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Impact of Environmental Agreements on the CAP

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## **Legislation and support programmes of bioenergy in Europe**

Authors: A. Weiske, G. Fuchs

Author's Organisation(s): Institute for Energy and Environment (IE)

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## 1 Austria

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	78.1 %
<b>National</b>		
Share of biomass, geothermal, solar and wind power in the electricity supply	2003	2 %
	2005	3 %
	2007	4 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels in the energy content of all fuels /3/	2005	2.0 %
	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	<b>Environmental Promotion Law</b> (UFG (Umweltförderungsgesetz); since 1993, modified 2002) for the support of innovative technologies 10 to 30 % of the investment costs
Tax relief	<b>Electricity Delivery Law</b> (since 1996, modified 2000) Tax relief for the production of RE-electricity for own consumption up to 5000 kWh/a 11.8 % of the revenues are allocated to the states for the promotion of RE-projects
Feed-in tariffs	<b>Eco-Power-Law</b> (since 2003) Feed-in tariffs are guaranteed for at least 10 years (2002: 13 years) biomass 10.2 to 16.5 €/kWh depending on the installed electrical power, used technology and used kind of biomass (solid, liquid, gaseous; waste...)
System of quota / certificates	—
NFFO	—
Miscellaneous	Investment incentives for RE at a state level

## Heat

Investment incentives	<p><u>Small private plants</u> are supported in line with the housing support scheme (e. g. additional eco-fee depending on the energy characteristic and floor space) or specific biomass promotion (often as a one-time grant to the investment costs), the conditions for and the degree of the support are different in the individual states. /15/</p> <p><u>Commercial plants</u> are supported in line with the environmental promotion. e. g. Tyrol Environmental promotion is handled as ‚de-minimis’-grant in the sense of EU-jurisdiction and is valid until December 31<sup>st</sup> 2006. The following measures are supported: operative measures for an alternative use of energy (e. g. biomass plants), construction investments (incl. capitalised services), equipment investments (incl. capitalised services) and other equipment as well as immaterial costs (e. g. external surveys or concepts). Only costs with a direct connection to the project can be supported. This costs may only include the additional costs to reach the environmental targets. The support is given as one-time grant in the height of max. 10 % of the eligible costs (assessment basis for promotion). /15/</p>
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

## Fuels

Tax relief	<p><b>Mineral Oil Taxation Law (BGBl 1995/630)</b>; since 1995 100 % tax relief for biodiesel and bioethanol partial tax relief for fuel mixes (up to 5 % biodiesel) production of biodiesel is not taxable, if the biodiesel is used exclusively in the agriculture</p>
R & D	Especially in local traffic
Miscellaneous	<p><b>Fuel Decree (BGBl 1992/123)</b>; since 1992 it regulates the use of liquid fuels  unlimited production of biodiesel</p> <p><b>Austrian Decree on Transportation Fuels</b> up to 3 % of biodiesel can be mixed with conventional diesel</p>

## 2 Belgium

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	6.0 %
<b>National</b>			
Share of RE in the gross electricity consumption		2004	3.0 %
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>			
<b>Electric Energy /11/</b>			
Investment incentives	<b>Decree 15.12.1993</b> (1993 to 1999) depending on the size of the company 10 to 20 % of the investment costs		
Tax relief	<b>Fiscal deduction investments</b> (since 1992) The investment costs can partly be deducted from the taxable income (2002: 13.5 % of the investment costs)		
Feed-in tariffs	<b>Green Franc system</b> (1995; modified in 1998) biomass 2.0 €/kWh		
System of quota / certificates	<b>Green Certificates Flanders</b> (since 2002) for Flanders there is an obligation for all energy suppliers:		
	Share of RE in the power generation	2002	1.4 %
		2003	2.05 %
		2004	3.0 %
		2005	5.0 %
	Fine, if the share is not reached since 02/2003 the import of RE-electricity is accepted for the quota there is no fixed minimum price for a certificate		
	<b>Green Certificates Wallonia</b> (since 2002) for Wallonia: RE-electricity and electricity from CHP generation		
	Share of RE in the power generation	2004	3.0 %
		2007	7.0 %
	Fine, if the share is not reached only RE-electricity generated in Wallonia is accepted for the quota minimum price: 65 €/certificate		

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System of quota / certificates	<b>Green Certificates Brussels-capital</b> (not yet implemented) for Brussels; still under construction
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NFFO	—
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**Heat /34/**

There is no nationally standardised structure of subsidies for the heat market in Belgium. There are only regional initiatives. Nevertheless the heat generation on the basis of biomass has reached noticeable shares in the industry (3.7 %) and in the household sector (> 2 %).

Investment incentives	In the Walloon region the use of wood and other biomasses for the heat generation is promoted (Investment subsidy scheme Wallonia - 1995, modified 1998, 2003).
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Tax relief	—
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Feed-in tariffs	—
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System of quota / certificates	—
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NFFO	—
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**Fuels**

R & D	Financial support for demonstration projects
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At the moment there are no specific subsidies for biofuels.

