RO 2011
Biomass sustainability - regulation and reporting

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The Renewable Energy Directive (RED - 2009)

RED has mandatory sustainability standards from day one for transport biofuels (liquids and gases) and ‘bioliquids’ – renewable liquids used for power or heat.

Sustainability requirements

• No use of highly bio diverse grassland or primary forest
• No use of land that was formerly high carbon stock
• EU-grown feedstocks must meet CAP cross-compliance
• Further reporting on social and economic issues
• Requirements on chain of custody systems and auditing
More on RED – GHG savings

- Minimum GHG saving required, relative to fossil fuel. 35% from day one, rising to 50% in 2017 (and 60% in 2018 for new installations)
- Companies can use published default values or calculate the emissions themselves using a standardised methodology
- European Commission to produce a report on GHG emissions arising from indirect land use change by end 2010
RED and solid biomass

Article 17(9) of RED:

‘The Commission shall report on requirements for a sustainability scheme for energy uses of biomass, other than biofuels and bioliquids by 31 December 2009. That report shall be accompanied, where appropriate, by proposals for a sustainability scheme for other energy uses of biomass.’

• REA strongly supported binding EU-wide criteria (including a minimum GHG saving requirement), along similar lines to those currently in RED. This was stance of UK/Benelux and to some extent Germany and Denmark.
EU Regulation of Sustainability
Solid/Gaseous Biomass Report published Feb 2010

• Member States free to set up their own national mandatory schemes, but no EU wide mandatory scheme.
• Non-binding recommendation that MS schemes to follow RED guide and only apply to ‘primary biomass’ use.
• Consistency with biofuels/liquids sustainability scheme req’d. Calculation methods and GHG default values given.
• LCA for solid biomass to energy to include conversion.
• Scheme should apply at >1MW.
• Records should be held of primary biomass origins.
• Commission to review national schemes at the end of 2011 – with particular regard to whether they are distorting internal market.
Environmental sustainability

Several key terms still to be defined:

- Primary forest (no visible human activity?)
- Highly bio diverse grassland
- Continuously forested areas
- Canopy cover
- ‘waste, landfill gas and sewage gas’ (excluded from sustainability requirements)
- ‘EU Committee of Member States on Biofuels Sustainability’ formed to address these issues among others.
Sustainability Reporting (from April 2009)

- Submit an annual report
- Applies to biomass
- Have to detail:
  - Type of biomass
  - For the biomass:
    - Mass/Volume
    - Whether it’s a by-product of another process
    - Country of Origin
    - Country of purchase
    - If it’s an energy crop (including types and proportions)
    - Any environmental assurance schemes it is certified under
    - The land use as at 30th Nov 2005
Sustainability Reports 2010

• Ofgem has gathered the required information for the 2009-10 obligation period
• No summary report accompanying the data but next year it is likely Ofgem will report in a similar way to the Renewables Fuel Agency (RFA).
• No standard format was used to submit the information
• Findings:
• 393 separate entries of fuel consignments reported, by a total of 79 biomass generating stations, 15 of which were biogas plants.
• Volumes:
  > 4.1Mt solid biomass
  > 4.7M litres liquid biomass
  > 35.8M m3 gaseous biomass
• 48% of solid biomass was wood.
• Over 50% of solid biomass came from the UK.
RO 2011 – Sustainability Reporting

- Annual mandatory reporting from April 2011
- Sustainable compliance for ROC’s from April 2013.
- <50kW no requirements
- >50kW – annual factual report.
- De-minimis reporting >1MW
- Waste derived biomass/gas exempt.
- No cross compliance required (CAP, ACCS etc)
RO 2011 – Sustainability Criteria

- Broad compliance with RED criteria
- 60% minimum GHG saving (285.12kg CO2/MWh)
- EU Fossil Fuel comparator 712.8kg CO2/MW
- No ‘High Biodiversity grassland’ origin fuel
- No ‘High Carbon stock land’ origin fuel
- No material from peatland
- Default values + actual conversion efficiency
- But ‘actuals strongly encouraged’
Figure 2: Modelled GHG savings for a biomass plant of 25% conversion efficiency.

RO 2011 – Reporting Requirements

- GHG saving and actual intensity (kg CO$_2$/MWh)
- High biodiversity grassland origin?
- High carbon stock origin?
- Peatland origin?
- ILUC change post January 2008
- Sourced from certified scheme (FSC, PEFC etc)?
Issues still to be resolved

- April 2011 is not far away!
- Many terms still to be defined. This includes certain wastes, which will be assumed automatically to be sustainable
- How will the 60% saving be calculated?
- How will existing certification schemes be incorporated, to avoid duplication of effort?
- Consistency with liquids (for power/heat/transport) and with other EU member states
Stop Press!
(DECC stakeholder meeting 01/11/10)

- Draft amending regulations to Parliament end Feb 2011
- EA ‘BEAT’ tool being revised for GHG saving calculation.
- Claiming ROC’s – generators only need report GHG saving and compliance with land criteria.
- Audit/Verification not at this stage, but annual report to be independently verified, submitted end of May following previous ‘Obligation Period’
- Exemptions for wastes/residues DECC ‘working on’
- Working groups to be set up to provide industry input.
Thank you!

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