Renewable energy policy database and support – RES-LEGAL EUROPE

Regional profile: Flanders

Client: DG Energy

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Flanders – Summary text

Flanders supports electricity from renewable energy sources by means of a quota system, an ecological premium and a net-metering scheme. Regarding heating and cooling from renewable energy resources, the Flemish support scheme so far only provides for a quota system. Grid operators and municipalities are responsible for setting up premium schemes.

The access of electricity from renewable energy sources to the grid is basically regulated by the basic legislation on energy market and technical regulations by the Flemish Electricity and Gas Regulator (VREG). Electricity from renewable energy sources is given priority in both connection to and use of the grid. Distribution grid operators are obliged to finance grid expansion.

Diverse policies are currently under discussion. The level of implementation differs. On 28 September 2012, the Energy Regulation has been revised transposing the building obligations for heat from renewable energy into Flemish law.

RES-E support schemes

Summary of support schemes

Overview	Flanders supports electricity from renewable energy sources by means of a quota system, an ecological premium and a net-metering scheme.
Support schemes	**Subsidy:** The ecological premium is designed to stimulate companies to invest in environmental friendly and energy efficient technologies including renewable energies. This subsidy is paid to companies that operate in the Flemish region (Art. 9 Decree on Economic Aid). Eligible technologies are registered within a limited technology list (LTL) compiled and revised by the Ministry on the basis of proposals made by VITO (Independent Research Centre). Projects are selected on a call for project basis 3 times per year. This subsidy cannot be combined with green electricity certificates (Art. 16 1° Decree on Ecological Investment). **Quota system:** The region of Flanders uses a quota system and a certificate trading scheme to support renewable energy (Article 7.1.10 in conjunction with Article 7.1.1, Article 7.1.5 § 1 2° Energy Decree). In general, all renewable energy generation technologies are eligible for the quota system (Article 7.1.1 in conjunction with Article 7.1.3 Energy Decree, Article 6.1.16 Energy Regulation). The green electricity certificates are issued by the Flemish regulatory authority (VREG). The amount of electricity to be produced for 1 certificate varies across technologies and is based on a technology-specific banding factor. **Net-metering:** All renewable technologies with a capacity ≤10 kW are eligible for the net-metering scheme.
Technologies	In general, all renewable electricity generation technologies are eligible for support in the framework of the quota system. Regarding the subsidy, eligible technologies are set out in the technology list (LTL).
Statutory provisions	• Decreet houdende algemene bepalingen betreffende het energiebeleid – het Energiedecreet van 8 mei 2009 (Law Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009) • Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid – het Energiebesluit van 19 november 2010 (Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010) • Ministerieel besluit houdende de goedkeuring van het technisch reglement distributie elektriciteit

	Vlaams Gewest (Ministerial Decision on the approval of the technical regulation concerning the distribution of electricity in Flanders of 21. January 2010) • Besluit van de Vlaamse Regering tot toekenning van steun aan ondernemingen voor ecologie-investeringen in het Vlaamste Gewest (Decree of the Flemish Government dated 16 May 2007 on the granting of aids to companies for ecological investments undertaken in the Flemish Region) • Decreet betreffende het economisch ondersteuningsbeleid van 31 januari 2003 (Decree of 31 January 2003 on economic aid policy)

Basic information on legal sources

Name of legal source **(original language)**	Energiedecreet van 8 mei 2009	het Energiebesluit van 19 november 2010	Ministerieel Besluit van 21. Januari 2010
Full name	Decreet houdende algemene bepalingen betreffende het energiebeleid	Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid	Ministerieel besluit houdende de goedkeuring van het technisch reglement distributie elektriciteit Vlaams Gewest
Name (English)	Decree Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009	Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010	Ministerial Decision on the approval of the technical regulation concerning the distribution of electricity in Flanders.
Abbreviated form	Energy Decree	Energy Regulation	Ministerial Decision
Entry into force	01.01.2011	01.01.2011	21.01.2010
Last amended on	24.07.2012	01.01.2013	
Future amendments			
Purpose	The Energy Decree bundles all prior energy related decrees, e.g. electricity and gas decree, and stipulates general	The Energy Regulation replaces all prior energy related regulations and includes further details on the general conditions	The Ministerial Decision sets out the main regulations concerning the distribution of electricity in Flanders from a technical perspective covering inter alia grid

	conditions for energy policy in Flanders.	for energy policy in Flanders.	access.
Relevance for renewable energy	The Energy Decree includes general principles for support for renewable energy.	The Energy Regulation was adopted to support renewable energy in Flanders and stipulates the terms and conditions for support and the subsidy levels for the different technologies.	The Ministerial Decision stipulates the requirements for grid access for an installation. From a procedural point, the document foresees a prioritisation of installations producing electricity from renewable energy.
Link to full text of legal source (original language)	http://codex.vandenbroele.be/Zoeken/Document.aspx?DID=1018092&param=inhoud	*http://codex.vlaanderen.be/Zoeken/Document.aspx?DID=1019755&param=inhoud*	*http://staatsbladclip.zita.be/staatsblad/wetten/2010/02/18/wet-2010035104.html*
Link to full text of legal source (English)			

Name of legal source **(original language)**	Besluit van de Vlaamse Regering tot toekenning van steun aan ondernemingen voor ecologie-investeringen in het Vlaamste Gewest	Decreet betreffende het economisch ondersteuningsbeleid van 31 januari 2003
Full name	Besluit van de Vlaamse Regering tot toekenning van steun aan ondernemingen voor ecologie-investeringen in het Vlaamste Gewest	Decreet betreffende het economisch ondersteuningsbeleid
Name (English)	Decree of the Flemish Government dated 16 May 2007 on the granting of aids to companies for ecological investments undertaken in the Flemish Region.	Decree of 31 January 2003 on economic aid policy
Abbreviated form	Decree on Ecological Investment	Decree on Economic Aid Policy
Entry into force	17.12.2010	31.1.2003
Last amended on	23.01.2013	27.04.2012
Future amendments		
Purpose	The Decision on Ecological investment sets out the legal framework for the support of companies to invest in ecological techniques.	The Decree on economic aid policy sets out the rules and procedures for companies to apply for ecological investment subsidy.
Relevance for renewable energy	The Decision on Ecological Investment entails the promotion of renewable energy technologies.	The Decree on economic aid policy entails the promotion of companies to invest in renewable energy technology.

Link to full text of legal source (original language)	http://www.emis.vito.be/sites/default/files/legislation/1332/2013/sb030113-1.pdf	*http://www.ejustice.just.fgov.be/cgi/api2.pl?lg=nl&pd=2012-04-27&numac=2012202237*
Link to full text of legal source (English)		

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Vlaamse Ministerie van Energie, Wonen, Steden en Sociale Economie – Flemish Ministry of Energy, Housing, Cities and Social Economy	http://www.freyavandenbossche.be/		+32 2 552 61 00	kabinet.vandenbossche(at)vlaanderen.be
Vlaamse Regulator van de Elektriciteits- en Gasmarkt (VREG) – Flemish Regulator of the Electricity and Gas market	http://www.vreg.be		+32 2 55 313 79	info@vreg.be
Vlaamse Energieagentschap (VEA) – Flemish Energy Agency	http://www.energiesparen.be/			
Agentschap ondernemen (Enterprise Flanders)	http://www.agentschapondernemen.be		+32 (0) 800 20 555	info@agentschapondernemen.be

