

4BIOMASS – Fostering the Sustainable Usage of Renewable Energy Sources in Central Europe - Putting Biomass into Action!

Acts and Ordinances Implementing

The German government's Integrated Energy and Climate Change Programme Launched in August 2007

At its meeting in Meseberg (Germany) in August 2007 the Cabinet adopted an ambitious energy and climate programme, consisting of 29 key elements. The Cabinet submitted a comprehensive package of 14 acts and ordinances in 2007. Another, smaller package containing further legislative proposals was submitted in 2008.

Ongoing legislative initiatives are aimed at creating greater competition in the energy markets, the promotion of local public transport, the Allocation Plan 2008-2012 and the new regulations for emissions trading.

Three main objectives:

***Security of supply,
Economic efficiency
Environmental protection***

The integrated e + c programme consists of measures in five areas:

- a) Energy efficiency***
- b) Renewable energies in the electricity and heat sector***
- c) Biofuels***
- d) Transport***
- e) Non-CO2 greenhouse gas emissions***

Example:

National Biomass Action Plan

The aim of the National Biomass Action Plan is to provide an holistic concept to significantly increase the bioenergy share in Germany's energy supply while adhering to sustainability criteria. Bioenergy is an ideal choice in efforts to mitigate the effects of climate change, secure supply and promote economic development. It also serves in boosting domestic value creation – especially in rural areas.

Contents:

- sets out potential for the use of biomass in Germany
- quantifies the biomass share in meeting current demand and identifies available reserves
- describes the German government's strategies towards promoting bioenergy use in heating, electricity and fuel sectors
- describes the measures it intends to take in implementing them

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Goals:

- Increasing the share of renewable energy in electricity production to at least 30% by 2020.
- Using biofuels to achieve greater reductions in greenhouse gas emissions in the transport sector; from 2015, rather than being set relative to energy content, biofuel quotas will be based on net greenhouse gas reductions.
- Increasing the share of biofuels in overall fuel consumption to 7 percent of net greenhouse gas reductions by 2020 (equivalent to approximately 12% energy content).
- Increasing the share of renewables-generated heat from the current 12% energy content.

Implementation:

1. Renewable Energy Sources Act (EEG) 2009

- entered into force on 1 January 2009 and replaces the previous act of 2004
- most effective funding instrument at the German government's disposal
- purpose to further increase in the share of renewable energies in electricity generation by 2020 according to the cabinet decision of Meseberg on an integrated energy and climate protection programme
- internationally observed as exemplary

2. The Renewable Energies Heat Act (EEWärmeG) 2008

- instrument to raise the share of renewable energies in heat supply to 14% by 2020
- purpose of the Act promoting renewable energies in the heat sector
- to achieve a sound management of fossil resources and lower dependency on energy imports
- it aims to facilitate a sustainable development of energy supply and further development of technologies generating heat from renewable energy sources

3. Biomass ordinance 2001

- lays down which substances are recognised as biomass
- which technical processes may be used for electricity generation
- which environmental standards have to be met

4. Biomass Electricity Ordinance (BioSt-NachV) and Biofuel Sustainability Ordinance (Biokraft-NachV) 2009

- Implementing RED sustainability criteria for biomass
- Legal technical rules for recognition of certification systems and certification bodies

The Biomass Action Plan will be integrated into the Renewable Energy Action Plan which the German government must present by June 2010 to comply with the requirements of the EU Renewable Energy Directive.

Development:

Following table was published by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in: Development of Renewable Energy Sources in Germany 2009, 18 March 2010.

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Table: Renewable energy sources in Germany 2009/2008 – Key figures

	2008	2009	Change 2008/2009
Final energy from renewable energy sources ¹⁾	236 bn kWh	238 bn kWh	+ 0.8 %
RES as a share of total final energy consumption (FEC) ²⁾	9.3 %	10.1 %	+ 8.6 %
RES as a share of total gross electricity consumption	15.2 %	16.1 %	+ 5.9 %
RES heat as a share of total FEC for heat ³⁾	7.4 %	8.4 %	+13.5 %
RES as a share of total fuel consumption ²⁾	5.9 %	5.5 %	- 6.8 %
RES as a share of total primary energy consumption ⁵⁾	8.1 %	8.9 %	+ 99 %
Emission avoided via the use of RES			
- Greenhouse gas emissions	109 mill. t	109 mill. t	- 0.3 %
- CO ₂ emissions	108 mil.. t	107 mill. t	- 0.4 %
Total turnover from RES	30.7 bn €	33.4 bn €.	+ 8.9 %
Of which: Investments in RES plants	14.8 bn €	17.7 bn €	+ 19.6 %
Employees in the RES sector	278,000	300,500	+ 8,1 %

Figures are rounded and provisional; as at: March 2010. Data may still change during the course of the year.

- 1) Although energy supply from RES remained almost constant in 2008/2009, declining levels of overall energy consumption prompted by economic factors have led to an increase in the RES share.
- 2) Final energy consumption figures for 2009 were not yet available: this is an estimate by ZSW
- 3) Final energy consumption figures for heat in 2009 were not yet available; this is an estimate by ZSW
- 4) Fuel consumption and biofuel data for 2009 according to BAFA
- 5) Source: Arbeitsgemeinschaft Energiebilanzen (Working group on Energy Balances, AGEb)

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