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### 3 Cyprus

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	6.0 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	<b>New Grant Scheme for Energy Conservation and the Promotion of the Utilisation of Renewable Energy Sources (2004-2006)</b> biomass plants 30 to 40 % of the investment costs		
Tax relief			
Feed-in tariffs	Electricity Authority of Cyprus (EAC) buys RE-electricity for fixed prices Fixed tariff for electricity from RES biomass 6.3 €ct/kWh  Additionally the EAC awards a feed-in tariff depending on the energy source and used technology (financed by the consumers) biomass 6,3 €ct/kWh		
System of quota / certificates			
NFFO	—		
<hr/>			
<b>Heat</b>			
Investment incentives	—		
Tax relief	—		
Feed-in tariffs	—		

System of quota /  
certificates —

NFFO —

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**Fuels**

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## 4 Czech Republic

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	8.0 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	—		
Tax relief	Up to 5 years tax relief (depending on income and ownership) for investments in RE		
	Reduced VAT rate (5 % instead of 22 %) for biomass plants		
Feed-in tariffs	<b>Decree of the MIT n. 252/2001 / ERO Decree No. 438/2001 Coll.</b>		
	Feed-in tariffs are adapted annually		
	solid biomass	8.3 €ct/kWh (2004)	
	biogas	8.0 €ct/kWh	
	biomass co-combustion	6.6 €ct/kWh	
System of quota / certificates			
NFFO	—		
Miscellaneous	<b>Law for support of electrical and heat energy production from RES (2004)</b>		
	for the realisation of the targets of the EU until 2010		
	certificates for electricity from RES		
<hr/>			

### Heat

Biomass as a RES in the Czech Republic is used predominantly for the production of heat. In this regard, especially the use of wood, straw and oil plants is of utmost importance.

Investment incentives	<p>Promotion by grants from the national environmental fund:</p> <ul style="list-style-type: none"> <li>- individuals max. 30 % of the total costs</li> <li>- municipalities max. 40 % of the total costs</li> </ul> <p>Combinations of grants and subsidised loans also possible:</p> <ul style="list-style-type: none"> <li>- individuals: promotion adds up to 70 % of the total costs</li> <li>- municipalities: promotion of up to 80 % of the total costs</li> </ul>
Tax relief	<p>5 years relief from the property tax, if buildings are heated by RE.</p> <p>Up to 5 years of tax relief (depending on income and ownership) for investments in renewable energies.</p> <p>Reduced VAT rate (5 % instead of 22 %) for biomass plants, also for the end user of biomass-based heating systems.</p>
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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## Fuels

Tax relief	Relief from consumption tax for biodiesel
Miscellaneous	<p><b>Support for purchasing rape seed for the production of methylester</b>  Support is defined individually for each producer to keep the price for biodiesel 5 % under the price for conventional diesel</p> <p><b>Support for production of bioethanol as alternative liquid fuel</b>  support about 10.7 €/t bioethanol</p> <p><b>Oleoprogram of the Ministry of Agriculture</b>  Support for the production of biofuels</p> <p>Production of biodiesel is oriented at German and Austrian standards</p>

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## 5 Denmark

Targets	Year		
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/	2010		29.0 %
<b>National</b>			
Share of RE in the gross electricity consumption	2003	6.80 TWh	20.0 %
Share of biomass in the gross electricity consumption (base 2000)	2004		10.0 %
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels	2005		2.0 %
in the energy content of all fuels /3/	2010		5.75 %

### Political Instruments to Promote the Use of Biomass /5/, /7/, /9/

#### Electric Energy /11/

Investment incentives	<p><b>Act on Utilisation of Renewable Energy Sources</b> (since 1996)</p> <p>15 to 30 % of construction costs (for pilot projects up to 50 %)</p> <p>biogas plants: up to 30 %</p> <p>biomass cogeneration plants: up to 16 %</p> <p>maximum subsidy: 132 450 €</p> <p>(2002 many subsidies have been cut)</p>
Tax relief	—
Feed-in tariffs	<p>Adaptation of <b>Electricity Reform Agreement</b> (2001-2002)</p> <p>biomass 8.1 €ct/kWh</p> <p><b>Act on payment for green energy</b> (2003)</p> <p>Feed-in tariff is guaranteed for 10 years</p> <p>solid biomass 4.0 €ct/kWh (+1.0 €ct/kWh for RE-certificate)</p> <p>biogas 4.0 €ct/kWh</p> <p>municipal waste 1.0 €ct/kWh</p>
System of quota / certificates	<p>Providers of electricity have to use a certain amount of biomass;</p> <p>consumers of electricity have to use a certain amount of power from RES or CHP generation (self supporters can be exempted from a part of this amount)</p>
NFFO	—

Miscellaneous	It was planned to replace the feed-in tariffs with a certificate by January 2003; this was delayed and now it should start with the start of the EU-wide trade with CO <sub>2</sub> -certificates
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**Heat /12/**

Investment incentives	<b>Act on utilisation of renewable energy (1981/97)</b>
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Tax relief	The energy sources coal, oil and natural gas are surtaxed on the basis of the tax decree on fossil fuels. In these taxes the use of biomass for the heat generation is not integrated, so that biomass is competitive in most heat markets. This is not effective in the industrial sector, since fossil fuels are not integrated in the taxation during the implementation phase.
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Feed-in tariffs	—
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System of quota / certificates	—
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NFFO	—
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**Fuels**

At the moment there are no specific subsidies for biofuels.

R & D	demonstration projects
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## 6 Estonia

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	5.1 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	—		
Tax relief	—		
Feed-in tariffs			<b>Electricity Market Act (EMA)</b> since 2003 Payment for electricity made of biomass for 7 years (till 2015) network operators (Eesti Energia AS) is committed to buy RE-electricity for a price 1.8 % higher than the average market price of electricity in the year before biomass (incl. org. municipal waste) 5.2 €/kWh (2004)
System of quota / certificates	—		
NFFO	—		
Miscellaneous			<b>Pollution Charge Act</b> Companies, that use biomass for the power generation, do not have to pay CO <sub>2</sub> -tolls (others pay 50 €/t CO <sub>2</sub> )
<hr/>			
<b>Heat</b>			
Investment incentives	—		
Tax relief			<b>Value Added Tax Act (2001)</b> Until 30.6.2007: 5 % VAT for wood used for heating in the private sector. Normally the VAT rate is 18 %.

