

Making Sense of the ILUC Debate



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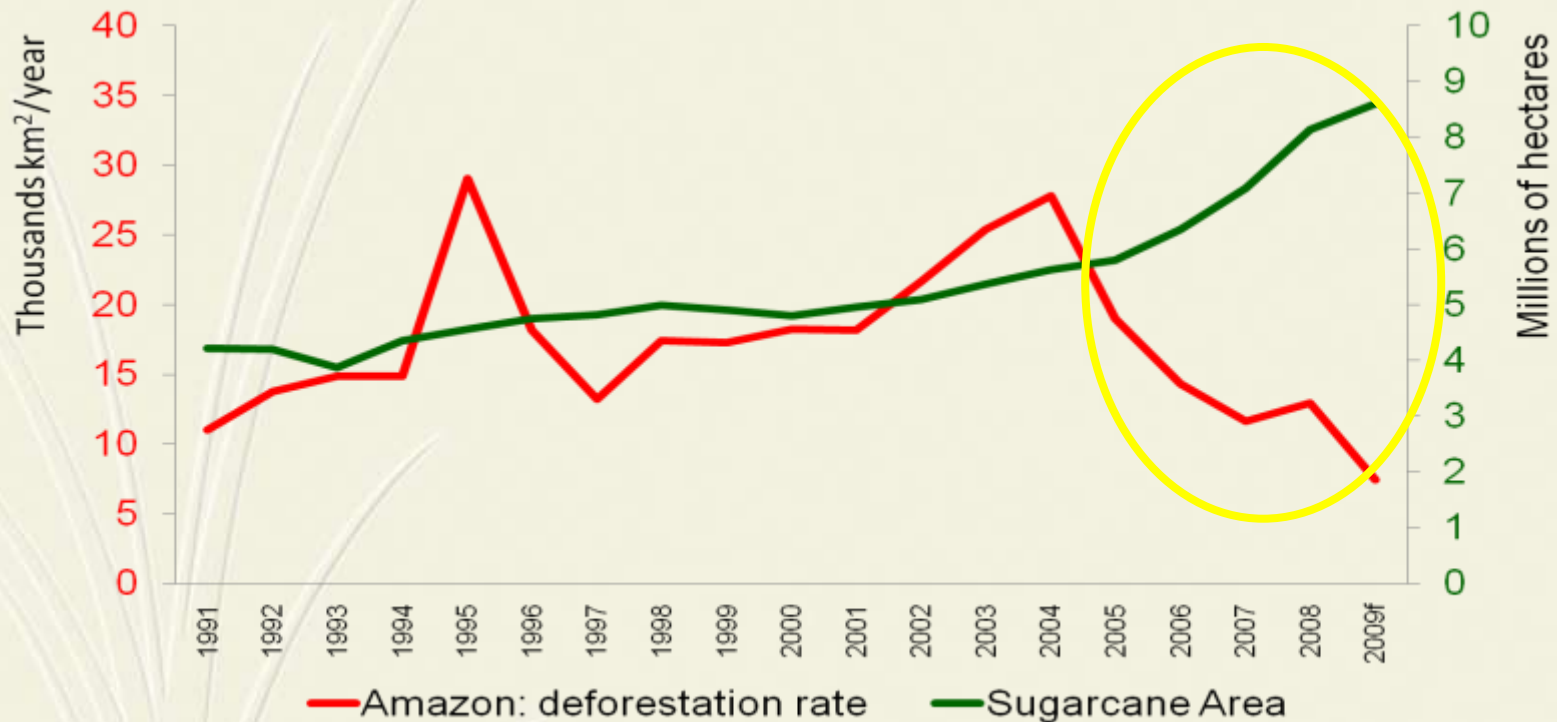
IPC Seminar on Carbon Standards in Agriculture and Trade: Session I on Biofuels
São Paulo – 26 October 2010

ABOUT UNICA

- **Leading sugarcane industry association**, representing over 120 producers and mills located in the Center-South of Brazil.
- Responsible for **more than 50% of the ethanol and 60% of the sugar** produced in Brazil.
- Emerging as a **leader in the generation of bioelectricity**, already meeting 3% of Brazil's electricity needs.
- **International presence** in Washington and Brussels to engage in constructive dialogue



Indirect Land Use Change ?



