International Standards and Certification

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Biofuels as energy commodities

- **Security of supply**: there is a need for more countries that produce and consume biofuels;

- **Compatibility/Harmonized Standards and Codes**: in order for biofuels to be traded as commodities, it is necessary to have internationally acceptable set of technical and environmental requirements;

- **Futures market**: liquid biofuels must be traded in the international commodity markets, with the establishment of futures markets.
Compatible Technical Standards

- **Tripartite Task Force on Internationally Compatible Biofuels Standards**: collective effort of experts from Brazil, the European Union and the United States to review and, in possible, harmonize technical specs of biodiesel and ethanol of the three regions.

White Paper on Internationally Compatible Biofuel Standards

- It is been used as reference for revisions of technical specifications in the three regions and elsewhere (South Africa, MERCOSUR, for exemple).
## Compatible Technical Standards – Ethanol

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<tr>
<th>Category A similar</th>
<th>Category B significant differences</th>
<th>Category C fundamental differences</th>
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<tr>
<td>Color</td>
<td>Ethanol content</td>
<td>Water content</td>
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<td>Appearance</td>
<td>Acidity</td>
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<td>Density</td>
<td>Phosphorus content</td>
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<td>Sulfate content</td>
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<td>Sulfur content</td>
<td>Gum / Evaporation residue</td>
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<td>Copper content</td>
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<td>Sodium content</td>
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<td>Electrolytic conductivity</td>
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The Sustainability Dimension

- Bioenergy alleged environmental impacts: soil erosion, water depletion, biodiversity loss, deforestation, GHG emissions.

- Bioenergy alleged social impacts: land grabbing, competition for land with food production, poor work conditions.

- Bioenergy alleged economic impacts: heavily dependent on subsidies, market protection.

Regulatory changes and certification schemes
Brazilian Certified Mills

- Bonsucro: 26 mills (~450 thousand hectares)

- ISCC: 4 mills
TC 28/SC 7 Liquid Biofuels
work on ethanol and biofuels test methods

PC 248/ Sustainability Criteria for Bioenergy
ISO 13065
ISO Standards Development Requirements

- ISO Guide 7 ‘Guidelines for drafting of Standards suitable for use of conformity assessment: “Test methods should be clearly identified and be consistent with the purpose of the standard. They should be objective, concise and accurate, and produce unambiguous, repeatable and reproducible results, so that results of tests made under defined conditions are comparable.”
The conclusion, based on the expertise of, and literature reviewed by, the work group, is that the ‘state of science,’ in terms of evidence-based research, is inconclusive or contradictory regarding indirect effects of bioenergy. The indirect effects of bioenergy may depend, inter alia, on factors related to the management of the sector (including public policy and production), and the local socio-economic and environmental situation of the specific area or group considered. **An economic operator should not be held responsible for indirect effects and variables that are outside the operator’s control.**
GBEP’s take on Indirect Effects

“In light of discussions on the issue and considering the state of the science on quantifying possible indirect land-use change (ILUC) impacts of bioenergy, it has not yet been possible to include an indicator on ILUC.”

Conclusions of the 12th meeting of the GBEP Task Force on Sustainability.

- Food Security: decision to address potential direct effects.
Why do ISO standards matter?

WTO Agreement on Technical Barriers to Trade
Article 2.4

- ISO standards, for its international nature, are deemed to be compatible with WTO TBT Agreement and therefore less vulnerable to a challenge at the WTO dispute settlement mechanism.
Why do ISO standards matter?

But that is not the whole story…

- **TBT Agreement Article 2.7:** “Members shall give positive consideration to accepting as equivalent technical regulations of other Members, even if these regulations differ from their own, provided they are satisfied that these regulations adequately fulfil the objectives of their own regulations.”
Equivalence as an alternative to Certification Schemes

- **Certification**: can be costly for small producers (create niche markets); may not generate incentives for all producers to maintain or improve their environmental practices.

- **Equivalence**: encompasses more producers, allows for considering local production systems characteristics, creates incentives for better regulations and public policies for the bioenergy sector, facilitates the development of bioenergy and food systems in Developing Countries.
Thank you!

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