

Second National Energy Efficiency Action Plan Belgium

Prepared by

Federal Public Service of Economy, S.M.E.'s, Self-employed and Energy

Brussels Capital Region

Walloon Region

Flemish Region

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ANNEX

Second Federal energy efficiency action plan; prepared by the Federal Public Service of Economy, S.M.E.'s, Self-employed and Energy, the Directorate-General of Energy

Second energy efficiency action plan of the Brussels-Capital Region; prepared by the Brussels Institute for Environmental Management (IBGE-BIM)

Second Walloon energy efficiency action plan; prepared by the Operational Directorate General for Spatial Planning, Housing, Heritage and Energy of the Walloon Public Service

Second Flemish energy efficiency action plan, which the Flemish Government took note of June 17, 2011

1 INTRODUCTION

1.1 The institutional framework of Belgium

A. The distinctive features of the Belgian institutional context regarding energy efficiency

Various constitutional reforms have made Belgium a federal State, as a result of which competences have been distributed among the Federal State and the 3 Regions (Flanders, Wallonia and Brussels-Capital)

The rational use of energy falls within the competence of the Regions.

The Federal State also implements some measures aimed at enhancing energy efficiency within its competences (taxation, product standards, ...).

B. The Regional-Federal Consultation Cell

The federal structure and the distribution of competences in the field of energy have made it necessary to organise a consultation between the Regions and the Federal State. As far as national issues are concerned, the policies implemented by the Regions and the Federal State need to be coordinated and made coherent. As regards European and international matters such consultation makes it possible for Belgium to adopt a position view, commonly agreed on by the Regions and the Federal State.

In practice, this consultation takes place within the « Interministerial Conference for Economy and Energy », which set up the working group CONCERE/ENOVER (Consultation between the Federal State and the Regions on energy matters) in 1991 through a cooperation agreement. This working group holds regular meetings and has set up various groups of experts that:

- prepare Belgium's positions, notably on European issues ;
- agree on the reports to be submitted to international bodies and designate the Belgian representatives ;
- strive to harmonise certain provisions ;
- provide joint financing for some research or study projects ;
- keep each other informed about projects and supporting measures implemented within their respective competences.

C. The drawing-up and structure of the Belgian Energy Efficiency Action Plan

It was only logical that the Belgian Energy Efficiency Action Plan should be worked out within the working group CONCERE/ENOVER in charge of energy efficiency. As a matter of fact, the Directive applies to the Member State Belgium while it concerns mostly regional competences and must therefore be transformed into regional law. The three Regions and the Federal State had therefore to come to mutual agreements in order to draw up the national action plan. On drawing up the first National Energy Efficiency Action Plan the working group ENOVER also had to agree on a certain number of principles with a view to a coherent transposition of the directive.




The working group started by defining indicative energy efficiency targets as required by Directive ES 2006/32/EC.

The indicative energy savings targets for 2016 and the intermediate target for 2010 were defined at the regional level according to a common method and on the basis of the regional energy balance sheets. Each Region has committed itself to reaching a 9% energy savings target. The measures implemented by the Federal State are meant as supporting or additional measures.

The national energy savings target and the national intermediate target respectively amount to the sum of the regional targets and the sum of the intermediate regional targets. This is how Belgium meets its obligations as a Member State.

Each Region aims to reach the calculated energy savings target and to this end, draws up its own regional action plan. Each Region is also responsible for monitoring the implementation of its own measures. The Federal State has also listed its measures in a federal action plan. However, these measures were not evaluated separately from the regional measures as they overlap with the regional measures to a certain extent.

Table 1: Energy savings targets of the 3 Regions as set out in the first National Action Plan

	Brussels-Capital Region 	Walloon Region 	Flemish Region 
Average end-use consumption 2001-2005 falling under Directive [GWh]	24.429	92.868	188.429
9% savings by the end of 2016 [GWh]	2.199	8.358	16.959

After defining the energy savings targets, the working group moved on to defining a common method for assessing the energy efficiency measures in accordance with the Commission's recommendations. This was done as far as possible, taking into consideration the specific parameters and available data for each Region.

To this end, the working group CONCERE/ENOVER for energy efficiency dealt with what follows:

- Interpreting the formulas of the European Commission for the calculation of energy savings;
- carrying out a consultation concerning input data and parameters used in the formulas, and as far as possible harmonising the parameters;
- doing a joint study on the applicability of the proposed top-down indicators (Odyssee).

Finally, the second National Energy Efficiency Action Plan (EEAP2) was drawn up on the basis of the second regional and federal Energy Efficiency Action Plans, which differ although they are all based on the Commission's template and method.





In order to compile the national Action Plan a common layout was chosen on the basis of the template. This layout makes it possible to highlight the federal and regional sections of (almost) each point. These sections provide a summary or an overview of the various policies. In order to improve clarity each section is recognisable by means of a logo in the margin.