- ILUC for biofuels is in the public debate and being introduced in regulatory initiatives (EU RED and FQD, CARB LCFS, EPA RFS2)
- What are the best regulatory responses to tackle a phenomenon whose importance and magnitude is unknown today?

f = Forecasted sugarcane area

Sources: INPE (deforestation rates) and IBGE (sugarcane area). Prepared by UNICA.

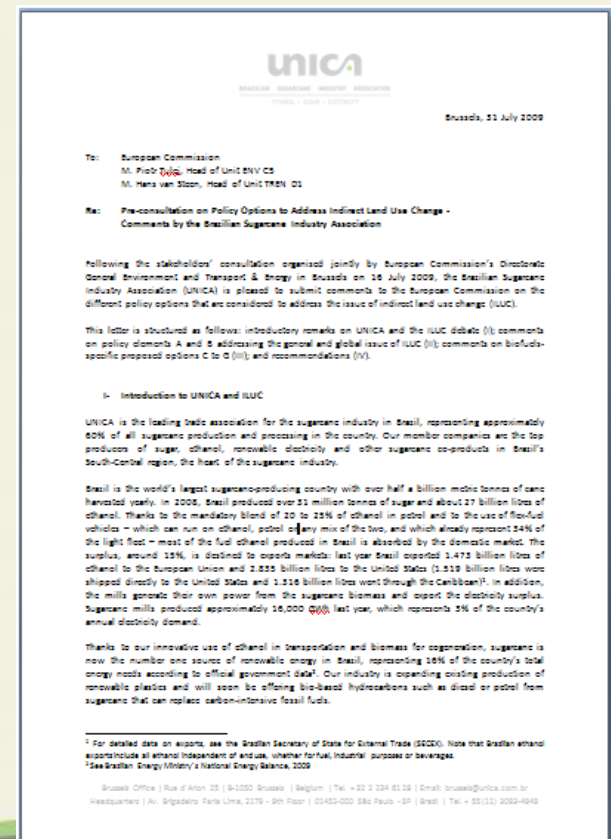
Main drivers for deforestation in Brazil

- Lack of structured and consistent national policy to control deforestation
- Institutional confusion and fragility - no clear rules, alphabet soup of federal, state and municipal legislation
- Lack of clear land titles
- Lack of resources to enforce legislation
- High value of free land
- Informal and illegal market for timber - unfair competition to sustainable models
- Poverty and lack of environmental education. The forest is a cash-crop for local communities
- Poor value added to forest products (environmental services, wood and non-wood products)
- Precarious governance structure of human settlements in Amazon



