



# Biomass Soup! Biodiversity, Sustainability, Certification, and ILUC

9<sup>th</sup> CONCAWE Symposium

14-15<sup>th</sup> March 2011

conservation of clean air and water in europe

- Sustainability is based on three pillars and refers to social, economical and environmental criteria.
- The directive on the promotion of use of energy from renewable sources (RED) focuses on environmental criteria.



- Only biofuels that fulfill RED criteria are eligible for fiscal support and mandates.
  - 2 types of criteria

Origin (RED 17.3 to 17.6) : biofuels must be produced with biomass that do not alter the environment (protection of biodiversity, protection of land with high carbon stocks,...)

➔ Necessary to trace the origin of biomass

- □ GHG savings (RED 17.2) : biofuels must have better GHG footprints than fossil fuels (from -35 % up to -60 %).
  - Necessary to aggregate GHG emissions (direct and indirect) from the field up to the fuel consumption.
  - → Some guidance and calculation tools are in the RED

Additional elements will be reported (protection of soil, water, absence of child labor,...)

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- Three tools for the demonstration:
  - 1. Voluntary schemes (private initiative): will apply in all member states once approved by the EC
  - 2. National systems: can be used by other MS if they agree to do so
  - 3. Bilateral agreements with foreign countries (not an immediate solution).
- Standards are very useful to get some convergence and additional guidance. They can be used by national systems or voluntary schemes. PREN 16214 (CEN standard under public consultation) is referenced on the transparency platform. It provides a framework for:
  - Chain of custody,
  - Terminology,
  - Environmental aspects,
  - GHG calculation.

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## **Chain of custody**



- Use of voluntary scheme(s) / national system
- Possible reference to PRFN 16214

Independent audit (RED requirement)

- Demonstration of compliance must rely on responsibility of each > economic operator that belongs to the chain of custody.
- Blenders and fuel suppliers receive a finished product with sustainability > properties.

Blenders and fuel suppliers are placed under the control of Customs.

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## **GHG** savings



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### Direct land use changes

- Conversion of use of land (from forest to crop,...).
- DLUCs are visible : they can be monitored/measured/prevented.
- DLUCs are covered by the RED.

### Indirect land use changes

- Assumption that one ha used to produce biofuel oriented biomass will have to be replaced by another additional equivalent amount of food produced on additional land.
- ILUCS are not visible and cannot be measured.
- ILUCs are not specific to biofuels either.
- Estimations of ILUC depend on models and vary a lot according to assumptions made (yield gains, type of land, drivers of conversion,...). Consequence: many discrepancies in the estimations.

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- So far very few Member have transposed the RED. Among those who have done it, only Germany has developed a comprehensive, practical approach.
- Many voluntary schemes transmitted to the EC. Won't be approved before April 2011. Thus demonstration is often base on German national schemes (ISCC, RedCert,...).
- Discrepancies in approaches: system boundaries, content of national systems, link with Customs,... <u>Urgent need for a real coordination to get a</u> <u>level playing field</u>. PREN 16214 should help to achieve this coordination.
  - ILUCs: EC will present impact assessment on July for 4 options:
    - 1) Continue to monitor. No action for the time being
    - 2) Increase the minimum greenhouse gas saving threshold for biofuels.
    - 3) Introduce additional sustainability requirements on certain categories of biofuels,
    - 4) Attribute a quantity of greenhouse gas emissions to biofuels reflecting the estimated indirect land-use impact

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## To put it in a nutshell...

IF YOU KEEP TRYING YOU WILL EVENTUALLY SUCCEED HENCE : THE MORE YOU FAIL, THE MORE CHANCES YOU'VE GOT IT WORKS.

Derived from Jacques Rouxel original picture

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