The federal and regional EEAP2 are herewith enclosed for further consultation.

1.2 Competent bodies for control and supervision

The three regions and the federal government each appoint their own bodies to control the reporting and monitoring of the overall energy savings framework and supervision to ensure the exemplary role of the public sector. The necessary coordination with regard to methodologies and reporting is part of the formal consultation structure CONCERE/ENOVER (referee to 1.1).

Table 2: Competent bodies for control and supervision

	Federal government	Brussels-Capital Region	Walloon Region	Flemish Region
	Federal Public Service of Economy, SMEs, Self-employed and Energy, DG Energy	Brussels Institute for Environmental Management IBGE-BIM	Operational Directorate General for Spatial Planning, Housing, Heritage and Energy of the Walloon Public Service	Flemish Energy Agency
			 Wallonie	
Overseeing ESD target	x	x	x	x
Public sector integration control (ESD)	x	x	x	x



The Federal Public Service of Economy, S.M.E.'s, Self-employed and Energy, DG Energy, more specifically the Directorate General of Energy, was charged with overall control and responsibility for overseeing the framework set up in connection with the implementation of Directive 2006/32/EC within the federal government. The DG Energy is therefore also responsible for reporting on the implemented energy efficiency measures. In this context, the DG Energy maintains contacts with the other competent Federal Public Services.



The Brussels Institute for Environmental Management (IBGE-BIM) has expertise in environment and energy of the Brussels-Capital. The IBGE-BIM is a public interest organization Class A instituted by the Royal Decree of 8 March 1989.



The Department for Energy and Sustainable Building from the Operational Directorate General (DGO4) for Spatial Planning, Housing, Heritage and Energy of the Walloon Public Service is the department of the Walloon administration in charge of implementing the competencies allocated to Wallonia what regards energy matters according to the Special Law for Institutional Reform dated August 8th 1980 (art 6, VII).



The Flemish Energy Agency, abbreviated VEA, was founded by the Flemish Government Decree of 16 April 2004. It is an internal autonomous agency without legal identity within the Flemish Ministry of Environment, Nature and Energy. The VEA has been operational since 1 April 2006. The Flemish Energy Agency's mission is to implement a sustainable energy policy by means of implementing policy instruments in a cost-effective and qualitative manner.

The main tasks of these bodies under the Energy Service Directive are as follows :

- monitoring and ensuring a global control of the measures implemented in the context of the transposition of directive 2006/32;
- monitoring and reporting on the integration of energy efficiency improvement measures in the public sector, which should play an exemplary role, e.g. laying down criteria, specifications, analysing the minimised life-cycle cost of energy efficiency in public procurements for the purchase of equipment and vehicles;
- collecting aggregated statistical information from energy suppliers and distributors;
- ensuring the transparency and dissemination of information on the monitoring mechanisms for energy efficiency and on the legal and financial frameworks set up in order to reach the indicative energy savings target;
- monitoring the contributions of energy suppliers and distributors to the promotion of energy savings in end-use consumption.

2 OVERALL CONTEXT OF THE SECOND NEEAP

2.1 Highlights of the second NEEAP

The second National Energy Efficiency Action Plan is based on the energy savings targets for 2010 and 2016 as defined in the first Action Plan.



A. Federal Government

The first federal energy efficiency action plan was presented to support the regional plans. The federal measures do not strive towards specific savings targets, but support and complement the regional measures. Measures of the first plan are evaluated in the second federal energy efficiency action plan. Due to the existence of overlap between the regional and federal energy efficiency measures, the impact of federal actions on energy consumption will not be calculated as such to avoid the risk of duplication. However, there will be an informative reporting carried out per measure regarding the context, objective(s), evolution, current status and any expectations relating to this measure.

In addition to the regional investment grants, low and no-interest loans and premiums, energy performance standards for buildings and covenant of sectors the federal Government provides energy-related taxes, tax incentives, soft loans (Global Fund to Reduce Energy Costs) and other measures. The energy performance standards for systems and energy labels also resort under federal jurisdiction (ecodesign and labelling directive, respectively).

The federal Government values its exemplary role. The state has instructed the Federal Participation and Investment Society (FPIM) to provide Fedesco, the public ESCO established as a public limited company of public law commissioned by the federal government, with start-up capital. Fedesco promotes and encourages energy efficiency in public buildings in cooperation with the Federal Buildings Agency. In addition, Belesco was created by 20 Belgian public and private organizations on the initiative of Fedesco and the Energy Magazine to stimulate the Belgian ESCO market in the context of the promotion of energy efficiency.