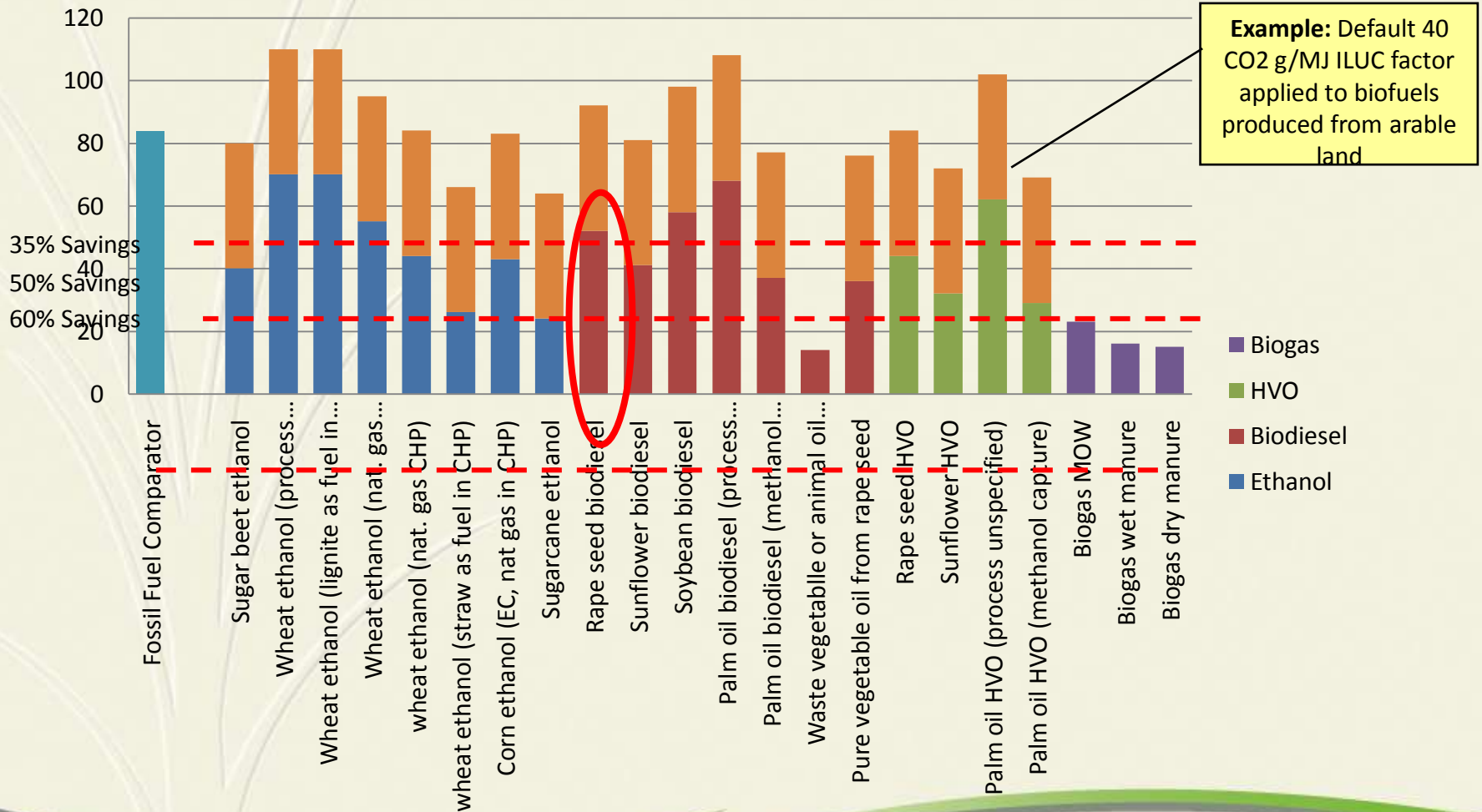
ILUC in the EU – State of Play

- Summer 2009 Stakeholders pre-consultation conceived ILUC as a global phenomenon, not limited to biofuels, and included policy options to reflect on this reality.
- The option to **foster international agreement to protect carbon-rich habitats** was backed by most consulted stakeholders as **is the only one that allows limiting or avoiding CO2 global emissions from any source, in any country.**
- The 2010 public consultation seeks stakeholders views on analytical work and only consider biofuels specific policy solutions, including an ILUC factor.
- UNICA to contribute till end of October.

