

RO 2011

Biomass sustainability - regulation and reporting



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10th November 2010

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.

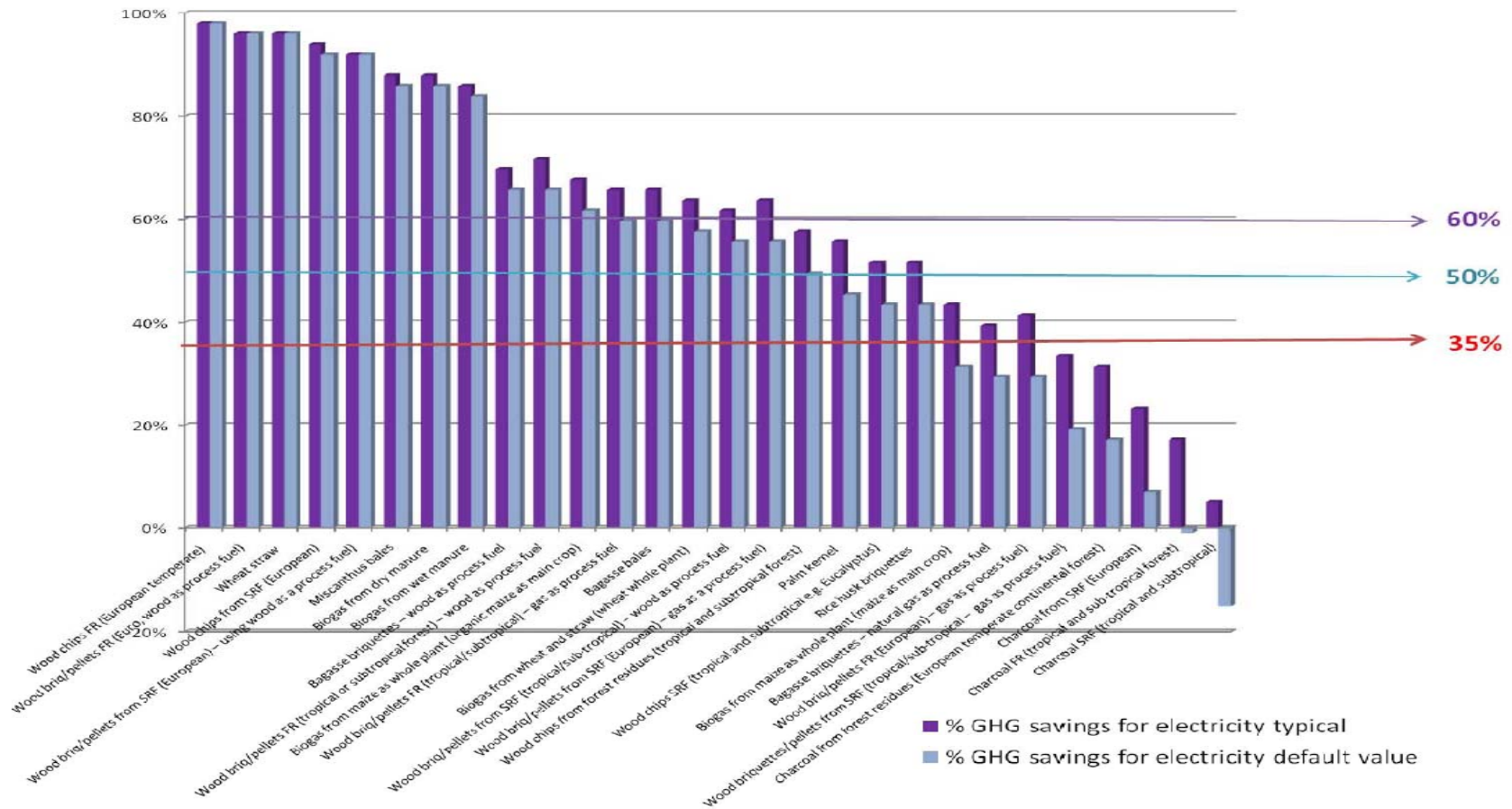
RO 2011 – Sustainability Reporting

- 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.



Key: FR=Forestry Residues; SRF = Short Rotation Forestry

Ref: Data and methodology sourced from EU (2010) Report from Commission on sustainability requirements for use of solid & gaseous biomass sources in electricity, heating & cooling http://ec.europa.eu/energy/renewables/bioenergy/sustainability_criteria_en.htm

RO 2011 – Reporting Requirements

- GHG saving and actual intensity (kg CO₂/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)

- Government response to RO consultation target early December 2010.
- 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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