



Global Agribusiness Forum 2016

Agriculture of tomorrow: doing more, with less

Panel 4: Energy Agriculture as Development

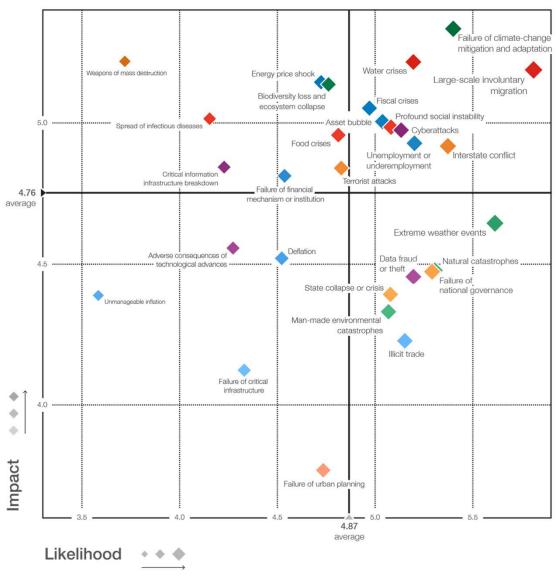
Factor: The contribution of Ethanol

São Paulo • July 4th, 2016





Global warming is the biggest threat to the future of the world, according to World Economic Forum Global Risk Report 2016



Costs to mitigate:

Last year's cost to mitigate CO2 emissions in the world was US\$3,7 trillion or close to 3% of the world GDP

Categories

- Economic
- Environmental
- Geopolitical
- SocietalTechnological

Source: Global Risk Perception Survey 2015, The Global Risk Report 2016 - 11th. Edition, World Economic Forum





The Paris Agreement: A historic turning point on climate change

188 countries agreement: global warming < 2º above pre-industrial levels.

62 countries have biofuel legislation (mandatory or voluntary)

37 countries mentioned specific commitments to use biofuels in their INDCs³

It means:

A clear recognition of the risks of climate change

The urgency of action and the high cost of inaction

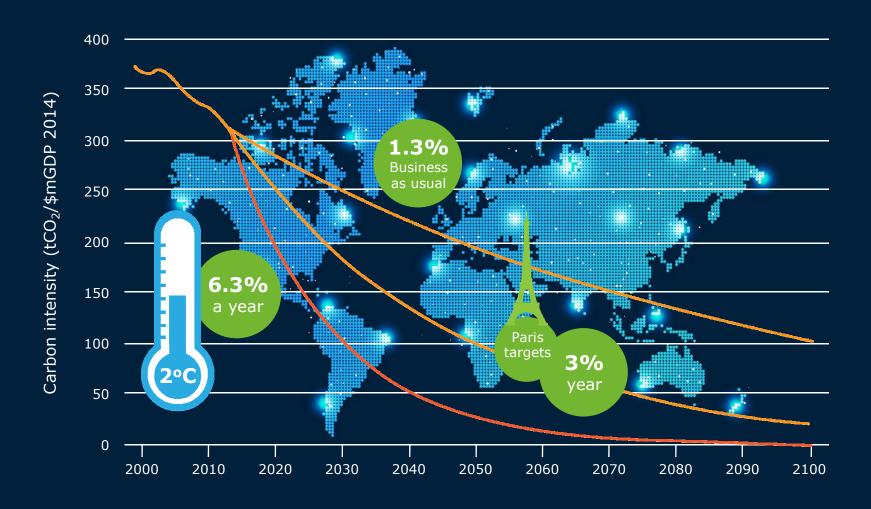
New business opportunities

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¹ According to UN oficial event on April 22nd, 2016



