

PROGRESS REPORT FOR BELGIUM

prepared in application of

Article 22 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC , and

Article 3(3) of Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market.

Prepared by the CONCERE-ENOVER State-Region Consultation Group for energy, and comprising the following authorities:

Federal Authority:

Federal Public Service Economy, SMEs, Self-Employed and Energy,
Directorate-General for Energy

Regional authorities:

Flemish region:

Vlaams Energie Agentschap

Walloon region:

Operational Directorate-General of Planning, Housing, Heritage and Energy
Department of Energy and Sustainable Building

Brussels-Capital region:

Brussels Institute of Environmental Management

Glossary

AATL: Urban Planning and Housing Administration
BNSWEP: Belgian North Sea Wind Energy Platform
BRUGEL: Commission for the Regulation of Energy in the Brussels-Capital Region
CBE: College of Mayor and Aldermen
COBAT: Brussels Town and Country Planning Code.
COBRACE: Brussels Code for Air, Climate and Energy
National concession: is an administrative contract by which the granting Authority allows a user to temporarily and exclusively occupy a piece of land in the public domain for a specific purpose, over the long term but precariously as grant can be revoked and tenancy is subject to the payment of a fee.
COP: Performance coefficient
CREG: Commission for Electricity and Gas Regulation
CWAPE: Walloon Energy Commission
CWATUPE: Walloon Code for Land Management, Town Planning, Heritage and Energy.
DSO: Distribution System Operators
Elia: the operator of the Belgian high voltage transmission system.
EPE: Prospective Electricity Study
FEDESCO: public energy services company (ESCO) created in March 2005 as a public limited company.
IBGE: Brussels Institute of Environmental Management
IBGE: is the administration for environment and energy in the Brussels-Capital Region
M.B.: Moniteur Belge (Belgian official gazette)
RBC: The Brussels-Capital Region
RECAST PEB: The new European directive on the Energy Performance of Buildings
RGIE: General Regulations on Electrical Installations
RW: The Walloon region
SER: Sustainable Energy Sources
Sibelga: The operator of the electricity and natural gas distribution networks for the 19 communes in the Brussels-Capital Region.
SPF: Federal Public Service
SPW: Wallonia Public Service
TRDE: Technisch Reglement Distributie Elektriciteit [technical regulation on electricity distribution]
TSO: Transmission System Operators
UGMM: Mathematical Model Management Unit (for the North Sea)
VG: Vlaams gewest (The Flemish Region)
Vlarea: Vlaams Reglement inzake Afvalvoorkoming en beheer [Flemish regulation on waste prevention and management]
VLIF: Vlaams Landbouwinvesteringsfonds [Flemish agricultural investment fund].
VREG: Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt [Flemish gas and electricity regulatory authority]

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1) SUMMARY OF THE NATIONAL SUSTAINABLE ENERGY POLICY

The distribution of jurisdiction as of 8 August 1980. – Special institutional reform act (M.B. of 15/08/1980).

Jurisdiction relating to the energy policy is split between the Federal Authority and the Regions.

The regional aspects of energy include:

the distribution and local transmission of electricity through networks with rated voltage less than or equal to 70.000 volts;

the public distribution of gas;

the use of coal gas and blast furnace gas;

the remote heat distribution networks;

the development of coal stock;

new energy sources with the exception of those linked to nuclear energy;

energy recovery by industry and other users;

the rational use of energy.

However, the Federal Authority has jurisdiction over matters where the technical and economic indivisibility requires homogenous national implementation, namely:

The national equipment plan for the electricity sector;

The nuclear fuel cycle;

Large-scale storage, transmission and energy production infrastructures;

The rates.

Maritime transport space over which Belgium can exercise its jurisdiction in accordance with international maritime law within the Federal Authority. As a result, the renewal energy facilities in the North Sea fall under Federal jurisdiction.

Summary of the Belgian energy policy

The Belgian authorities have a sustainable energy policy that takes both economic and social energy interests into account as well as the depletion of fossil resources and environmental problems.

In this context, sustainable energy sources contribute to achieving the following objectives:

decreasing the consumption of fossil fuels so as to guarantee reserves for the future;

reducing greenhouse gas emissions;

reducing the country's dependency on energy imports;

minimising the impact of price fluctuations from other energy sources;

creating jobs in an innovative economy;

diversifying the energy offer in order to improve the functioning of the energy market.

In terms of energy production, Belgium has implemented several "green" certificates and guaranteed minimum price regimens with a view to supporting the development of electricity production from sustainable sources.

At Federal level, this scheme accompanies a series of measures aimed at the deployment of offshore wind farms on the Belgian continental shelf (North Sea).

The regions are also developing a policy for supporting green heating.

Generally speaking, in order to support the facilities producing energy from sustainable sources, whilst the Federal Authority has recourse to the tax tool (tax deductions for companies); the Regions have introduced investment support systems for companies and subsidies for individuals.

In the transmission sector, in order to promote the development of bio fuels, the Federal Authority has introduced a tax-exempt bio fuel quota system as well as an obligation to include it (currently 4%).

All these measures are supported by significant information, training and awareness-raising actions in order to inform companies, the general public and the sector's different players.

In regulatory terms, sustainable energy projects must comply with environmental and town planning regulations in force, mainly in terms of permits. However, certain simplified schemes are set out for some technologies depending on the size of the facility.

2)QUESTION 1: SECTOR BASED AND OVERALL SHARES AND ACTUAL CONSUMPTION OF SUSTAINABLE ENERGY IN THE LAST 2 YEARS (N-1; N-2 E.G.: 2010 AND 2009) (ARTICLE 22, PARAGRAPH 1, POINT A), OF DIRECTIVE 2009/28/EC).

Indicate the actual shares and actual consumption of sustainable energy for the last 2 years in the tables provided.

Table 1: Sector based (electricity, heating and cooling, and transmission) and global shares of energy produced from sustainable sources.

	2009	2010
	TOT	TOT
RES- C&R[1] (%)	4.35%	4.51%
RES- E[2] (%)	6.33%	6.97%
RES- T[3] (%)	3.03%	4.46%
Total share of the RES[4] (%)	4.51%	5.05%
Share from the cooperation mechanism [5] (%)	0.00%	0.00%
Surplus related to the cooperation mechanism [6] (%)	0.00%	0.00%

[1] Share of sustainable energy sources in the heating and cooling sector: final gross energy consumption produced from sustainable sources for heating and cooling [according to the definition in article 5, paragraph 1, point b), and paragraph 4, in directive 2009/28/EC] divided by final gross energy consumption for heating and cooling. The methodology applied is the same one applied in table 3 of the national sustainable energy action plans.

[2] Share of sustainable energy sources in electricity production: final gross consumption of electricity produced from sustainable energy sources [according to the definition in article 5, paragraph 1, point a), and paragraph 3, in directive 2009/28/EC] divided by final gross total electricity consumption. The methodology applied is the same one applied in table 3 of the national sustainable energy action plans.

[3] Share of sustainable energy sources in transport: final energy share from sustainable sources consumed in the transport sector [according to the definition in article 5, paragraph 1, point c), and paragraph 5, in directive 2009/28/EC] divided by consumption in the transport sector of a) petrol, 2) diesel, 3) bio fuels used in road and rail transport and 4) electricity in land transport (see line 3 in table 1). The methodology applied is the same one applied in table 3 of the national sustainable energy action plans.

[4] Share of sustainable energy in final gross energy consumption. The methodology applied is the same one applied in table 3 of the national sustainable energy action plans.

[5] In percentage points of the total RES share.

[6] In percentage points of the total RES share.

Table 1a: Table for calculating the contribution of sustainable energy sources in each sector to final energy consumption (ktep)

	2009	2010
	TOT	TOT
(A) Final gross consumption of RES for heating and cooling	839.48	987.48
(B) Final gross consumption of electricity produced from RES	493.98	596.23
(C) Final consumption of energy produced from RES in the transport sector.	228.49	345.49
(D) Total gross consumption of RES[1]	1,561.95	1,929.21
(E) Transfers of RES <u>to</u> other Member States		
(F) RES transfers from other Member States and third countries		
(G) RES consumption corrected for the target (D)-(E)+(F)		

[1]Pursuant to article 5, paragraph 1, of directive 2009/28/E, the gas, electricity and hydrogen coming from sustainable energy sources can only be taken into consideration once. Double counting is not allowed.

Table 1.b: Total actual contribution (installed capacity, gross electricity production) of each technology based on sustainable energy sources in Belgium with a view to achieving the fixed 2020 targets and the indicative intermediary trajectory for the shares of energy produced from sustainable energy in the electricity sector

	2009		2010	
	TOT		TOT	
	MW	GWh	MW	GWh
Hydroelectricity [1]:	1,428.9	1,801.3	1,428.6	1,720.9
without pumping	118.9	372.1	118.6	372.4
< 1MW	8.8	24.7	8.7	26.1
1MW-10 MW	54.7	198.2	54.6	194.5
>10MW	55.3	149.1	55.4	151.8
with pumping	1,310.0	1,429.3	1,310.0	1,348.5
mixed[2]	0.0	0.0	0.0	0.0
Geothermal energy	0.0	0.0	0.0	0.0
Solar energy:	218.4	169.4	660.7	557.5
photovoltaic	218.4	169.4	660.7	557.5
concentrated solar energy	0.0	0.0	0.0	0.0
Hydrokinetic/wave/tidal energy	0.0	0.0	0.0	0.0
Wind energy	586.4	1,092.7	919.5	1,589.3
land installations	554.9	1,010.8	723.0	1,399.7
sea installations	31.5	82.0	196.5	189.6
Biomass[3]:	900.7	4,103.8	1,010.7	4,413.8
Solid biomass	638.0	3,268.1	726.8	3,575.9
biogas	111.8	462.2	123.6	568.2
bioliquids	150.9	373.5	160.2	269.6
TOTAL	3,134.3	7,167.3	4,019.5	8,281.4
<i>cogeneration</i>	181.0	971.5	271.4	1,511.6

[1] Standardised in accordance with directive 2009/28/EC and the Eurostat methodology.

[2] In accordance with the new Eurostat methodology.

[3] Only taking into account that which complies with the sustainability criteria, see article 5, paragraph 1, last paragraph, in directive 2009/28/EC.

Table 1c: Total actual contribution (final energy consumption) of each technology based on sustainable energy sources in [name of the Member State] with a view to achieving the fixed targets for 2020 and the indicative intermediary trajectory for the shares of energy produced from sustainable energy sources in the heating and cooling sector (ktep)

	TOT	TOT
ktep	2009	2010
Geothermal energy (with the exception of low-temperature geothermal energy in heat pump applications)	1.9	1.9
Solar energy	11.1	12.0
Biomass[1]:	814.4	957.5
Solid biomass	755.1	890.4
Bio gas	23.5	26.2
Bio liquids	36.4	41.6
Renewable energy from heat pumps:	11.4	13.4
aerothermal:	0.0	26.1
geothermal:	11.4	29.0
hydrothermal:	0.0	5.2
TOTAL	838.8	984.8
district heating[2]	18.3	19.8
biomass in households[3]	220.4	248.9

[1] Only taking into account that which complies with the sustainability criteria [see article 5, paragraph 1, last paragraph, in directive 2009/28/EC].

[2] Share of urban heating and/or cooling in total energy consumption for heating and cooling produced from sustainable energy sources (RES-CU).

[3] Share in total energy consumption for heating and cooling produced from sustainable energy sources.

Table 1d: Total actual contribution of each technology based on sustainable energy sources in Belgium with a view to achieving the fixed targets for 2020 and the indicative intermediary trajectory for the energy shares produced from sustainable energy sources in the transport sector (ktep)

	TOT	TOT
	2009	2010
Bioethanol/bio-ETBE	30.8	38.2
bio fuels[1] appearing in art. 21, par.2	0.0	0.0
imports[2]	15.4	19.1
Biodiesel	195.5	304.6
bio fuels[3] appearing in art. 21, par.2	0.0	0.0
imports[4]	183.3	292.4
Hydrogen from renewable sources	0.0	0.0
Electricity from renewable sources	1.9	2.4
<i>road transport</i>	0.0	0.0
<i>non-road transport</i>	1.9	2.4
Others (bio gas and vegetable oils etc) - Please specify	0.0	0.0
bio fuels[5] appearing in art. 21, par.2	0.0	0.0
TOTAL	228.2	345.3

[1] Bio fuels appearing in article 21, paragraph 2, in directive 2009/28/EC.

[2] Share in the total quantity of bio fuel/bio-ETBE.

[3] Bio fuels appearing in article 21, paragraph 2, in directive 2009/28/EC.

[4] Share in the total amount of biodiesel.

[5] Bio fuels appearing in article 21, paragraph 2, in directive 2009/28/EC.

3)QUESTION 2: MEASURES TAKEN DURING THE LAST 2 YEARS AND/OR PROVIDED AT NATIONAL LEVEL WITH A VIEW TO PROMOTING THE GROWTH OF ENERGY FROM SUSTAINABLE SOURCES, BY TAKING THE INDICATIVE TRAJECTORY INTO ACCOUNT TO ACHIEVE THE NATIONAL TARGETS IN TERMS OF RES AS SET OUT IN YOUR NATIONAL SUSTAINABLE ENERGY ACTION PLAN (ARTICLE 22, PARAGRAPH 1, POINT A), IN DIRECTIVE 2009/28/EC).