Another important measure where the federal Government plays out its exemplary role is through the promotion and compensation of energy efficient forms of transport such as public transport and bicycle use for commuting journeys with regard to federal employees. Through the 'Sustainable Procurement Guide' (www.gidsvoorduurzameaankopen.be), knowledge is transmitted regarding the ecological and ethical requirements, ensuring that the federal Government is able to strive for the 50% sustainable procurement procedures for all federal public contracts. Most federal agencies also seek to attain the EMAS label.

The federal Government endeavours to provide citizens with the necessary knowledge and information regarding more efficient use of energy in order to reduce their energy consumption and costs, through, among others, the knowledge centre of Fedesco, Belesco forum and campaigns, brochures and websites of various federal Government agencies.

Certain measures included in the 1st NEEAP, appear to have only a minimal energy efficiency effect. Their energy-saving impact is likely to be negligible because the focus is elsewhere, for example on the reduction of CO₂ emissions etc. So they are less relevant in the context of the Energy Efficiency Action Plan. In the current action plan, a brief description and status update of the following measures are provided, but these will not be elaborated upon.

- More speed radars and 'drive more carefully campaigns';
- Corporation tax deductibility of motor car expenses other than fuel in terms of CO₂ emissions;
- Harmonisation of tax rates;
- Support for fuel substitution: This may refer to the initiatives taken to include certain bio-components in fossil fuels. The energy content of the blended fuels, however, appears to be lower than that of 100% fossil fuels. Thus this appears to be not very energy-efficient.

B. The Brussels-Capital Region



The first real energy and climate policies for the Brussels-Capital Region appeared in 2004. After an initial period of awareness raising and experience necessary for making the solutions envisaged credible, in 2009, the RBC adopted the ambitious goal of reducing by 30% domestic greenhouse gas emissions by 2025 compared to 1990. To achieve this goal, priorities were defined and mainly targeted the building and transport sectors:

- Building: proactive implementation of energy performance of buildings (EPB) in the residential and tertiary sectors, and, especially the passive standard for new buildings and the low-energy standard for large-scale renovation projects (different timescales in the private and public sectors); obligation to carry out an energy audit and implementation of profitable solutions for large buildings; encouragements for improving the energy performance of buildings; supporting households; development of the sustainable construction sector, etc.

- Transport: improvement of travel plans, encouragement of soft transport methods and improvement of public transport, parking policies management, etc. Furthermore, the IRIS II mobility plan should reduce traffic by 20% in 2018 compared to 2001 through a series of additional measures.

Also, the RBC is focusing specifically on the exemplary nature of public authorities:

- In all real estate investments, with high demands in terms of energy and environmental performance and renewable energy production;
- In transport, with the strengthening of public enterprise travel plans and the improvement of the energy performance of public service vehicles;
- In the implementation of a sustainable purchasing policy.

All these initiatives, whose results are already beginning to be visible, will enable the Brussels-Capital Region to achieve its objective to reduce energy consumption by 2016, as defined in its first energy efficiency action plan. This major result will be achieved despite a large increase in the population.



C. The Walloon Region

This 2nd Energy Efficiency Action Plan describes:

- implemented and planned measures aimed at improving energy efficiency in order to achieve the goals which have been defined;
- provisions concerning the exemplary role of the public sector;
- provisions taken to inform citizens about public sector actions and to ensure that market operators provide information and advice to final customers.

The analysis and evaluation of the results of the 1st NEEAP has been the opportunity to develop a tool for assessing the measures and actions. This computerised system (database) enables:

- for each action, to calculate energy savings as well as the amount of any subsidies and corresponding investments,
- to monitor the implementation of these actions through a series of implementation indicators (e.g.: number of files, budget devoted, etc.);
- to gather together the EEAP1's 137 specific actions within new measures aggregated for a better integration of the Walloon EEAP2 within a Belgian NEEAP;
- to produce reporting tables.

This tool may be used for all new actions and measures implemented. It will be valuable for making decisions about future measures on energy policy when preparing the EEAP's.

The present EEAP's must be understood as a tool which reviews the present-day impact as much as the expected future impact of the already implemented measures regarding energy efficiency (most of which appeared already in the 1st EEAP's), which evaluates the gap compared to the target, and which shows the way in which it is planned to achieve this target.



D. The Flemish Region

In the second Flemish Energy Efficiency Action Plan, the policies of the first plan are reviewed. Progress and (anticipated) changes in the implementation of the measures are described and the energy savings realised or expected in 2010 and 2016 are recalculated.

Compared to the first plan, five measures are added: insulation regulations for homes with an application for a planning permit between 1 September 1992 and 31 December 2005, the benchmark agreements with the companies that are not covered by the emissions trading directive, the financial incentives for photovoltaic solar panels, the reduction in property tax for energy efficient new buildings and the additional subsidy from the Flemish government for the installation of roof insulation. The first three measures were already implemented at the time of submission of the first action plan, but its effects were not assessed at that time because of a lack of calculation models and/or input data.