Pathway to 2°C

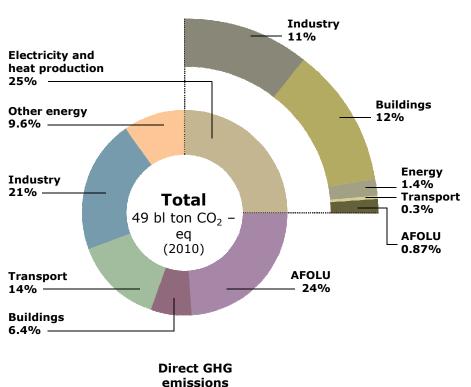




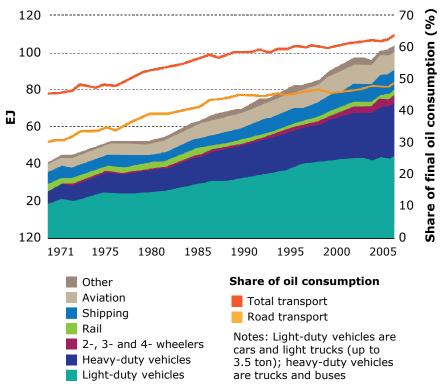


Transport has a relevant share in global GHG emissions

Greenhouse gas emissions by economic sectors



Evolution of global energy consumption per transport mode since 1971



In 2010, the transport sector was responsible for approximately 14% of global GHG emissions

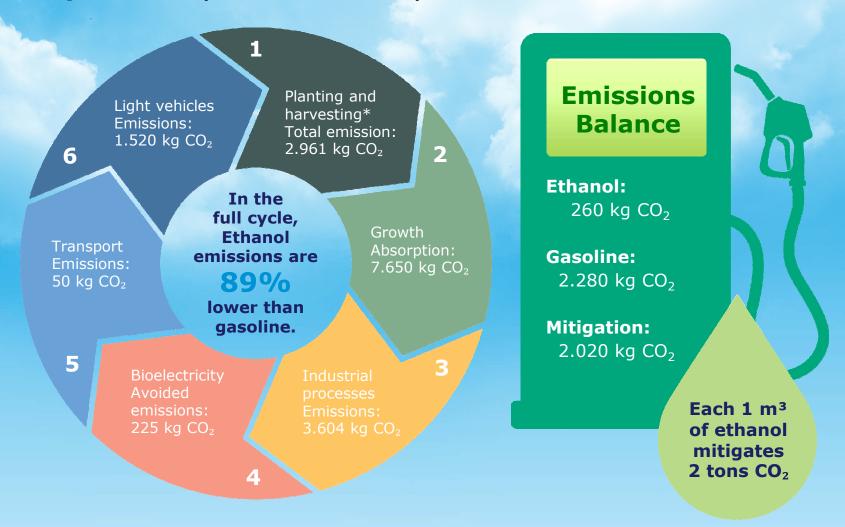
Fossil fuels are responsible for **63% of energy consumption** of all transport modes