Table 2: General overview of the policies and measures

** Type of measure:*

FIN = financial measure

REG = regulatory measure

NC = non-fixed measure

*** Expected results:*

MC = change in behaviour

KTEP = energy produced or consumed

MW =installed capacity (in MW)

**** Group(s) and/or activities targeted (e-s):*

INV = investors

INST = installer or producers

ADM = administration

UTIL = end users, public

MIX = Stakeholders

Measure name and reference	Type of measure*	Result expected**	Group and/or activity targeted***	Existing or under development	Start and end dates for the measure
Federal Authority					
Scheme favourable to production gaps	FIN	KTEP	INV	Existing	2009>
Granting of guarantees of origin for the offshore production of sustainable electricity	REG	KTEP	INV	Under development	2012>
Incorporation obligation for sustainable bio fuels	REG	KTEP	INST	Existing	>2009
Sustainability criteria for bio fuels	REG	MC	INST	Existing	>2011
Tax reduction for electric vehicles and charging points	FIN	MC	UTIL	Existing	2011>
Flemish Region					
1. Promotion of renewable energy					
1.1 Heating and CHP					
Green heat support	FIN	KTEP	INV	Under development	2012 >
2. Administrative simplification					
Reinforcing tasks of wind energy working party	REG	MW	Licensing authorities	Existing	2011 >
3. Access to the network					
'Flexible' connection to the high-tension grid	NC	MW	INV TNB	Existing	2011 - 2014
4. Consumer protection and information					
Green heat publicity campaign	NC	MC	GEB	Existing	Juni 2010
5. R&D, studies					
Creating of model for estimating reemployment on green jobs	NC	MC	UTIL	Existing	2012
Walloon Region					
GC: quotas for 2010-2012	FIN/REG	MW	INV	Existing	2010-2012
Setting of post-2012 quotas	FIN/REG	MW	INV	Under development	2012>
Global overhaul of the GC grant system	FIN/REG	MW	INV	Under development	2012
SOLTHERM Decree	REG	MC	INV/UTIL	Existing	Fin 2010
Boiler & heating network grants	FIN/REG	MW	UTIL	Existing	Ongoing & Strengthening in 2012

Biomass heater grant	FIN/REG	MC/MW	INV/UTIL	Existing	2011-2012
Wind: production target for 2020	NC	MW	INV	Existing	2012>
Wind: Map of potential	REG	MW	ADM/INV	Existing	Ongoing
Biometh platform	REG	MC	INV	Existing	2011
Biometh/bio gas study	NC	MC	ADM	Existing	2011
Biomass sustainability criteria	REG	MC	ADM/INV	Existing	2011>
PV: digressive support for new facilities	FIN/REG	KETP	INV	Existing	2011>
Geothermal: 3 pilot projects and map of potential	REG	MW	ADM/INV	Existing	2011-2012

Région de Bruxelles-Capitale					
1. Refonte des pages énergies renouvelables du site web de Bruxelles Environnement destinées aux porteurs de projets professionnels	NC	MC MW	INV UTIL INST	Existant/ En projet	2010> mi2012>
2. Guides d'étapes pour l'installations de systèmes PV (petits et grands)	NC	MC MW	INV UTIL	Existant	2010>
3. Point de contact unique pour les porteur de projet professionnels (Facilitateur Bâtiment Durable)	NC	MC MW	INV UTIL INST	Existant	2011>
4. Point de contact unique pour les porteur de projet particuliers (Maison de l'énergie)	NC	MC MW	INV UTIL INST	Existant	2012>
5. Assouplissement permis d'urbanismes (PV et ST)	R	MW	INV	Existant	2010>
6. Suppression permis d'environnement pour le PV	R	MW	INV	Existant	2010>
7. Simplification des conditions d'octroi des primes 'énergie'	REG FIN	MC MW	INV ADM	Existant	2011>
8. Simplification de la gestion des dossiers de primes 'énergie'	REG	MC	INV	Existant	2011>
9. Refonte du calcul des CV octroyés aux installations PV	REG FIN	MC MW	INV ADM	Existant	mi2011>
10. Simplification de la procédure de certification des installations PV (dans le cadre de l'octroi des CV)	REG	MC	ADM	Existant	mi2011>
11. Simplification de la procédure d'octroi des CV pour le PV (1 fois/an)	REG	MC	ADM	Existant	mi2011>
12. Réalisation de pages web dédiées aux CV sur le site de Bruxelles Environnement	NC	MW	INV	Existant	mi2011>
13. Fixation d'un prix minimum garanti pour les CV de 65 EUR	FIN	MC MW	INV	Existant	mi2011>
14. Fixation des quotas de CV 2013-2025	FIN	MC MW	INV	En projet	2012>
15. Réalisation d'un guide de maintenance des grandes installations ST	NC	MC	UTIL INST	Existant	2010>
16. Réalisation d'études de monitoring d'installations PV, ST et PAC+Géothermie	NC REG	MC	ADM INST	Existant	2011-2012
17. Mise en place de la Certification des installateurs	REG	MC	INST	En projet	2011>
18. Mise en place d'un 'démineur' éolien	NC	MC MW	ADM INV	Existant	mi2011>
19. Réalisation de mesures de vents et d'études de faisabilité	NC REG	MC MW	ADM INV	Existant	mi2011>
20. Réalisation d'une étude de potentiel biomasse et réseau de chaleur	NC	MC	ADM	Existant	2010-2011
21. Adaptation de la législation pour intégrer les critères de durabilité de la biomasse	REG	MC	ADM INV	Existant	mi2011>
22. Réalisation d'une étude qualité de l'air des installations de chauffage biomasse	NC REG	MC	ADM INV	Existant	2011-2012

Federal Authority

1.Tolerance limits for offshore windfarm production variations

Since 2009¹, Federal regulations have provided a range of additional support measures for offshore windfarms aimed at supporting energy distribution managers in integrating these farms into their production schedules in order to manage energy variations by lessening the expected production variations due to the unpredictable nature of windfarms. This system of production variations enables the network operator to offset the difference between estimated production (set the previous day) and the actual production, provided that the production variation is less than, or equal to 30%, by either the purchase or sale of energy. For electricity production that falls within this bracket, the network operator either buys in (in the case of reduced production) or sells (in the case of excess production) to the service provider at a price which compares to the market rates (BELPEX - 10% and BELPEX + 10 % respectively). Purchases and sales are balanced out by the variation calculations of the distribution managers concerned. For production variations in excess of 30%, the surplus or shortfall above or below this 30% figure are taken into account in the ARP variation calculations. Therefore, the network operator applies the usual variation rate to the difference between the amounts of energy actually produced (balanced out by the amount of energy shortfall below the 30% bracket) and the amounts of energy actually used by the ARP in question.

2.Obligation to incorporate sustainable bio fuels

In 2009, the Federal government imposed a 4% incorporation rate on sustainable bio fuels into fossil fuels marketed for general use. Thus, the law of 22 July 2009 concerning the obligation to incorporate bio fuels specifies that any registered oil company marketing petrol products and/or diesel products for general use is also obliged to market, during the same calendar year, 4% of sustainable bio fuels. The aforementioned law entered into force on 1 July 2009.

Given the proven effectiveness of this system, this law has been extended by 24 months. This extension entered into force on 30 June 2011.

3.Sustainability criteria for bio fuels

The Royal Decree of 26 November 2011 sets out the product standards for bio fuels and lays down the provisions in terms of the national certification plan demonstrating the sustainability applying to bio fuels in accordance with directive 2009/28/EC and directive 2003/30/EC.

4.Tax reduction for vehicles and electrical terminals

In accordance with the law of 22 December 2009 concerning tax and other set forth in the law of 23 December 2009, Belgium supports electrically powered mobility by offering those buying electric vehicles the following tax benefits:

✓ For motorcycles and tricycles, the tax reduction is equal to:

- 15% of the purchase value of the electric vehicle, but limited to
- 2,770 Euro for the 2011 financial year (2010 income);
- 2,830 Euro for the 2012 financial year (2011 income);

✓ For quadricycles, the tax reduction is equal to:

- 15% of the purchase value of the electric vehicle, but limited to
- 2,540 Euro for the 2011 financial year (2010 income);
- 4,640 Euro for the 2012 financial year (2011 income);

✓ For cars, cars and minibuses designed for the transport of both passengers and goods, the tax reduction is equal to

1 Royal decree of 30 March 2009 concerning production variations in relation to maritime electricity production facilities using wind power

- 30% of the purchase value of the electric vehicle, but limited to
- 9,000 Euro for the 2011 financial year (2010 income);
- 9.190 Euro for the 2012 financial year (2011 income);

These provisions are reinforced by a tax reduction incentive for the installation of exterior electric recharging terminals equal to 40% of the investment, but limited to 250 Euro for the 2011 and 2012 financial years (2010 and 2011 income).

Flanders region

1.Green heating action plan

Flanders boasts a green heating action plan. To stimulate the production of green heating, solar water heater subsidies have been increased for households and SMEs. For individuals, the subsidy for water heaters increased from 75 to 200 €/m² in 2012.

The action plan also includes a proposal to provide support for green heating produced from large-scale facilities using biomass (> 1 MW). The scheme for supporting green heating has still not been completely approved.

This is a voluntary scheme in which anyone can ask for support in initiating a call. A call is launched at least once every 6 months. The applicant must indicate the measure of support they estimate to be necessary per MWh of green heating produced. Project classification is based on the support requested. In all cases, the support requested must be less than 6 €/MWh. The list of requests is followed up until the allocated budget is exhausted. The operational support scheme is then paid for a 10-year period. The first call is expected in the summer of 2012.

The calls are launched by the VREG, which also classifies the requests and selects them until the budget is exhausted. Payment is made by the electricity distribution network operator. The latter receives compensation from the authorities.

For the call, projects that use the residual value or that inject biomethane into the gas network are also taken into account.

The support scheme will be reviewed in 2013 and triennially from then on.

2.Green heating communication campaign

In order to familiarise citizens with green heating, a specific communication campaign was organised in June 2010 "Kies voor groene warmte" ['Choose green heat']. Promotional films are broadcast on an Internet site (www.energyparen.be/groenewarmte), and communication campaigns explaining the different technologies and subsidies have multiplied. In three large train stations, "solar shower bags" have been distributed to illustrate how a solar water heater works.

3.Contribution to the quantitative and qualitative development of green employment

A 2011 study was aimed at developing a simple mathematical model for estimating the effects of Flemish energy saving measures that receive the highest priority on employment. A reference model for 2009 and 2010 will be implemented for the end of February 2012.

Walloon region

1.Green certificates:

- Increase in green certificate quotas for 2010, 2011 and 2012.

All electricity suppliers are subject to an obligation consisting of submitting a green certificate quota set by the government to the CWaPE on a quarterly basis. This quota is expressed by a percentage representing the relationship between the number of green certificates to be produced and the number of electric MWh supplied to end customers in the Walloon territory. These quotas are:

2003	3%	2008	8%
2004	4%	2009	9%

2005	5%	2010 (1 st quarter)/ end 2010	10% / 11.75%
2006	6%	2011	13.5 %
2007	7%	2012	15.75%

- Negotiations are ongoing for setting the quotas for the years following 2012. From 1st January 2013, new quotas should enter into force.
- Green certificates: complete overhaul of the system used to award green certificates under discussion.

2. Thermal solar:

In 2000, an action programme called SOLTHERM was launched with the aim of supporting the development of solar thermal. Two principles underlie the actions: the quality of the facilities via the training of the installers and their approval, the second being the support from the request through the soltherm subsidy (mainly).

In 2010, the Walloon government adopted a draft Decree aiming, among other things, to improve the quality of the facilities and strengthen the supervision of installers.

3. Subsidies:

Introduction of increased subsidies for boilers supplying a heating network, which will be strengthened in 2012: subsidies for boilers or cogeneration supplying the network are conserved and increased in the event of a link to a network supplying at least 3 distinct buildings and 4 housing units at an agreed rate per m of the network (capped).

Subsidies for bio mass boilers: the subsidies for automatic loading boilers comply with standard NBN EN 303-5 class 3, and having a thermal return greater than or equal to 80% (until May 2011) and greater than or equal to 85% (from June 2011).

4. Wind:

The Walloon government has reached a political agreement on the wind energy sector:

- setting an onshore wind energy production target of 4.500 GWhel for 2020 as well as on the principle of establishing a linear trajectory for reaching this target.
- providing for the creation of a regional map showing the areas suitable for the installation of wind farms aiming to achieve coherence at regional level.

Wind Energy Decree:

This Decree aims to (i) recognise public interest in wind energy production; (ii) give the government the power to specify the wind energy target and an annual trajectory for an 8-year period and for the first time for 2020; (iii) establish the positive reference map associated with a minimum producible amount per batch; (iv) establish the method of awarding the batches; (v) establish citizen involvement methods and local jurisdiction; (vi) regulate the issue of compensation for those benefitting from the installation of wind farms.

Specifically, this Decree enables, for example, the organisation of calls to tenders, public interest easements (and therefore enables expropriation), and sets the target selection criteria like citizen involvement and socio-economic effects.

5. Bio mass

Creation of an administrative platform bringing together the different players/administration during the assembly of a biomethanation unit implementation project. (see point relating to the decrease in administrative restrictions)

Study of the biomethanation sector in order to tick off all the restrictions on development in the biomethanation and biogas sector: publication of a green paper making this synthesis.

6. Photovoltaic

Concerning low powers (<10 kW), decrease in the level of support in line with the fall in equipment prices (e.g. panels); improvement in the time taken to see a return on investments via a digressive multiplier coefficient over time (decision of the WG on 28-11-11)

7.Geothermal:

Financing of 3 pilot projects: i) low energy geothermal for urban heating; (ii) average energy geothermal for electricity production; (iii) determination of the Walloon potential based on previous studies with a view to obtaining the map of potential suitable for the use of high depth geothermal as well as the determination of the obstacles to geothermal.