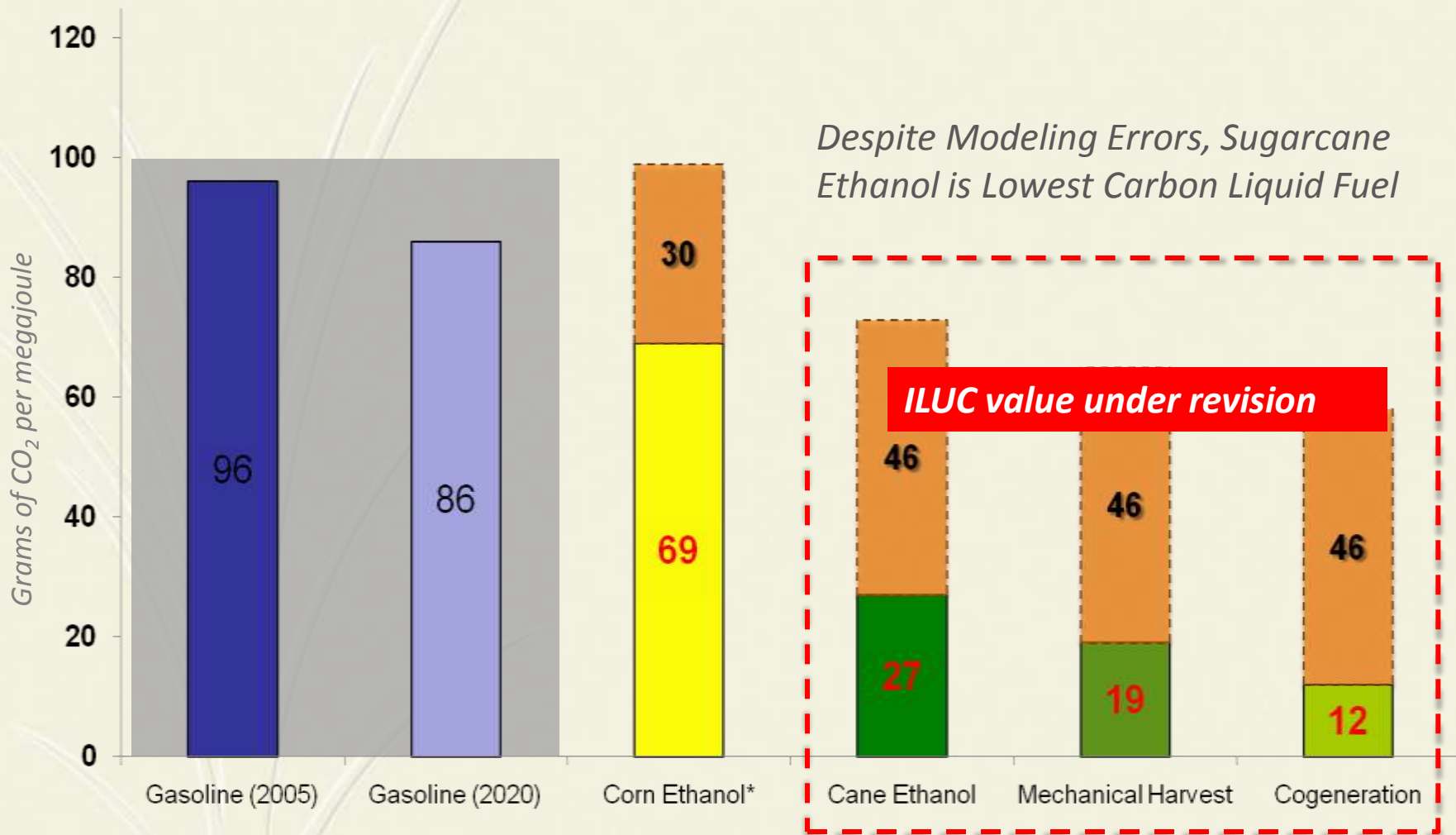




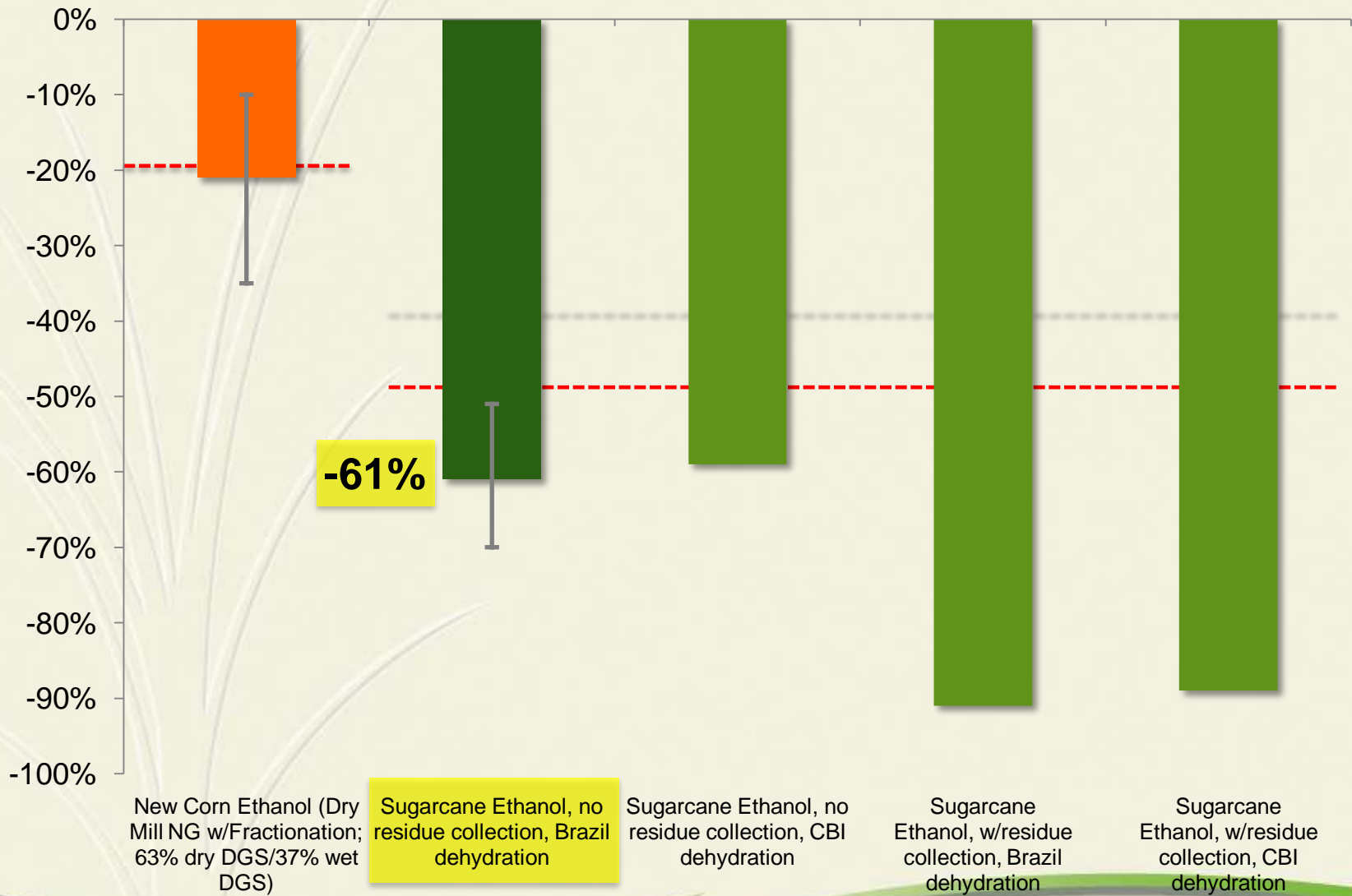
GHG implications of a random ILUC penalty independent of feedstock



