

The Importance of a Bioenergy Policy Framework

Global Bioenergy Partnership (GBEP)

Working Group on Capacity Building (WGCB)

ECOWAS Bioenergy Forum

Bamako - Mali, 19-22 March, 2012

What are the challenges for developing countries in the years ahead?

- Build an agriculture system that can deliver safe, reliable, and affordable food for their people.
- Build the infrastructure than can provide safe, reliable, and affordable energy to meet their energy needs.

AND...

Some of the challenges for developing countries in the years ahead

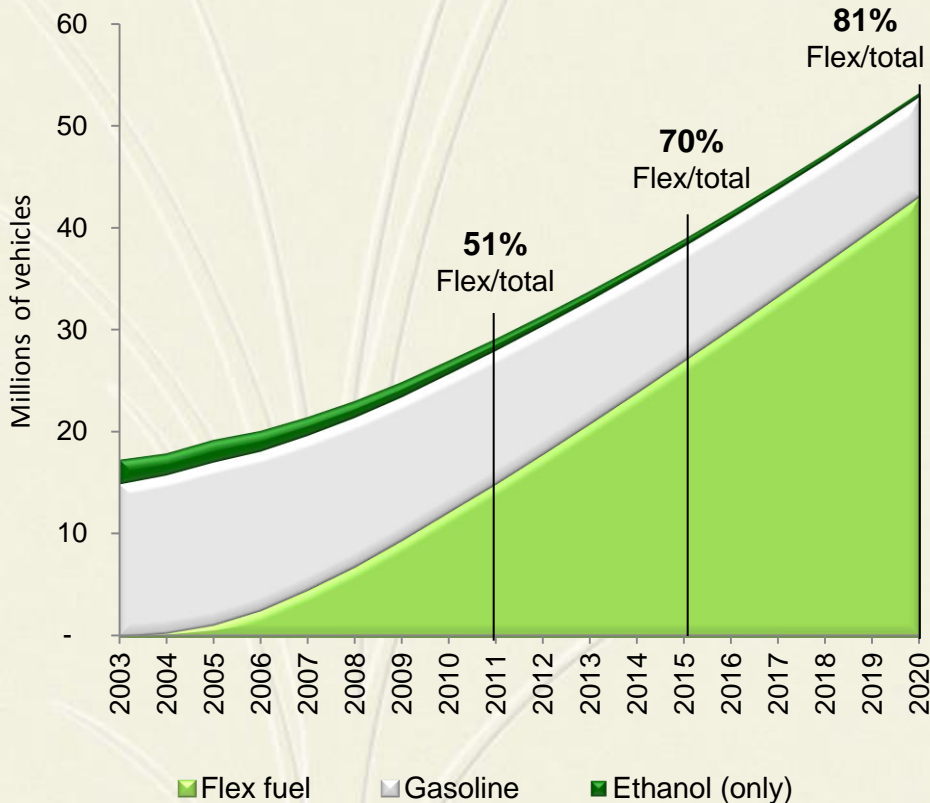
... do that in a sustainable way.

So, governments must implement public policies that integrate food and energy production and sustainable in all three pillars – economic, social, and environmental.