Brussels-Capital region

1.Energy saving guidance for project managers

- ✓Improvements to the sustainable energy pages on the Bruxelles-Environnement website aimed at professionals.
- ✓Step-by-step guides for the installation of photovoltaic systems (small and large). Since 2005, Bruxelles-Environnement has developed a series of tools for professional and project managers and individuals. Calculators and specifications etc are made available to the public on the Bruxelles-Environnement site. In terms of sustainable energy, it should be noted that step-by-step guides are made available for photovoltaic facilities aimed at both individuals and professionals.
- ✓Creation of a single contact point for professional project managers. From now on, professionals can contact a sustainable building facilitator service, which is responsible for providing a global approach to questions asked by professional project managers.
- ✓Implementation of energy saving housing for private individuals. From 2012, households wanting to carry out Energy saving renovations and invest in sustainable energy will be supported by local structures set up and supported by Bruxelles-Environnement within the framework of the Energy Saving Household scheme.

2.Permits:

In the Decree dated 17 June 2010, the Brussels-Capital Region's Government simplified the conditions relating to town planning permits in the event of installing thermal and photovoltaic solar panels (Chap. VII - Art 21, 3°- 22, 5° in 23, 3°).

Included in the same decree is the exclusion of photovoltaic panels from the list of classified facilities for which an environmental permit is required (Art. 6 concerning point No.55).

3."Energy" subsidies":

- ✓Simplification of the conditions for awarding subsidies:

The administrative conditions relating to access to energy subsidies were reviewed and simplified in 2011. These subsidies also now take the income of the applicant into account.

- ✓Simplification of the management of subsidy files:

From 1st January 2012, the management of subsidies is fully managed by Bruxelles-Environnement whereas the management of subsidies was previously shared between the distribution network's operator (Sibelga) and Bruxelles-Environnement. By reducing the number of players and integrating the analysis of subsidy requests within Bruxelles-Environnement, the administrative management is more effective.

4.Green certificates (GC):

- ✓Overhaul of the calculation of GCs for photovoltaic:

In 2010, discussions on the operation of the green certificates market took place. In 2011, these talks led to a new Decree favourable to large photovoltaic facilities and guaranteeing in the case of the installation

of photovoltaic panels, a financial return time of 7 years or less. This takes into account a series of parameters, such as:

- The average unit cost of a photovoltaic system
- Financial aid for investment
- The selling price of electricity to the network
- The resale price of Green Certificates on the market

The new Decree sets out an annual adaptation (by the Ministry) of the number of green certificates awarded to guarantee a 7-year financial return time depending on the annual evolution of the 4 aforementioned parameters. The green certificates are awarded for a 10-year period.

✓ **Simplification of the certification procedure for photovoltaic facilities:**

For facilities under 10kVA, the certification visit was scrapped in 2011.

✓ For these same facilities, the indexes for the award of green certificates must be introduced once a year instead of the previous every 4 years.

✓ Creation of pages dedicated to green certificates on the Bruxelles-Environnement website in 2011

✓ **Minimum guaranteed GC price of €65 in 2012:**

The GCs were previously sold at a market price of €82 to €86 /GC. The repurchase obligation of Brussels' GCs by the electricity transmission operator, ELIA, at a minimum price of 65 EUR/GC is especially reassuring for investors who often have to provide funding for installation through external financing from banks for example.

✓ **Setting of GC quotas for 2013-2025 in 2012:**

The electricity suppliers have an obligation to provide BRUGEL with a certain quota of GCs. This quota increases on a yearly basis in order to support the production of green electricity in the Region. In 2012, the quotas will be set for the 2013-2025 period.

5. Quality of the facilities:

✓ Creation and publishing, in 2010, of a maintenance guide for large solar water heater systems.

✓ Implementation and performance of facility monitoring studies (PV; ST; geothermal and PAC) in the 2011-2012 period. This monitoring enables Bruxelles-Environnement to have a clearer understanding of the operating conditions that guarantee the optimal operation of the facilities in question.

✓ In 2011, in consultation with the other Belgian regions, the implementation of a certification system for installers was launched and this will be confirmed in 2012.

6. Wind:

✓ **Troubleshooter:**

The wind power "troubleshooter" helps sponsors in their administrative approaches. It is clear that these approaches remain complex, particularly following constraints linked to the Brussels-National airport radar systems and the regulations adopted as a result by Belgocontrol.

✓ **Data collection and feasibility studies:**

The aim is to scientifically determine the zones with the best wind power potential in the Brussels-Capital Region. At the same time, feasibility studies are planned for some sponsors.

7. Biomass and heating network

✓ **Study of the bio mass and heating network potential:**

In 2010 and 2011, two closely linked studies highlighted the difficulty expressing the Brussels bio mass potential. Taking the air quality maintenance objectives into account, the introduction of flue gas scrubbing is required. However, this seems unlikely for small facilities. As a result, a study considered the feasibility of the largest bio mass boilers linked to heating networks. Unfortunately, at this stage, these facilities are not economically viable.

✓ **Bio mass sustainability criteria:**

In 2011, new regional provisions have been adopted in order to transpose the requirements set out in directive 2009/28/EC concerning bio mass sustainability.

✓ **Air quality study for bio mass heating installations:**

Following studies performed in both 2010 and 2011, monitoring including measurements of air pollutants on site aims to characterise the impact, on air quality, of bio mass heating installations such as rapeseed oil cogeneration or even pellet boilers. This new study will enable Bruxelles-Environnement to better determine (at the end of 2012):

- The dangers linked to liquid or solid bio mass combustion in heating installations (boiler or cogeneration)
- Minimum operating conditions in order to protect air quality in the RBC.

4)QUESTION 2A: PLEASE DESCRIBE THE PROGRESS MADE RELATING TO THE ASSESSMENT AND IMPROVEMENT OF ADMINISTRATIVE PROCEDURES IN ORDER TO OVERCOME REGULATORY AND NON-REGULATORY OBSTACLES TO THE DEVELOPMENT OF ENERGY FROM SUSTAINABLE SOURCES (ARTICLE 22, PARAGRAPH 1, POINT E), OF DIRECTIVE 2009/28/EC).

At the start of 2011, the Federal ministry and the 3 regional ministries responsible for energy decided to develop a more coordinated approach relating to a number of aspects related to their missions. In this context, a large-scale consultation took place with the stakeholders, the general Energy States, in order to identify the barriers to investments in production capacities and network infrastructures. The participants have insisted on the fact that one of the main obstacles relating to this subject is the multiplicity, complexity and inconsistency of some authorisation procedures. Following this report, a working group of Federal and regional experts has been set up with a view to providing recommendations in order to achieve simplified administrative and better integrated procedures. This process's first concrete results are expected in the second General States Session (summer 2012).

Federal state

A simplified procedure has been implemented for users already having a state concession with a view to facilitating the validation of minor changes made to their projects.

Flemish region

1.Strengthening of the "wind power" working group

The interdepartmental "wind power" working group is a consultation body between the different public administrations. Not all of the consultation bodies were represented. This is the reason why the "wind power" working group has been expanded in order to harmonise the different political objectives as best as possible.

The "wind power" working group will re-evaluate the project that have received positive feedback in the past but which haven't been carried out. Therefore, the reasons why these projects failed will be highlighted and we will try and find a way to resolve these issues.

Special attention is also given to the establishment of projects in the ports. In consultation with the appropriate port authorities, sensitive issues are identified and examined in order to decide how the Flemish government can act as a facilitator.

2.Introduction of an environmental permit

An environmental permit aims to integrate building and environment permits via the harmonisation of consultation and decision-making skills. This is one way to achieve more efficient licensing with maximum synergy between the different steps to be followed. More attention is expected to be given to the preliminary permit grant procedure, good cooperation between the policy holder and the authorities concerned and between the various authorities concerned.

A concept note with the principles was approved at the end of 2011. Adaptations to the regulations involving the environmental permit have been prepared.

Walloon region

1. Inter-administrative working group on biomethanation

This inter-administrative group includes the appropriate administrations for each aspect of biomethanation:

- DG04-land planning for building permits,
- DG03-environment for permits to operate and environmental permits,
- DG03-agriculture for farming installations,

- DG03-waste for facilities that use waste (farming and agro-industrial), status of the digestate
- DG04-energy since biogas produces energy (fuel, electricity and/or heat).

The aim is to enable administratively easier implementation in order to facilitate the achievement of our sustainable targets through biomethanation.

2.Wind power reference framework:

Decision from the Walloon government to produce a positive map of zones with wind power potential with a view to coherent exploitation at regional level. This decision is regulated through the wind power Decree.

This decision is based on the following principles:

- Developing a land policy for the territory's sustainable development targets;
- Developing landscapes and natural spaces respecting the European Landscape Convention;
- Encouraging citizen participation in sustainable energy development projects (wind, bio mass and wood-energy saving, etc), thanks to appropriate structures such as cooperatives;
- Working, in the medium-term, towards increasing the network's capacity, so as to enable the connection of all the decentralised resources required in terms of our European objectives.

This Decree recognises that wind energy is in the public interest, empowers the government to determine a wind power target, a relevant public utility, introducing optimal operating criteria for wind power, whilst taking into account all the constraints evaluated in the context of the Feltz study, socio-economic criteria as well as the community and citizen participation principle, and enabling wind farms to be set up in the best places (with planning measures and regulating the issue of compensation).

Therefore, this Decree and its associated map will give the sector a long-term view enabling its development.

3.Geothermal reference map:

Determination of the Walloon potential based on studies with a view to obtaining the map showing the potential exploitation of high-depth geothermal as well as the determination of the obstacles to development of geothermal in Wallonia.

Brussels-Capital region

1.Permits:

In its Decree dated 17/06/2010, the Brussels-Capital Region's Government simplified the conditions relating to town planning permits in the event of installing thermal and photovoltaic solar panels (Chap. VII - Art 21, 3°- 22, 5° in 23, 3°).

Included in the same Decree is the exclusion of photovoltaic panels from the list of classified facilities for which an environmental permit is required (Art. 6 concerning point No.55).

2."Energy" subsidies:

✓ Simplification of the conditions for awarding subsidies.

The administrative conditions relating to access to energy subsidies were reviewed and simplified in 2011. These subsidies also now take the income of the applicant into account.

✓ Simplification of the management of subsidy files.

From 1st January 2012, the management of subsidies is fully managed by Bruxelles-Environnement whereas the management of subsidies was previously shared between the distribution network's operator (Sibelga) and Bruxelles-Environnement. By reducing the number of players and integrating the analysis of subsidy requests within Bruxelles-Environnement, the administrative management is more effective.

3.Green certificates (GC):

✓ Simplification of the certification procedure for photovoltaic facilities:

For installations under 10kVA, the certification visit was scrapped in 2011.

✓In addition, for these same facilities, the indexes for the awarding of green certificates must now be introduced once a year instead of the previous 4 years.

5)QUESTION 2B: PLEASE DESCRIBE THE MEASURES AIMED AT GUARANTEEING THE DISTRIBUTION OF ELECTRICITY PRODUCED FROM SUSTAINABLE ENERGY SOURCES AND IMPROVING THE FRAMEWORK OR REGULATIONS CONCERNING THE MANAGEMENT AND SHARING OF COSTS INCURRED BY CONNECTIONS TO THE NETWORK AND STRENGTHENING OF THE NETWORK (ARTICLE 22, PARAGRAPH 1, POINT F), OF DIRECTIVE 2009/28/EC).

In addition to the provisions set out in the national action plan, the Federal and regional regulators are currently working with the GRT and GRDs in order to improve access to the network for electricity produced from sustainable energy sources. The flexible access track - for when there are congestion problems - is being studied both for access to the transmission system and for access to the distribution network.

In principle, the network connections and the network reinforcements are carried out by the network operator; which initially bears the associated costs. However, connection rates - published on the CREG site - are applied to allow the network operator to recover the connection costs. Through these rates, the producer bears the connection costs, even if there is a way of pooling costs within certain types of customers. However, the regulations currently in place by the national regulator offer the customer the option of carrying out, either by themselves or through a third party chosen by themselves, some of the work relating to the connection to the transmission system.

There are several exceptions to the aforementioned general principles. Here are some examples:

- In the Flanders region, there is a ceiling to direct connection costs. Therefore, the network connection costs borne by "green" production are restricted to the cost of a virtual connection, namely the costs of the shortest distance between the facility and the network;
- The transmission system operator is required to finance a third of the cost of the underwater cable; to a maximum amount of 25 million EUR for a 216MW or larger project. This 25 million EUR financing is reduced proportionally when the project is less than 216 MW.

The technical adaptation costs (deep connection costs) are borne by the network operator

Initiatives have been launched or are in progress to study the different challenges linked to the transition to intelligent networks. Consultation between the different players is ongoing.

Flemish region

1.Intelligent networks

In Flanders, the execution of the transition to intelligent networks is performed through the "*beleidsplatform slimme netten*" (Ed.: *political platform for intelligent networks*). This platform comprises the networks' stakeholders and intelligent meters both within and outside the Flemish authorities. The platform's aim is to obtain and maintain an overall view of ongoing actions.

Two working groups operate on this platform:

- The working group "*netbeheer en decentrale productie*" (Ed.: *network management and decentralised production*) deals with aspects linked to the intelligent networks and the good integration of the decentralised production in the network (among others, technological possibilities and interface with urban planning etc).
- The working group "*marktwerking en consument*" (Ed.: *free-exchange and consumer*) monitors the network marketing opportunities and intelligent meters and their impact on the consumer (among others, aspects such as private life, energy economy, influence on the social energy policy, the impact on billing, the marketing processes, the energy saving services and the link to electric vehicles etc.).

The two working groups aim to acquire expertise in these aspects. They must provide material for the political platform and deal with this platform's inputs.

2.Solution for network capacity restrictions

There are still some local congestion problems, which, at short notice, may prevent the connection of a sustainable electricity generation facility.