Support schemes

Subsidy Ecologic Premium Plus/Strategic Ecologic Support

Abbreviated form of legal source(s)	Decree on Ecological Investment, Decree on Economic Aid Policy	
Contact Authority	Agentschap Ondernemen	
Summary	In general, companies are stimulated to invest in environmental friendly and energy efficient technologies via a subsidy scheme consisting of the Ecologic Premium Plus (EP-PLUS) and Strategic Ecologic Support (EP-STRES). An ecologic premium plus (EP-PLUS) is paid to technologies registered within a limited technology list (LTL) compiled and revised by the Ministry on the basis of proposals made by VITO (Independent Research Centre). Technologies not singled out in LTL may apply for strategic ecologic support (EP-STRES).The subsidy is paid to companies that operate in the Flemish region (Art. 10 Decree on Economic Aid). For both, the support cannot be combined with green electricity certificates (Art. 17 6° Decree on Ecological Investment). Projects are selected on a call for project basis 3 times per year.	
Promoted technologies	**General information**	In order to be eligible for subsidy, the premium system differentiates between small and medium-size enterprises (SME) and large ones (LE) (Art. 3 2°, 3° and 4° Decree on Economic Aid Policy in conjunction with Art. 1 3° and 4° Decree on Ecological Investment). According to Enterprise Flanders (Agentschap Ondernemen), enterprises are required to exert an activity listed in the NACE code and realise the subsidised investment within Flanders (Art. 10 Decree on Economic Aid Policy). Moreover, the public stake in the company shall be less than 50 % (independence criteria as mentioned in Art. 8 Decree on Ecological Investment). Eligible technologies for EP-PLUS are registered within a limited technology list (LTL) (Art. 5 °1 Decree on Ecological Investment) which can be downloaded from http://www.agentschapondernemen.be/artikel/welke-investeringen-

		komen-aanmerking-incl-limitatieve-technologie%C3%ABnlijst. This list is compiled and revised by the ministry on the basis of proposals made by VITO (Independent Research Centre). Technologies that are not part of LTL can be proposed for recognition to VITO or can apply for EP-STRES. In order to qualify for EP-STRES, the project should dispose of the following characteristics underlying the project's strategic dimension (Art. 5 1° - 3°): a) Provision of global environmental and energy solutions at the enterprise level with closed energy and material cycles and process-integrated solutions. b) Adhering to the global vision of the company in respect of the environment or the sustainable use of energy in the company; c) Aiming for general environmental or energy policy objectives EP-PLUS and EP-STRES projects are selected on a call for project basis 3 times per year. This subsidy cannot be combined with green electricity certificates (Art. 17 6° Decree on Ecological Investment).
	Wind energy	If the project qualifies under EP-STRES
	Solar energy	Eligible
	Geothermal energy	Eligible
	Biogas	If the project qualifies under EP-STRES

<table>
<tr><td rowspan="2"></td><td>Hydro-power</td><td>If the project qualifies under EP-STRES</td></tr>
<tr><td>Biomass</td><td>Eligible</td></tr>
<tr><td>Amount</td><td colspan="2">The amount of subsidy is calculated as the percentage of extra investments needed in order to obtain a certain level of environmental protection (additional cost of investment) laid out in the LTL list (Art. 21 Decree on Ecological Investment in conjunction with Art. 16 Decree on Economic Aid Policy). The amount of premium (holds for both EP-PLUS and EP-STRES) is determined by the ecological performance of the technology (eco number), the eco class and the volume of the investment differentiating between small and medium enterprises (SME) and large enterprises (LE) (Art. 22 §1 Decree on Ecological Investment). The eco class for EP-PLUS is listed already in the LTL. Concerning EP-STRES an evaluation is done by VITO ad-hoc.

<u>The amount of EP-PLUS is the following:</u>

<table>
<tr><td>Eco class</td><td>Eco number</td><td>Premium in % SME</td><td>Premium in % LE</td></tr>
<tr><td>A</td><td>9 -6</td><td>45 %</td><td>35 %</td></tr>
<tr><td>B</td><td>4-3</td><td>30 %</td><td>20 %</td></tr>
<tr><td>C</td><td>2</td><td>15 %</td><td>5 %</td></tr>
<tr><td>D</td><td>1</td><td>5 %</td><td></td></tr>
</table>

According to Enterprise Flanders, EP-PLUS can be increased in form of a bonus if the company on the date of submission disposes an energy, environmental or ecological efficiency scan, a valid environment certificate or a certified environment management system. The bonus is the following:</td></tr>
</table>

	Bonus in % (SME)	Bonus in % (LE)
energy, environmental or ecological efficiency scan (Eerstelijns milieu-, energie- of eco-efficientiescan)	3 %	-
environment certificate (Milieucertificaat)	5 %	-
certified environment management system (Milieumanagementsysteem (ISO 14001/EN 16001/EMAS))	10 %	5 %

The amount of EP-STRES is the following:

Eco class	Eco number	Premium in % SME	Premium in % LE
A	9 -6	55 %	45 %
B	4-3	45 %	35 %
C	2	30 %	20 %
D	1	15 %	5

The budget has been reduced in the last two consecutive years from initially € 102 million in 2011 to € 79.5 million in 2012

	and € 63 million foreseen budget in 2013. Maximum premium is € 1 million per company over a period of 3 years (Art. 22 Decree on Ecological Investment). The premium is paid in 3 rates, the first of 30 % earliest 30 days after application was approved, the second 30 % after 60 % of the investment has been realised and the final rate is paid after investment is completed and monitored (Art. 37 1°-3° Decree on Ecological Investment).	
Addressees	The premium scheme is addressed to small and medium size as well as large enterprises as defined in Art. 3 2°, 3° and 4° Decree on Economic Aid Policy to support investment in environmental friendly and energy efficient technologies (Art. 16 Decree on Ecological Investment in conjunction with Art. 5 Decree on Ecological Investment).	
Procedure	**Process flow**	Every company that fulfils the requirements is eligible for the project calling. Applications have to be submitted online via www.ecologiepremie.be. After the premium has been granted, investments need to be realised within 3 years after the approval (Art. 15 Decree on Ecological Investment).
	Competent authority	Enterprise Flanders (Agentschap Ondernemen) is in charge.
Flexibility mechanism		
Distribution of costs	**State**	The budget is provided by the Flemish state.
	Consumers	
	Plant operator	
	Grid operator	

	European Union	
	Distribution mechanism	

Quota system (Groenestroomcertificaten)

Abbreviated form of legal source(s)	• Energy Decree • Energy Regulation	
Contact Authority	• Flemish Ministry of Housing, Cities and Social Economy, VREG	
Summary	The region of Flanders uses a quota system and a certificate trading scheme to support renewable energy (Article 7.1.10 in conjunction with Article 7.1.1, Article 7.1.5 § 1 2° Energy Decree). In general, all renewable energy generation technologies are eligible for the quota system (Article 7.1.1 in conjunction with Article 7.1.3 Energy Decree, Article 6.1.16 Energy Regulation). The green electricity certificates are issued by the Flemish regulatory authority (VREG). The amount of electricity to be produced for 1 certificate varies across technologies and is based on a technology-specific banding factor. This so called banding factor accounts for the specific technology costs and efficiencies for amortisation. Thus, from 1.1.2013 one certificate does not necessarily be equal to 1 MWh. The grid operators are obliged to meet their quota obligations, i.e. present green certificates for the quota defined by law, every year by 31 March (Article 7.1.10 §1 in conjunction with Article 7.1.5 § 1 2° Energy Decree).	
Promoted technologies	**General information**	In general, Flanders supports all renewable energy generation technologies (Article 7.1.1. in conjunction with Article 7.1.3 Energy Decree, Article 6.1.16 Energy Regulation). Plants generating more than 100,000 kWh of electricity from renewable sources shall be certified by an authorised body (Article 6.1.4 Energy Regulation).
	Wind energy	Eligible (Article 6.1.16 §1 2° Energy Regulation). The certificates for offshore wind energy are issued by the national regulatory authority (CREG).
	Solar energy	PV installations are eligible (Article 6.1.16 § 1 1° Energy Regulation).

