Policies on Sustainability for Biofuels

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Content

- Biofuel policy in the EU
- European sustainability initiative on biofuels
- Other sustainability initiatives

Biofuel Policy Development of the European Union

- **2001**: In the "**Communication on alternative fuels for road transport**" the European Commission identifies i.a. biofuels as potential future transport fuel
- **2003**: The EU adopts the **Biofuels Directive** (2003/30 EC).
  Targets: 2% in 2005; 5.75% in 2010
- **2003**: **Energy taxation Directive** (2003/96 EC)
  allows de-taxation of biofuels
- **2005**: EC presents "**Biomass Action Plan**"
- **2006**: EC presents "**An EU strategy for biofuels**"
  prepares the revision of the Biofuels Directive 2003/30 EC
- **2007**: EC presents "**Road Map for Renewable Energy in Europe**"

Development of the RES Directive

- **Jan 2008**: EC proposes a Directive “on the promotion of the use of energy from renewable sources” (**RES Directive**) including sustainability issues
- **Dec 2008**: The European Directive was adopted by the European Parliament
- **6 April 2009**: Adoption of the Directive by the European Council

Expected in

- **June 2009**: EC will deliver a Template for National Action Plans of the Member States
- **June 2010**: Deadline for the submission of National Action Plans

Content of the RES Directive

- Scope:
  Common framework for the promotion of energy from renewable sources

- Mandatory national targets
- 20% overall target for renewable energy in 2020
- 10% target for biofuels in vehicles in 2020

- Measures to achieve these targets:
  - ***Support schemes***
  - Measures of co-operation

Biofuel Sustainability in the RES Directive

- Need to meet sustainability criteria if biofuels should (Art. 15)
  - Contribute to national targets
  - Comply with RE obligations
  - Be eligible for financial support

Sustainability criteria are applicable to biofuels produced in and outside EU

Summary of criteria in the RES Directive

Requirements of biofuels for
quotas and targets
eligibility for subsidies

Minimum GHG savings	No areas with high biodiversity	No areas with high carbon stocks	Cross Compliance / CAP
35% by 2009/2013 50% by 2017 60% after 2017	Primary forests and wooded land	Peatland / wetlands	Environment
Only direct land use change considered	Protected natural areas	Cont. forested areas (trees higher 5m)	Requirements for good agri. and env. conditions
	Highly biodiverse land (grassland and non-grassland)	Only if it affects carbon stocks	**Applicable only within EU**
		Reference date: January 2008	

Summary of criteria in the RES Directive

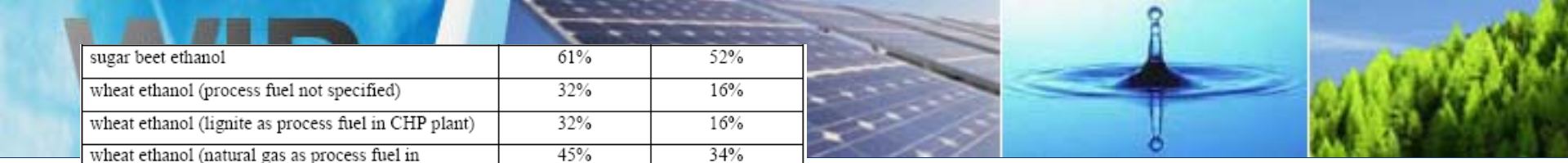
Reporting Requirements of the EC to the European Parliament and Council

- **Land use rights**
- **Availability of foodstuff at affordable prices**
- **Wider development issues**
- **Cartagena Protocol on Biosafety**
- **Convention on trade in endangered species**
- **ILO conventions**

- The first report shall be submitted until 2012
- The EC shall report on requirements for a sustainability scheme until 31 December 2009