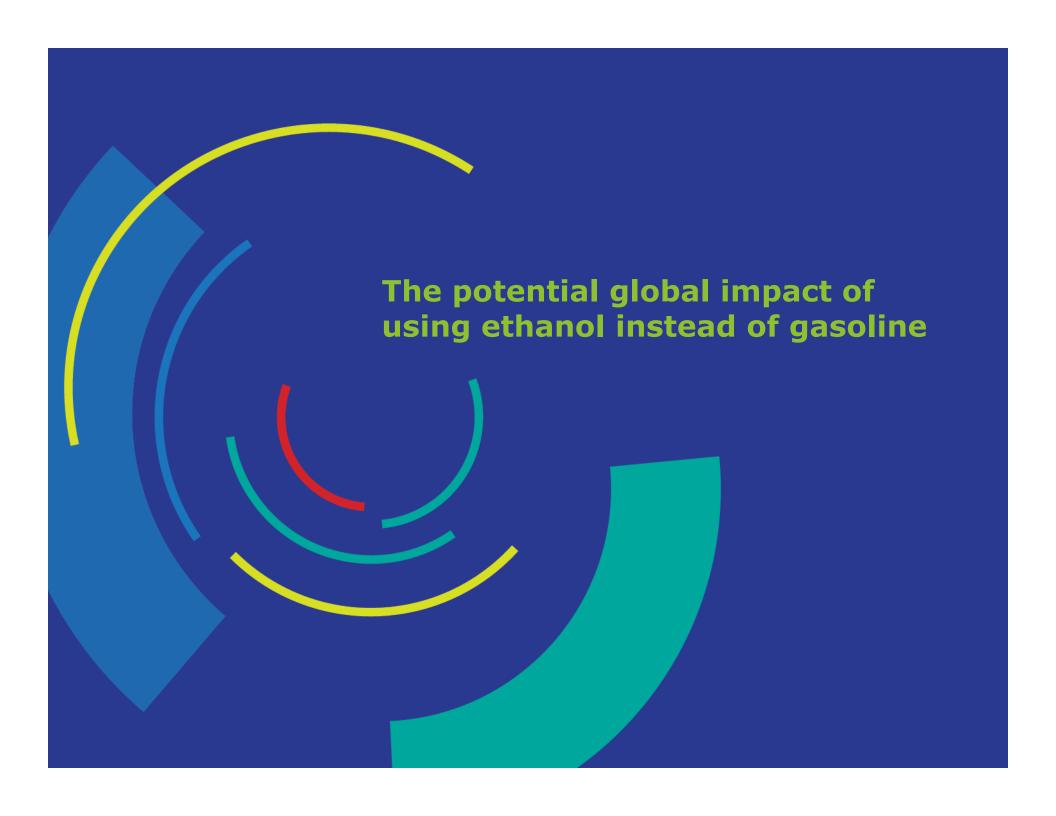


Ethanol Life Cycle Analysis (LCA) – GHG Emissions

Ethanol generates environmental benefits from the field until the end use, absorbing most of the CO₂ emitted in its production and consumption.



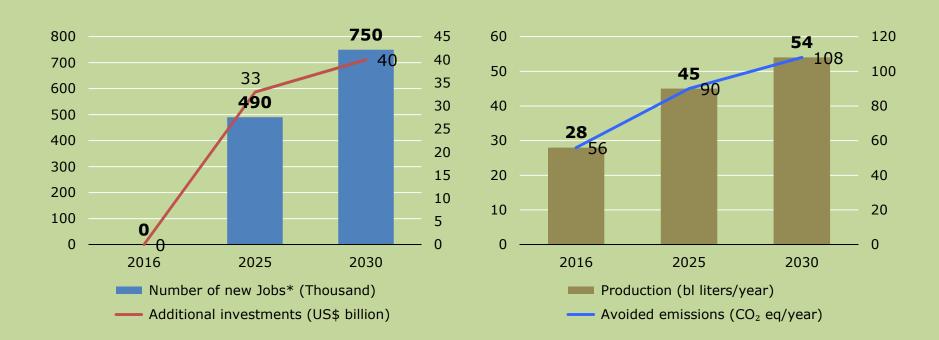
^(*) Considering 50% of mechanized harvest and 50% of manual harvest. Data refer to the emission of CO₂ per thousand liters Sources: Isaías Macedo, UNICAMP; Joaquim Seabra, PhD thesis, Unicamp, 2008.