	Geothermal energy	Eligible (Article 6.1.16 § 1 5° Energy Regulation).
	Biogas	Both biogas from biological fermentation of organic substances in fermentation plants (Article 6.1.16 § 1 6° a) Energy Regulation) and landfills (Article 6.1.16 § 1 6° b) Energy Regulation) are eligible. Moreover, biogas from liquid biomass has to fulfil sustainability criteria.
	Hydro-power	Plants are eligible if their capacity is less than 10 MW (Article 6.1.16 § 1 3° Energy Regulation).
	Biomass	Eligible (Article 6.1.16 § 1 7° Energy Regulation).
Amount	**Amount of quota and period of application**	The quota is calculated according to a formula set by law (Article 7.1.10 § 2 Energy Decree): C = G x Ev According to law, the amount of green certificates to be presented "C" is calculated by multiplying the amount of electricity supplied Ev in MW by factor "G". According to law, the factor "G" is 0.07 from 31 March 2012. From 31 March 2013, the amount of green certificates to be presented "C" is calculated by multiplying the amount of electricity supplied Ev in MW by factor "Gr" and a "banding coefficient" (Btot). C= Gr x Ev x **Btot** The "banding coefficient" Btot (bandingcoëfficiënt) represents the ratio between the granted green certificate quota and the total gross green electricity production in the year n-2. According to law, the factor "Gr" is: • 0.14 from 31 March 2013

		• 0.155 in 2014 • 0.168 in 2015 • 0.18 in 2016 From 1.1.2013, the right to receive green certificates is determined by the duration of the amortisation period used for the calculation of the "onrendabele top" (unprofitable peak) used for a specific technology (Art. 7.1.1. §2 Energy Decree). Currently, the amortisation period for PV and onshore wind is 15 years, for biomass and biogas 10 years and plants with an installed capacity > 20 MW between 10 to 15 years. Since 31 March 2013 onwards, exemptions for energy intensive industries have been introduced (Art. 7.1.11. §2/1 Energy Decree). Accordingly, Ev is reduced by a certain percentage if energy consumption ranges between certain levels: • 40% if the total amount of electricity consumed in the year n-1 was between 1,000 MW and 5,000 MW • 75% if the total amount of electricity consumed in the year n-1 was between 20,000 MW and 100,000 MW • 80% if the total amount of electricity consumed in the year n-1 was between 100,000 MW and 250,000 MW • 98% if the total amount of electricity consumed in the year n-1 was above 250,000 MW
	Adjustment of quotas	According to current legislation, the quota obligation will be in force until 2021 (Article 7.1.10 § 2 Energy Decree).
	Number of certificates according to technology	The green electricity certificates are issued by the Flemish regulatory authority (VREG). The amount of electricity to be produced for 1 certificate is calculated by multiplying 1 MWh with the corresponding banding factor of the respective technology (Article 7.1.1. §2 Energy Decree). The banding factor is technology specific and represents the ratio between the "onrendabele top" (amount of € necessary per MWh for amortisation) and "banding deler" (fixed to € 97). From 1.1.2013 one certificate does not necessarily be equal to 1MWh. The banding factor is communicated by the Flemish Energy Agency (VEA) to the Flemish government and the respective minister before 30 June each year (Art. 7.1.4/1. §1 Energy Decree). Concerning PV, the banding factor is

updated twice a year (before 30 June and 31 December) (Art. 7.1.4/1. §2 Energy Decree).

Amount of kWh per 1 GSC for installations erected between 1.1.2013 – 30.6.2013

Photovoltaic energy:

Plant capacity	banding factor	Amount of kWh per 1 GSC
≤ 10 kW	0.23	1,000 kWh/0.23 = 4,348 kWh
> 10 en ≤ 250 kW	0.63	1,000 kWh/0.63 = 1,587 kWh
> 250 en ≤ 750 kW	0.49	1,000 kWh/0.49 = 2,041 kWh

Onshore wind:

Plant capacity	banding factor	Amount of kWh per 1 GSC
≤ 4 MW	0,80	1,000 kWh/0.8 = 1,250 kWh

Biogas:

Plant capacity	banding factor	Amount of kWh per 1 GSC
≤ 5 MW	1	1,000 kWh/1 = 1,000 kWh
> 5MW - 20 MW	To be decided	

Biomass:

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>Plant capacity</td><td>banding factor</td><td>Amount of kWh per 1 GSC</td></tr>
<tr><td>≤ 20 MW</td><td>To be decided</td><td></td></tr>
</table>

Based on information from Enterprise Flanders and concerning all other not yet defined technologies, project developers have to contact the Flemish Energy Agency (VEA) being in charge of calculating the banding factor (Art. 6.2/1.2.Energy Regulation).
</td></tr>
<tr><td></td><td>Minimum price per certificate</td><td>From 1 January 2013 onwards, the minimum price per certificate is € 93 (Art. 7.1.6 § 1. Energy Decree).</td></tr>
<tr><td></td><td>Fees and penalty charges</td><td>Electricity suppliers that fail to meet their quota shall pay a fine for every missing certificate (Article 13.3.5 §1 1° Energy Decree). The following fines are set by law:
<table>
<tr><th>Start of obligation period</th><th>Fine</th></tr>
<tr><td>31.03.2012</td><td>€ 125 per missing certificate</td></tr>
<tr><td>31.03.2013</td><td>€ 118 per missing certificate</td></tr>
<tr><td>After 31.03.2013</td><td>€ 100 per missing certificate</td></tr>
</table>
</td></tr>
<tr><td></td><td>Yearly Average Certificate Price</td><td>In 2012, the overall average certificate market price was € 79.99 (based on data until 7 September 2012).</td></tr>
<tr><td>International applicability</td><td>International certificate trade</td><td>No</td></tr>
<tr><td></td><td>Flexibility Mechanism</td><td></td></tr>
</table>

Addressees	The entities obliged to purchase green certificates are the distribution grid operators or ELIA, the transmission grid operator, depending on whose grid a given plant is connected to. The grid operators shall meet their quota obligation as defined by law by presenting green certificates to the Flemish regulatory authority (VREG) by 31 March (Article 7.1.10 in conjunction with Article 7.1.5 § 1 2 Energy Decree). ELIA has been obliged to satisfy a quota since 1 July 2003; however, its obligation only applies to plants installed less than 10 years ago. In the case of offshore wind power plants, only ELIA, the transmission grid operator, is obliged to purchase certificates. The persons benefiting from the quota system are the operators of renewable energy plants, as they may sell their green certificates to the grid operators at a guaranteed price (Article 7.1.10 in conjunction with Article 7.1.5 § 1 2° Energy Decree).	
Procedure	**Process flow**	• An operator of a renewable energy plant who would like to receive green certificates for the electricity he produced shall file an application with the Flemish regulatory authority (VREG) (Article 6.1.2 §1 Energy Regulation). Plants generating more than 1,000 kWh of electricity from renewable sources shall be certified by an authorised body (Article 6.1.4 Energy Regulation). • The Flemish regulatory authority (VREG) shall assess every application for completeness and inform the applicant about missing documents and data within 2 months after receipt of an application (Article 6.1.2 §1 Energy Regulation). • VREG shall, within two month after receipt of a complete application, communicate to the applicant whether or not he/she has the right to participate in the certificate scheme (Article 6.1.2 §2 Energy Regulation). • Green certificates are allocated per month considering the amount of electricity (kWh) that need to be produced per technology in order to receive 1 certificate (Article 6.1.7 Energy Regulation in conjunction with Article 7.1.1. §2 Energy Decree). All kWhs not accounted for in one month will be considered in the following month (Article 6.1.7 Energy Regulation).
	Competent authority	The Flemish Ministry of Housing, Cities and Social Economy defines the quota obligations and the allocation process of green certificates. The Flemish regulatory authority (VREG) is responsible for the award of certificates to the plant operators (Article 7.1.1 Energy Decree). Green certificates awarded for offshore wind power generation are issued by the federal regulatory authority CREG.
Distribution of costs	**State**	
	Consumers	According to information from the Flemish regulatory authority (VREG), consumers bear the costs of the quota system

		in Flanders, too.
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	Distribution grid operators buy the certificates and pass the costs to consumers via higher prices (Art. 7.1.15 Energy Decree).

Net-Metering

Abbreviated form of legal source(s)	• Ministerial Decision	
Contact Authority	• Flemish Ministry of Housing, Cities and Social Economy, VREG	
Summary	All renewable technologies with a maximum capacity of ≤10 kW are eligible to the net-metering scheme.	
Promoted technologies	**General information**	Installations with a maximum capacity of ≤10 kW are eligible to the net-metering scheme (Art. IV.1.1.4 Ministerial Decision). Installations with a capacity >10 kW need to apply for a separate access point or meter to the grid operator. Moreover, the latter are required to sign a contract with the balance responsible entity (for more information see grid access). Excess electricity produced by installations with a maximum capacity of ≤10 kW is injected into the grid and automatically deducted from the electricity consumed from the grid for example via a so called "terugdraaiende kWh-meter" (backward running kWh-meter) (Art. IV.1.1.4 & V.2.4.2 Ministerial Decision). However, if an installation injects more electricity than it has taken from the grid during a billing period, this amount is not financially reimbursed. According to information from the Flemish Regulator (VREG), all renewable technologies are eligible.
	Wind energy	Eligible.
	Solar energy	Eligible.
	Geothermal energy	Eligible.
	Biogas	Eligible.