LCFS including ILUC



EPA: RFS 2 including ILUC



Synthesis of ILUC modeling results for sugarcane ethanol

Study	IFPRI	JRC	EPA	CARB
ILUC emissions (in gCO ₂ eq/MJ)	17.8 – 18.9	56-359 (all EtoH)	3.8	46

Alarming differences in the calculations

- Science does not provide a sound understanding of the level of ILUC emissions that can be attributed to biofuels.
- With such difference between final results, something must be wrong with the science, proof that is not mature and **easily challengeable at WTO**.
- The reason of the discrepancies is to be found in the role and limits of the models and modelling exercises themselves.

Limits of current predictive models

- CGE models take given world economic conditions shocked with a volume of biofuels to create the perceived land conversion results
 - Unfit for world changing economic conditions, not for shifts in policies, weather, social variables, assume zero innovation, etc.
 - Do not compute use of degraded, marginal, or idle land
 - Unable to integrate recent and evolving science
- Predictive modeling has high degree of uncertainty
 - Small bias in input parameters lead to large errors: the more complex the model is, the less accurate results are
 - Need for accurate data vs today's use of unrealistic macrodata
 - Models gives indications of changes from simulated scenarios. Modelers avoid putting too much weight or credence on precise numbers
- Do not define responsibilities:
 - Impossible for industry to use as management practices
 - Uncertain for policy makers

Conclusions

- **Current models are complex, subject to numerous assumptions, and not fit for policy recommendations**
- **A penalty based policy would not reduce ILUC but simply run the risk to disqualify existing biofuels based on immature science, while the scope of the problem goes well beyond the competences of the industry.**
- **Recommendations (because ILUC can only be tackled by public policies)**
 - **Consistent policies to fight deforestation**
 - **Encourage/recognise land use planning (e.g. agro-ecological zoning in Brazil) and use of land which is available, suitable and does not displace other crops, e.g. degraded lands**
 - **Promote biofuels with high environmental (GHG) performances and high productivity**
- **Don't sacrifice biofuels which have a real potential to mitigate climate change and enhance energy security on the basis of unproven hypothesis that are legally questionable ! If we are concerned by the protection of carbon-rich habitats, this is what we should be focusing our efforts on !**

The Unica logo is rendered in a stylized, lowercase font. The letters are white with a dark grey shadow on the bottom half, giving them a 3D appearance. A small green sphere is positioned at the end of the 'a'.

Thank you !

www.unica.com.br/en

Brazilian Climate Change Mitigation Actions

- Announced in Copenhagen in December 2009, the Brazilian national action plan on climate change includes
 - Reduction in Amazon and Cerrado deforestation
 - Restoration of grazing land
 - Integrated crop-livestock system
 - No-till farming
 - Biological N₂ fixation
 - Etc.
- Expected to provide a 36.1 to 38.9 % reduction compared to the projected emissions of Brazil by 2020.