Feed-in tariffs —

System of quota /  
certificates —

NFFO —

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**Fuels**

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## 7 Finland

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	31.5 %
<b>National</b>		
Increase in the share of biomass use for energetic needs (Bioenergy Promotion Programme, 1994)	1995-2005	25 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	<b>Energy support subsidies, based on state decision 29/99</b> (since 1999) for biomass plants max. 30 % of the investment costs max. subsidy only when innovative technology is used (100 wood based biomass plants have been supported with 13.8 Mill. € in 2001)						
Tax relief	—						
Feed-in tariffs	<b>Energy tax exemption Motion 519/98</b> (since 1998) Electricity tax (that has to be paid by all consumers) is transferred as a subsidy to producers of electricity from biomass <table border="0"> <tr> <td>biomass</td> <td>&lt; 1 MW<sub>el</sub></td> <td>0.42 €/kWh</td> </tr> <tr> <td>wood chips</td> <td>(currently only a proposal)</td> <td>0.69 €/kWh</td> </tr> </table>	biomass	< 1 MW <sub>el</sub>	0.42 €/kWh	wood chips	(currently only a proposal)	0.69 €/kWh
biomass	< 1 MW <sub>el</sub>	0.42 €/kWh					
wood chips	(currently only a proposal)	0.69 €/kWh					
System of quota / certificates	—						
NFFO	—						

### Heat /13/

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Investment incentives	<p>Indirect investment incentive in line with measures for the forestry. Fixed transportation support of 7 €/m<sup>3</sup> (&gt; 3.5 €/MWh) and support of the wood conditioning (crushing) of 1.7 €/m<sup>3</sup> (&gt; 2 €/MWh)</p> <p>Investment subsidies for new companies (for the use of wood as energy source)</p> <p>Local promotion projects for the use of biomass for heating</p>
Tax relief	<p><b>Energy tax exemption Motion 519/98</b></p> <p>biomass                      1.0 €/GJ</p> <p>Heat is subject to the full VAT rate of 22 %</p>
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—
<hr/>	
<b>Fuels</b>	
	Up to now Finland does not produce biofuels commercially.
R & D	Demonstration projects

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## 8 France

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/	2010		21.0 %
<b>National</b>			
Installed electrical power from (solid) biomass	2007	200-400 MW	
Installed electrical power biogas		50-100 MW	
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels	2005		2.0 %
in the energy content of all fuels /3/	2010		5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>			
<b>Electric Energy /11/</b>			
Investment incentives	<b>FIDEME</b> (private investment fund) max. 25 % of project costs  <b>FACE Programme</b> (financed by EDF – a joint fund financed by the government and the electricity consumers) up to 70 % of the investment costs in self-sufficient production in remote areas		
Tax relief	—		
Feed-in tariffs	<b>Electricity Law 2000</b> (since 2000) Feed-in tariffs for 15 or 20 years, will increase in the coming years because of inflation and rising labour costs		
	biomass	$\leq 12 \text{ MW}_{el}$	4.9 €ct/kWh (Standard) 6.0 €ct/kWh (Premium)
System of quota / certificates	—		
NFFO	for RE-electricity from plants $> 12 \text{ MW}_{el}$ open tender; the winner gets a guaranteed feed-in tariff, that depends on the supply, up to now projects in the fields of biogas and wind power with an overall power of $250 \text{ MW}_{el}$ have been tendered		

## Heat

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Investment incentives	<b>Investment compensation schemes</b> (compensation payments) ADEME (Agence de l'Environnement et de la Maîtrise de l'Energie) ; 40 % of the costs
Tax relief	Reduced VAT rate of 5.5 % for wood products and wood heating in the private sector (instead of 19.6 %)
Feed-in tariffs	See miscellaneous
System of quota / certificates	—
NFFO	—

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### Fuels

Tax relief	Reduced consumption taxes for mineral oil products (2000): 0.35 €/l for biodiesel (that corresponds with about 120 Mill. €/a) 0.50 €/l for ethyl alcohol annual production amounts of biodiesel are limited to guarantee a fair competition between EU-countries; the tax relief will be reduced in 2005
Investment incentives	<b>Biofuel production programme</b> Investment incentives for the production of biodiesel
Miscellaneous	Mineral oil companies can mix conventional diesel with biodiesel: up to 5 % for private use up to 30 % for commercial car pools (company cars, buses etc.)  France is leading in the production and commercialisation of biodiesel (40 % of the European production)

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## 9 Germany

Targets	Jahr	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	12.5 %
<b>National</b>		
Share of RE in the primary energy consumption	2010	4.2 %
	2030	25.0 %
	2050	50.0 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels in the energy content of all fuels /3/	2005	2.0 %
	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	<p><b>Long-term subsidised interest rates ("Marktanreizprogramm")</b> up to 5 Mill. € net investment costs; max. 20 years credit period automatically fed biomass plants &gt; 100 kW<sub>th</sub> with CHP biogas plants</p> <p><b>Partly remission of debt ("Marktanreizprogramm")</b> biogas plants up to 70 kW<sub>el</sub>; 15 000 €/plant</p>												
Tax relief	—												
Feed-in tariffs	<p><b>Renewable Energies Law (EEG)</b> since 01.04.2000, modified 2004 guaranteed feed-in of RE-electricity tariffs guaranteed for 20 years bonus for natural biomass, CHP, innovative technologies degression of the tariffs: 1.5 %/a</p> <table> <tbody> <tr> <td>biomass</td> <td>≤ 150 kW<sub>el</sub></td> <td>11.5 €/kWh</td> </tr> <tr> <td>(2004)</td> <td>&gt; 150 kW<sub>el</sub> and ≤ 500 kW<sub>el</sub></td> <td>9.9 €/kWh</td> </tr> <tr> <td></td> <td>&gt; 500 kW<sub>el</sub> and ≤ 5 MW<sub>el</sub></td> <td>8.9 €/kWh</td> </tr> <tr> <td></td> <td>&gt; 5 MW<sub>el</sub> and &lt; 20 MW<sub>el</sub></td> <td>8.4 €/kWh</td> </tr> </tbody> </table>	biomass	≤ 150 kW <sub>el</sub>	11.5 €/kWh	(2004)	> 150 kW <sub>el</sub> and ≤ 500 kW <sub>el</sub>	9.9 €/kWh		> 500 kW <sub>el</sub> and ≤ 5 MW <sub>el</sub>	8.9 €/kWh		> 5 MW <sub>el</sub> and < 20 MW <sub>el</sub>	8.4 €/kWh
biomass	≤ 150 kW <sub>el</sub>	11.5 €/kWh											
(2004)	> 150 kW <sub>el</sub> and ≤ 500 kW <sub>el</sub>	9.9 €/kWh											
	> 500 kW <sub>el</sub> and ≤ 5 MW <sub>el</sub>	8.9 €/kWh											
	> 5 MW <sub>el</sub> and < 20 MW <sub>el</sub>	8.4 €/kWh											
System of quota / certificates	—												
NFFO	—												