	Hydro-power	Eligible.
	Biomass	Eligible.
Amount	Net-metering only applies to installations with a capacity ≤ 10 kW. There is no direct financial compensation for the injected electricity, but the financial equivalent of the injected kW is deducted from the overall electricity bill. However, if an installation feeds more electricity into the grid than it has taken from the grid during a billing period, this amount is not financially reimbursed.	
Addressees	Installations of renewable energy with a capacity ≤10 kW.	
Procedure	**Process flow**	The distribution grid operator is required to adapt meters on his own costs (Art. V.2.4.2 §1 Ministerial Decision).
	Competent authority	Distribution grid operator
Flexibility Mechanism		
Distribution of costs	**State**	
	Consumers	
	Plant operator	
	Grid operator	The distribution grid operator is obliged to adapt meters (Art. V.2.4.2 §1 Ministerial Decision).
	European Union	
	Distribution mechanism	

RES-E grid issues

Overview

Overview of grid issues	In Flanders, access of electricity from renewable energy sources to the grid is basically regulated by the basic legislation on energy market and technical regulations by the Flemish Electricity and Gas Regulator (VREG). Electricity from renewable energy sources is given priority in both connection to and use of the grid. Distribution grid operators are obliged to finance grid expansion.
Connection to the grid	Plant operators have to apply for grid connection to the distribution grid operator. Two different procedures apply depending on the access capacity: simple access procedure for an access capacity less than 25 kVA (Art. III.3.2.3. §1 Ministerial Decision) and access procedure of installations with higher capacities requiring a feasibility study (Art. III.3.2.4. Ministerial Decision). During application preferential status is granted to renewable energy. The plant operator has to cover a fixed amount of costs determined by law, any excess costs are covered by the distribution grid operator.
Use of the grid	Plants have to apply for a delivery permit in order to make use of the grid. Having a permit, an application has to be filed to the distribution grid operator. Minor procedural differences apply according to voltage capacity (<30 kV, ≥ 30 kV) (Ministerial Decision Art. IV 2.2. & 2.3.). Five days after a complete application has been received, grid usage is disapproved or approved. Use of grid can be curtailed on grounds of safety, reliability and efficiency (emergency curtailment) but need to be communicated by the distribution grid operator, who also is obliged to compensate losses. According to information from the Flemish grid operator, there is no regulation in place that gives preferential status to renewable energy in case of emergency curtailment. In case of congestion the distribution grid operator is obliged to undertake all measures at his disposal to enforce the save, reliable and efficient functioning of the grid by giving access priority to electricity generated from renewable energy in case of congestion (Art. IV.5.2.5 Ministerial Decision).
Grid expansion	The distribution grid operator is obliged to expand the grid as long as it is economically viable (Art. III.3.1.1 §1 Ministerial Decision & Art. 4.1.6. 1° Energy Decree). Doing so, an investment plan is drafted covering a period of 3 years with yearly revisions and presented to the Flemish Regulator VREG (Art. II.1.1.1 §1 Ministerial Decision & Art. 4.1.19 Energy Decree). The latter determines

	the sufficiency of grid expansion investment. The distribution grid operator bears the costs. In how far the plant operator can intervene and enforce grid expansion is currently under deliberation. According to the Flemish Regulator (VREG), the plant operator can communicate complaints to the VREG.
Statutory provisions	• Energy Decree (Decreet houdende algemene bepalingen betreffende het energiebeleid - Law Establishing General Conditions for Energy Policy) • Energy Regulation (Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid - Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010) • Technical Regulation (Technisch Reglement Distributie Elektriciteit Vlaams Gewest van 15 mei 2012 - Technical regulation of the distribution of electricity in the Flemish Region from 15 May 2012)

Basic information on legal sources

Name of legal source **(original language)**	Energiedecreet van 8 mei 2009		het Energiebesluit van 19 november 2010	Technisch Reglement Distributie Elektriciteit van 15 mei 2012
Full name	Decreet houdende algemene bepalingen betreffende het energiebeleid		Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid	Technisch Reglement Distributie Elektriciteit Vlaams Gewest van 15 mei 2012
Name (English)	Law Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009		Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010	Technical regulation of the distribution of electricity in the Flemish Region from 15 May 2012
Abbreviated form	Energy Decree		Energy Regulation	Technical Regulation
Entry into force	01.01.2011		01.01.2011	15.05.2012
Last amended on	24.07.2012		01.01.2013	
Future amendments				

Purpose	The Energy Law bundles all prior energy related decrees, e.g. electricity and gas decree, and stipulates general conditions for energy policy in Flanders.		The Energy Regulation replaces all prior energy related regulations and includes further details on the general conditions for energy policy in Flanders.	The regulation sets out the main technical requirements for the distribution for electricity.
Relevance for renewable energy	The Energy Law includes general principles for support for renewable energy.		The Energy Regulation was adopted to support renewable energy in Flanders and stipulates the terms and conditions for support and the subsidy levels for the different technologies.	The regulation stipulates the technical requirements for electricity distribution affecting also renewable energy plants producing electricity.
Link to full text of legal source (original language)	http://codex.vandenbroele.be/Zoeken/Document.aspx?DID=1018092&param=inhoud		*http://codex.vlaanderen.be/Zoeken/Document.aspx?DID=1019755&param=inhoud*	http://www.vreg.be/sites/default/files/uploads/trde_versie_15_mei_2012.pdf
Link to full text of legal source (English)				

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Vlaamse Regulator van de Elektriciteits- en Gasmarkt (VREG) – Flemish Regulator of the Electricity and Gas market	www.vreg.be		+32 2 55 313 79	info@vreg.be

Grid issues

Connection to the grid

Abbreviated form of legal sources	• Energy Decree • Energy Regulation • Technical Regulation	
Contact Authority	• VREG	
Overview	Plant operators have to apply for grid connection to the distribution grid operator. Two different procedures apply depending on the access capacity: simple access procedure for an access capacity less than 25 kVA (Art. III.3.2.3. Technical Regulation) and access procedure of installations with higher capacities requiring a feasibility study (Art. III.3.2.5. Technical Regulation). Moreover, there is a procedure for temporary grid connection (Art. III.3.2.4. Technical Regulation). During application preferential status is granted to renewable energy. The plant operator has to cover a fixed amount of costs determined by law, any excess costs are covered by the distribution grid operator.	
Procedure	**Process flow**	Every grid operator is obliged to publish tariffs and conditions for grid access and usage (Art. 4.1.18 §2 Energy Decree). Access can be denied on the basis of insufficient capacity, safety and technical reasons as well as non-eligibility (Art. 4.1.18 § 2. Energy Decree). A written reasoning thereof has to be sent to the applicant (Art. 4.1.18 §3 Energy Decree). Conditions on cutting or interrupting access are laid out in Art. 4.1.18 §3 containing emergency situations etc. The application of access contains the applicant's identity and contact details, ownership relationship to the installation and plant including a floor plan, the actual access capacity and voltage level, technical characteristics of the installation and further information relevant for determining consumption profile (Art. III.3.3.1 §2 Technical Regulation). Generally, one has to differentiate between simple

		access with an access capacity less than 25 kVA (Art. III.3.2.3. Technical Regulation) and access of installations with higher capacities requiring a feasibility study (Art. III.3.2.5 Technical Regulation). Regarding simple access, the application is handed over to the distribution grid operator via letter, e-mail or the website. Within 5 days, the distribution grid operator has to communicate to the applicant if the application is inadmissible. If not, the grip operator will send the applicant a binding offer (stating conditions and further steps) or a written stated denial within 10 days. (Art. III. 3.3.3 - 6 Technical Regulation) Applying for access to capacities < 25 MVA, the application has to be sent to the distribution grid operator of lowest voltage level stating whether an orientation study or detailed study is requested. The costs thereof are published by the distribution grid operator. The orientation study is facultative for high voltage access and not binding to either party (Art. III.3.3.14 Technical Regulation). Costs have to be covered by the applicant. The distribution operator can request further information but has to communicate its decision within 15 days (maximum 30 days if access to voltage > 30kV or access of installation with a capacity higher than 1 MVA) (Art. III.3.3.20 Technical Regulation). The access with study is designed as part of a price offer in line with the regulator's policy (Art. III.3.3.15 Technical Regulation). Two procedures are laid out by regulation; an orientation study with preliminary access and a detailed study with design of access. Regarding orientation study with preliminary access, the distribution grid operator has to communicate the admissibility or denial of the application within 15 days (max. 30 days) after a complete application has been received (Art. III.3.3.20 §1 Technical Regulation). The preliminary connection study entails a scheme of the planned connection, technical requirements and an estimation of costs (Art. III.3.3.20 §3 Technical Regulation).