Following the development of wind power projects with state concessions on the Belgian continental shelf, the existing land network must be strengthened. The Stevin project concerning the extension of the 380kV network from Eekloo to Zeebrugge may provide a solution to this problem. The procedure for integrating this connection into a regional town planning plan ("GRUP") was launched at the end of 2009 after the establishment of a plan to evaluate the environmental impact ("MER-plan").

This connection must be operational by 2014-2015. Meanwhile, 27 green electricity projects, with a total capacity of 144 megawatts, are ongoing. The network in the Coxyde-Zeebrugge-Bruges is saturated given that all the available capacity is contractually reserved for offshore wind farms, even though they still haven't been constructed. For this reason, new production parks such as large solar, wind power or bio mass cogeneration facilities can no longer be connected to the network.

After consultation with all the stakeholders, a solution was developed. Elia will free up the capacity required and organise the "flexible" connection of the projects to the network. This means that the new projects can pass their electricity through the network provided that they agree to disconnect in exceptional cases where there is a lot of electricity produced simultaneously (lots of wind) and low demand (at night for example). It is expected that this will rarely be required and that the facilities will be able to operate normally for 92% of the time.

Walloon region

The CWaPE have issued a warning² on the impact on the network cost of the targets relating to the production of electricity from sustainable energy sources by 2020. The impact analysis performed in this context showed the main costs affected, their likely evolution in 2020 as well as the way in which these costs are passed onto the end customer. To do this, the CWaPE drew on relevant studies on the subject and adopted relatively conservative assumptions. Therefore, the future development of the intelligent networks has not taken this stage into account.

The CWaPE was given the task of leading a study on sustainable and intelligent electricity networks; this work was carried out in 2011 through a REDI study group with the aim of submitting a report to the Government concerning the investment priorities for the electricity networks in order to enable the increased integration of low-cost decentralised production units. Therefore, it studied the different measures for this to be achieved, particularly the active management of the request or the flexible connections.

As soon as these investment priorities for the electricity networks have been determined, a more specific study on Wallonia will be carried out in order to quantify the investments required. It is essential that these investments are optimised to reduce their cost as much as possible. The European reference studies show that this extra cost is not likely to lead to major discrepancies since it will represent, in 2020, around 1% of the electricity bill.

In addition to these economic aspects, the development of intelligent networks must also be able to allow the rapid connection of decentralised production units. In fact, in a more conventional approach to strengthen network capacities, the delays may be too long given the licences and financing required.

Brussels-Capital region

As indicated in the national plan, the Brussels-Capital Region applies the compensation principle to all decentralised electricity producing facilities with power less than or equal to 5kVA. Specifically, the electricity produced, up to a limit of electricity consumption, is valued at the higher price (purchase of electricity), which increases the profitability and facilitates administrative approaches (no need to have a contract for the resale of the electricity produced on the network).

In addition, in the RBC, there are no costs linked to the injection of electricity into the network and this, irrespective of the power of the decentralised production unit.

2 CD-11g05-CWaPE-334 from the CWaPE (<http://www.cwape.be>): "Warning relative to the impact on the network cost and the price of electricity, green certificate quotas expected in 2020" published on 19 July 2011.

Green electricity has priority over the electricity network. Suppliers are required to buy the green electricity produced first.

In the context of the energy subsidy for photovoltaic installations, the existing electric meter could be replaced with a bi-directional meter (approx. cost 270 €).

6)QUESTION 3: PLEASE DESCRIBE THE AID SCHEMES AND OTHER EXISTING MEASURES THAT ARE CURRENTLY IMPLEMENTED TO PROMOTE ENERGY PRODUCED FROM SUSTAINABLE SOURCES AND COMMUNICATE ANY NEW ELEMENT INTRODUCED IN THE MEASURES APPLIED RELATING TO THOSE SET OUT IN YOUR NATIONAL ACTION PLAN RELATING TO SUSTAINABLE ENERGY (ARTICLE 22, PARAGRAPH 1, POINT B), OF DIRECTIVE 2009/28/EC).

The Commission reminds the Member States that all the national aid schemes must comply with the regulations relating to State aid set out in articles 107 and 108 of the Treaty on the operation of the European Union.

Notification of the report in accordance with article 22 of directive 2009/28/EC does not replace a State aid notification in accordance with articles 107 and 108 of the treaty on the operation of the European Union.

*We suggest that you use **table 3** to provide detailed information on the existing aid schemes and the levels of aid that are applied to the various technologies relating to sustainable energy sources. The Member States are encouraged to provide information on the methodology used to determine the level and design of the aid schemes relating to sustainable energy.*

The Federal Authority and the Regions have implemented negotiable certificate schemes with a view to promoting the production of electricity from sustainable sources taking the skills allocated to them into account.

Although very similar, particularly in their intent (negotiable certificate schemes with different levels of support according to the technologies), the schemes developed by each of these entities presents a number of particularities.

These instruments complement a series of investment support mechanisms implemented at both Federal and regional level. These mechanisms are the subject of a broad description in the national action plan.

Table 3: Aid schemes for sustainable energy

RES aid schemes		Aid per unit		Total		Aid per unit		Total	
		2009		2010		2009		2010	
Total annual aid estimated for the electricity sector		518,911,603.50 €		628,111,793.00 €					
Total annual aid estimated for the heating sector		33,476,881.54 €		32,334,281.89 €					
Total annual aid estimated for the transport sector		*		*					
Federal Authority									
electricity production									
OFFSHORE wind	Production incentives	107 €/MWh	8,700,000.00 €	107 €/MWh	20,200,000.00 €				
Vlaamse Geweest									
HEB-steuuregeling									
Systeem van groenestroomcertificaten									
	Verplichting/quota (%)	4,9%		5,25%					
	Boete (€/GSC)	125.00 €		125.00 €					
	Minimumtarief (€/GSC)	60.00€ to 450.00€		60.00€ to 450.00€					
	Gemiddelde prijs (€/GSC)	107.30 €		105.50 €					
	Totale kost (euro)		271,200,000.00 €		401,400,000.00 €				
Investeringssteun									
Ecologiepremie bedrijven (euro)									
		Gemiddeld	Totaal	Gemiddeld	Totaal				
	Fotovoltaïsche zone-energie	91,369.00 €	81,409,879.00 €	33,652.00 €	5,451,625.00 €				
	Zonneboiler	2,736.00 €	73,867.00 €	3,598.00 €	32,384.00 €				
	Windenergie (> 1,5 MW)	669,128.00 €	9,367,793.00 €	131,187.00 €	262,373.00 €				
	Waterkracht	98.00 €	98.00 €	- €	- €				
	Warmtepomp en geothermische energie	5,826.00 €	192,245.00 €	2,773.00 €	249,569.00 €				
	Biomassa warmte	24,786.00 €	123,929.00 €	149,655.00 €	59,862.00 €				
	Biomassa WKK	77.00 €	77.00 €	400.00 €	400.00 €				
	Biogas warmte	- €	- €	944.00 €	944.00 €				
	Biogas WKK	937,812.00 €	21,569,676.00 €	1,154,083.00 €	33,468,418.00 €				
Premie elektriciteits-distributienetbeheerder (euro)									
		Gemiddeld	Totaal	Gemiddeld	Totaal				
	Zonneboiler particulieren	555.00 €	1,955,210.00 €	530.00 €	1,787,336.00 €				
	Zonneboiler niet-particulieren	1,157.00 €	11,571.00 €	1,315.00 €	1,052.00 €				
	Warmtepomp particulieren	889.00 €	551,788.00 €	901.00 €	285,687.00 €				
	Warmtepomp niet-particulieren	1,837.00 €	82,686.00 €	1,366.00 €	84,687.00 €				
Walloon Region									
electricity production									
Instrument	Obligation/quota (%)	9%		11,25%					
	Penalty (€/unit)	100.00 €		100.00 €					
	min guaranteed (€/unit)	65.00 €		65.00 €					
	Average cost of the certificate	87.88 €		84.90 €					
	Total GC cost (€)		113,541,575.00 €		154,501,085.00 €				
Investment aids									
Biomethanation	average €/unit	1,355,479.00 €	2,710,958.00 €	350,994.00 €	1,052,982.00 €				
Biomass boilers	average €/unit	382,726.00 €	1,913,630.00 €	93,155.40 €	931,554.00 €				
Fossil cogeneration	average €/unit	1,799,954.00 €	3,599,908.00 €	197,143.33 €	591,430.00 €				
energy saving	average €/unit	1,267,773.43 €	8,874,414.00 €	345,034.83 €	8,280,836.00 €				
Environment	average €/unit	190,458.50 €	761,834.00 €	7,598,106.56 €	68,382,959.00 €				
High wind	average €/unit	1,301,493.57 €	9,110,455.00 €	1,502,013.67 €	13,518,123.00 €				
Hydroelectricity	average €/unit	36,653.50 €	73,307.00 €	244,220.10 €	2,442,201.00 €				
Heat pump	average €/unit	10,855.50 €	21,711.00 €	111,421.40 €	557,107.00 €				
Low wind	average €/unit	20,481.00 €	40,962.00 €	15,675.40 €	78,377.00 €				
Photovoltaic	average €/unit	51,008.03 €	7,090,116.00 €	45,780.62 €	8,560,976.00 €				
Thermal solar	average €/unit	9,724.00 €	9,724.00 €	18,146.00 €	18,146.00 €				
Investment subsidies									
heat pump	€/unit	750.00 €	182,250.00 €	750.00 €	101,250.00 €				
heat pump (combi)	€/unit	2,250.00 €	929,250.00 €	2,250.00 €	500,789.49 €				
Biomass boilers	average €/unit	1,835.05 €	730,351.04 €	1,763.11 €	558,901.40 €				
heat pump (heating)	average €/unit	1,835.05 €	248,250.00 €	1,500.00 €	214,500.00 €				
Thermal solar	average €/unit	2,014.68 €	8,072,805.00 €	2,008.21 €	5,253,480.00 €				

Table 3a: A summary of the all the Belgian measures:

Abbreviations used in the table:

Type of measure:	Results expected	Group and/or activity targeted	EX= Existing	Start dates
R = regulatory	MC = change in behaviour	INV=investors	or	and
FIN=financial	MW = installed capacity (in MW)	UTIL= final users, ADM= public administrations	EP=under development	end dates
NC=non-binding	KTEP = energy produced or consumed	INST=installers, bio fuel production		for the measure
		GRT/D = Transport/distribution network operator		

Measure name and reference	Type of measure	Results expected	Group and/or activities targeted	EX = Existing	Start dates
1. Promotion of renewable energy					
1.1. Offshore wind electricity					
Demarcation of a zone reserved for the installation of offshore wind farms	R	MW	ADM	EX	2000>
Granting of domain-specific concessions	R	MW	INV	EX	2000>
Support for the production of renewable electricity (green certificates)	FIN	KTEP	INV	EX	2002>
System favourable to production gaps	FIN	KTEP	INV	EX	2009>
Contribution to cabling costs	FIN	MW	INV	EX	2008>
1.2. Onshore electricity					
Green certificate mechanism with minimum guaranteed price	FIN	KTEP	INV	EX	2002>
Green electricity quotas	FIN	KTEP	Electricity suppliers	EX	2002>
Specific value of the green certificates for photovoltaic energy	FIN	KTEP	GRD	EX	2006>
Multiplying factor (RW)					
Compensation principle for systems with power less than 10 kVA	FIN	KTEP	Producers	EX	2008
Granting of guarantee of origin labels	R	KTEP	INV	EX	2002>
Lifting of restrictions for wind farms in rural areas (VG)	R	MW	INV	EX	2009>
Action plans for the purchase of green electricity by public authorities	NC	MC	ADM	EX	2009>
1.3. Heating and cogeneration					
Cogeneration certificates	FIN	KTEP	Electricity suppliers	EX	2005>
Green heat support mechanism	FIN	KTEP	INV	EP	>2012
2. Promotion of investment in renewable energies					
Fiscal reduction for investments in renewable energies (individuals)	FIN	MW	INV	EX	2002-2011
Fiscal reduction for investments in renewable energies (companies)	FIN	MW	INV	EX	2004 >
Tax reduction on the interest rate on a loan and tax reduction on interest paid for renewable energy investments in housing (individuals)	FIN	MW	INV	EX	2009 - 2011
Funding of a third party investor FEDESCO	FIN	MW	ADM	EX	2007 >
Grants for the installation of renewable energy equipment	FIN	MW	Companies	EX	ongoing
			Individuals		
Investments in agriculture (VLIF)	FIN	MW	Agricultural and horticultural sector	EX	ongoing
Involvement in the connection charges for a renewable energy plant	FIN	MW	GRD	EX	2004>
Additional support given to local authorities	FIN	MW	Local authorities	EX	2004>
Obligation relative to a (pre)feasibility Renewable Energies study for new buildings (>1000 m ²) and those undergoing renovation from 5000 m ²	R	MC	INV	EX	2008>
Subsidies for the construction of particularly innovative and exemplary buildings	FIN	MW	Architects	EX	2007>
Grants for heating networks	FIN	MW	INV	EX	2008>
LGO for bio gas injection					
3. Promotion of renewable transport					
3.1. Electric vehicles					
Fiscal reductions and grants for electric vehicles and charging points	FIN	MC	UTIL	EX	2010 - 2012
Exemplary role of the public authorities	NC	MC	ADM	EX	2010>
3.2. Promotion of bio fuels					
Obligation to incorporate sustainable bio fuels	R	KTEP	Oil companies	EX	01/07/2009-30/06/2011
					01/07/2011 - 30/06/2013
Marketing authorisation for non-standardised bio fuels and those from oil and pure colza	R	KTEP	Constructors, oil product distributors, farmers	EX	November 2006 >
Defiscalisation of sustainable bio fuel quotas	FIN	33/59 MC	Oil companies	EX	01/11/2006 - 30/09/2013
Exemption of pure colza oil	FIN	MC	Farmers	EX	March 2006 >
4. Administrative simplification					
Single interface for federal energy infrastructure permits	R	Administrative consultation	ADM	EP	Ongoing
Circular on the implementation of wind turbines	R	MW	Bodies issuing authorisations	EX	2001>