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Miscellaneous	Different investment incentives in different states for biomass plants with electricity generation; partly under the condition, that there is no federal subsidy.
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**Heat /35/ /36/**

Investment incentives	<p><b>Subsidies (“Marktanreizprogramm”, BAFA)</b>  Automatically fed plants for solid biomass from 8 to 100 kW and for log boilers from 15 to 100 kW, subsidy of 60 €/kW, at least 1700 €/plant</p>
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	<p><b>Subsidised interest rates and partly remission of debt (“Marktanreizprogramm”, KfW)</b>  Automatically fed plants of more than 100 kW with mostly natural wood, interest rates of up to 5 Mill. € net investment costs with max. 20 years credit period</p>
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Tax relief	<p><b>Mineral oil taxation law</b> (since 01.01.2004)  Oil products and natural gas for the heat generation are subject to taxes, in contrast to biomass products and coal products that are not subject to taxes.</p>
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Feed-in tariffs	—
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System of quota / certificates	A model of quota for renewable energies in the heat market is discussed. Connected with this is the requirement of a "heat law" for renewable energies.
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NFFO	—
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Miscellaneous	Different investment incentives in individual states for biomass plants with electricity generation and heat production; provided that there is no federal subsidy.
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**Fuels**

Tax relief	<p><b>Mineral oil taxation law</b> (since 01.01.2004)  Tax relief for biofuels (and also for biogen components in mixed fuels) until 31.12.2009  The extent of the tax relief can be adjusted to the development of the oil markets or the prices of biomass and fuels  for the time being complete tax exemption</p>
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## 10 Greece

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	20.1 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>			
<b>Electric Energy /11/</b>			
Investment incentives	<b>New Operational Programme for Energy (2000-2006)</b> for biomass plants 40 % of project costs  <b>Development Law 2601/98 (since 1998)</b> up to 40 % of the project costs as partial financing of the capital costs, subsidised loans, leasing		
Tax relief	<b>Law 2364/95</b> Reduction of the taxable income in case of installation of RE-equipment in private buildings 75 % of the investment and installation costs are deductible		
Feed-in tariffs	<b>Law 2244/94 (since 1994) and Law 2773/99 (liberalisation)</b> prior purchase of RE-electricity, up to 50 MW <sub>el</sub> feed-in tariffs for 10 years tariffs depend on the electrical voltage, place and time of day (about 7 to 7.8 €ct/kWh) Self-sufficiency: 70 % of the electricity market price independent power generators: 90 % of the electricity market price Producers of RE-electricity have to pay an annual fee of 2 % of the revenues from the electricity production (this money is used for the implementation of new projects)		
System of quota / certificates	—		
NFFO	—		
Miscellaneous			

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## Heat

The new development law 2601/98, replacing 1892/90, which is expected to be the main funding tool of RES applications in the future. The law provides a combination of subsidy options that is either

a) capital investment subsidies up to 40 %, interest subsidy up to 40 % and subsidy for leasing up to 40 % or

b) tax deduction up to 100 % and interest subsidy up to 40 % for investments in RES. /14/

<http://www.ypetho.gr/ypourgeio/anaptyksiakos.asp>

### Investment incentives

Measure 2.1 of Sub programme 2 of the current Operational Programme for Competitiveness (OPC), under the third Community Support Framework (2000-2006), that is devoted to provide State support to private investments in RES and RUE the grants are given following rounds of public calls. For biomass - biogas investments, the public subsidy is 40 % of the total eligible investment cost regardless of the geographical region. /14/

[www.antagonistikotita.gr](http://www.antagonistikotita.gr)

### Investment incentives

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### Tax relief

#### **Law 2364/95**

Reduction of the taxable income in the case of installation of equipment for renewable energies in private buildings, 75 % of the investment and installation costs are deductible.

### Feed-in tariffs

—

### System of quota / certificates

—

### NFFO

—

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## Fuels

The production of biofuels is still a pilot project; support for biofuels can only be expected when they become competitive.

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## 11 Hungary

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	3.6 %
<b>National</b>		
<hr/>		
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<hr/>		
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>		

### Electric Energy

Investment incentives

Tax relief

Feed-in tariffs

**Ministerial Decree 56/2002**  
guaranteed feed-in tariffs for RE-electricity  
biomass 6 to 6.8 €ct/kWh

System of quota /  
certificates

NFFO

—

Miscellaneous

**Energy Conservation and Energy Improvement Action Programme (2000)**  
Support of the energy production from RE  
  
R & D  
financial support for the implementation of RE-projects

### Heat

Biomass as renewable energy is an important resource in Hungary. Its use has at this stage a remarkable standard. Reasons for this are substantial research works and financial support by different promotion measures of the Hungarian government.