		Concerning a detailed study with design of access, the distribution grid operator has to communicate the admissibility of the application within 10 days after a complete application has been received in a written form. Within 30 days (max. 50 days), the decision on access or denial is communicated including further steps of implementation. Both procedures give preferential status to renewable energy. If access capacity is between 250 kVA and 15 MVA, access is established from high voltage grid via the distribution grid operators to the lowest voltage level (Art. III.3.1.3. §3 Technical Regulation). If access capacity is between 15 MVA and 25 MVA, the distribution grid operator can decide on the basis of technical and economic considerations to transfer application to the operator of a higher voltage level (Art. III.3.1.3. §4 Technical Regulation).
	Deadlines	Regarding simple access, the application is handed over to distribution grid operators via letter, e-mail or the website. Within 5 days, the distribution grid operator has to communicate to the applicant if the application is inadmissible. If not, the grip operator will send the applicant a binding offer (stating conditions and further steps) or a written stated denial within 10 days (Art. III. 3.3.3 – 6 Technical Regulation). The connection is carried out within 15 days after payment by the applicant has been received. Regarding orientation study with preliminary access, the distribution grid operator has to communicate the admissibility or denial of the application within 15 days (max. 30 days) after a complete application has been received (Art. III.3.3.20 §1 Technical Regulation). Concerning a detailed study with design of access, the distribution grid operator has to communicate the admissibility of the application within 10 days after a complete application has been received in a written form. Within 30 days (max. 50 days), the decision on access or denial is communicated including further steps of implementation. The connection is carried out within 18 days after payment by applicant has been

		received. In case the access to the grid was denied, an appeal can be filed to the VREG, which within 2 months after receiving the appeal has to settle the dispute (Art. III.3.4.1 Technical Regulation).
	Obligation to inform	
Priority to renewable energy **(qualitative criteria)**	( ) Priority to renewable energy (x) Non-discrimination	According to the Flemish Regulator (VREG), no preferential status is explicitly granted to renewable energy in connecting an installation to the grid.
Capacity limits **(quantitative criteria)**	The distribution net operator is obliged to expand the distribution grid as long as it is economically reasonable (Art. III.3.1.1 §1 Technical Regulation) (Art. 4.1.6. 1° Energy Decree).	
Distribution of costs		
	State	
	Consumers	
	Grid operator	The difference between the actual costs and the costs calculated on the basis of a virtual connection (the costs of the shortest distance that is available between the installation and the grid) are covered by the grid operator to whose net access is granted as part of his public service obligation (Art. 6.4.13 §1 Energy Regulation).
	Plant operator	Plant operator as applicant has to pay the amount calculated on the basis of a virtual connection (the costs of the shortest distance that is available between the installation

		and the grid) (Art. 6.4.13 §1Energy Regulation).
	European Union	
	Distribution mechanism	

Use of the grid

Abbreviated form of legal sources	• Energy Decree • Energy Regulation • Technical Regulation	
Contact Authority	• VREG	
Overview	Plants have to apply for a delivery permit in order to make use of the grid. Having a permit, an application has to be filed to the distribution grid operator. Minor procedural differences apply according to voltage capacity (<30 kV, ≥ 30 kV) (Art. IV 2.2. & 2.3. Technical Regulation). Five days after a complete application has been received, grid usage is disapproved or approved. Use of grid can be curtailed on grounds of safety, reliability and efficiency (emergency curtailment) but need to be communicated by the distribution grid operator, who also is obliged to compensate losses. According to information from the Flemish grid operator, there is no regulation in place that gives preferential status to renewable energy in case of emergency curtailment. In case of congestion the distribution grid operator is obliged to undertake all measures at his disposal to enforce the save, reliable and efficient functioning of the grid by giving access priority to electricity generated from renewable energy in case of congestion (Art. IV.5.3.1 Technical Regulation).	
Procedure	**Process flow**	In order to make use of the distribution grid for electricity it is required to have a delivery permit. The requirements thereof are determined by the Flemish Government in coordination with VREG (Art. 4.3.1. §1 Energy Decree) defining technical/organisational/ financial capacity, professional record, the capacity of the applicant to fulfil the needs of customers, public service obligations etc. (Art. 4.3.1. §2 Energy Decree). After the application form (determined by VREG) has been turned in, the decision of granting a permit must be made within 2 months. **<u>Voltage < 30 kV</u>** Access is granted by the distribution grid operator. An application form contains the following documents: identity and contact details of applicant; identity and contact

		details of balance responsible manager; cooperation agreement between applicant and balance responsible entity; financial security; day of access (Art. IV.3.3.3 Technical Regulation). Within one month after application has been received, the distribution grid operator has to communicate to the applicant if application is complete or if documents are missing (Art. IV.3.3.4 Technical Regulation). Certain preconditions have to be fulfilled by the applicant, which are the following: applicant has a valid supply license; if applicant is the balance responsible entity himself or has a cooperation agreement; if balance responsible person is registered as access manager; date of access is at least one month ahead; financial securities are sufficient (Art. IV.3.2.5 Technical Regulation). **Voltage ≥ 30 kV** Each supplier, producer, balance responsible entity and distribution grid user can apply to the distribution grid operator. The procedure outlined for Voltage < 30 kV applies. Preconditions are fulfilled if the applicant is a balance responsible entity himself or has a cooperation agreement; if a balance responsible person is registered as access managers; date of access is at least one month ahead; financial securities are sufficient (Art. IV.3.3.5 Technical Regulation).
	Deadlines	Five days after a complete application, meeting the preconditions described, has been received the distribution grid operator has to approve or disapprove grid usage (Art. IV. 3.3.6 §3 Technical Regulation).
	Obligation to inform	
Priority to renewable energy **(qualitative criteria)**	(x) Priority to renewable energy ( ) Non-discrimination	As enshrined in the Ministerial Decision, the distribution grid operator is obliged to undertake all measures at his disposal to enforce the save, reliable and efficient functioning of the grid by giving access priority to electricity generated from renewable energy in case of congestion (Art. IV.5.3.1 Technical Regulation).

Curtailment	Flemish legislation differentiates between planned and unplanned curtailment. Access can be curtailed by the distribution grid operator on grounds of safety, reliability and efficiency which have to communicated to the plant operator in case of planned curtailment on high voltage grid within 10 days and low voltage within 5 days (Art. IV.4.2. Technical Regulation). As far as unplanned curtailments (emergency curtailments) are concerned, distribution grid operators informs plant operator via telephone indicating the respective duration of curtailment (Art. IV.4.3. Technical Regulation). Moreover, distribution grid operator can deny partly or wholly access in case of emergency, risk for grid operation and excess capacity (Art. IV.4.5. Technical Regulation). The distribution grid operator has to compensate losses (Art. IV.4.6. Technical Regulation). According to information from the Flemish Regulator (VREG), there is no regulation in place that gives preferential status to renewable energy in case of emergency curtailment. In case of mere congestion, the distribution grid operator is obliged to undertake all measures at his disposal to enforce the save, reliable and efficient functioning of the grid by giving access priority to electricity generated from renewable energy in case of congestion (Art. IV.5.3 Technical Regulation).	
Distribution of costs		
	State	
	Consumers	
	Grid operator	
	Plant operator	According to Art. 6.4.13. §2 Energy Regulation, the plant operator bears the costs.
	European Union	
	Distribution mechanism	

