



**European Commission**  
**JRC - Institute for Energy**  
**David Baxter**



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# Policy and Legislative Activities

- **New Renewables Directive**  
“Promotion of the use of energy from renewable sources”

Initial Proposal [COM(2008)19] of January 2008  
now transformed into final adopted text, to be  
published in May 2009 as Directive 2009/???./EC

Discussions in the European Parliament  
(Industry, Research and Energy Committee)  
& the European Council concluded on March 26<sup>th</sup> and  
April 6<sup>th</sup>, respectively

## The New Renewables Directive

- Key issues during Parliament and Council discussions:
  1. Mandatory targets
  2. Sustainability criteria
  3. Grid access

## The New Renewables Directive

### Definitions:

"biomass" means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste;

## The New Renewables Directive

- Target for 2020: “energy from renewable sources in all forms of transport is at least 10% of final consumption (in each Member State)”

### *Article 3 (4):*

- a) For calculation, the total of petrol, diesel, biofuels for transport and electricity is taken into account.*
- b) All types of renewable used in all forms of transport shall be taken into account*
- c) For electricity, its consumption shall be considered to be 2.5 times the energy content of the biomass input.*

## The New Renewables Directive

*So, the 10% target is not limited to biofuels as the only source of renewable energy for transport*

*Electricity is an important component of the renewable fuel mix - and so is hydrogen*

*Note: there is no intermediate target for "biofuels" before 2020. Also, there is no specified mix of individual contributions of biofuels and electricity to the 2020 target*

## The New Renewables Directive

- **Grid Access: Electricity and Gas**

*Article 16 (7):*

Member States shall ensure that charging of transmission and distribution tariffs does not discriminate against electricity from renewable sources, in particular in peripheral regions.

Member States shall ensure that charging of transmission and distribution tariffs does not discriminate against gas from renewable sources



## The New Renewables Directive

- **Grid Access: Electricity and Gas**

*Article 16 (9):*

*Where relevant, Member States shall assess the need to extend existing gas network infrastructure to facilitate integration of gas from renewable sources*

*Article 16 (10):*

*Where relevant, Member States shall require grid operators to publish technical rules regarding network connection (viz. gas quality, odoration, pressure) and publish connection tariffs for renewable gas sources*

## The New Renewables Directive

- Sustainability

### *Article 17 (2)*

*The greenhouse gas (GHG) emission saving from use of biofuels shall be 35%*

*With effect from 2017 the GHG saving shall be 50%. For new installations starting production after 2017 the target shall be 60%*

*Savings shall be calculated according to the method defined in Article 19(1)*

## The New Renewables Directive

- Sustainability

### *Article 17 (3 & 5)*

*Defines land not to be used for biofuel feedstock production (e.g. primary forest, areas with protected ecosystem, natural grasslands, previously undrained peatlands)*

### *Article 17 (9)*

*The Commission shall report on requirements for a sustainability scheme for energy uses from biomass, other than biofuels, by December 31<sup>st</sup> 2009.*

## The New Renewables Directive

- Calculation of GHG Impact

### *Article 19 (1)*

*Defines the method for calculation, using the methodology given in Annex V.C. Typical and default values for GHG emissions from defined stages of the production pathway are given in Annex V.D & E*

*Here, we see the clear difference between the GHGs for biofuels produced from energy crops and those produced from wastes/residues*

## The New Renewables Directive

- Calculation of GHG Impact

### *Article 19 (6)*

*Concerning the as yet unquantified effects of Indirect Land Use Change (ILUC)\*, safeguards to be provided to ensure certainty for investment undertaken before the ILUC methodology is applied. So, for installations producing biofuels before 2014, measures shall not apply before 2018, provided they then achieve a GHG saving of at least 45%*

*\* Report on ILUC effects due by 31-12-2010*

## The New Renewables Directive

- Specific Provisions for Biofuels

### *Article 21 (2)*

*For purposes of compliance with national renewable energy obligations, the contribution made by biofuels produced from wastes, residues, non-food cellulosic material, and ligno-cellulosic material shall be considered to be 2x that made by other biofuels*

*(i.e. promotion of 2<sup>nd</sup> generation biofuels)*

## Some life cycle assessment examples

- Typical GHG savings compared with fossil petrol/diesel  
(Annex V.A)

<i>Biogas* from municipal organic waste</i>	<i>80%</i>
<i>Biogas* from wet manure</i>	<i>84%</i>
<i>Biogas* from dry manure</i>	<i>86%</i>
<i>Rapeseed biodiesel</i>	<i>45%</i>
<i>Palm oil biodiesel (process not specified)</i>	<i>36%</i>
<i>Palm oil biodiesel (CH<sub>4</sub> capture at mill)</i>	<i>62%</i>
<i>Sugar beet ethanol</i>	<i>61%</i>
<i>Sugar cane ethanol</i>	<i>71%</i>

*(\* in the form of compressed biomethane compatible with natural gas)*

## Some life cycle assessment examples

- Estimated GHG savings - "2<sup>nd</sup> generation biofuels\*"  
(Annex V.B)

<i>Farmed wood F-T diesel</i>	<i>93%</i>
<i>Waste wood F-T diesel</i>	<i>95%</i>
<i>Wheat straw ethanol</i>	<i>87%</i>
<i>Farmed wood ethanol</i>	<i>76%</i>
<i>Waste wood ethanol</i>	<i>80%</i>

*\*The text actually refers to, "biofuels that are not, or in negligible quantities, on the market in January 2008"  
So, is biogas a second generation biofuel ???*



## Biowaste

- **Biowaste is one component of the new EU Waste Framework Directive: 2008/98/EC (Article 22)**

*Member States shall encourage:*

- (a) the separate collection of bio-waste with a view to composting and digestion;*
- (b) the treatment of bio-waste in a way that fulfils a high level of environmental protection;*
- (c) the use of environmentally safe materials produced from bio-waste.*

*The Commission shall carry out an assessment on the management of bio-waste.*

*The assessment shall examine the opportunity of setting minimum requirements for bio-waste management and quality criteria for compost and digestate from bio-waste.*

# Market Support

## • Proposed European Standards for Biogas

DG TREN is preparing to provide a mandate to CEN\* to formulate new standards supporting the exploitation of biofuels, particularly biogas.

Specific examples of standards:

- composition of biogas for injection into natural gas pipelines
- composition of different grades of digestate/compost from biogas production for use as organic fertiliser

\* The European Standards Organisation

**Thank you**

## Relevant References and Contact Details

- **Energy and Climate Change website:**  
[http://ec.europa.eu/energy/strategies/2008/2008\\_01\\_climate\\_change\\_en.htm](http://ec.europa.eu/energy/strategies/2008/2008_01_climate_change_en.htm)
- **Europa – Biomass/Biogas/Biofuels:**  
[http://ec.europa.eu/energy/res/sectors/bioenergy\\_en.htm](http://ec.europa.eu/energy/res/sectors/bioenergy_en.htm)
- **Waste Framework Directive:**  
<http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2008:312:SOM:EN:HTML>
- **Contact Point for Waste and Biomass Related Activities at JRC-  
Institute for Energy:** <http://ie.jrc.cec.eu.int/>  
**David.Baxter@jrc.nl - Tel/Fax: (+31) 22456-5227/5626**