The energy savings in the transport sector are estimated in a top-down manner because of the strong interaction between the large number of underlying individual policy measures. Savings from the policy measures in the other sectors are calculated bottom-up because the input data for each individual measure are available. The calculations are performed wherever possible on the basis of the harmonised calculation methods, duration periods and default values as recommended by the European Commission. If harmonised methods are omitted or if the Flemish data are not available for the application of harmonised methods (only one case), specific calculation methods are used and described in the annex to the Flemish action plan.

Particular attention is paid to avoiding overlap between the calculated savings from the various policies. Among others, two policies from the first action plan for schools are no longer quantified separately in the second action plan, because the savings are largely subject to the effects of other policies.

The calculations show that the savings in 2010 are almost twice as high as the interim absolute target. The energy savings target for 2016 is significantly exceeded as well: the savings amount to almost one and a half times the absolute target. In the first action plan, the expected savings in 2016 amounted to only 107% of the target.

Total projected savings for 2016 are covered for 66% by six measures (packages): financial support for the installation of roof insulation in homes (17%), the insulation and energy performance regulations for new dwellings (13%), mobility policy with impact on energy use by cars (12%), financial support for boiler replacement in households (9%), subsidies for energy saving investments in horticulture (8%), and energy efficiency agreements with companies (7%). The remaining 34% savings are spread over a wide range of measures.

The policy measures are divided into five sectors: buildings, industry, energy, mobility and agriculture. As recommended in the template, the savings in the end-use sectors that are realised by the network operators in the context of their RUE public service obligations, are assigned to the energy sector. Since these commitments have already been in force since 2003, have a wide range and have become more stringent several times, about half of the savings in this action plan are due to the energy sector.

The fact that the target has been exceeded compared to the first action plan is the result of:

- the addition of the three measures already implemented when submitting the first action plan (see above);
- the addition of two measures in force since 1 January 2009 (see above);

- the success of the premiums for energy-saving measures that the network operators award as part of their RUE public service obligations and the strengthening and expansion of these obligations;
- tightening of the energy performance standards for new buildings.

The second Flemish action plan also extensively describes which measures and actions by Flemish and local Governments contribute to the implementation of the provisions in the directive in terms of the role model function of the public sector and the provision of information and advice to end-users (Article 5 (1) and 7 (2)).

Notwithstanding the fact that the directive does not impose a reporting obligation with regard to articles 6 (2) 'requirements for energy distributors and/or suppliers' and 6 (3) 'incentives for other traders' but given that this is recommended in the template, a status update for these points is provided as well.

2.2 National context of energy savings

Today, the energy challenge is increasingly urgent. Indeed, the crisis which started in 2008 is also an energy crisis: a crisis of resources, an environmental crisis, a social as well as an economic crisis; which, also, is not a short-term phenomenon but very much a structural one.

The general trend towards an increase in energy costs (even if there have been major variations since 2004), by highlighting our economies' energy dependency and reminding us of declining fossil and fission energy resources, their geopolitical sensitivity, and their inherent risks, contributes to heightening the need for sustainable energy management.

Belgium is a densely populated country. The following figure shows the differences as regards density and surface area between the 3 Regions (the 3 coloured circles represent the relative size of the 3 regional populations and the dotted line circles show the developments expected by the end of 2016).

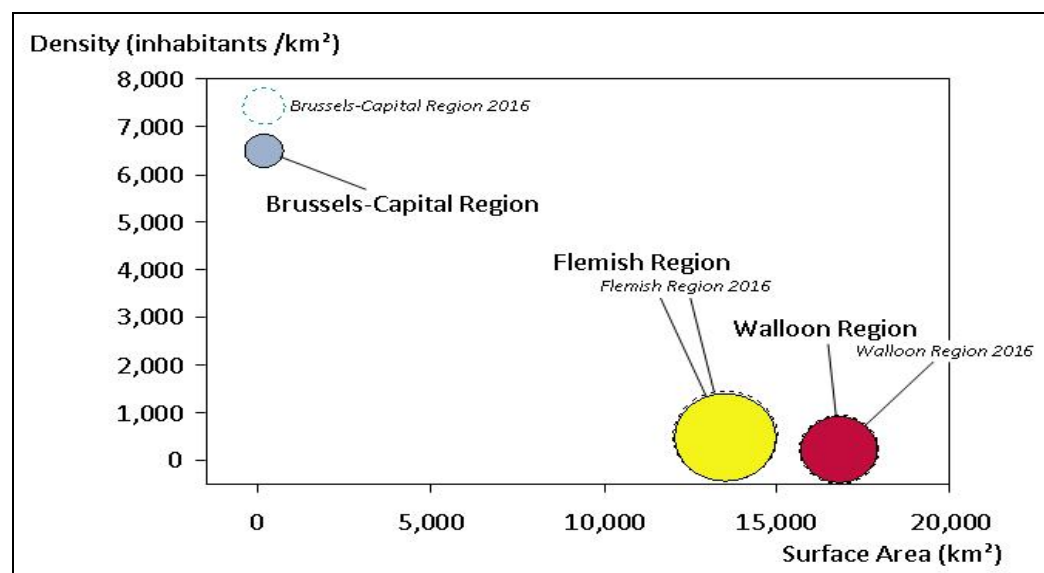


Figure 1: Surface area, density and population for the three Belgian Regions: data as available on 1/1/2008 and forecasts for 31/12/2016