Investment incentives

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Tax relief	—
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Feed-in tariffs	—
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System of quota / certificates	—
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NFFO	—
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**Fuels**

Tax relief	Biodiesel is not liable to consumption taxes.
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Miscellaneous	<b>Government decree about the conditions of the sales and use of biodiesel (2003)</b> Biodiesel is supported with 0.13 €/t/l
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## 12 Ireland

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	13.2 %
<b>National</b>		
<hr/>		
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	—
Tax relief	<b>Business Expansion Scheme (BES)</b> Tax relief for 5 years for investments in RE
Feed-in tariffs	—
System of quota / certificates	—

## NFFO

**Alternative Energy Requirement (AER)**

financial support by the European Regional Development Fund and feed-in tariffs for 15 years

AER I (1994)

Target: 12 MW<sub>el</sub> biomass / waste

Realisation: 12 MW<sub>el</sub>

tariff: 5.1 €/kWh

AER II (1995)

Target: 30 MW<sub>el</sub> biomass cogeneration plant, single plant

Realisation: not in use (a. o. problem: fuel supply)

tariff: 4.6 €/kWh

AER III (1997)

Target: 7 MW<sub>el</sub> biomass / waste

Realisation: 0 MW<sub>el</sub>

tariff: ≤ 5.1 €/kWh

AER IV (1997)

Target: 35 MW<sub>el</sub> CHP

Realisation: 0 MW<sub>el</sub>

tariff: 3.8 €/kWh

AER V (2001)

Target: 10 MW<sub>el</sub> biomass / waste

Realisation: 8 MW<sub>el</sub> (bis 2004)

tariff: ≤ 5.9 €/kWh

AER VI (2003)

Target: 8 MW<sub>el</sub> biomass      28 MW CHP      2 MW biogas

tariff: 6.4 €/kWh              7.0 €/kWh              7.0 €/kWh

## Miscellaneous

**Heat**

There are no political instruments to promote the generation of heat from renewable energy sources.

Investment incentives —

Tax relief —

Feed-in tariffs —

System of quota /  
certificates —

NFFO —

**Fuels**

R & D Demonstration projects

Tax relief Only for demonstration projects

### 13 Italy

Targets	Year		
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/	2010		25.0 %
<b>National</b>			
Share of RE in the primary energy consumption	2010		4.2 %
Installed electrical power		<u>biomass</u>	<u>waste</u>
	2006	800 MW <sub>el</sub>	500 MW <sub>el</sub>
	2012	2 300 MW <sub>el</sub>	800 MW <sub>el</sub>
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels	2005		2.0 %
in the energy content of all fuels /3/	2010		5.75 %

#### Political Instruments to Promote the Use of Biomass /5/, /7/, /9/

##### Electric Energy /11/

Investment incentives	<b>Law 10/91</b> (since 1991) 30 to 40 % of the investment costs
Tax relief	—
Feed-in tariffs	<b>Law 9/91 and CIP provision 6/92</b> (since 1991) tariffs for 8 years payment of a premium on the basis of market prices
System of quota / certificates	<b>Law 79/99</b> (since 1999) share of RE in the electricity production 2,0 % for electricity generators > 100 GWh/a (for own consumption, CHP and exports are not credited). It is possible to buy certificates or build RE-plants to fulfil the quota. RE-plants, that get feed-in tariffs, cannot sell certificates.
NFFO	—

##### Miscellaneous

##### Heat

Investment incentives	—
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Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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## Fuels

Tax relief	<p><b>Financial law (2000)</b> Tax relief for biodiesel, bioethanol etc.</p> <p><b>Law 173/1998 (1998)</b> Relief for the non-food production of the raw materials for biofuels (e. g. rape seed for biodiesel)</p>
Miscellaneous	<p>since 1991 biodiesel is used in municipalities; the production of biodiesel is regulated annually.</p> <p><b>National Voluntary Agreement (2001)</b> Biodiesel can be mixed to a share of 5 % to conventional diesel.</p> <p>Italy has (besides France) a leading position in the market for biodiesel.</p> <p>The production of bioethanol is tested currently.</p>

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## 14 Latvia

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	49.3 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	—		
Tax relief	—		
Feed-in tariffs			<b>Regulation No. 9</b> "Requirements for co-generation plants and the procedure of setting price for purchase of excess electricity" (since 2002) higher payments for electricity from domestic sources biogas / waste                      feed-in tariffs comply with the market price
System of quota / certificates			<b>Regulation No. 28</b> "On total installation capacities for each type of electricity generation if RES are utilised" (since 2002) every year the installed electrical power from renewable sources is revised 2004: 1 MW <sub>el</sub> from solid biomass (wood or peat) 1 MW <sub>el</sub> from biogas or municipal waste
NFFO	—		
<hr/>			
<b>Heat</b>			
Investment incentives	—		
Tax relief	—		
Feed-in tariffs	—		

System of quota /  
certificates —

NFFO —

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### **Fuels**

Miscellaneous Up to now biodiesel is not used; to make biodiesel competitive with fossil fuels public support is necessary.

**National Program on Production and Use of Biofuel in Latvia**  
Production and use of biodiesel from 2010  
adaptation of diesel engines to biodiesel

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## 15 Lithuania

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	7.0 %
<b>National</b>		
<hr/>		
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<hr/>		
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>		

### Electric Energy

Investment incentives	Up to 40 % of the costs for the net access are subsidised
Tax relief	—
Feed-in tariffs	<b>Resolution No. 1474</b> (since 2002) no guaranteed time for the feed-in tariffs biomass 5.8 €ct/kWh (2004)
System of quota / certificates	—
NFFO	—
Miscellaneous	Until 2009 the installed electrical power of biomass plants shall increase to 35 MW

### Heat

	The main user of wood are one-family houses. Further information about the promotion of the use of biomass are not available.
Investment incentives	—
Tax relief	—
Feed-in tariffs	—

System of quota /  
certificates —

NFFO —

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**Fuels**

Currently there are no special subsidies for the promotion of biofuels.