Grid expansion

Abbreviated form of legal source	• Energy Decree • Technical Regulation • Energy Regulation	
Contact Authority	• VREG	
Overview	The distribution grid operator is obliged to expand the grid as long as it is economically viable (Art. III.3.1.1 §1 Technical Regulation & Art. 4.1.6. 1° Energy Decree). Doing so, an investment plan is drafted covering a period of 3 years with yearly revisions and presented to the Flemish Regulator VREG (Art. II.1.1.1 §1 Technical Regulation & Art. 4.1.19 Energy Decree). The latter determines the sufficiency of grid expansion investment. The distribution grid operator bears the costs. In how far the plant operator can intervene and enforce grid expansion is currently under deliberation. According to the Flemish Regulator (VREG), the plant operator can communicate complaints to the VREG (see procedure connection to grid).	
Procedure	**Process flow**	The distribution grid operator is obliged to expand the distribution grid as long as it is economically reasonable (Art. III.3.1.1 §1 Technical Regulation & Art. 4.1.6. 1° Energy Decree). The distribution grid operator drafts an investment plan covering a period of 3 years, adapted every year, and submitted to the VREG before 1 July (Art. II.1.1.1 §1 Technical Regulation& Art. 4.1.19 Energy Decree). This plan entails capacity needs, investments and an overview on denied access requests. VREG determines whether the investment plan is sufficient or not.
	Enforcement of claims	According to information from Flemish regulator (VREG), it is currently being discussed in how far plant operators can enforce their claims. The plant operator can communicate complaints to the VREG in case of denied access to the grid (see procedure connection to grid). Right now, the overview of denied access requests included in the investment plan alludes to the degree access is denied due to a lack of grid expansion. Furthermore, in

		certain regions the VREG already witnessed a rising demand for grid access from plants producing electricity from renewable energy. It is now being discussed whether to grant timely limited grid access as a solution. Only VREG is controlling the sufficiency of grid expansion.
	Deadlines	Investment plans need to be submitted before 1 July (Art. II.1.1.1 §1 Technical Regulation*)*
	Obligation to inform	Once per year, the distribution net operator consults with the operators connected to his grid on the investment plan.
Regulatory incentives for grid expansion and innovation	According to Flemish Regulator (VREG), no regulatory incentives for grid expansion and innovation exist.	
Distribution of costs		
	State	
	Consumers	Costs are redistributed to consumers via higher energy tariffs.
	Grid operator	Grid operators bear the costs (Art. 6.4.13 §2 Energy Regulation)
	Plant operator	
	European Union	
	Distribution mechanism	
Grid studies	http://www.vreg.be/sites/default/files/rapporten/rapp-2011-19.pdf http://www.elia.be/en/grid-data/grid-development/~/media/files/Elia/Grid-data/Investment-plans/Flemish/InvesteringsplanVlaamsGewest_2011-2014.pdf	

	http://economie.fgov.be/fr/modules/publications/general/etude_perspectives_electricite_2008-2017.jsp

RES-H&C support schemes

Summary of support schemes

Overview	Regarding heating and cooling from renewable energy resources, the Flemish support scheme so far only provides for a quota system. Grid operators and municipalities are responsible for setting up premium schemes.
Summary of support schemes	• Premium: Grid operators and municipalities are responsible for setting up premium schemes to support heating and cooling from renewable energy. Therefore, the amount of premium attributed and eligible technologies differ among municipalities. • Quota system: In Flanders, CHP producers are eligible for CHP certificates. The amount of CHP certificates granted for 1000 kWh of primary energy saved in a qualitative CHP-facility compared to a situation in which the same quantity of electricity or heat were produced separately is multiplied with the respective technology-specific banding factor (Art. 7.1.2. §2 Energy Decree)..
Technologies	The eligibility of the kind of renewable energy sources for support differs depending on Support schemes.
Statutory provisions	• Decreet houdende algemene bepalingen betreffende het energiebeleid – het Energiedecreet van 8 mei 2009 (Law Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009) • Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid – het Energiebesluit van 19 november 2010 (Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010)

Basic information on legal sources

Name of legal source **(original language)**	Energiedecreet van 8 mei 2009	het Energiebesluit van 19 november 2010
Full name	Decreet houdende algemene bepalingen betreffende het energiebeleid	Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid
Name (English)	Law Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009	Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010
Abbreviated form	Energy Decree	Energy Regulation
Entry into force	01.01.2011	01.01.2011
Last amended on	24.07.2012	01.01.2013
Future amendments		
Purpose	The Energy Law bundles all prior energy related decrees, e.g. electricity and gas decree, and stipulates general conditions for energy policy in Flanders.	The Energy Regulation replaces all prior energy related regulations and includes further details on the general conditions for energy policy in Flanders.

Relevance for renewable energy	The Energy Law includes general principles for support for renewable energy.	The Energy Regulation was adopted to support renewable energy in Flanders and stipulates the terms and conditions for support and the subsidy levels for the different technologies.
Link to full text of legal source (original language)	http://212.123.19.141/ALLESNL/wet/detailframe.vwp?SID=0&WetID=1018092	http://codex.vlaanderen.be/Zoeken/Document.aspx?DID=1019755&param=inhoud
Link to full text of legal source (English)		

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Vlaamse Ministerie van Energie, Wonen, Steden en Sociale Economie – Flemish Ministry of Energy, Housing, Cities and Social Economy	http://www.vlaanderen.be		+32 2 552 61 00	kabinet.vandenbossche@vlaanderen.be
Vlaamse Regulator van de Elektriciteits- en Gasmarkt (VREG) – Flemish Regulator of the Electricity and Gas market	http://www.vreg.be/		+32 2 55 313 79	info@vreg.be
Vlaamse Energieagentschap (VEA) – Flemish Energy Agency	http://www.energiesparen.be		+32 2 553 1700	www.energiesparen.be/info (contact template)

Support schemes

Subsidy (Premium)

Abbreviated form of legal source(s)	• Energy Regulation	
Contact Authority	• **Vlaamse Ministerie van Energie, Wonen, Steden en Sociale Economie – Flemish Ministry of Energy, Housing, Cities and Social Economy, VEA**	
Summary	**Premium:** Grid operators and municipalities are responsible for setting up premium schemes to support heating and cooling from renewable energy. Therefore, the amount of premium attributed and eligible technologies differ among municipalities.	
Promoted technologies	**General information**	According to the Flemish Ministry of Energy, Housing, Cities and Social Economy and the Energy Agency (VEA), specific subsidies for renewable heat and cooling installations are in the competency of grid operators or municipalities. Since 2012, new premiums are in force concerning investments undertaken from 1 January 2012 onwards. An overview of the premium opportunities for 2013 is published on the site of the Flemish ministry (http://www2.vlaanderen.be/economie/energiesparen/premies/premiebrochure2013.pdf) or can be individually searched via zip code via www.energiesparen.be . For 2013, premium schemes exist for solar thermal boilers and heat pumps. Concerning eligibility and the amount of premium, the Flemish regulation differentiates between protected and non-protected recipients. Protected recipients are citizens obtaining government benefits or special support (e.g. income replacement, integration allowance etc.) and thus, are eligible to obtain a social maximum price for electricity and gas (Art. 1.1.1 7° Energy Regulation).