Source of data:

- SPF Economie, Structure de la population selon le lieu de résidence
- Projections démographiques bruxelloises 2010-2020
RBC-BHG: Les Cahiers de l'IBSA – mai 2010

- VG: Studiedienst Vlaamse Regering- Bevolkingsprojecties 2009-2030, maart 2011
- RW: DGSIE, perspective population 2007-2061

The Belgian economy is more energy intensive than the neighbouring economies owing to a very energy intensive industrial sector (mostly metallurgical and chemical industry). However the energy intensity has been decreasing since the Seventies (see Figure 2).

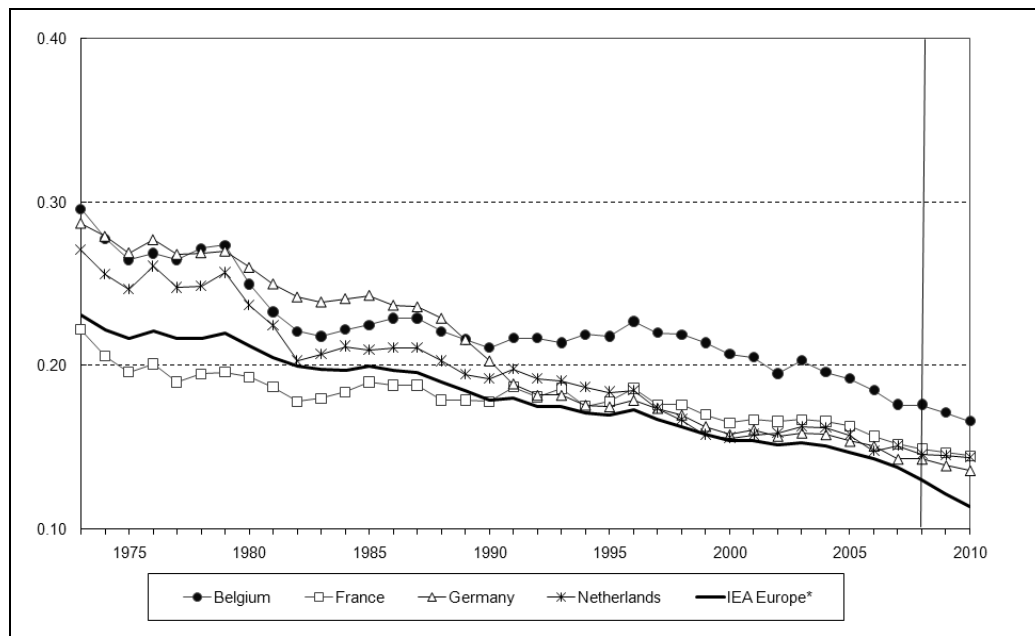


Figure 2: Energy intensity in Belgium and some other IEA Member States, 1973 - 2010 (toe per thousand USD, prices and purchasing power of 2000)

Sources: Energy Balances of OECD Countries, IEA/OECD Paris, 2009 and National Accounts of OECD Countries, OECD Paris, 2009.

Belgium is highly dependent on foreign energy sources: oil, natural gas, uranium,...(cf. figure 3)

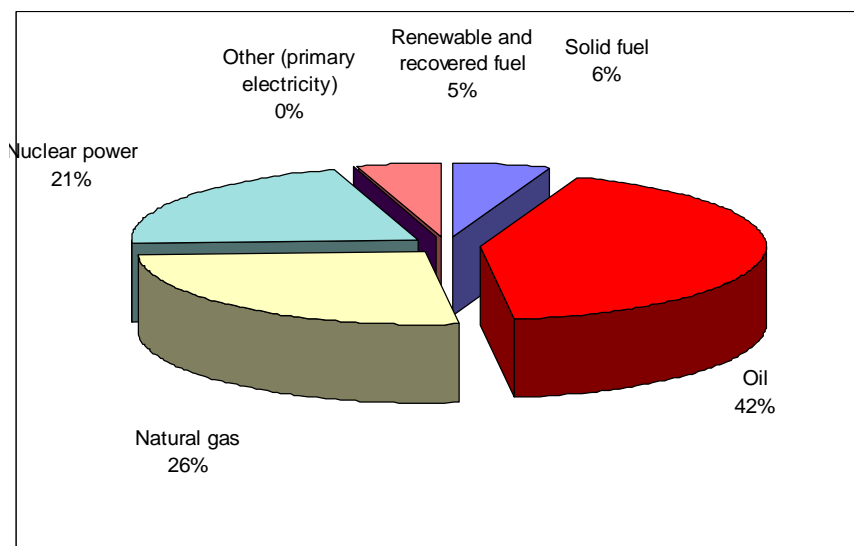


Figure 3: Share of energy sources in the primary energy consumption in Belgium in 2009