To reach the targets of the EU, until 2005 about 20 000 t/a and until 2010 about 55 000 t/a of biofuels will have to be utilised; the production capacities to reach this targets can easily be built up for bioethanol and RME.

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## 16 Luxembourg

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	5.7 %
<b>National</b>		
Share of RE in the public electricity grid (CEGEDEL)	2010	5.0 %
Share of wood in the primary energy consumption	2010	1.0 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	<p><b>Subsidised interest rates SNCI</b> (Société Nationale Crédit à l'Investissement; since 1948) The government offers low-interest rates (interest rate: 3 % max. 10 (in exemptions up to 14) years maturity Interest rates are offered for 25 to 60 % of the investment costs max. investment costs: 1 220 000 € min. investment costs: 12 261 €</p> <p><b>Framework law 27.07.1993 and Grand Ducal regulation</b> from 05.08.1993 concerning economic development and diversification (since 1993) Subsidies of up to 25 % of the investment costs own funds are necessary</p>						
Tax relief	<p><b>Flexible depreciation</b> (1989-1999) Tax payers (companies) could depreciate up to 60 % of the investment costs.</p>						
Feed-in tariffs	<p><b>Framework law 05.08.1993</b> (since 1994) Payments by the public supporter CEGEDEL</p> <table> <tbody> <tr> <td>biomass</td> <td>≤ 500 kW<sub>el</sub></td> <td>10.0 €ct/kWh</td> </tr> <tr> <td></td> <td>&gt; 500 und ≤ 1 500 kW<sub>el</sub></td> <td>5.8 €ct/kWh (day) 3.0 €ct/kWh (night)</td> </tr> </tbody> </table>	biomass	≤ 500 kW <sub>el</sub>	10.0 €ct/kWh		> 500 und ≤ 1 500 kW <sub>el</sub>	5.8 €ct/kWh (day) 3.0 €ct/kWh (night)
biomass	≤ 500 kW <sub>el</sub>	10.0 €ct/kWh					
	> 500 und ≤ 1 500 kW <sub>el</sub>	5.8 €ct/kWh (day) 3.0 €ct/kWh (night)					
System of quota / certificates	—						

NFFO —

Miscellaneous Divers investment promotion programmes in the past

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**Heat**

Investment incentives —

Tax relief —

Feed-in tariffs —

System of quota /  
certificates —

NFFO —

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**Fuels**

Currently there are no specific promotion instruments for the use of  
biofuels

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**17 Malta**

<b>Targets</b>		<b>Year</b>	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	5.0 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	—		
Tax relief	—		
Feed-in tariffs	—		
System of quota / certificates	—		
NFFO	—		
Miscellaneous			
<b>Heat</b>			
<b>Fuels</b>			
			currently Malta works out a strategy for the promotion of RE

## 18 Poland

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	7.5 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	Investors can ask (without automatic entitlement) for investment promotion or subsidised interest rates at: National Fund of Environmental Protection Environmental Protection Bank ECOFUND		
Tax relief	RE-electricity is not subject of the consumption tax (0.44 €ct/kWh)		
Feed-in tariffs	Until 2000 Poland had a feed-in tariff for RE-electricity		
System of quota / certificates	<b>Quota Obligation Ordinance</b> (since 2003) Electricity suppliers have to sell a certain share of RE-electricity of which biomass and wind should have the biggest share 2001 at least 2.4 % 2002 at least 2.5 % 2010 at least 7.5 % currently there are no legal or financial consequences for suppliers, that miss that quota		
NFFO	—		
Miscellaneous	For a better promotion of RE (definition of an overall strategy, secure legal basis for investments etc.) currently a "Renewable-Energies-Law" is worked out (draft is under discussion in the Parliament)		
<hr/>			
<b>Heat</b>			
Investment incentives	—		

Tax relief —

Feed-in tariffs A decree of the Minister for Economy, Labour and Social Policy from 30.05.2003 regulates the obligations to buy electricity and **heat** from renewable sources and smoothes out at least partially the existing uncertainties for investors and plant operators.

System of quota /  
certificates —

NFFO —

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### **Fuels**

Miscellaneous **Act on the Organisation of the Market for Liquid biofuels (2003)** regulates the admixing of biofuels, the minimum share of biofuels is revised annually

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## 19 Portugal

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	39.0 %
<b>National</b>		
<hr/>		
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>		

### Electric Energy /11/

Investment incentives	<b>MAPE/POE-Programme, 2000-2006</b> for public and private organisations power generation from RE or energy management and co-combustion about 40 % of the investment sum (varies depending on economic efficiency and technology)
Tax relief	<b>Favourable taxation on personal income tax</b> (DL number 442-A/88), since 1988 Private individuals can deduct up to 30 % (max. 700 €/a) of their investments in RE-technologies from their tax basis (since 2002)  <b>VAT reduction</b> Reduction of the VAT rate (normal: 17 %) since 2001 to 12 % for all investments in RE besides side and service investments
Feed-in tariffs	<b>Decree-Law number 339-C/2001</b> (update of 168/99), since 2001 obligation to buy RE-electricity feed-in tariffs guaranteed for 12 years tariffs are adapted annually to the consumer price index biomass            6.198 €/kWh (2003)
System of quota / certificates	—
NFFO	—
Miscellaneous	

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**Heat**

Discount	Use energy potential and streamline consumption (MAPE in POE)
Investment incentives	The projects promoted by the EU between 1995 and 1999 (ENERGIA Program) have been predominantly biomass-heat-projects. There are no information available about national promotion programmes.
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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**Fuels**

Tax relief	Tax relief (up to 100 %) for biofuels, that are used in (certified) R&D or pilot projects
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**20 Slovakia**

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	31.0 %
<b>National</b>		
Share of RE in the primary energy consumption	2005	4.0 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %

**Political Instruments to Promote the Use of Biomass /5/, /8/, /10/****Electric Energy**

Investment incentives	<b>Program of the State Support for Alternative Energy sources Usage</b> Relief of up to 70 % of the interests on interest rates
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—
Miscellaneous	The government supports the financing of biomass projects only in remote, mountainous or rural areas

**Heat**

Investment incentives	—
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—



NFFO

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**Fuels**

"Biofuel act" is in force

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## 21 Slovenia

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	33.6 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /8/, /10/</b>			
<b>Electric Energy</b>			
Investment incentives	Refund of up to 40 % of the investment costs, in remote areas without access to the grid up to 60 % Provision of subsidised interest rates		
Tax relief	biomass is not subject to the CO <sub>2</sub> -tax (which is otherwise 2 % of the fuel prices)		
Feed-in tariffs	<b>Decree on prices and premiums for purchase of electricity</b> from qualified producers (Official Gazette RS, no. 8/04) it is planned to adapt the feed-in tariff annually (depending on inflation and other factors of influence)		
	biomass	up to 1 MW	6.98 €ct/kWh
		more than 1 MW	6.76 €ct/kWh
System of quota / certificates	—		
NFFO	—		

## Heat

**Programme for the use of wooden biomass for the power generation (2000)**

Until 2010 a total of 50 district heating systems (with 3 MW on the average), 100 modern industrial combustion plants (300 kW) and 5 000 boilers for private central heating (up to 30 kW) shall be built resp. installed; total costs: 179 Mill. Euro (thereof 53 Mill. Euro public grants)

**National Energy Programme (NEP)**

Is to be passed by the parliament in 2004, an increase of the use of biomass for heating reasons is planned.

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Investment incentives	Subsidies of up to 40 % of the investment costs
Tax relief	Biomass is exempted from the CO <sub>2</sub> -tax
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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**Fuels**

Up to now there is no production of biodiesel.

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## 22 Spain

Targets		Year	
<b>Electric Energy</b>			
<b>EU</b>			
Share of RE in the gross electricity consumption (ind.) /2/		2010	29.4 %
<b>National</b>			
<hr/>			
<b>Fuels</b>			
<b>EU</b>			
Share of biofuels and other renewable fuels		2005	2.0 %
in the energy content of all fuels /3/		2010	5.75 %
<hr/>			
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>			
<b>Electric Energy /11/</b>			
Investment incentives	<b>Línea ICO-IDEA</b> , since 1999 for private and public organisations Reduced interest rate subsidies on investments in RE (a. o. biomass, biogas and biofuels) annual review of rates, 2002: 2 to 4 % max. credit line per project: 6.3 Mill. € (available total credit volume 2002: 150.2 Mill. €)		
Tax relief	—		
Feed-in tariffs	<b>Royal Decree 2818/1998</b> (since 1999) Promotion of RE-electricity up to 50 MW <sub>el</sub> feed-in tariffs guaranteed for 5 years optionally guaranteed feed-in tariff or premium on the market price tariffs are adapted annually to the market conditions feed-in tariffs 2003:                   energy plants                   6.85 €/kWh other biomass                   6.05 €/kWh Premium tariff 2003:                   energy plants                   3.32 €/kWh other biomass                   2.51 €/kWh		
System of quota / certificates	—		
NFFO	—		
Miscellaneous	Own targets and instruments on the regional level		

## Heat

### **Plan for the Promotion of Renewable Energies (1997)**

Investment incentives	—
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—

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## Fuels

Tax relief	<b>Law 53 (30.12.2002)</b> Biofuels are exempted from the hydrocarbon tax until 2012
Investment incentives	<b>Spanish Energy Saving and Efficiency Plan</b> Subsidised interest rates of up to 30 % of the eligible costs
Miscellaneous	<b>Promotion Plan</b> Promotion of production and use of biodiesel and bioethanol  Besides France, Spain is the only commercial producer of ETBE in the EU

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## 23 Sweden

Targets		Year									
<b>Electric Energy</b>											
<b>EU</b>											
Share of RE in the gross electricity consumption (ind.) /2/	2010		60.0 %								
<b>National</b>											
Increase of the share of RE-electricity	2010	around	10 TWh								
<b>Kraftstoff</b>											
<b>EU</b>											
Share of biofuels and other renewable fuels	2005		2.0 %								
in the energy content of all fuels /3/	2010		5.75 %								
<b>Political Instruments to Promote the Use of Biomass /5/, /7/, /9/</b>											
<b>Electric Energy /11/</b>											
Investment incentives	Various investment incentives (short term)										
Tax relief	<b>Act 1994: 1779</b> (since 1994) Small scale RE-electricity production Relief from energy tax (1 to 2 €ct/kWh) biomass: also relief from different environmental charges (CO <sub>2</sub> , sulphur, NO <sub>x</sub> )										
Feed-in tariffs	—										
System of quota / certificates	<b>Electricity certificate trading system</b> (since May 2003) Share of RE at the power generation <table border="0" style="margin-left: 20px;"> <tr> <td>2003</td> <td>7.4 %</td> </tr> <tr> <td>2010</td> <td>16.9 %</td> </tr> </table> in the start phase this rule is not valid for energy intensive industries power suppliers can allocate the certificate price to consumers (with the power bills; about 0.55 €ct/kWh) guaranteed min. price per certificate: <table border="0" style="margin-left: 20px;"> <tr> <td>0.66 €ct/kWh (2003)</td> </tr> <tr> <td>0.22 €ct/kWh (2008)</td> </tr> </table> Fine, if the share is not reached: <table border="0" style="margin-left: 20px;"> <tr> <td>1.93 €ct/kWh (2003)</td> </tr> <tr> <td>2.63 €ct/kWh (2004)</td> </tr> </table>			2003	7.4 %	2010	16.9 %	0.66 €ct/kWh (2003)	0.22 €ct/kWh (2008)	1.93 €ct/kWh (2003)	2.63 €ct/kWh (2004)
2003	7.4 %										
2010	16.9 %										
0.66 €ct/kWh (2003)											
0.22 €ct/kWh (2008)											
1.93 €ct/kWh (2003)											
2.63 €ct/kWh (2004)											
NFFO	—										
Miscellaneous	<b>R &amp; D – Programme</b> (1998-2004) 257 Mill. € overall Swedish Energy Agency is responsible for the implementation										