3.2. Promotion of bio fuels					
Obligation to incorporate sustainable bio fuels	R	KTEP	Oil companies	EX	01/07/2009-30/06/2011 01/07/2011 – 30/06/2013
Marketing authorisation for non-standardised bio fuels and those from oil and pure colza	R	KTEP	Constructors, oil product distributors, farmers	EX	November 2006 >
Defiscalisation of sustainable bio fuel quotas	FIN	MC	Oil companies	EX	01/11/2006 – 30/09/2013
Exemption of pure colza oil	FIN	MC	Farmers	EX	March 2006 >
4. Administrative simplification					
Single interface for federal energy infrastructure permits	R	Administrative consultation	ADM	EP	Ongoing
Circular on the implementation of wind turbines	R	MW	Bodies issuing authorisations	EX	2001>
Wind farms in rural areas	R	MW	Bodies issuing authorisations	EX	2008>
Circular on the implementation of bio gas plants	R	MW	Bodies issuing authorisations	EX	2006>
Working group on the coordination of policies and players in the field of biomethanation	R, Support		Agricultural co-ops	EX	2009>
Permit exemption for solar panels	R	MW	INV	EX	2008>
5. Access to the network					
Development plans for electrical infrastructures (and EPEs)	R	MW	INV, GRT		Every 3 years
Funding for the BeProne platform on the network reliability	NC		ADM, universities	EX	2009>
Priority network connection for plants producing electricity from renewable energy sources	R	KTEP	GRT, GRD	EX	2002>
Priority network connection for plants producing electricity from renewable energy sources	R	KTEP	GRT, GRD	EX	2002>
Technical connection requirements for decentralised production plants operating in parallel on the network	R	KTEP	INST	EX	2001>
Simple declaration for plants under 5 kW with a single-phase connection or less than 10 kW with a three-phase connection	NC	MW	UTIL	EX	2009>
Development of smart grids (among other pilot projects)	R	MW	GRD	EP	2009>
6. Cooperation between the Federal Authority and the Regions					
Cooperation agreement for the coordination of energy	R	Consultation	ADM	EX	1993>
Platform for the certification of installers	NC	Harmonisation	ADM	EX	2009>
Additions to the RGIE to set the technical specifications for renewable plants (note 71)*	NC	Cooperation	ADM, INV	EX	07/10/2008>
7. Consumer protection and information					
Information for citizens on renewable energies	NC	MC	UTIL	EX	ongoing
Consumer protection and information	NC	MC	General public	EX	ongoing
Government promotion campaigns (telephone guidance, website, professional guidance, magazines, ads, campaigns, fact sheets, tools and reference books etc)	NC	MC	General public	EX	ongoing
Awareness-raising of the industry's professionals (technical seminars, contests and sheets etc)	NC	MC	INV, architects	EX	ongoing
Training of installers for domestic RES installations (thermal solar and photovoltaic)	Training	MC	INST	EX	2003 >
Getting local players and citizens interested in wind projects (participatory wind)	FIN, Support	MW	Communities and individuals	EX	2008>
Creation of reference works (best practice guides and vademecum etc)	NC	MC	INST	EX	ongoing
Publication of annual statistics: installed power, prices, amount of renewable energy produced	NC	MC	ADM, public	EX	ongoing
8. Exemplary role of the public authorities					
Special provisions to promote energy efficiency and renewable energy in public buildings, including through the Belgian Building Agency	NC	MC, MW, KTEP	ADM	EX + EP	2008>
9. R & D, studies					
Environment-Innovation programme 2	FIN	Knowledge	Research centres	EX	2009
Studies to clarify and solve problems found in the renewable energies sector in the RBC	NC	MW	INV	EX	ongoing
Study on the feasibility of the heating networks	R, FIN	KTEP	ADM	EX	2009
Study on support for the production of green heat	NC	KTEP	ADM	EX	2010

Federal Authority

1.The main legal bases for organising these different support schemes are as follows:

- Law of 19 April 1999 relating to the organisation of the electricity market;
- Royal Decree of 16 July 2002 relating to the establishment of mechanisms aiming to promote electricity produced from sustainable energy sources;
- Royal Decree of 30 March 2009 concerning production differences relating to facilities producing energy from wind in maritime transport space;
- Law of 10 July 1996 concerning bio fuels.

2.Development of the support systems

The Federal Authority and the Regions have implemented their own investment support schemes with a view to promoting the production of electricity from sustainable sources.

- ✓ *Investment support*

In addition to the measures set out in point 2 of this report, we would also like to mention:

- Contribution to the financing of the cost to connect offshore wind farms

The transmission system operator is required to finance a third of the cost of the underwater cable; to a maximum amount of 25 million EUR for a 216MW or larger project. This 25 million EUR financing is reduced proportionally when the project is less than 216 MW.

- Tax deduction for investment in favour of companies

Companies can also benefit from a tax reduction for some sustainable energy investments. The tax deduction rate is between 13.5% and 20.5% depending on the evolution of the average of the consumer price index.

Investments in the production of energy from sustainable sources eligible for tax deduction are:

- *Systems capturing diffuse or direct sun rays;*
- *The use of wind power;*
- *Hydraulic facilities for the production of energy with maximum power of 1MW;*
- *Energy production through the burning of waste;*
- *The use of gases from the anaerobic fermentation of waste;*
- *Heat pumps.*

3.Periodic revision

- ✓ *Production support (negotiable green certificates)*

No periodic revision is planned.

- ✓ *Investment support*

- Contribution to the financing of the cost to connect offshore wind farms: No periodic revision is planned. This measure complements the arsenal of measures implemented by the Federal Authority with a view to supporting the development of offshore wind energy on the Belgian continental shelf, and as such is monitored by the CREG³.

- Tax deduction for investment in favour of companies: The tax aid schemes are liable to be reviewed at the end of each budgetary year. However, the latter has not changed in recent years.

³ Art.23, §2, 12° of the electricity act.

Flemish region

1.The main legal bases for organising these different support schemes are as follows:

- Decree of 8 May 2009 concerning general provisions relating to the energy policy (Energy Decree);
- Decree from the Flemish Government of 19 November 2010 concerning general provisions relating to the energy policy

2.Evolution of the support systems

- ✓ *Investment support*
 - Ecological support

Companies can receive a subsidy allocated to investments in energy generation based on sustainable sources. The subsidy is a maximum of 40% for small and medium companies and 20% for large companies. The extra admissible costs vary according to the technologies:

- 10% for wind farms (over 1.5 MW);
- 50% for production facilities using biomass, bio gas and cogeneration;
- 10% for photovoltaic panels.

Ecological support was reformed in 2011. The facilities coming into play for green certificates [electricity production or cogeneration] are no longer eligible for ecological support.

The green heating subsidy remains and is a maximum of 30% for small and medium companies and a maximum of 15% for large companies. The extra cost authorised for green heating is 80%. In the context of the green heating action plan, the support for heat pumps and solar boilers is classified in the highest category.

3.Periodic review

- ✓ *Production support (negotiable green certificates)*

No periodic review is planned.

However, a number of mechanisms have been put in place to guarantee regular feedback, paving the way for adaptations to existing schemes. In addition to this monitoring carried out by the regulation bodies, we can also mention:

A study is carried out every 3 years to estimate the operation support required to guarantee acceptable profitability for a project. The next evaluation is scheduled for 2012.

Due to the development of the photovoltaic market, we have had to review the minimum rates for photovoltaic installation on an expedited basis. The minimum rate for new installations has been adapted to the pivotal profitability value. We can see a trend of decreasing prices and this threshold is reviewed several times a year in 2011 and 2012. The minimum pivot for biomethanation has been adjusted to 110 Euro per green certificate. The certificate fees have been decreased to 125 Euro in 2012, 118 Euro in 2013 and 100 Euro in 2014.

In 2011, the green certificate system was reviewed. In 2012, we will decide on the changes to be made to the system.

- ✓ *Investment support*
 - Support for ecological investments (ecologiesteun): the list of technologies and extra costs eligible is subject to revision before each call to tender (3 times a year).

Walloon region

1.The main legal bases organising these different support schemes are as follows:

- Decree of 12 April 2011 concerning the organisation of the electricity market;
- Decree from the Walloon Government of 30 November 2006 concerning the promotion of electricity produced from sustainable energy sources or cogeneration.

2. Evolution of the support systems

✓ *Investment support*

- Investment subsidy (and exoneration from property tax):

Companies can receive a subsidy for investments in energy production from sustainable energy sources. The level of support corresponds to 50% of the extra cost admissible for small and medium companies and 20-30% for large companies (depending on their geographic location). The extra cost admissible varies according to the technologies.

✓ *Production support*

- From 1 December 1999, the Walloon Region has organised an early system of granting green certificate for facilities with net developable power lower than or equal to 10 kW.

This advance, which is subject to conditions, must be applied for with the CWaPE and approved by the latter.

The green certificates granted in advance correspond to the estimated number of green certificates to be received for *a five-year production period* and subject to a limit of 40 green certificates.

3. Periodic revision

✓ *Production support (negotiable green certificates)*

No periodic revision is planned.

However, a number of mechanisms have been put in place to guarantee regular feedback paving the way for adaptations to existing schemes. In addition to this monitoring carried out by the regulation bodies, we can also mention:

Every 3 years, the CWaPE must perform a detailed analysis of the technical-economic characteristics of the different electricity production sectors. Every years, the CWaPE must also carry out an assessment of the operation of the green certificate market and make projections relating to the development of new medium-term installations (5 years);

✓ *Investment support*

- Investment subsidy: no periodic revision is planned. The scheme has been reviewed and optimised several times since it entered into force.

Brussels-Capital region

Specifically, the existing support mechanisms in the Brussels-Capital Region described in the national plan are maintained even if the grant conditions have been subject to studies and adaptations.

1. The main legal bases organising these different support schemes are as follows:

Order of 19 July 2001 relating to the organisation of the electricity market in the Brussels-Capital Region;

Decree of 29 March 2007 setting the green certificate quotas for 2008 and following. In 2011, a study was carried out with a view to determining the evolution of the level of green certificate quotas up to 2015.

2. Investment support

- The "energy" subsidies support sponsors with the acquisition of facilities producing energy from sustainable energy sources.

For photovoltaic solar panels and within the limits allowed, the 2010 scheme applied a ceiling of 1€ per Watt installed⁴. The subsidy is restricted to 30% of the bill (TVAC).

For the other sustainable energy sectors⁵ that produce electricity, the scheme allocates, for the service and industrial sector only, subsidies corresponding to 30% of the bill. Only facilities using energy from sustainable energy sources designed to meet the needs of the company's building or process are affected.

- In municipal housing, the service sector and industry, feasibility studies for facilities using sustainable energy sources are also eligible for an "Energy" subsidy corresponding to 50% of its cost.
- Economic expansion aids: this aid aims to support the regional economy. Within the limits allowed, investment varies depending on the size of the company.

3. Periodic revision

- ✓ *Production support (negotiable green certificates)*

No periodic revision is planned.

However, a number of mechanisms have been put in place to guarantee regular feedback paving the way for adaptations to existing schemes. In addition to this monitoring carried out by the regulation bodies, we can also mention:

In 2010, a study on the operation of the green certificates market was carried out relating to investments in large facilities using more easily profitable sustainable energy sources. In 2011, these talks led to a new Decree favourable to the large photovoltaic installations and guaranteeing in the case of installation of photovoltaic panels, a financial return time of under 7 years. This takes into account a series of parameters such as:

- *The average unit cost for a photovoltaic system*
- *Financial aid for investment*
- *The purchase price of electricity to the network*
- *The resale price of Green Certificates on the market*

A method integrating these parameters is reviewed every year by the RBS's Ministry of Energy in order to determine the multiplication coefficients that determine the number of green certificates enjoyed by the investor over a 10-year period.

- ✓ *Investment support*

- Energy subsidies: the scheme is reviewed and optimised every year both in terms of technical requirements and financing. Periodical statistics are used as a feedback mechanism.
- Economic expansion aids: the scheme is reviewed each year, based on the yearly statistics produced by the Directorate of company aids of the Brussels-Capital Region's Ministry.

⁴ This subsidy depends on the building complying with "passive" standards (< 15 kWh/m².year) for new constructions and "low energy" standards (< 60 kWh/m².year) for renovations according to the PHPP calculation method (2007 or more recent version).

⁵ The sustainable energy must comply with the definition in article 2 of Directive 2009/28/EC from the European Parliament and Council of 23 April 2009 concerning promoting the use of energy produced from sustainable sources.

7)QUESTION 3A: PLEASE PROVIDE INFORMATION ON THE METHOD OF DISTRIBUTION BETWEEN END USERS OF ELECTRICITY RECEIVING AID ACCORDING TO ARTICLE 3, PARAGRAPH 6, OF DIRECTIVE 2003/54/EC (ARTICLE 22, PARAGRAPH 1, POINT B), OF DIRECTIVE 2009/28/EC).

European Directive 2009/72/EC on the internal electricity market (repealing Directive 2003/54/EC) imposes a transparency obligation on each supplier vis-à-vis its customers relating to the energy sources used to supply electricity (fuel mix disclosure).

This obligation aims to provide the consumer with accurate information enabling them to make a choice based, not on price or service quality, but also on the production method used for the electricity provided. This obligation is imposed on the supplier for its entire supply portfolio in the Member State's territory in question (or the Region in Belgium) as well as for each product sold when the supplier sells a product claiming a particular environmental characteristic (sustainable and/or cogeneration).