Source: FPS Economy, SMEs, Self-employed and Energy

The Belgian energy efficiency policy is increasingly being determined by EU requirements and directives, such as the energy efficiency directive, the energy performance of buildings directive, the ecodesign directive, the labelling directive, the renewables directive.

Belgium is strictly observing EU initiatives (2020 Strategy, revision of the Energy Efficiency Action Plan, Energy Roadmap,...).

Fostering the reduction of the energy consumption and promoting the use of renewables should make our country less dependent on fossil energy sources and nuclear power.

Belgium sees energy efficiency as a cost-effective way to reduce greenhouse gas emissions and improve air quality. Moreover, the introduction of measures to improve energy efficiency can create jobs relatively quickly, improve competitiveness and reduce purchasing power.

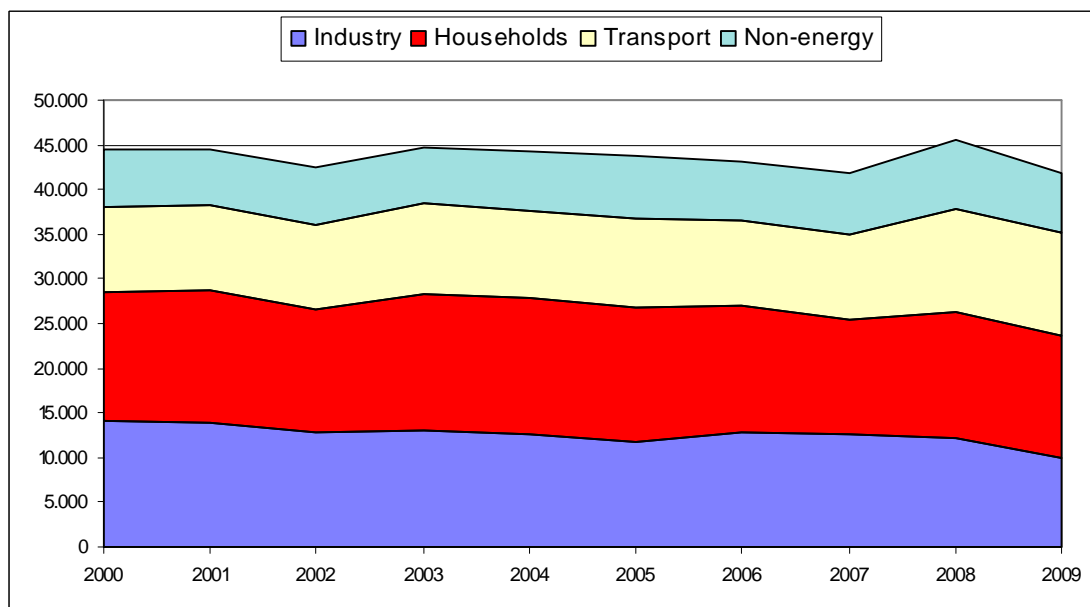


Figure 4: Total end-use consumption per sector 2000-2009 (Ktoe)