	Aerothermal	
	Hydrothermal	
	Biogas	
	Biomass	
	Geothermal energy	**Heat pumps:** A maximum premium of € 1,700 is granted if the installation is carried out by a registered contractor. Companies can file an application for registration to the competent provincial registration commission. Registration is granted on the basis of special examination and monitoring of the company's technical competence and financial capacity. The address of the competent provincial registration commission can be retrieved from the site of the Federal Ministry of Finance. This premium is valid for installations constructed from 1 January 2012 onwards. Apartments connected to the distribution grid of the grid operator before 1 January 2006 are eligible too. The installation needs to be installed and billed only by registered contractors. Heat pumps are not allowed to be used for active cooling or as swimming pool heating.
	Solar Thermal	**Solar thermal boiler:** If a solar thermal boiler is installed in an existing building and by a registered contractor (see geothermal energy), the grid operator offers a premium. This premium is valid for installations constructed from 1 January 2012 onwards. Buildings connected to the distribution grid of the grid operator before 1 January 2006 are eligible too. The installation needs to be installed and billed only by registered contractors (see geothermal energy). The premium is paid only if the solar thermal boiler is used for the production of sanitary hot water and or in combination with heating.
Amount	**<u>Heat pump:</u>**	

	A maximum premium of € 1,700 is granted for heat pumps. The individual premium is calculated on the basis of the following formula: • Electric heat pump: € 270 x ((0,87 x COP) – 2,5) x nominal electric compressor capacity in kWatt • Gas heat pump: € 270 x ((0,87 x COP) – 1) x installed gas capacity in kWatt COP being the gain factor determining how much energy the heat pump produces compared to the energy consumption. The premium rate is doubled if the heat pump replaces completely an existing electrical resistance heating system. Furthermore, the premium rate can be increased by 50% if the installation owner is a protected recipient and the investment is undertaken in an existing building. Protected recipients are citizens obtaining government benefits or special support (e.g. income replacement, integration allowance etc.) and thus, are eligible to obtain a social maximum price for electricity and gas (Art. 1.1.1 Energy Regulation). In case the premium is requested for several apartments within the same building (condominium), the maximum premium rate applies per apartment. **Solar thermal boilers:** The premium is € 550 per m² with a maximum of € 4,750 per installation or 50% of the investment costs. The premium rate can be increased by 50% if the installation owner is a protected recipient.	
Addressees	Installations within the Flemish Region	
Procedure	**Process flow**	The application form can be downloaded from the homepage of each grid operator. The application form needs to be sent within 12 months after the bills have been issued. The premium is to be paid at latest 6 months after the application form has been received by the grid operator. The application form can be submitted online. For the same type of investment a premium is paid only once during a period of 12 months.

	Competent authority	Grid operators and municipalities.
Flexibility mechanism		
Distribution of costs	**State**	Costs for municipal schemes are covered by the competent municipalities.
	Consumers	
	Plant operator	
	Grid operator	Costs for support schemes set up by grid operators are covered by the competent grid operator.
	European Union	
	Distribution mechanism	

Quota system (CHP certificates)

Abbreviated form of legal source(s)	• Energy Decree • Energy Regulation	
Contact Authority	• **VREG**	
Summary	In Flanders, CHP producers are eligible for CHP certificates. The amount of CHP certificates granted for 1000 kWh of primary energy saved in a qualitative CHP-facility compared to a situation in which the same quantity of electricity or heat were produced separately is multiplied with the respective banding factor (Art. 7.1.2. Energy Decree). The certificates are issued by the Flemish Regulator (VREG) and are registered in a central database. CHP certificates can be sold to electricity producers that need to fulfil their certificate obligations.	
Promoted technologies	**General information**	Regarding the regulation for combined heat and power plants (CHP), plants generating both electricity and heat from renewable energy are eligible for CHP certificates (warmtekrachtkoppeling). The amount of CHP certificates granted for 1000 kWh of primary energy saved in a qualitative CHP-facility compared to a situation in which the same quantity of electricity or heat were produced separately is multiplied with the respective technology-specific banding factor (Art. 7.1.2. §2 Energy Decree). This so called banding factor accounts for the specific technology costs and efficiencies for amortisation and is determined by VREG. Accordingly, the amount of heat to be produced for 1 certificate varies across technologies. The heat has to be produced within the Flemish territory (Art. 6.2.3. Energy Regulation). The left amount of kWh is transferred to the next month (Art. 6.2.7. Energy Regulation). The calculation of primary energy saving of CHP only takes the heat into consideration that is used as heat source only and is not used for the further production of electricity (nuttige warmte). (Art. 6.2.10. §3 Energy Regulation). For CHP plants using renewable energy, the electrical efficiency is equated to 42 % (biogas), 42.7 % (liquid biofuel), 34% (wood) and 25% (other solid biomass) (Art. 6.2.10. §8 Energy Regulation). A CHP certificate can be transferred only once to the grid operator (Art. 7.1.7. §1 Energy Decree) in the framework of certificate obligation (Art.

		7.1.5. §2 Energy Decree).
	Aerothermal	
	Hydrotherm al	
	Biogas	Eligible If used in CHP plant.
	Biomass	Eligible If used in CHP plant.
	Geothermal energy	
	Solar Thermal	
Amount	**Amount of quota and period of application**	The quotas are calculated according to a formula set by law (Article 7.1.11 § 2, Energy Decree). According to law, the amount of CHP certificates is calculated on the basis of the following formula: Cw = W x Ev The amount of CHP certificates (Cw) to be presented is calculated by multiplying the total amount of electricity produced (MW) in the year n-1 (Ev is defined as) by the factor "W", being: • 2013 = 0.086 • 2014 = 0.098 • 2015 = 0.105 • 2016 = 0.112 • 2017 = 0.112

<table>
<tr><td></td><td></td><td>

2018 = 0.112
2019 = 0.112
2020 = 0.093
2021 = 0.070

From 31 March 2013 onwards, exemptions for energy intensive industries will be introduced (reduction of Ev) (Art. 7.1.11. §2/1 Energy Decree). From 31 March 2013, Ev is reduced by:

10% if the total amount of electricity consumed in the year n-1 was between 1,000 MW and 5,000 MW
15% if the total amount of electricity consumed in the year n-1 was between 5,000 MW and 20,000 MW
25% if the total amount of electricity consumed in the year n-1 was between 20,000 MW and 100,000 MW
50% if the total amount of electricity consumed in the year n-1 was between 100,000 MW and 250,000 MW

80% if the total amount of electricity consumed in the year n-1 was above 250,000 MW

From 1.1.2013, the right to receive green certificates is determined by the duration of the amortisation period used for the calculation of the “onrendabele top” (unprofitable peak) (Art. 7.1. §2 Energy Decree). For more information see http://www2.vlaanderen.be/economie/energiesparen/milieuvriendelijke/monitoring_evaluatie/2013/VEA_rapport_stakeholderoverleg_maart_2013.pdf
</td></tr>
<tr><td></td><td>Adjustment of quotas</td><td>According to NREAP, the quota augments to 5.23 % in 2012 remaining at this level the following years.</td></tr>
<tr><td></td><td>Number of certificates according to technology</td><td>The amount of heat produced per CHP certificate is technology specific depending on the respective banding factor.
<table>
<tr><th>Renewable energy source used</th><th>banding factor</th><th>Amount of kWh per 1 GSC</th></tr>
<tr><td>Biogas from biological fermentation of fruit, vegetable and gardening waste with a max. capacity ≤ 5 MWe (new plants, modernised plants)</td><td>1</td><td>1.000 kWh/1 = 1,000 kWh</td></tr>
</table>
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		Gas from fermentation of other organic substances with a max. capacity ≤ 5 MWe (new plants, modernised plants) — 1 — 1.000 kWh/1 = 1,000 kWh For other technologies and renewable heat sources the banding factor is still to be decided.
	Minimum price per certificate	From 1 January 2013 the minimum price per certificate is € 31 (€ 31 Art. 7.1.7. § 1 Energy Decree).
	Fees and penalty charges	From 31 March 2012 a penalty charge of € 41 applies per missing CHP certificate (Art. 13.3.5. §1 2° Energy Decree). From 31 March 2015, the penalty charge is € 38.
International applicability	**International certificate trade**	
	Flexibility Mechanism	
Addressees	CHP plant operators. Plant operators can sell their certificates as a pay-off for their energy saving commitments.	
Procedure	**Process flow**	The application for granting CHP certificates has to be sent to the Flemish Regulator (VREG). The application entails the complete filled in application document determined by VREG depending on energy source used and installation capacity (Art. 6.2.2. §1 1° – 5° Energy Regulation). If the application is incomplete, a letter is written to the applicant stating the missing documents within 2 months. If the application concerns an

		installation that has not yet started operation, a more detailed letter is written stating an explanation of the required measurements (Art. 6.2.2. §1 5° Energy Regulation). Within one month after a complete application has been received, VREG decides on the matter (Art. 6.2.2. §2 Energy Regulation). Within 5 working days, the applicant is informed about the decision (Art. 6.2.2. § 3 Energy Regulation). In order to be eligible for CHP certificates, the following requirements need to be fulfilled: the installation needs to operate within the Flemish territory, fulfils the requirements for qualitative CHP installations (see Annex I Energy Regulation), has a capacity > 1 MW and has a valid inspection report (renewal every 2 years) (Art.6.2.3. Energy Regulation). The first CHP certificates are granted on the first day of the month after the application was approved depending on the amount of CHP savings (Art. 6.2.7. Energy Regulation).
	Competent authority	Flemish Regulator (VREG)
Distribution of costs	**State**	
	Consumers	According to information from the Flemish regulatory authority (VREG), the consumers bear the costs of the quota system in Flanders.
	European Union	
	Others	
	Distribution mechanism	