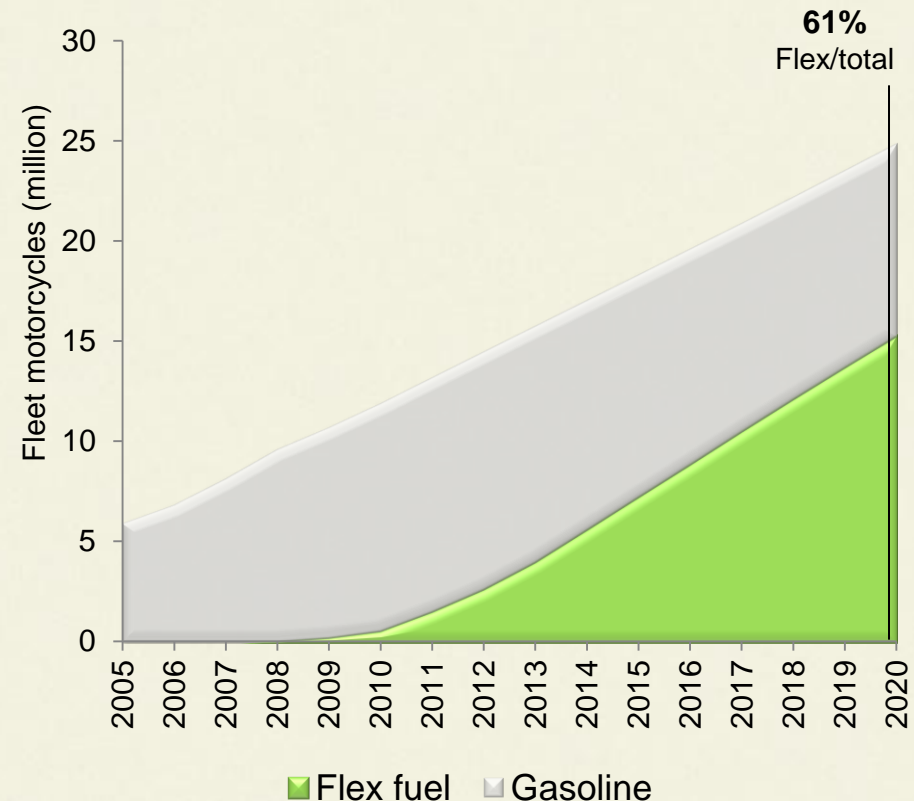
WHAT COMES NEXT

ETHANOL: ACCELERATED GROWTH OF THE FLEX FLEET

Estimate of the Brazilian fleet of light vehicles (Otto cycle)



Fleet of motorcycles: 53% of bikes sold, in the first half of this year, were flex



Brazil will need to double the supply of fuels (ethanol and gasoline) to attend the demand in 2020

GROWTH SCENARIO IN THE SUGARCANE SECTOR

	2010/2011	2015/2016	2020/2021
Sugarcane production (million t)	620	875	1,206
Sugar (million t)	38.0	44.8	51.1
<i>% Exports</i>	<i>(72%)</i>	<i>(73%)</i>	<i>(73%)</i>
Ethanol (billion liters)	27.4	44.3	70.0
<i>% Exports</i>	<i>(7%)</i>	<i>(8%)</i>	<i>(20%)</i>
Bioelectricity (GW average)	1.0	8.6	15.3
Share in Brazilian electric matrix (%)	(2%)	(13%)	(18%)

ASSUMPTIONS

- **Sugar exports:** Maintenance of Brazil's share of 50% in the global sugar market until 2020/21.
- **Ethanol domestic market:** 50% of ethanol share in the total fuel consumption by the light vehicle fleet in 2020/21.
- **Ethanol exports:** Gradual growth in ethanol exports, aiming to reach the estimated volume in the American mandate for "advanced ethanol" (13.5 billion liters in 2020/21).
- **Non-fuel Ethanol:** Projected demand of 5 billion gallons/year by 2020.

At the international level

- Expand the sustainable production of biofuels to other countries.
- Provide assistance to other countries in the identification and implementation of the most suitable set of incentive policies.
- Look into compatible and/or harmonized standards and codes (technical specifications and sustainability criteria).
- Reduce trade barriers to bioenergy products.

International Cooperation

- MoU Brazil-US to Advance the Cooperation on Biofuels of 2007
- More than 71 bilateral agreements on bioenergy
- MoU with UEMOA
- MoU with CEDEAO under negotiation.

International Standards and Codes

➤ Created in 2007, the Biofuels International Forum aims at the harmonization of technical standards for ethanol and biodiesel to the "commoditization" of these products

In this context, the "White Paper on Internationally Compatible Biofuel Standards" was elaborated, with the participation of Brazil, the United States and the European Union, in order to evaluate existing technical standards for ethanol and biodiesel

Brazil has worked to ensure that regulatory processes do not create barriers to future production and use of biofuels

White Paper

- It was widely recognized that biofuels were an emerging global commodity
- Motivations:
 - ❑ Economics - Agricultural invigoration
 - ❑ Environment - Climate Change mitigation
 - ❑ Security - Energy independence
- Agreed to establish two Task Forces in July 2007 (Ethanol and Biodiesel) to:
 - ❑ - review existing documentary standards
 - ❑ - identify areas where greater compatibility can be achieved in the short and long term (binning process)

White Paper

- Classifying existing specifications into three categories:

<i>Category A</i>	<i>Category B</i>	<i>Category C</i>
Specifications that are already quite closely aligned	Significant differences between parameters and methods, but which might be aligned by work on the products, standards, and methods	Fundamental differences, perhaps due to regional regulation, which are not deemed bridgeable in the foreseeable future

- Tasked to make recommendations

White Paper

- NIST (U.S.), INMETRO (Brazil) and IRMM (EC)
- have established plans for cooperative development of Certified Reference Materials
 - for calibrating instruments to a known and internationally accepted reference
 - - for validating the accuracy of measurement results

White Paper: main conclusions

- Bioethanol specifications are more closely aligned than biodiesel
- Key influencing factors:
 - Bioethanol is a single chemical entity
 - Biodiesel is not a single entity, but is FAME or FAEE
 - Different test methods are needed for FAEE
 - Use as pure fuel vs. blend stock results in differences in properties needed for adequate performance
- For bioethanol, there is no technical specification that constitutes an impediment to trade given the current situation (water content requirement in the EU may have an economic impact)

Emerson Kloss

Head of the Division for New and Renewable Energy Resources

Ministry of Foreign Affairs

drn@itamaraty.gov.br