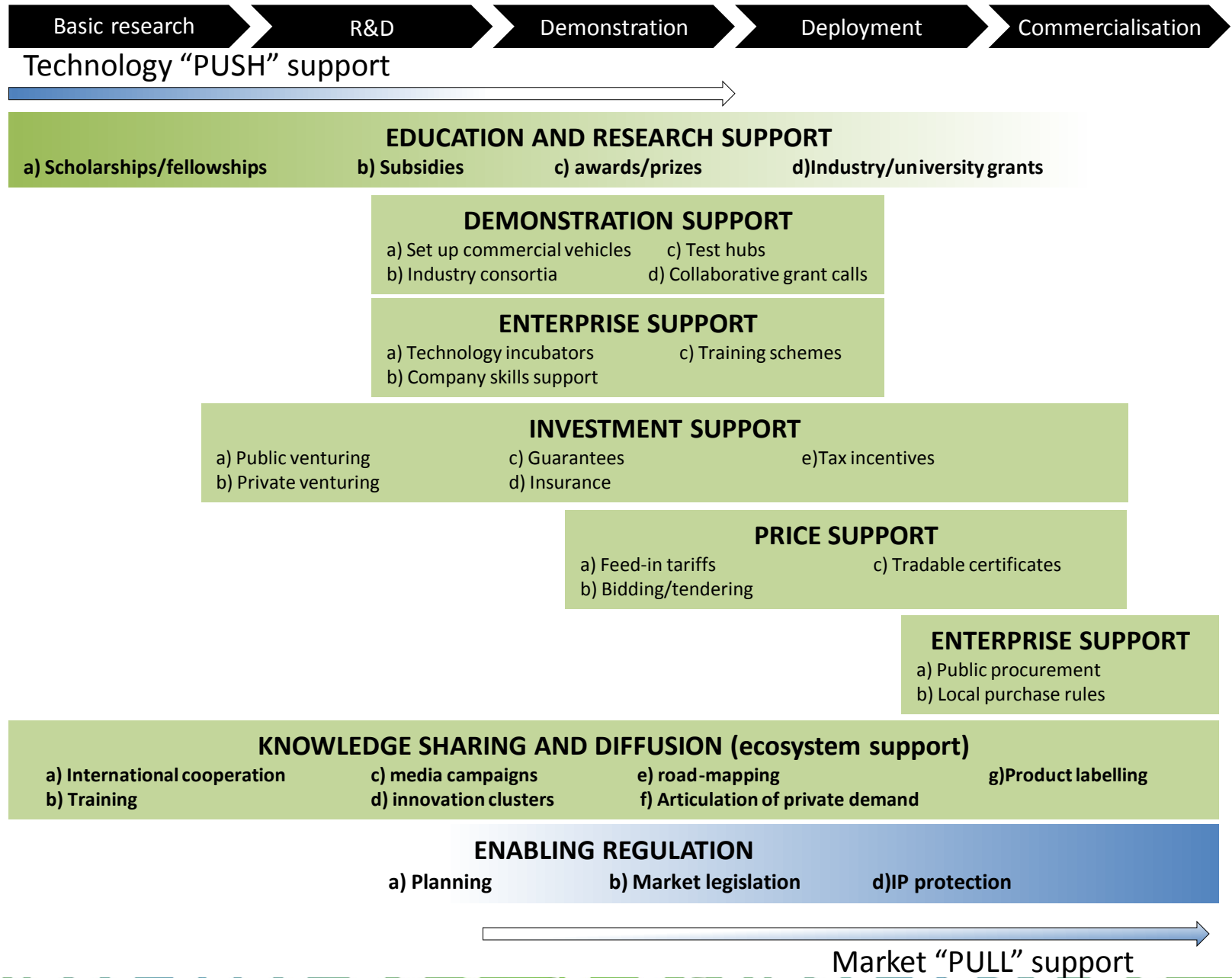
Technology-push – where the policy helps reduce the cost of research and development to drive new ideas and reduce the cost of the technology

Market-pull – where the policy helps create or increase market demand for the technology