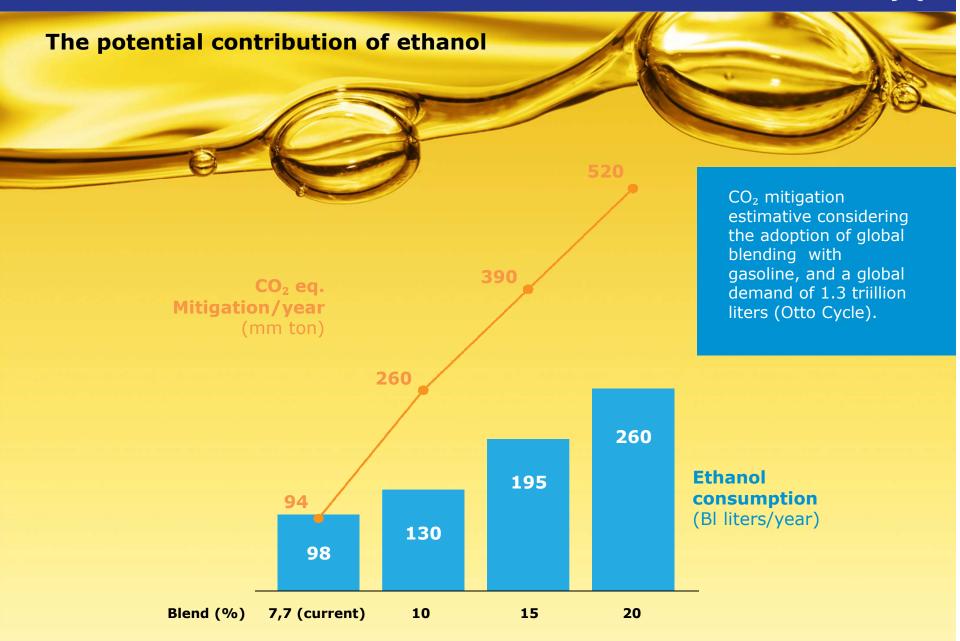
The potential contribution of ethanol

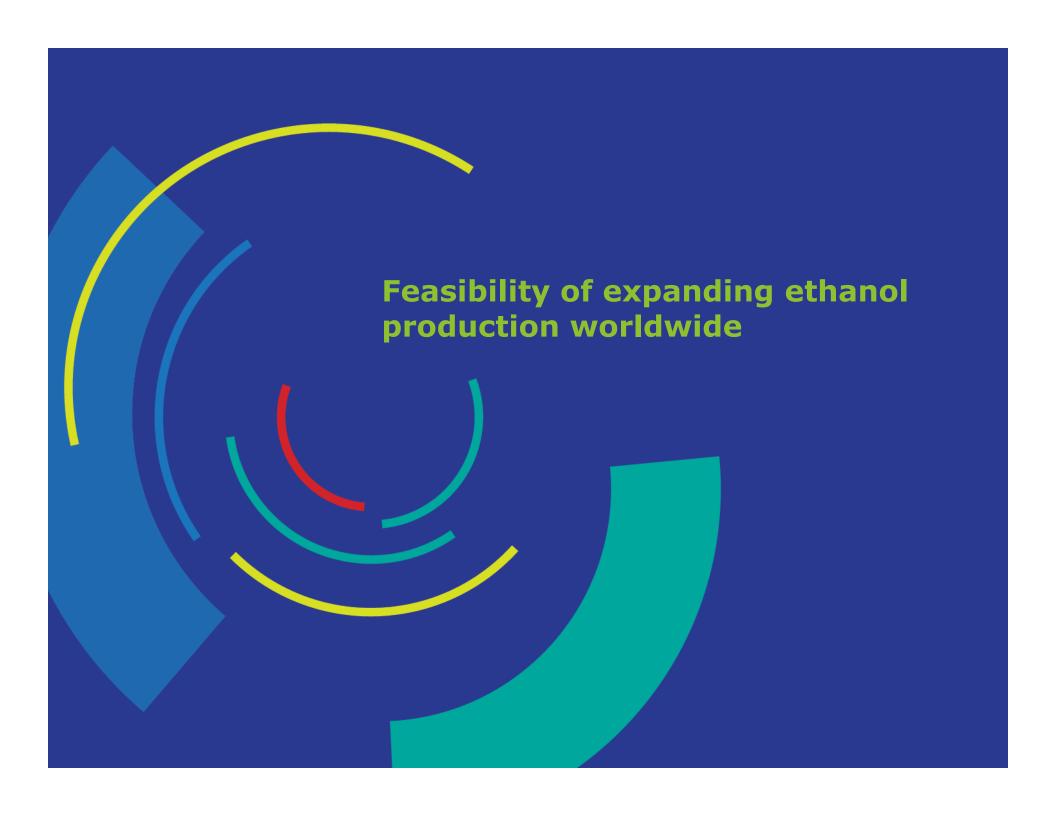
Brazilian case (According to Brazilian INDC – COP21)



