RED implementation in the Netherlands- framework and double counting of waste to biofuels
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The Netherlands

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Summary

• Why Biofuels?
• The Dutch perspective
• Some Facts and Figures
• EU Renewable Energy Directive (RED) & Fuel Quality Directive (FQD)
• Sustainability Requirements and certification in the EU
• Sustainability of biofuels in the Netherlands
• Policy developments in the Netherlands
  - new motion adopted
• Double counting (art.21,2 RED)
Why biofuels?

- Commitment to the Kyoto Protocol, further GHG reductions in the future: large potential and technological/financial interesting opportunities
  - Transport accounts for 21% of the EU’s GHG emissions
  - GHG-emissions in transport sector, by far the largest increase since 1990
Some key perspectives of Dutch biofuel policy

• Co2 reduction is first motivation, independency from oil delivering countries is 2nd motivation
• Sustainability is very important (Cramer criteria)
• Almost no national biofuel production, espacially no 1st generation
• Some innovative companies, making 2nd generation biodiesel from UCO and animal fats
• Little production of bio-methanol (2nd generation)
• In the future production of hydrotreated vegetable oils (HVO)
• Indirect Land Use Change very important
• In favour of European harmonisation (certification, definitions of waste & residues)
Some facts on biofuels in the Netherlands

- Year 2012: 4.5% biofuels in transport
- Evaluation in 2014 for next steps towards 10% goal in 2020

<table>
<thead>
<tr>
<th>Jaar</th>
<th>Minimaal energetisch aandeel biobenzine in benzine [%]</th>
<th>Minimaal energetisch aandeel biodiesel in diesel [%]</th>
<th>Minimaal energetisch aandeel hernieuwbare bronnen in transportbrandstoffen [%]</th>
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<td>2014</td>
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*Tabel 3 Minimaal energetisch aandeel hernieuwbare bronnen voor benzine en biodiesel per jaar [GAVE 2011].*
Source of biofuels in the Netherlands 2010

• Ethanol: 39% corn, wheat 19%, sugarcane 10%
• FAME (Fatty Acid Methyl Ester/biodiesel): 53 % Used Cooking Oils
• MTBE: almost 100% glycerine
A Glance at a renewable Transport Mix in 2020

- Electric cars: 200.000 vehicles, 0,5% share in 10% target

- Cars on biogas/green gas: 200.000 vehicles, > 0,5% share in 10% target

- Second generation biofuels: 2,5%, double counting for a 5% share in the 10% target
  - Waste and residues, lignocellulosic material
  - Liquid and gas

- First generation biofuels in 2020: 4% of 10% target
  - Bioreplacement for petrol and diesel
  - Independent auditing required
  - Sustainability ensured
EU 2020 Targets

- **Renewable Energy Directive**
  - Minimum of 10% renewable energy in transport in 2020
  - Electric, biofuels, biogas, hydrogen
  - At least applicable to road transport, opt in for shipping/air
  - Double counting 2nd generation biofuels (waste/residues/cellulosic)

- **Fuel Quality Directive**
  - Life Cycle Analysis, CO2-reduction of 6% compared to 2010
  - Looks at the whole chain of production and use of fuels
  - No double counting 2nd generation biofuels

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Concerns about biofuels

• Competition with food (price spikes 2007/2008)
• Land use change (direct and indirect)
• biodiversity
• GHG emission
• Other sustainability effects:
  • Locally: soil, water, air
  • Social (poverty, land rights)
EU Sustainability Requirements (art. 17)

- For biofuels and other bio liquids for energy purposes:
  - GHG-emissions: $\geq 35\%$ better than fossil equivalent, 2017 50% existing and 60% new installations
  - Biodiversity: no go areas
  - Carbon sinks: preservation of status of areas
  - wetlands
  - EU: cross compliance requirements (agriculture and nature protection)
  - Reporting requirements: food security and food prices, ILO, land security
- For waste, residues:
  - Waste and residues (not from agriculture, aquaculture, fishery, forest): only GHG-emission requirement
Voluntary certification schemes

Schemes being developed by consortia / roundtables

- **Bonsucro (formerly BSI, sugarcane)** – [www.bettersugarcane.com](http://www.bettersugarcane.com)
- **ISCC** – [www.iscc-system.org](http://www.iscc-system.org)
- **NTA 8080/8081** – [www.sustainable-biomass.org](http://www.sustainable-biomass.org)
- **REDcert** – [www.redcert.org](http://www.redcert.org)
- **RSB** – [www.rsb.epfl.ch](http://www.rsb.epfl.ch)
- **RSPO (palm oil)** – [www.rspo.org](http://www.rspo.org)
- **RTRS (soy)** – [www.responsiblesoy.org](http://www.responsiblesoy.org)

Schemes being developed by companies

- **Abengoa (RED Bioenergy Sustainability Assurance)**
- **Greenergy**: [www.greenenergy.com](http://www.greenenergy.com)
- **French stakeholders** – 2BSvs
- **Nesté Oil**
- **SEKAB/UNICA** – [www.sustainableethanolinitiative.com](http://www.sustainableethanolinitiative.com)
Certification in the Netherlands

- By one of the adopted voluntary certification systems
- By our own national system (NL can accept an existing system if it is in line with the RED). The Dutch Emission Authority (NEA) can do a scan on that.
- By another national system of an EU Member State (after a quick scan)
- NL is in favour of harmonisation as far as possible
Policy Developments in the Netherlands

- July 2009: Advisory Committee on Sustainability of Biomass (Committee Corbey)
  - waste / residues, lignocellulosic material
  - GHG balance >35%
- April 2010: Duty charge minus 27% on high blends sustainable ethanol (E85)
- April 2010: Agreement on transparency on nature, origin and sustainability of biofuels with business sector
- May 2010: Perspective on mid-term developments: from 4% in 2010 to 5.5% in 2014 and evaluation of 2020 target in 2014
- June 2010: Dutch Renewable Action Plan ready: presented to European Commission
Policy Developments in the Netherlands

- Implementation of European legislation RED and FQD
  - January – March 2011: Legislation has been approved by Parliament and Senate. Into force April 2011 and associated decisions and regulations published in May 2011
  - Make it work in practice: operational structure for the administration of sustainable biofuels (Dutch Emission Authority/NEA)
- October 2011: Consultation of the EU Commission on indirect land use change (iLUC). The Netherlands in favour of iLUC-factor and low risk iLUC biofuels
- EU consultation on sustainability criteria for solid biomass for energy purposes. Netherlands in favour
Further Policy Perspectives

- **Parliament adopted motion in December 2011:**
  - higher percentage of renewable energy in transport coming years and broadening obligation to shipping and air transport
  - Reassurance of no impacts of biomass use on primary forests
  - Subtarget 2nd generation biofuels, biogas, electricity
  - Adequate enforcement of current legislation
  - New figures: 2012 5.25%, 2013 6.25%, 2014 7.5%, 2015 8.75%, 2016 and further 10%.
  - The higher amount (difference between old and new line) must come from double counting biofuels
Double Counting of biofuels (art. 21,2)

- Advanced biofuels made from wastes, residues and lignocellulosic materials count double
- NL was first country with regulation on double counting
- Disharmonisation of regulation between MS
- Problems with used cooking oils
- Problems with animal fats
Used cooking oil
Questions
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