Verification of compliance with RED criteria

- Economic operators must show that the RED sustainability criteria are fulfilled
- Applicable tool: mass balance system
- Independent auditing
- Option to conclude bilateral or multilateral agreements with third countries on sustainability criteria



sugar beet ethanol	61%	52%
wheat ethanol (process fuel not specified)	32%	16%
wheat ethanol (lignite as process fuel in CHP plant)	32%	16%
wheat ethanol (natural gas as process fuel in conventional boiler)	45%	34%
wheat ethanol (natural gas as process fuel in CHP plant)	53%	47%
wheat ethanol (straw as process fuel in CHP plant)	69%	69%
corn (maize) ethanol, Community produced (natural gas as process fuel in CHP plant)	56%	49%
sugar cane ethanol	71%	71%
the part from renewable sources of ETBE (ethyl-tertio-butyl-ether)	Equal to that of the ethanol production pathway used	
the part from renewable sources of TAEE (tertiary-amyl-ethyl-ether)	Equal to that of the ethanol production pathway used	
rape seed biodiesel	45%	38%
sunflower biodiesel	58%	51%
soybean biodiesel	40%	31%
palm oil biodiesel (process not specified)	36%	19%
palm oil biodiesel (process with methane capture at oil mill)	62%	56%
waste vegetable or animal (*) oil biodiesel	88%	83%
Hydrotreated vegetable oil from rape seed	51%	47%
Hydrotreated vegetable oil from sunflower	65%	62%
Hydrotreated vegetable oil from palm oil (process not specified)	40%	26%
Hydrotreated vegetable oil from palm oil (process with methane capture at oil mill)	68%	65%
pure vegetable oil from rape seed	58%	57%
biogas from municipal organic waste as compressed natural gas	80%	73%
biogas from wet manure as compressed natural gas	84%	81%
biogas from dry manure as compressed natural gas	86%	82%

Typical and default values of the RED for biofuels

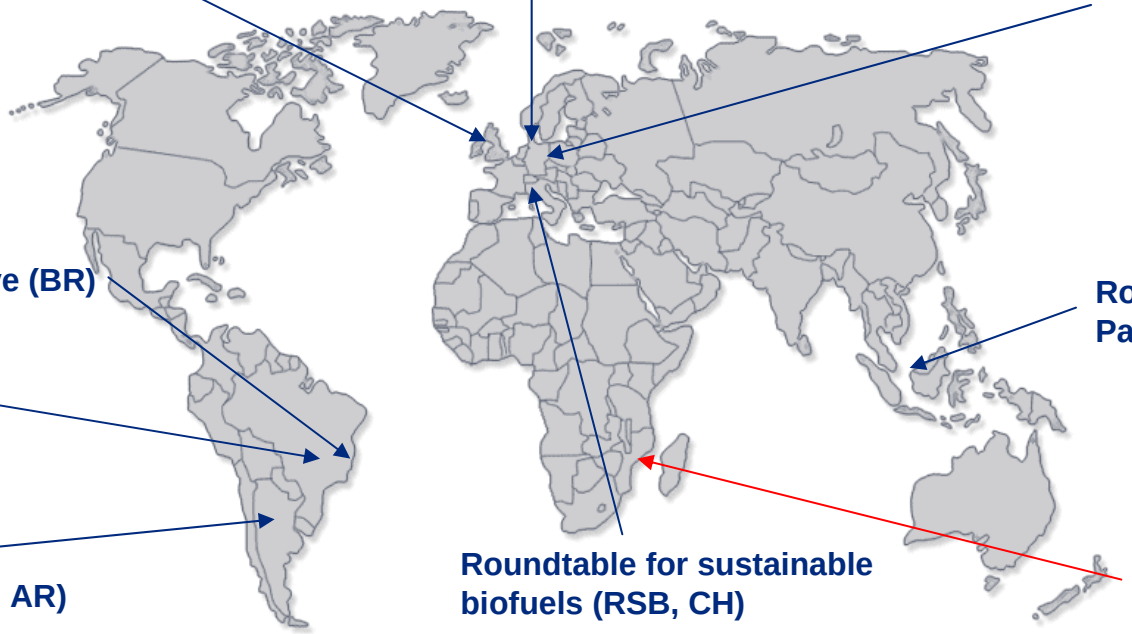
Typical value

Default value

Typical and default values of the RES Directive for future biofuels (2nd generation biofuels)

biofuel production pathway	typical greenhouse gas emission saving	default greenhouse gas emission saving
wheat straw ethanol	87%	85%
waste wood ethanol	80%	74%
farmed wood ethanol	76%	70%
waste wood Fischer-Tropsch diesel	95%	95%
farmed wood Fischer-Tropsch diesel	93%	93%
waste wood DME (dimethylether)	95%	95%
farmed wood DME (dimethylether)	92%	92%
waste wood methanol	94%	94%
farmed wood methanol	91%	91%
the part from renewable sources of MTBE (methyl-tertio-butyl-ether)	Equal to that of the methanol production pathway used	