In Belgium, the regional regulator validates these fuel-mixes based on a simple declaration, except for electricity produced by sustainable energy sources (RES) and for electricity produced by high-output cogeneration facilities (COGEN). In fact, given the physical impossibility of tracking the electrons, the 3 regional authorities impose, as sole proof of sustainable electricity and high-output cogeneration, the cancellation of guarantees of origin (LGO or GO), a tracking instrument based on a harmonised standard relating to the European Union's internal electricity market.

Flanders Region

Article 7.4.1 of the Decree of 8 May 2009 concerning the general provisions relating to the energy policy (hereinafter the Energy Decree) requires each electricity supplier to indicate, on all their bills and printed and electronic promotional material, the fuel mix of the energy saving source of the electricity that it has provided to its customers living in the Flanders Region, in addition to the details of its services and products on offer.

En application of article 6.3.4 of the Flemish Government Decree of 19 November 2010 concerning the general provisions relating to the energy policy (hereinafter the Energy Decree), each electricity supplier must, from 1 March of the current year, indicate, on each bill or accompanying document, as well as in the promotion material that it sends directly to its end consumers via the transmission or distribution network, the origin of the electricity it provided during the previous year.

The origin of the electricity must be indicated under the following categories:

- I. Electricity produced from sustainable energy sources;
- II. Electricity produced from qualitative cogeneration facilities;
- III. Electricity produced from fossil fuels;
- IV. Electricity produced from nuclear facilities;
- V. Electricity produced from unknown sources.

This distribution is also called fuel mix.

This fuel mix must be indicated, both in terms of all deliveries from the supplier ("fuel mix total") and the product delivered or offered to the end consumer ("fuel mix by product").

➤ VREG review relating to the authenticity of the fuel mix

In accordance with article 6.3.4 of the Energy Decree, the VREG must verify if the information given by the supplier during the execution of this obligation is correct. Therefore, the supplier must submit an annual report to the VREG relating to the origin of the electricity supplied during the previous year. In practice, 1 March is an impractical reporting deadline for the suppliers: it is at this time of year that the suppliers receive the exact figures of the supply allocated to the previous year. This is why the VREG has agreed to an extended deadline, until 15 March 2011, so that the suppliers can submit their report on the fuel mix. During this period, between reception of the suppliers' reports and the publication of this VREG report,

errors and mistakes between both parties have been eliminated and a harmonisation has been obtained with the figures that the VREG has received from the GRDs in terms of the monthly green reporting, in accordance with the procedure laid down in article 6.1.21 of the Energy Decree.

In its annual report, the VREG describes how the fuel mix is calculated, globally and by supplier. This report contains the percentages relating to the origin of the electricity supplied by the suppliers during the previous year, figures which, after checking, the VREG declares to be correct.

The latest report can be consulted on the VREG's Internet site via the following link: <http://www.vreg.be/sites/default/files/rapporten/rapp-2011-5.pdf>.

Walloon Region and Brussels-Capital Region

The distribution of electricity to end consumers receiving a subsidy is worked out in exactly the same way as those not receiving a subsidy as there is no link between the sustainable energy production support system (2009/28) and the source transparency obligation (2003/54).

The guarantee of origin provided for sustainable energy and cogeneration is a simple traceability instrument; it enables, after commercial exchanges, the clear and unequivocal allocation of each sustainable and cogeneration MWh to a given consumer. Thanks to this, each electricity consumer can choose the electrical product they wish (100% sustainable, 50% sustainable, 0% sustainable) from the different suppliers required to indicate these choices.

In addition, all consumers in the same category (quantity of electricity consumed) contribute equally to financing subsidies.

8)QUESTION 4: PLEASE PROVIDE INFORMATION ON THE WAY IN WHICH THE AID SCHEMES ARE STRUCTURED, WHERE APPLICABLE, TO INTEGRATE THE RES APPLICATIONS THAT PRESENT ADDITIONAL ADVANTAGES BUT WHICH MAY PRESENT HIGHER COSTS, PARTICULARLY BIO FUELS PRODUCED FROM WASTE, RESIDUE, NON-FOOD CELLULOSE MATTER AND LIGNOCELLULOSES MATTER (ARTICLE 22, PARAGRAPH 1, POINT C), OF DIRECTIVE 2009/28/EC)

The Federal State and the Regions have all, in their respective skill sectors, established support schemes which vary according to their individual approaches to producing electricity from sustainable sources. These various approaches – expressed in the form of a different number by sector of green certificates granted or a different minimum guaranteed price according to the sector in question - by definition take into account the advantages and costs between advantage and cost sectors.

1.Investment aids

Federal Authority

- ✓ *Contribution to the financing of the cost to connect offshore wind farms: Only offshore wind farms can take advantage of this offer.*
- ✓ *Tax reduction for energy-saving investments in favour of individuals (and green loans): In 2010, the tax reduction rate was 40% whatever the eligible investment in question. The annual ceiling is 2,770 EUR, except for facilities producing energy from the sun's rays (photovoltaic and thermal solar) where the ceiling is 3,600 EUR.*
- ✓ *In terms of electricity production from sustainable energy sources, only the installation of photovoltaic panels is subject to a tax reduction for energy-saving investments and is eligible for the green loan.*

Support for ecological investments (VG) or Investment grants (RW) or even Energy grants (RBC): The name varies according to the region but the mechanisms differentiate the support depending on the technology.

2.Economic expansion aids:

The support does not vary according to the technologies.

3.Electricity production aid

Flanders Region

For green electricity, the minimum rate depends on the technology and the bio mass source.

	Technology	Min tariff (Euro/certificate)		
		In service before 2010	In service after 2010	
Vlaams Gewest	Onshore wind energy	80	90	
	Landfill gas, bio gas from wastewater and waste (green)	80	60	
	Bio gas from agricultural fermentation and organic waste through composting	100	100 110 (after 2012)	
	Other bio gas	80	90	
	Other biomass	80	90	
	Hydraulic	95	90	
			Min tariff (Euro/certificate)	
	PV			
	In service	< 250 kW	> 250 kW	
	Between 2006 and 2010	450	450	
	2010	350	350	
	2011	330 to 270*	330 to 150*	
	2012	250 to 210*	90	
	2013	190	90	
	2014	150	90	
	2015	110	90	
From 2016	90	90		
*: according to the service time				

Walloon region

In terms of electricity production, in order to offset the maturity of these sectors and compare their support, a multiplying coefficient influencing the green certificate award rate has been implemented. The table showing the current coefficients can be found below:

Sectors (and total installation power)	Granting rate (GC/Mwh)	Minimum guaranteed level of support (EUR/MWh)	Maximum theoretical level of support (EUR/MWh)
Fossil cogeneration (≤ 20 MW)	0.1 to 0.4	6.5 to 25	10 to 40
Bio mass (≤ 20 MW)	0.1 to 1	6.5 to 65	10 to 100
Hydraulic (≤ 20 MW)	1	65	100
Wind	1	65	100
Biomass cogeneration (≤ 5 MW)	0.1 to 2	6.5 to 130	10 to 200
Photovoltaic (≤ 10 kWc)	6 to 7	390 to 455	600 to 700
Photovoltaic (10 - 250 kWc)	1.2 to 6	160 to 390	170 to 600
Photovoltaic (> 250 kWc)	1 to 1.2	150 to 160	150 to 170

Brussels-Capital Region

As indicated in the national plan, the green certificates mechanism in the Brussels-Capital Region rewards electricity production when it results in a CO₂ saving. Therefore, in the case of cogeneration facilities, recourse to bio mass is more lucrative in terms of green certificates granted due to a lower CO₂ emission level in comparison to the reference facilities operating on gas.

This benefit does not just pay for the improvement in the CO₂ balance but also adequately offsets:

- ✓ The extra costs linked to the higher maintenance costs than those for facilities supplied by natural gas;

- ✓ The risk associated with the wide variations in the price of bio fuels such as colza for example.

9)QUESTION 5: PLEASE PROVIDE INFORMATION ON THE OPERATION OF THE GUARANTEES OF ORIGIN SYSTEM FOR ELECTRICITY, HEATING AND COOLING FROM RES AND THE MEASURES TAKEN TO ENSURE THE RELIABILITY AND PROTECTION OF THE SYSTEM AGAINST FRAUD (ARTICLE 22, PARAGRAPH 1, POINT D), OF DIRECTIVE 2009/28/EC).

Flanders Region

In terms of sustainable energy, the guarantees of origin are used:

- ✓ *as proof that a certain level of green electricity is maintained, through a certificate system with a quota per supplier, and*
- ✓ *as an electricity label proving that a certain amount of electricity has been produced from sustainable energy*

1. Support system

The Flemish government encourages the production of electricity from sustainable energy via the green certificates system. This system is made up of two parts:

I.Producers producing electricity from sustainable sources, such as solar energy, wind energy, bio mass (e.g. fermentation of vegetable, fruit and garden waste, fermentation of manure, sludge or the incineration of forest waste), and hydraulic energy etc receive GCs from the VREG

II.Electricity suppliers must provide a certain amount of GCs (the quota) to the VREG.

✓ *Certificate award*

A green electricity certificate proves that 1.000 kWh of electricity has been produced in Flanders from sustainable energy. The green certificates only exist in virtual form and are saved in a VREG online database. The producer can sell their GCs to the suppliers. In fact, they are obliged to respect their quota. If the producer is also an electricity supplier, they can use the GCs for meeting their certificate obligations.

GCs are awarded by the VREG for the production of electricity from:

- solar energy
- wind energy
- hydraulic energy
- tide energy (via high and low tides)
- wave energy
- geothermal (via deep buried heat reservoirs)
- bio gas (via the fermentation of organic material)
- landfill gas (via methane and carbon dioxide)
- sewage purifying gas (via gas that escapes during purification)
- bio gas (via the biological degradation of matter)

In Flanders, wind energy, landfill gas, purifying gas from sewage water and bio mass, are the most widely used sustainable energy.

✓ *Quota obligation*

In order to respect the quota obligation the electricity suppliers must give a certain number of green certificates back to the VREG before the 31 March each year. The precise number corresponds to the

quota previously determined by the law. If an electricity supplier does not give back enough GCs, they must pay a 125 € fine for every certificate missing. The fines are paid to the Energy Fund.

•Quota

A certain percentage of all the electricity produced must come from sustainable energy. This percentage changes each year. To calculate the number of certificates, C to be submitted, you need to multiply the variable factor, G , by the total amount of electricity in MWh, E_v . The formula is as follows: , where G is equal to: $C = G \times E_v$

-0.0490 on 31 March 2009

-0.0525 on 31 March 2010

-0.0600 on 31 March 2011

-0.0700 on 31 March 2012

-0.0800 on 31 March 2013

-0.0900 on 31 March 2014

-0.1000 on 31 March 2015

-0.1050 on 31 March 2016

-0.1100 on 31 March 2017

-0.1150 on 31 March 2018

-0.1200 on 31 March 2019

-0.1250 on 31 March 2020

-0.1300 on 31 March 2021

In terms of the determination of E_v , a partial exemption is applied for sampling points with large consumers:

- Per sampling point supplied by one or more suppliers, the annual consumption is reduced, in the first consumption bracket of 20,000 MWh to 100,000 MWh V_{S1} , by 25% of the amount of electricity supplied L_e and 20,000 MWh:

$$E_v = V_{S1} - [25\% (L_e - 20,000 \text{ MWh})]$$

- In the second consumption bracket greater than 100.000 MWh V_{S2} , annual

consumption is down by 50% of the difference between the amount of

electricity supplied L_e and 100,000 MWh:

$$E_v = V_{S2} - [50\% (L_e - 100,000 \text{ MWh})]$$

- *Procedure*

The operators declare the amount supplied by each supplier to the VREG. Then, the VREG calculates the number of green certificates to be submitted per supplier. The VREG notifies the suppliers of this in writing; before 31 March; they are responsible for submitting the required number of GCs via the online database.

As an electricity supplier, you can buy GCs or request them for your own production. The certificates can be returned up to 5 years after granting. Only the GCs awarded by the VREG are accepted in the context of the quota obligation.

- ✓ *Acceptability of the green certificates*

Not all the green certificates are valid to meet the certificate obligation. Only green certificates awarded by the VREG are accepted.

Green certificates awarded for the production of electricity from certain waste (particularly waste likely to be recycled or removed more qualitatively) are not accepted in the context of the certificate obligation.

Green certificates awarded for the production of electricity abroad, in Wallonia or in the Brussels Region or by the CREG cannot be returned at the present time to satisfy the certificate obligation in the Flanders Region.

The green certificates can be returned in their year of allocation and the following five years.

- ✓ *Administrative fine*

If a supplier enters the exact number of green certificates, they satisfy their certificate obligation. If they do not enter enough certificates, they have to pay an administrative fine per missing certificate. This fine is 125 € per missing certificate for green certificates to be entered up to 31 March 2012. For green certificates to be entered up to 31 March 2013, this fine is 118 €. For all green certificate obligations after 31 March 2013, the fine is 100 €. The administrative fines are paid to the Energy Fund. This fund is used for the rational use policy relating to energy, cogeneration, sustainable energy and flexible Kyoto protocol mechanisms.

- ✓ *Certificate database*

The VREG manages the green certificates awarded in a free online database. For each green certificate, the following data are recorded: the owner of the certificate, the registration number, a set of data on the production facility (place of production and nominal power etc), the sustainable energy used and the year and month of production etc.

We also record in the database whether, yes or no, the green certificate has already been entered in the context of the certificate obligation and, if this is not the case, if it can be accepted by the VREG with a view to satisfying the certificate obligation.

In this database, we also mention whether, yes or no, these green certificates can be used as a guarantee of origin as proof of the supply of electricity produced from sustainable energy to end consumers.

This database is used by producers of electricity from sustainable sources, electricity suppliers and green certificate traders. The VREG provides them with a username and password with which they can read, on the Internet, the data on the green certificates that they own. In this way they can continuously control the production, purchase and sale of their own green certificates. Traders requiring access to the certificate database can contact the VREG.