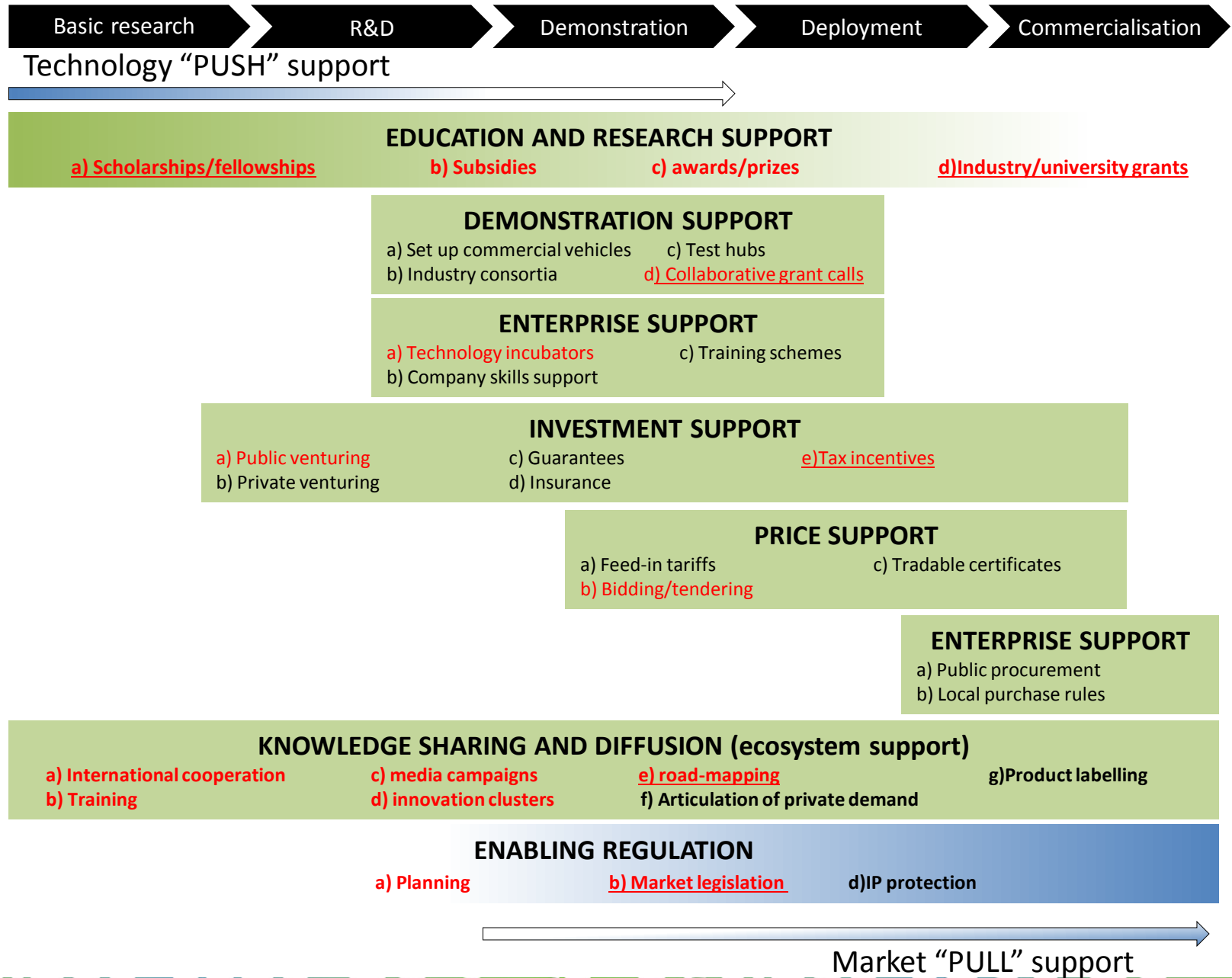
Enabling – where the policy addresses the barriers existent in the institutional environment to enable further innovation and deployment



Innovation Journey – Policies types



Policies types – Brazilian Practices



Main Policy practices

Scholarships/fellowships (TP)

Subsidies and Industry grants (MP)

Collaborative grant calls (TP)

Tax incentives (MP)

Planning (E)

Market legislation (E)



Policies and Programs

Scholarships/fellowships (TP)

- **Capes** and **CNPQ** funds

Subsidies and Industry grants (MP)

- **CNPQ** funds early stage research
- **FINEP** and **BNDES**: funds late stage refundable and non refundable at low interest

Collaborative grant calls (TP)

- PAISS: joint call of **FINEP/BNDES** to fund late stage research done in PPP. The program is dedicate to 2G Ethanol.
- Bioen: **Fapesp** grant program that fund exploratory research (up to demonstration) done in PPP. Industry must co-fund. Dedicated to biofues
- Embrapii's Biotec call: Creation of Embrapii's units (deployment and commercialization)



Policies and Programs

Tax incentives (MP)

- Tax reduction for production and distribution of biofuels

Planning (E)

- National Plan of Energy (PNE) - **MME**
- Low Carbon Agriculture Plan - **MAPA**
- Climate Change National Plan – **MMA**
- CGEE studies

Market legislation (E)

- Mandatory blend of biofuels
 - Ethanol up to 27.5%
 - Biodiesel 7%



Strategy actions

PróAlcool

- Brazilian program to promote bioethanol usage

PNPB

- National biodiesel production & use program



Main Institutions – Sectors class associations

CNI - National Confederation of Industry

IBÁ – Brazilian Institute of Trees

ABBI – Brazilian Association on Industrial Biotechnology

Unica – Union of sugarcane industry



Research Infrastructure

Institutions	Pre-treatment	Hydrolysis		C5 Fermentation	Pilot plant	
		Enzymatic (HE)	Acid (HA)		HA	HE
CTC	X	X				X
Embrapa/CNPAE		X				
Dedini	X		X		X	
Novozymes		X				
CTBE	X	X		X		X
Petrobras	X	X		X		X
Rede de Hidrólise	X	X		X		X

Source: adapted from BNDES (2015)



Obrigado!
Thank you!
Gracias!

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