*Households = households+ service industry + agriculture

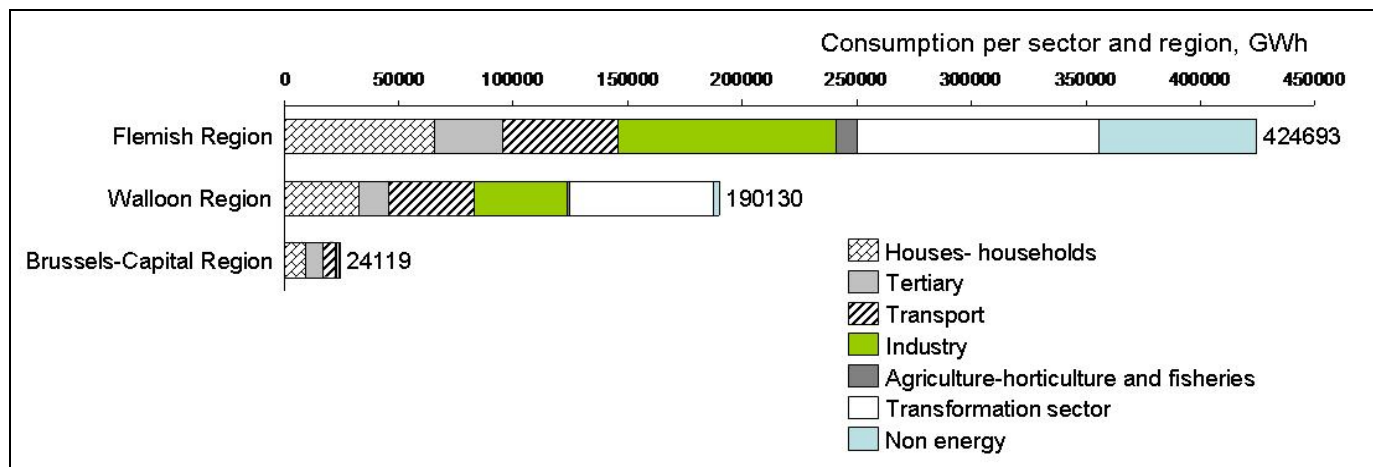


Figure 5: Gross domestic consumption per Region in 2009



A. Federal government

Security of supply is an essential element of the federal energy policy. It must be properly managed, especially in times of crisis. Belgium must therefore take adequate action in order to guarantee the continuity of security of supply.

The European plans and directives relating to energy and energy efficiency have stimulated the Federal State to take action within its area of competence, which has led to the integration of energy efficiency measures in several federal action plans:

- Federal Plan for Sustainable Development, 1st (2000-2004), 2nd (2004-2008), 3rd (2009-2012). As determined in the Act of 5 May 1997, this federal plan "establishes the measures, which should be taken at federal level to achieve the targets of sustainable development". The plan encloses also several actions that can contribute to improving energy efficiency.
- The Federal Action Plan Sustainable Public Procurement 2009-2011 was approved by the Ministerial Council of 3 July 2009. In particular, reference is made to the implementation of measure 1.1 of this action plan: Updating and renewing the 'Guide to sustainable procurement'. This is an online tool that should assist governments in effectively making their procurement more sustainable.
- The Federal Climate Plan was approved by the Ministerial Council of 20 March 2004. The federal government has committed to reduce emissions by 4.8 million Tons of eq. CO₂ for the period 2008 and 2012, within the national climate plan. The plan aims to include the optimisation of energy production, rational use of energy in buildings, development of sustainable transport, etc.
- Emas: more and more federal institutions are EMAS registered (Eco Management en Audit Scheme). Most of these institutions have projects to improve their energy efficiency in the context of their environmental systems. FEDESCO, the federal public ESCO responsible for the federal public buildings, is the most important partner when it comes to technical aspects.



B. The Brussels-Capital Region

Given that the BCR, a largely urban area, imports virtually all the energy it consumes, reduction in energy dependence involves essentially decrease in energy consumption.

The sectors that account for the greatest part of this final consumption are buildings (74% of the total, mainly for heating) and transport (23%). In this context, the increase in the number of inhabitants (estimated at 19% between 2004 and 2016) already underway constitutes a key issue¹.

Between 2004 and 2009, the Brussels energy policy was developed mainly around the building sector². Thanks to the numerous initiatives of the Brussels Region (energy subsidies, strengthening of the regional regulations on energy performance of buildings, etc.)³, the final energy consumption per inhabitant decreased by 15% over this period. With regard to mobility, the increase in the sustainable mobility offering and the improvement in public transport allowed the number of passengers taking public transport in the Region to be considerably increased.

With respect to energy, the Brussels-Capital Region has paved the way for greater restraint in energy use without compromising its economic viability and while granting special attention to the most disadvantaged sectors of the Brussels population, thanks to its advanced policy. In order to continue along this path, the Brussels Government Agreement of 2009, entitled "Sustainable regional development at the service of Brussels residents", defines the policy orientations for the legislative session underway (2009-2014) and announces the transition from separate initiatives to a new sustainable city project. To arrive at this, the Government plans to support economic development and the living environment in Brussels with a major tool: the Regional Sustainable Development Plan, currently being elaborated.

These efforts will be maintained and increased from 2009 to 2014. The Brussels-Capital Region continues in fact to raise standards with regard to the energy performance of buildings and to encourage the exemplary role of the public authorities. Moreover, it intends to develop a competitive offering with regard to sustainable construction and renovation in the construction sector thanks to the Employment-Environment Alliance – 1st theme, Sustainable Construction.

In this sector, public investment programmes will also allow the Region to become a pioneer in social housing in particular

¹ Source : Institut Bruxellois de Statistique et d'Analyse, Projections démographiques bruxelloises 2010-2020 [2010]

² The Energy Policy in buildings was developed following seven areas: developing a culture of energy, provide specialized technical assistance, training experts, encourage exemplary achievements, help the quality of investment, modify structurally the legal framework and develop the energy economy. To achieve these goals, between 2004 and 2009, budgets for measures related to energy and energy premiums have increased respectively by six and eleven.