Initiatives for biofuels sustainability



Renewable Transport Fuel Obligation (RTFO, UK)

Cramer Commission (NL)

German draft biomass sustainability regulation / ISCC (DE)

Better Sugar Initiative (BR)

Roundtable on sustainable Palm oil (RSPO, MY)

INMETRO (BR)

Round Table on Responsible Soy Association (RTRS, AR)

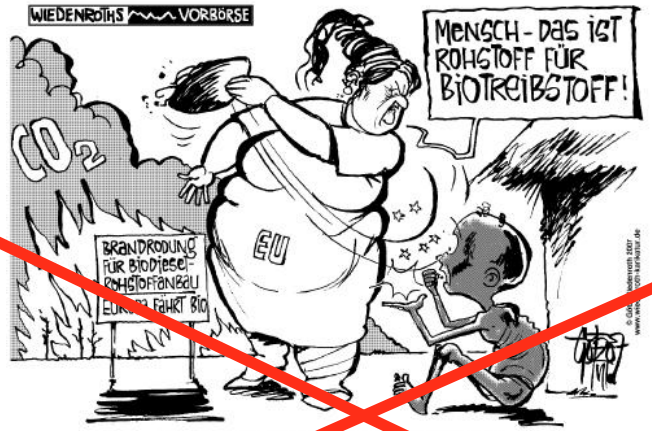
Roundtable for sustainable biofuels (RSB, CH)

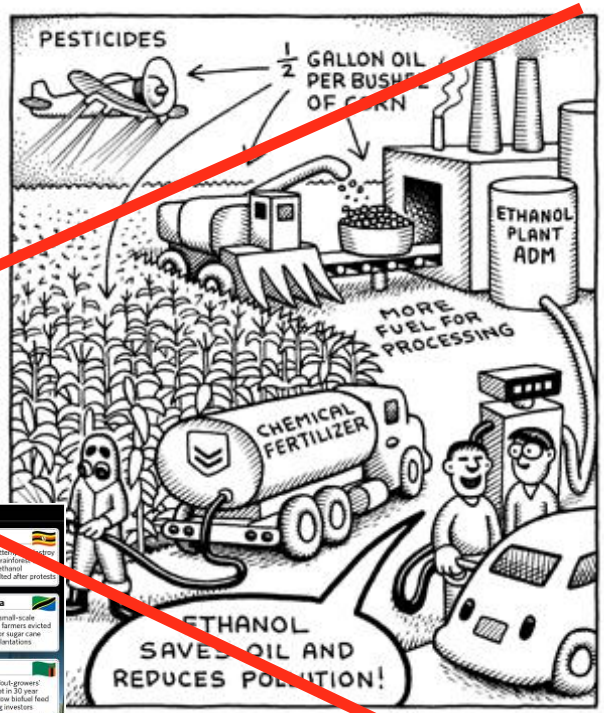
Mozambique Govt., GTZ-ProBEC

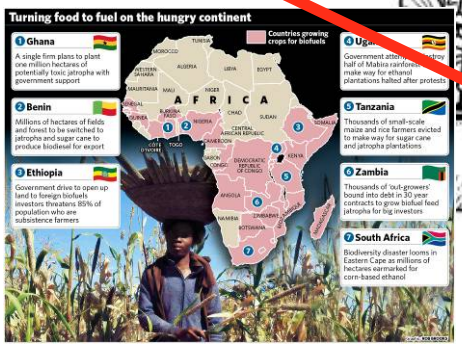
Why do producers (exporters) and users (importers) need sustainability certification?

- Credibility and acceptance of biofuels among the public
- Preserve the nature and avoid negative impacts

Guarantee SUSTAINABLE biofuels
- avoid generalisations and the negative image of biofuels







THANK YOU VERY MUCH FOR YOUR ATTENTION!!

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