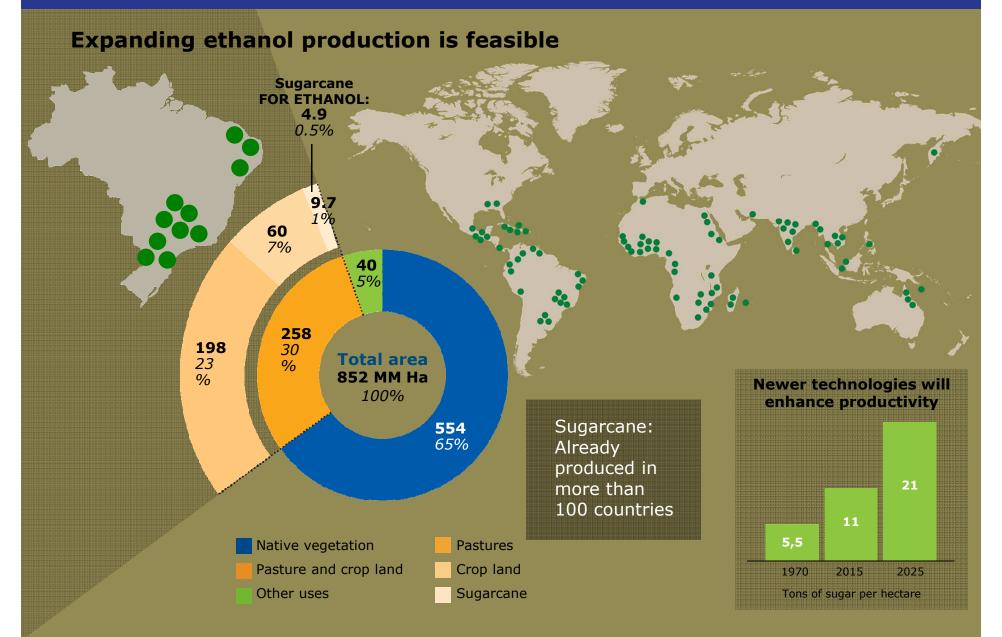
If Braziian etanol production reach 45 bl liters by 2025 and 54 bl liters by 2030, avoided emissions will represent almost 1.5 billion ton of CO₂ eq. in the next 14 years**