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## Heat

Investment incentives	<b>Energy tax exemption (1990)</b> biomass becomes the cheapest source to produce heat
Tax relief	There were local investment programmes to promote sustainable development, in which e. g. biomass heating installations have been promoted. /16/, /17/
Feed-in tariffs	Different measures to support the use of biomass have been introduced, e. g. a tax relief (at the same time taxes on fossil fuels) and a CO <sub>2</sub> -tax, so that biomass is one of the cheapest energy sources to produce heat.
System of quota / certificates	—
Quotenregelung / Zertifikate	—
NFFO	—

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## Fuels

Tax relief	<b>Energy tax exemption</b> Biofuels are not subject to the energy or environmental taxation and free of any charges (CO <sub>2</sub> , sulphur)
R & D	<b>Research programmes</b> of the Swedish Energy Agency

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## 24 The Netherlands

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	9.0 %
<b>National</b>		
Share of RE in the primary energy consumption	2010	5.0 %
	2020	10.0 %
Share of RE in the gross electricity consumption	2020	17.0 %
<b>Fuels</b>		
<b>EU</b>		
Share of biofuels and other renewable fuels in the energy content of all fuels /3/	2005	2.0 %
	2010	5.75 %

### Political Instruments to Promote the Use of Biomass /5/, /7/, /9/

#### Electric Energy /11/

Investment incentives	<p><b>Energy Investment Deduction</b> (EIA, since 1997) Deduction of the taxable income to a certain share (2002: 55 %) of the investment costs in the first year max. deduction of the taxable income: 99 Mio. € min. investment costs: 1900 €</p> <p><b>Subsidy Regulation on Energy Supply in Non-profit and Private Sectors</b> (EINP, since 1997) only for investments higher than 1 750 € non-profit organisations: up to 18.5 % of the investment costs private households: up to 20.0 % of the investment costs</p>
Tax relief	<p><b>Regulating Energy Tax</b> (REB, since 1997, modified July 2003) Energy tax <u>and</u> subsidies for the production of RE-electricity (since 2003 no subsidies for electricity from biomass) Charges for small and medium energy and gas consumers since 2001 Introduction of certificates Tax relief for RE-electricity biomass (100 % and small plants): 2.9 €/kWh</p>
Feed-in tariffs	<p><b>Environmental quality of electricity production</b> (MEP, since July 2003) Feed-in tariffs guaranteed for max. 10 years can be used additionally to the REB-relief biomass (small plants): 6.8 €/kWh</p>



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System of quota / certificates	—
NFFO	—
Miscellaneous	Support for R&D biogas projects, pilot projects Promotion of CHP no plants > 100 MW <sub>el</sub> and hereby support of local power supply and biomass co-combustion

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**Heat**

Investment incentives	—
Tax relief	<b>Energy Investment Allowance</b> is a tax deduction for investments in energy efficiency and for renewable energy cooperation. The advantage is based on a deduction of the taxable income to a certain share (from 2001: 55 %, before 40 %) of the investment costs.
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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**Fuels**

Tax relief	100 % tax relief for the use of cold-pressed vegetable oil in certain vehicles.  Tax relief for refined biofuels and lubricants.
R & D	Test of the use of biodiesel in vehicles.

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## 25 United Kingdom

Targets	Year	
<b>Electric Energy</b>		
<b>EU</b>		
Share of RE in the gross electricity consumption (ind.) /2/	2010	10.0 %
<b>National</b>		
Share of RE in the primary energy consumption	2003	13.0 %
	2010	18.0 %

### Fuels

<b>EU</b>		
Share of biofuels and other renewable fuels	2005	2.0 %
in the energy content of all fuels /3/	2010	5.75 %

### Political Instruments to Promote the Use of Biomass /5/, /7/, /9/

#### Electric Energy /11/

Investment incentives	<b>The New Opportunities Fund under National Lottery Act</b> (since 1998, annual adjustment) electricity production from biomass (no waste): energy plants, CHP private heat generation from biomass 40 % of the investment costs (depending on the availability of funds)							
Tax relief	<b>Climate Change Levy</b> (CCL, Statutory Instrument; 28.07.2000-2010) ("polluter-pays-principle" for industrial and public sector) Taxes on electricity from fossil sources (to pay with energy bill, 2001: ca. 0.63 €/kWh) For electricity from RES no tax has to be paid.							
Feed-in tariffs	—							
System of quota / certificates	<b>New &amp; Renewables Obligation</b> (01.04.2002-2027) Obligation for all energy suppliers share of RE in the electricity generation <table> <tbody> <tr> <td>2003</td> <td>3.0 %</td> </tr> <tr> <td>2011</td> <td>10.4 %</td> </tr> <tr> <td>2027</td> <td>10.4 %</td> </tr> </tbody> </table> if the share is not reached, certificates have to be bought (ROCs = Renewable Obligation Certificates) or fine paid (prices are revised annually, currently about 4.5 €/kWh)		2003	3.0 %	2011	10.4 %	2027	10.4 %
2003	3.0 %							
2011	10.4 %							
2027	10.4 %							
NFFO	—							
Miscellaneous								

**Heat**

Investment incentives	Publication of a promotion programme > £ 4.2 Mill. (ca. € 3 Mill.) for the heat production from biomass and for small CHP-plants
Tax relief	—
Feed-in tariffs	—
System of quota / certificates	—
NFFO	—

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**Fuels**

Tax relief	<b>Tax Exemption (2004)</b>
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