- ✓ *Trade and delivery*

The green certificates and the electricity in question can be sold separately. The VREG facilitates the operation of the green certificate and cogeneration certificate market through the management of the certificate database. Sales of certificates are integrated into the database. Owners of green certificates are also required to communicate the sale of certificates to the VREG; there is a specific space provided for the buyer's name, the certificates sold and the price used. Based on these elements, the VREG publishes the average sale price every month.

A GC can only be used once in the context of the certificate obligation and the guarantee of origin.

2. Reliability and security of the guarantee of origin system

Security is guaranteed because double counting of the same amount of green electricity is avoided.

The VREG is the only competent body able to issue guarantees of origin.

Art. 7.1.1. Energy Decree.

The VREG awards a green electricity certificate to the owner of a production facility located in the Flanders Region or to the individual or corporate entity designated for this purpose, for each 1000kWh of electricity generated in the facility coming from sustainable energy sources.

Art. 7.1.2.

§ 1. The VREG awards a green electricity certificate to the owner of a production facility located in the Flanders Region or to the individual or corporate entity designated for this purpose, for each 1000kWh of electricity generated in the facility coming from sustainable energy sources.

§ 2. The Flemish government sets the conditions that a cogeneration unit must meet to be considered as a qualitative cogeneration unit and sets the reference installations.

Art. 7.1.4.

The green electricity and cogeneration certificates are saved in a central database. The Flemish Government decides on the certificate specifications that must be included in the central database.

Art. 7.1.5.

§ 1. Green electricity certificates and cogeneration certificates can be granted as follows:

1. As a guarantee of origin, to be presented in the context of the supply of electricity to consumers as being electricity from sustainable energy sources, relating to electricity from qualitative cogeneration;

2. As proof to be submitted in the context of the certificates obligation, set out in articles 7.1.10 and 7.1.11 respectively.

§ 2. A green electricity certificate or a cogeneration certificate can only be submitted once as a guarantee of origin as defined by § 1, 1, and can only be submitted once in the context of the certificates obligation, as defined by § 1, 2.

A green electricity certificate or a cogeneration certificate that has been entered in the context of the certificates obligation, as defined by § 1, 2, cannot be submitted as a guarantee of origin, as defined by § 1, 1.

A green electricity certificate or a cogeneration certificate that has been presented as a guarantee of origin, as defined by § 1, 1, can be entered after this presentation in the context of the certificates obligation, as defined by § 1, 2, except in the case where this is a cogeneration certificate that has only been granted for 1 000 kWh of electricity that has been generated from qualitative cogeneration.

§ 3. A green electricity certificate or a cogeneration certificate can only be presented as a guarantee of origin, as defined by § 1, 1, in the twelve months after the production period relating to the quantity of energy in question.

In the event that the guarantees of origin are delivered after the 6-month period following production, and that this is not the responsibility of the certificate's beneficiary, the latter can be used as a guarantee of origin up to six months after being granted

A green electricity certificate can be entered in the context of a certificates obligation, as defined by § 1, 2, up to 5 months after it is granted.

Art. 7.1.8.

The supply of electricity in the Flanders Region as a quantity of electricity generated from sustainable energy sources or from qualitative cogeneration is authorised if the quantity of electricity supplied corresponds to the respective number of green electricity certificates and qualitative cogeneration certificates presented to the VREG as a guarantee of origin.

Art. 7.1.9.

The Flemish Government sets out the conditions under which the guarantees of origin granted by the Federal authorities' competent body, by other regions or other countries, can be accepted for the

supply of electricity as set out in article 7.1.8. These conditions must be objective, transparent and non-discriminatory.

The VREG is a member of the Association of Issuing Bodies (AIB).

For the supply of energy produced from sustainable energy but not produced in the Flanders Region, the body issuing the guarantees of origin must be a member of the Association of Issuing Bodies (AIB) in the "European Energy Certification System" (EECS). In addition, this registration must be specifically as an 'Issuing Body' for guarantees of origin for electricity produced from sustainable energy.

The AIB's website is accessible via the following link: <http://www.aib-org.net>.

Among the members appearing on the AIB list, only the parties with reference 'RES-GO' ('Sustainable Energy Sources - Guarantee of Origin') are considered to be bodies delivering guarantees of origin acceptable to the VREG and able to accept guarantees of origin delivered by the VREG.

These guarantees of origin must be imported into the Flanders Region according to the protocol set out by the AIB in the "The Principles and Rules of Operation of Members of the Association of Issuing Bodies for The European Energy Certification System" (to be consulted on the AIB's website), complemented by the specific domain protocol for Flanders. This specific domain protocol for Flanders has been published as an annexe to BESL-2006-5 (pdf) from the VREG, relating to the arrangements for setting up the use of green certificates as guarantees of origin.

Walloon region

In the Walloon region, the "disclosure" mechanism (RES-E) and electricity produced from cogeneration units (CHP) is based entirely on guarantees of origin. No other proof of green classification is accepted, in the same way as no sale of electricity with a sustainable origin or produced from "cogeneration" units is authorised in the absence of the cancellation of the guarantees of origin in question. The imports and exports of guarantees of origin from the Member States having implemented the regulations relating to the "European Electricity Certificate System" (EECS) from the "Association of Issuing Bodies" (AIB) are immediately accepted.

➤ Guarantee of origin

The electricity produced from certified sustainable or cogeneration units (CHP) receives guarantees of origin, whether these units are subject to support or not. Only the electricity sold, usually after injection into the network or, rarely, directly on the production site, is subject to the granting of guarantees of origin. Only clean electricity provides entitlement to a guarantee of origin. A guarantee of origin is presented in the form of RE-GO, CHP-GO, or RE-GO and CHP-GO.

The role of the issuing body has been granted to CWAPE, the regional energy market regulator. The system is entirely administered by the CWAPE's electronic records, which, every quarter, grants guarantees of origin to producers based on quarterly production reports. The guarantees of origin are granted in accordance with the EECS regulations. These guarantees of origin are then exchanged within the Member States applying the EECS regulations. No import or export request from a non-EECS Member State has been recorded.

The green certificate (support function) and the guarantee of origin ("disclosure" function) are completely separate. Their use is exclusively limited to the targets they meet in order to avoid double counting or incorrect use. The guarantee of origin can only be used for disclosure purposes. The cancellation of a guarantee of origin can in no way affect the validity of the green certificate for the purposes of meeting the quota, and vice-versa.

➤ Disclosure

The disclosure scheme is implemented by article 11 of the Walloon government's decision of 30 March 2007 requiring electricity suppliers to indicate, in their contracts and bills, the origin of the energy supplied in the previous year.

Every year before 31 March, the electricity suppliers inform the CWAPE of the origin of the electricity supplied in the previous year. The CWAPE guarantees the reliability of this information and prepares an

annual report on its findings. The Fuel Mix calculation is based exclusively on the cancelled guarantees of origin (GO-RE and/or GO-CHP) and the declarations from the suppliers relating to fossil and fissile energy. In order to avoid any double counting of sustainable energy, the sustainable share is deducted from the residual fuel mix calculation for the producer's production park. In terms of the listed electricity bought, the Belgian energy saving fuel mix calculated in the context of the RE-DISS project (EPED Platform) is used.

The CWAPE uses data provided by the Distribution Network Operators and Transmission Network Operators to establish the amount of electricity supplied by the supplier. Based on this data, the suppliers declare the total amount of electricity sold for each of their products.

The guarantees of origin are used in the context of the monthly check on the shares of energy from sustainable sources or from sustainable cogeneration units from the energy saving fuel mix to be allocated to each sampling point. In addition, the suppliers can cancel the guarantees of origin for their contracts that are not green stamped but contain electricity produced from sustainable or cogeneration units. The monthly and annual totals are aggregated in order to find out the annual "disclosure".

The cancellation of guarantees of origin exclusively concerns electricity suppliers with a licence, notably in order to strengthen the competition on the energy saving market. As a result, no end consumer is allowed to cancel the guarantees of origin for their own use. The private producers are legally obliged to cancel their GO-REs or GO-CHPs in proportion to their consumption. These mechanisms guarantee the correspondence between the RE and CHP attributes and the physical energy.

➤ Reference:

- *Decree from the Walloon Government concerning the public service obligations in the electricity market, 30 March 2006, <http://wallex.wallonie.be/index.php?doc=8986>*
- *Ministerial Decree establishing the method used to determine the primary energy sources used to produce electricity, 13 December 2006. – (M.B. of 22/12/2006, p. 73884), <http://wallex.wallonie.be/index.php?doc=9393>*
- *Decree concerning the organisation of the regional electricity market, 12 April 2001 <http://wallex.wallonie.be/index.php?doc=9075>*

Brussels-Capital Region

In the Brussels-Capital Region, the granting and management of the guarantees of origin mechanism falls to BRUGEL, the local regulation body for the electricity and gas markets.

BRUGEL is a member of the Association of Issuing Bodies (AIB) since September 2008, and became linked to the AIB international HUB in December 2008.

The AIB promotes the use of a standardised system based on an environment, structures and harmonised procedures to guarantee the reliability of the international energy certificate systems. This standardised system is known as EECS® (European Energy Certificate System) and is detailed in the document "The Principles and Rules of Operation" ("PRO" i.e. the EECS regulations) and its supporting documents.

The registration with the AIB, the implementation of the PRO and the interconnection with the other members thanks to the HUB guarantee the reliability and transparency of the grant, transfer and cancellation procedures relating to the guarantees of origin.

Table 4a: Allocation of national agricultural land to crops specifically devoted to energy production (ha)

Land use	Surface area (ha)	
	TOT	
	2009	2010
1. Land used for common field crops (wheat and sugar beet etc..) and oilseeds (rapeseed and sunflower etc) (Please specify the main types)	18,936.0	25,921.0
Wheat	6,605.6	-
Beet	550.8	-
2. Land used for short rotation forest plantations (willow, poplar) (Please specify the main types)	77.9	139.0
Willow	69.9	111.0
3. Land used for other energy crops such as herbaceous (false grass, switchgrass, miscanthus), sorghum (Please specify the main types)	81.0	82.0
Miscanthus	80.0	80.0

11)QUESTION 7: PLEASE PROVIDE INFORMATION ON ANY CHANGES MADE TO THE PRICES OF COMMODITIES AND TO THE ALLOCATION OF LAND IN YOUR MEMBER STATE IN THE LAST 2 YEARS LINKED TO THE INCREASED USE OF BIOMASS AND OTHER TYPES OF ENERGY FROM SUSTAINABLE SOURCES. PLEASE INDICATE, WHERE APPLICABLE, THE REFERENCE OF THE DOCUMENTS RELATING TO THESE IMPACTS IN YOUR COUNTRY (ARTICLE 22, PARAGRAPH 1, POINT H), OF DIRECTIVE 2009/28/EC).

For the assessment of impacts on the prices of commodities, we suggest you examine the following basic products as a minimum: common food and feed crops, firewood, pellets.

Federal Authority

Common food and feed crops:

"The study that aims to quantify the biomass flows in Belgium" is run jointly by the CRA-W and the VITO on behalf of the FPS Health, Food Chain Safety and Environment. However, the results of these studies have not yet been published.

Flanders Region

No effect is known relating to the modification of the process of raw materials and the use of land following the increased use of biomass and other sustainable energy.

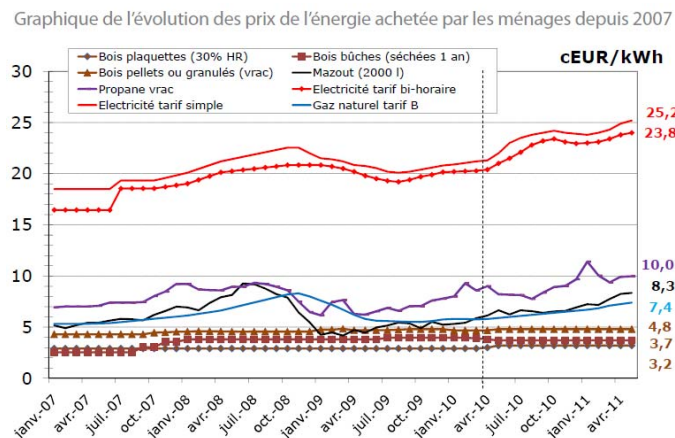
Walloon Region

Food crops: the "ALT-4-CER" study carried out by the CRA-W is based on the evolution of the price of some products and is still ongoing.

Firewood: Valbiom monitors the monthly prices of wood fuels (see www.renouvelle.org – graph below).

Pellets: According to Valbiom, the average price has changed slightly and depends on the price of sawdust. However, there is no sawdust in Wallonia and it is difficult to collect information on the price of the latter. The producers who do not have their own source of sawdust but who are dependent on the market have seen their price increase. Wood sector professionals mention a higher price for timber but there are many reasons for this increase, which are difficult to identify.

Logs: When the timber is sold, its final use is unknown. Therefore, it is not possible for us to monitor the evolution of the prices.



12)QUESTION 8: PLEASE DESCRIBE THE EVOLUTION AND THE SHARE OF BIO FUELS PRODUCED FROM WASTE, RESIDUE, NON-FOOD CELLULOSE MATTER AND LIGNOCELLULOSES MATTER (ARTICLE 22, PARAGRAPH 1, POINT I), OF DIRECTIVE 2009/28/EC).

Table 5: Production and consumption of bio fuels within art. 21, para. 2 (ktep)

[1] Bio fuels produced from waste, residue, non-food cellulose matter and lignocelluloses matter.