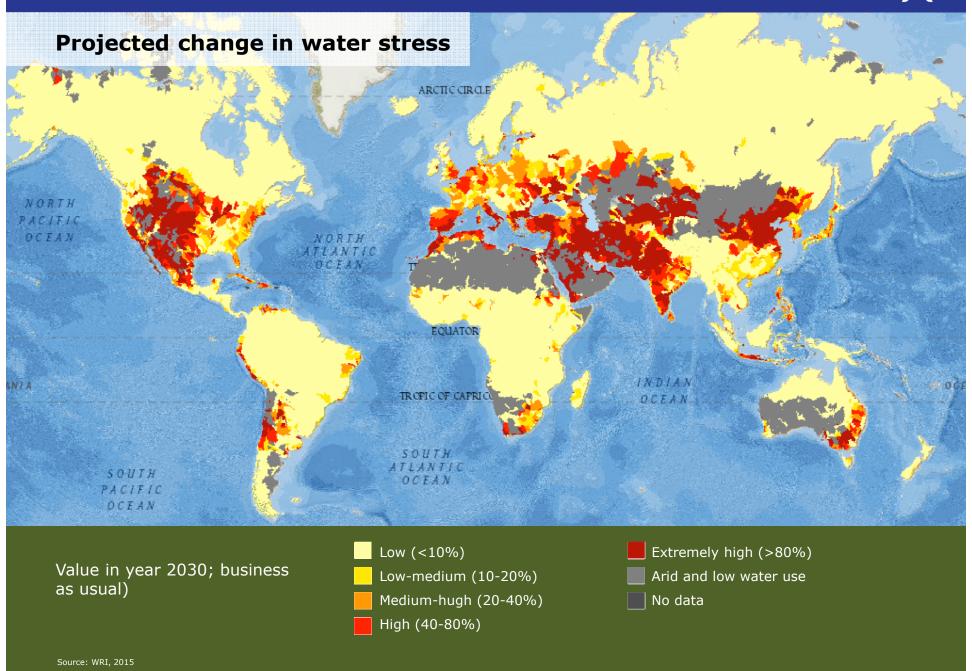








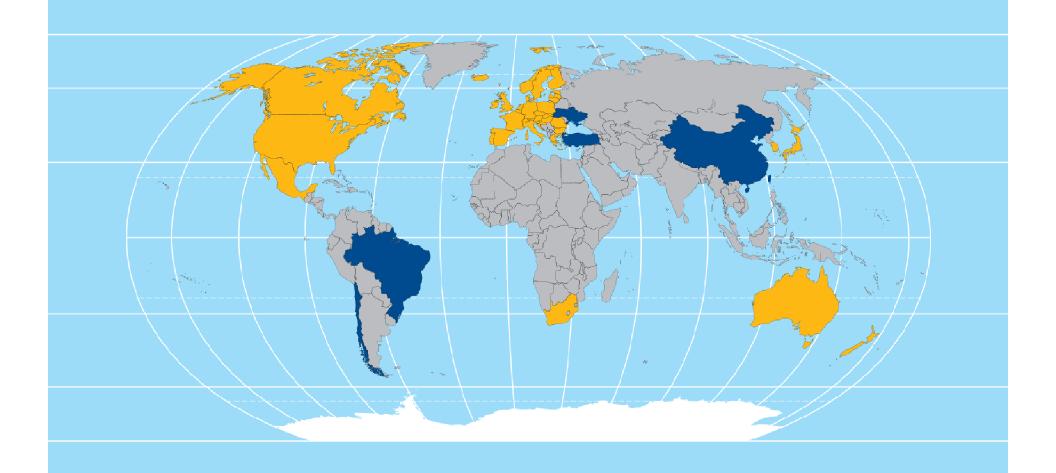






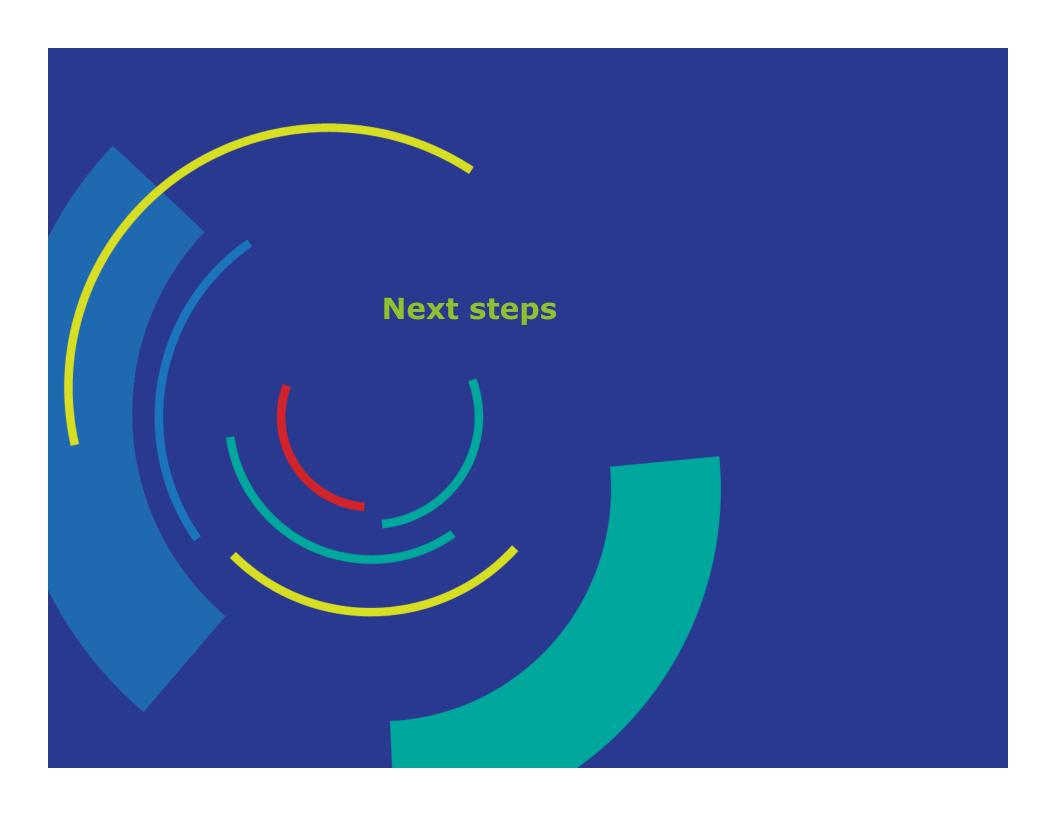


Existing, Emerging, and Potential Carbon Pricing Instruments



Implemented or scheduled for implementation

Under consideration





Next steps