Policies

Summary of policies

Overview	Diverse policies are currently under discussion. The level of implementation differs.
Summary of policies	• **Certification of installers:** a voluntary training and certification program is set-up for installers. • **Certification of installation:** A Certification of installations is not required by law and no certification system is in place. • **Exemplary role of public authorities:** An action plan is in place to promote the exemplary role. • **Research and Development:** An Energy Technology Innovation Platform (MIP) has been founded with funding programs for research on renewable energy technologies. • **RES-H building obligations:** For schools and public office buildings RES-H obligations apply since 1 January 2013.
Technologies	Policies aim to stimulate all renewable energy technologies.
Statutory provisions	• Energy Decree (Decreet houdende algemene bepalingen betreffende het energiebeleid - Decree Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009) • Energy Regulation (Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid - Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010) •

Basic information on legal sources

Name of legal source (original language)	Energiedecreet van 8 mei 2009	het Energiebesluit van 19 november 2010	
Full name	Decreet houdende algemene bepalingen betreffende het energiebeleid	Besluit van de Vlaamse Regering houdende algemene bepalingen over het energiebeleid	
Name (English)	Decree Establishing General Conditions for Energy Policy – Energy Law of 8 May 2009	Regulation of the Flemish Government on General Conditions for Energy Policy – Energy Regulation of 19 November 2010	
Abbreviated form	Energy Decree	Energy Regulation	
Entry into force	01.01.2011	01.01.2011	
Last amended on	15.12.2011	01.01.2013	
Future amendments	24.07.2012		
Purpose	The Energy Decree bundles all prior energy related decrees, e.g. electricity and gas decree, and stipulates general conditions for energy policy in Flanders.	The Energy Regulation replaces all prior energy related regulations and includes further details on the general conditions for energy policy in Flanders.	

Relevance for renewable energy	The Energy Decree includes general principles for support for renewable energy.	The Energy Regulation was adopted to support renewable energy in Flanders and stipulates the terms and conditions for support and the subsidy levels for the different technologies.	
Link to full text of legal source (original language)	*http://212.123.19.141/ALLESNL/wet/detailframe.vwp?SID=0&WetID=1018092*	*http://codex.vlaanderen.be/Zoeken/Document.aspx?DID=1019755&param=inhoud*	
Link to full text of legal source (English)			

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Quest vzw/asbl - Quality Centre for Sustainable Energy technologies	www.QuestForQuality.be	Hugues Latteur	+32 2 223 28 38	info@QuestForQuality.be
Vlaams Energieagentschap (VEA)	www.energiesparen.be	Maarten De Groote		maarten.degroote@vea.be
MIP - Innovation in Environmental and Energy Technology	http://www.mipvlaanderen.be/nl/webpage/8/situering.aspx		+ 32 3 286 74 58	info@mipvlaanderen.be

The Environment, Nature and Energy Department (LNE)	http://www.lne.be/		+32 02 553 80 11	info@lne.be

Policy categories

Training programmes for Installers

Abbreviated form of legal source(s)	• Energy Decree
Sector	• Electricity, Heating&Cooling
Contact Authoriry	• QUEST, VEA
Description	According to Art. 10.1.1. & 2. (Energy Decree), the Flemish government determines the legal framework for education and certification of installers. The recognition of training centres, energy experts and quality requirements and standards are determined by the Flemish government (Art. 10.1.5. Energy Decree). A voluntary certification regime for installers (certificaat van bekwaamheid) has been introduced concerning the following technologies: • photovoltaic installations • solar thermal installations for sanitary hot water • solar thermal installations for the combined production of sanitary hot water and heating • biomass stove for decentralised heating • biomass boiler for the production of sanitary hot water or heating; • heat pumps, except for shallow geothermal installations • heat recovery by shallow geothermal installations The training is organised in existing training centres, which are recognised by the Flemish Energy Agency (VEA). According to VEA, certificates are recognised on an individual basis after having passed a specific training (32 hours plus exam). The certificates are valid for a period of 5 years. A certificate of competency is awarded if the installer has passed the exam successfully.

Addressees	Private individuals without obligation for prior qualification.	
Competent authority	The Flemish region is in charge and its subsequent training institutions.	
Further information	According to the Flemish Energy Agency (VEA), the content and certification procedures are still under discussion.	
Distribution of costs	**State**	The Flemish region finances the development and content of the certification program.
	Private Financing	
	European Union	
	Others	

Certification Programmes for RES installations

Abbreviated form of legal source(s)		
Sector		
Contact Authoriry		
Description	Currently, no certificates are required by law. Accordingly, no certification program is in place.	
Addressees		
Competent authority		
Further information		
Distribution of costs	**State**	
	Industry	
	System Producers	
	European Union	
	Others	

Exemplary role of public authorities in accordance with Art. 13 Abs, 5 RES Directive

Abbreviated form of legal source(s)	
Sector	Electricity, Heating&Cooling
Contact Authority	VEA
Description	In 2006, the Flemish Government has already agreed upon an action plan. This action plan 2006-2010 stresses the exemplary role of public authorities. The action plan 'Energiezorg in de Vlaamse overheidsgebouwen' includes the commitment to introduce energy book keeping, awareness raising among public officials and energy audits in public buildings. Moreover, the construction of 25 new school buildings with passive house standard is planned.
Addressees	Currently, no regulation is in place that stipulates specific criteria.
Competent authority	The Environment, Nature and Energy Department
Further information	

RD&D Policies

Abbreviated form of legal source(s)	
Sector	Electricity, Heating&Cooling, Transport
Contact Authority	MIP
Description	The Environment and Energy Technology Innovation Platform (Milieu-en energietechnologie Innovatie Platform (MIP)) was created by a decision of the Flemish government in 2005. The platform is a cooperation of the policy domains Economy, Science and Innovation (Economie, Wetenschap en Innovatie (EWI)) and Environment, Nature and Energy (Leefmilieu, Natuur en Energie (LNE)). It brings together business, research and policy makers. MIP offers two kinds of funding programs: interdisciplinary cooperative research and feasibility studies. In the framework of the Program Environment-Innovation 2 (Programma Milieu-Innovatie 2) the Flemish government commissioned MIP to conduct specific research to develop sustainable technologies, products and services. From 23 eligible project proposals, 13 will be realised.
Addressees	Research institutions, business, industrial partners
Competent authority	Energy Technology Innovation Platform (MIP)
Further information	http://www.mipvlaanderen.be/nl/webpage/8/situering.aspx

RES-H building obligations

Abbreviated form of legal source(s)	Energy Regulation
Sector	Heating&Cooling
Contact Authority	VEA
Description	On 28 September 2012, the Energy Regulation has been revised transposing the building obligations for heat from renewable energy into Flemish law. For schools and public office buildings the obligations apply since 1 January 2013. Accordingly, an obligation of renewable heat of at least 10 kWh per m² usable floor area of the building is introduced. More information can be retrieved from http://www.energiesparen.be/epb/groeneenergie
Obligated entities	
Competent authority	
Further information	
Obligation on regional level	

Support of RES-H infrastructure

Abbreviated form of legal source(s)	
Sector	Heating&Cooling
Contact Authority	VEA
Description	District heating infrastructure is only marginally present in Belgium. Currently, studies have been commissioned to analyse the potential of heat networks from CHP (Biomass), geothermal etc. Moreover, priority zones regarding volume of heat demand and consumption patterns will be identified in a different study. Pilot projects are under consideration.
Addressees	
Competent authority	
Further information	