Bio fuels appearing in article 21, par. 2[1]	2009	2010
Production – Type of fuel X (specify)	-	-
Production – Type of fuel (specify)	-	-
Total production of bio fuels appearing in art. 21, par. 2	-	-
Total consumption of bio fuels appearing in art 21, par. 2	-	-
% of bio fuels appearing in art. 21, par. 2, in the total consumption of RES in transport	-	-

13)QUESTION 9: PLEASE PROVIDE INFORMATION ON THE ESTIMATED IMPACT OF BIO FUEL AND BIO LIQUID PRODUCTION ON BIODIVERSITY, WATER RESOURCES, WATER QUALITY AND SOIL QUALITY IN YOUR COUNTRY OVER THE LAST 2 YEARS. PLEASE PROVIDE INFORMATION ON THE WAY IN WHICH THESE IMPACTS ARE EVALUATED, BY PROVIDING REFERENCES TO RELEVANT DOCUMENTS CONCERNING THESE IMPACTS IN YOUR COUNTRY (ARTICLE 22, PARAGRAPH 1, POINT J), OF DIRECTIVE 2009/28/EC).

- A study is ongoing, carried out by the Belgian Royal Institute of Natural Sciences (interim report by Mr. H. Robert) on the Impact of TtCR crops (very short rotation coppices) and/or bio fuels on biodiversity.
- A research project is ongoing on the lifecycle analyses, but the results are not expected until 2013.

In the current state of knowledge, it is not possible to evaluate the negative or positive impacts of the production of bio fuel.

14) QUESTION 10: PLEASE ESTIMATE THE NET REDUCTIONS IN GREENHOUSE GAS EMISSIONS ACHIEVED THANKS TO THE USE OF ENERGY FROM SUSTAINABLE SOURCES (ARTICLE 22, PARAGRAPH 1, POINT K), OF DIRECTIVE 2009/28/EC).

To calculate the net reductions in greenhouse gas emissions achieved thanks to the use of sustainable energy, we suggest the following methodology:

For bio fuels: in accordance with the provisions of article 22, paragraph 2, of directive 2009/28/EC. Valbiom

For electricity and heating, we suggest the use of fossil fuel comparators at European level for the electricity and heating that appears in the report on the sustainability requirements for the use of solid and gaseous biomass sources relating to the production of electricity and heating and cooling energy⁶, if there are no more recent estimates.

If a Member State decides not to use the methodology suggested for the estimation of net reductions in greenhouse gas emissions, please describe the methodology used to estimate these reductions.

Table 6: Estimated reductions in greenhouse gas emissions attributable to the use of sustainable energy sources (equivalent tonnes of CO₂)

Environmental aspects	TOT	TOT
Tonnes of CO₂	2009	2010
Total estimated net reductions in GHG emissions attributable to the use of renewable energy[1]	6,018,891	7,440,702
Total estimated net reductions in GHG emissions attributable to the use of electricity produced from renewable energy sources	3,234,185	3,911,810
Net estimated reduction in GHG emissions attributable to the use of heating/cooling produced from renewable energy sources	2,127,645	2,514,273
Net estimated reduction in GHG emissions attributable to the use of renewable energy in transport.	657,062	1,014,620

6 The report can be consulted at the following address:

http://ec.europa.eu/energy/renewables/transparency_platform/doc/2010_report/com_2010_0011_3_report.pdf.

15) QUESTION 11: PLEASE INDICATE (FOR THE LAST 2 YEARS) AND ESTIMATE (FOR THE COMING YEARS UP TO 2020) THE SURPLUS/DEFICIT PRODUCTION OF ENERGY FROM SUSTAINABLE SOURCES AS AGAINST THE INDICATIVE TRAJECTORY, WHICH MAY BE TRANSFERRED TO/IMPORTED FROM OTHER MEMBER STATES AND/OR THIRD COUNTRIES, AS WELL AS THE ESTIMATED POTENTIAL FOR JOINT PROJECTS LOOKING AHEAD TO 2020 (ARTICLE 22, PARAGRAPH 1, POINTS L) AND M OF DIRECTIVE 2009/28/EC).

Table 7: Surplus and/or deficit (-) production, actual and estimated, of energy produced from sustainable sources, as against the indicative trajectory, which may be transferred to/imported from other Member States in Belgium (ktep)^{7,8}

EU trajectory for the % RES in final gross energy consumption	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES proportion (BE) in % (table 1)	2.20%	3.28%	3.82%	4.36%	4.36%	5.44%	5.44%	7.06%	7.06%	9.22%	9.22%	10.84%	13.00%
Comparison with the trajectory defined by the directive (in KTEP)	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES proportion (BE) in % (table 1)	2.20%	4.49%	5.01%										
heating/cooling		4.35%	4.51%										
electricity		6.25%	6.79%										
electricity in transport		3.03%	4.46%										
overall difference as against the EU's annual target		1.21%	1.19%										
Consumption projection (gross final)			41012	41222	41426	41638	41852	42057	42119	42189	43055	42321	42386
heating/cooling			21804	21804	21804	21804	21804	21804	21804	21804	21804	21804	21804
electricity			8670	8822	8973	9125	9276	9428	9539	9651	9762	9874	9985
electricity in transport			9485	9522	9552	9589	9629	9661	9591	9530	9463	9399	9333
Actual consumption	38,209	34662.3	38204.3										
heating/cooling	21804	19319.8	21913.6										
electricity	7912	7792.2	8543.1										
electricity in transport	8493	7550.3	7747.6										
overall difference as against 2005	0.0	-3546.7	38204.3										
overall difference as against the NAP			-2807.7										
	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

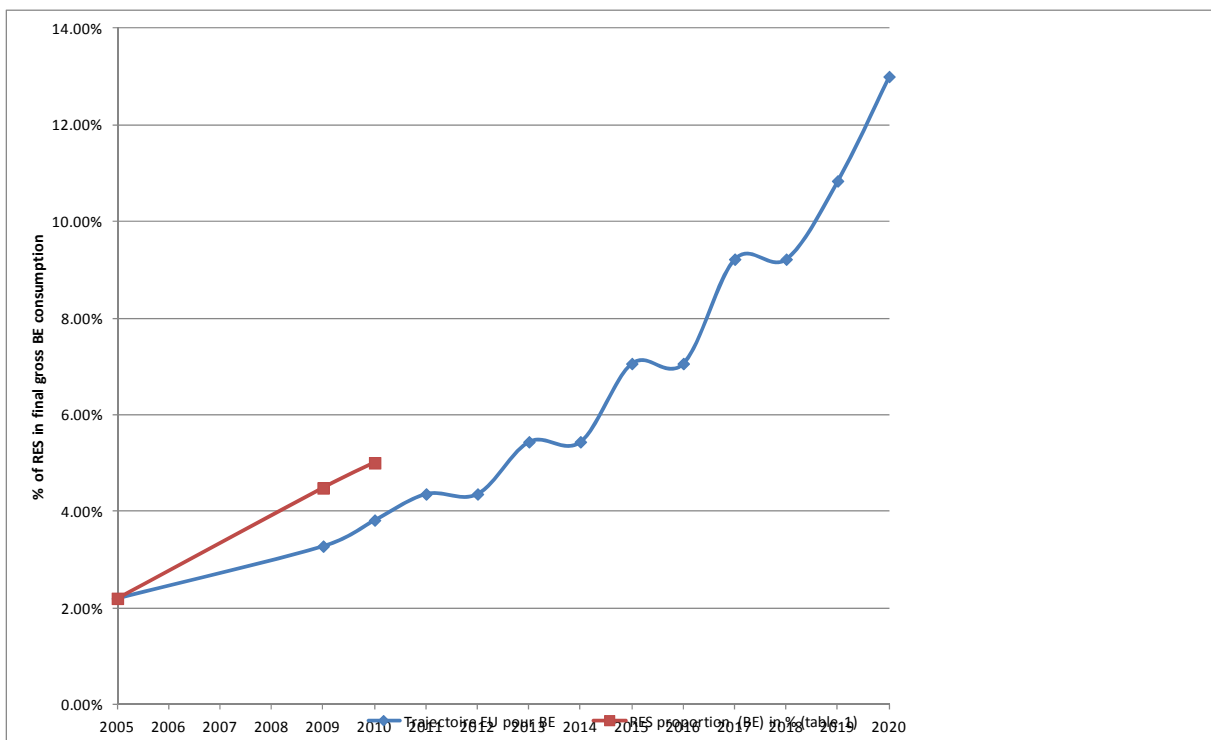
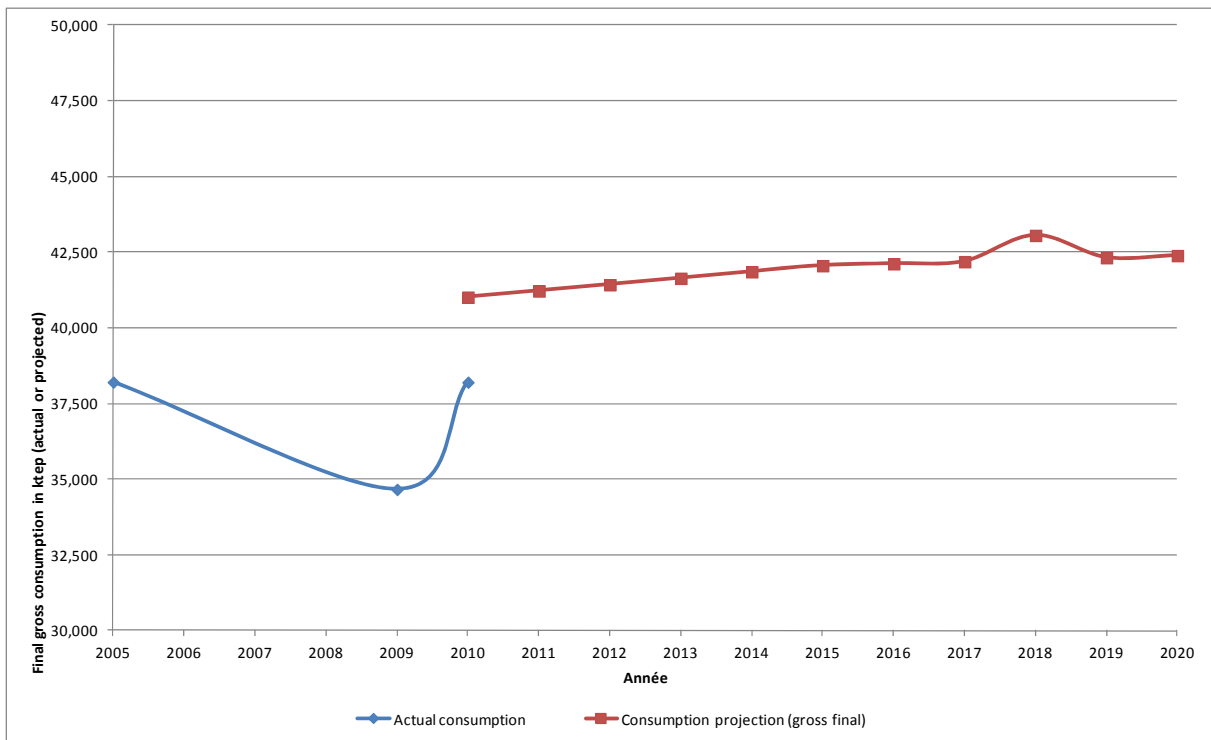
⁷ Please use the actual figures to count the surplus production over the two years prior to the presentation of the report and estimates for the coming years up to 2020. In each report, the Member State can correct the data provided in the previous reports.

⁸ When completing the table for the deficit production, please indicate the production deficit using negative figures (e.g.: -x ktep).

In the graph below, at the top, we can see developments in final gross consumption (actual and estimated) and below that; the curve shows the proportion of RES in the Belgian mix as against its European target of 13% in 2020.

16)QUESTION 11A: PLEASE PROVIDE DETAILS OF STATISTICAL TRANSFERS, JOINT PROJECTS AND DECISION-MAKING METHODS FOR JOINT AID SCHEMES.

At present, Belgium still has not performed any exchange of statistics.



17)QUESTION 12: PLEASE PROVIDE INFORMATION ON THE EVALUATION OF THE SHARE OF BIODEGRADABLE WASTE IN ALL THE WASTE USED FOR ENERGY PRODUCTION, AS WELL AS ON THE MEASURES ADOPTED WITH A VIEW TO IMPROVING AND CHECKING THESE ESTIMATES (ARTICLE 22, PARAGRAPH 1, POINT N), OF DIRECTIVE 2009/28/EC).

Please note that, in the first progress report (2011 report), the Member States are invited to outline their intentions relating to the questions asked in article 22, paragraph 3, points a) to c). They are also invited to provide any other information that they deem relevant concerning the specific situation of each Member State relating to the development of sustainable energy.

Flanders Region

Based on the data relating to the "tri déchets ménagers" [household waste sorting] campaign in Flanders in 2006, the sustainable quota of residual waste is 47.78% on an energy basis. The method is described in the "Bepaling van het hernieuwbaar aandeel van restafval" report (Vito, April 2009) [Determination of the recyclable proportion of residual waste].

Walloon Region

The biodegradable organic share of incinerated waste is estimated, by default, at 41%. This mass fraction changed from 30% in 1990-1996 to 35% in 1997-1999 to 40% in 2000 before staying at 45% between 2001 and 2003. From 2000, the specific information concerning the organic part is available. The ICP of the organic waste part is estimated at 4.24 GJ/t (ULB) (ICEDD.)

Brussels-Capital Region

The Neder-Over-Heembeek waste incinerator combined with a turbine (power of 45MW) produces +/- 67 GWh of green electricity in this region annually. Therefore, the incinerator 'processes' 477,100 tonnes of household waste (mainly 'white' bags from the region); 53% of this is organic according to an analysis of the content of bags.

Given an ICP for the organic fraction of 4.24 GJ/tonne (ADEME), this is equivalent to 25.61 ktep.