³ Three large-scale and emblematic experiments emerge from these actions: the "Energy Challenge", which challenges all citizens to reduce energy consumption and therefore emit less CO₂, the Local Action Plans for Energy Management ", which identifies potential for energy savings and priorities action for buildings of the same public property, and the call for cross-cutting project "Exemplary Buildings ", which covers aspects relating to the construction or renovation of buildings in terms of energy and environmental performance. Through these experiences, Brussels has shown the ability to act both on individual behaviour, pro-active management of buildings and on major investments.

In parallel, Brussels will also continue to improve the means for controlling its mobility, notably thanks to the Iris II plan adopted in 2010, which aims to reduce the traffic load by 20% in 2018 compared to 2001. Finally, an integrated Air-Climate-Energy Plan is under development. It will follow on the first Air-Climate plan of 2002-2010, the two energy efficiency plans already underway and the action plan with regard to renewable energies.

C. The Walloon Region



Wallonie

The Walloon Energy Policy is based on four pillars which are promoting rational use of energy (including energy efficiency), developing renewable energy sources, ensuring fair access to energy for anyone, and defining the legal framework for the liberalised electricity and gas markets.

On the other hand, the “Plan Marshall 2.Vert” (Marshall Plan 2.Green) contains a crosscutting integration of sustainable development matters, more specifically related energy – climate topics, implying an integrated approach on various fields like research and innovation, spatial planning, financing, support and advice to companies, employment, formation, industrial policy...

Among the scheduled measures within this energy policy frame let's pinpoint the “Alliance Emploi-Environnement” (Employment-Environment Alliance), the adoption of a set of measures contributing to pursue the implementation of renewable energy sources or the support to companies in their programmes for a more rational use of energy

D. The Flemish Region



In June 2009, a new Flemish Government was installed. Several factors resulted in significant attention to the themes 'Green economy' and 'Sensible use of energy' in the 2009-2014 coalition agreement:

- in May 2008, the oil price peaked at \$135 a barrel. Awareness grew that the era of cheap, seemingly inexhaustible fossil fuels will be ending sooner than previously thought;
- in the last quarter of 2008, industrialised Flanders, with its open and highly export-oriented economy, was hit hard by the economic crisis;
- increasing scientific insight has fuelled general awareness of climate problems. Yet the average Fleming appears to minimise his own part in the solution. In 2009, only 58% of Flemings thought of themselves as being efficient energy users;
- the increase in passenger and freight transport in densely populated Flanders has adverse effects on the Flemish economy, the logistical position of Flanders in Western Europe, road safety, environment and health;
- the group of citizens who are socially vulnerable, such as singles and seniors is growing. The number of families who are finding it hard to pay their energy bills is growing;
- more and more existing homes are being insulated, but there is still a long way to go to achieve an energy efficient housing stock in Flanders.

The Flemish Government is committed to undertaking the necessary measures in order to maintain the reduction in energy consumption and energy intensity initiated in Flanders in 2005.

Especially in some industrial sectors (chemicals, food, textiles, iron, steel and metal sector) and the electricity sector, energy efficiency (energy consumption per product) significantly increased in recent years.

The Flemish Government will continue to focus on rendering the economy greener. Eco-innovation, increased energy efficiency and a pioneering policy in the field of eco-efficiency of materials, products and services ensure a reduction in environmental pressure, and prepare the Flemish economy for the future, while creating green jobs.

Encouraging energy-efficient renovations, optimal energy performance standards and innovations in the construction industry must ensure that by 2020, energy consumption in buildings drops significantly. Moreover, these efforts should result in a substantial increase in housing quality and lower energy bills for families, especially for the socially disadvantaged.

It is an enormous challenge to control mobility and making it more sustainable. The Flemish Government is committed to approve a new Flanders Mobility Plan at the end of 2012, which includes measures to meet the five objectives of the Mobility Decree of 2009: improving reach, accessibility, road safety, traffic viability and reduction of damage to the environment and nature.

3 FINAL ENERGY SAVINGS IN THE END-USE SECTORS

3.1 Review of final energy saving targets and prognosis

Table 3: Overview targets and prognosis

	Final energy saving target		Final energy saving achieved or projected	
	in absolute terms (e.g. GWh)	Percentage (%) (compared to ESD reference consumption)	in absolute terms (e.g. GWh)	Percentage (%) (compared to ESD reference consumption)
2010 (interim period)	<ul style="list-style-type: none"> • BHG: 733 • WG: 2 786 • VG: 5 653 	3	<ul style="list-style-type: none"> • WG: 3 574 • VG: 10 818 	<ul style="list-style-type: none"> • WG: 3,8 • VG: 5,7
2016 (overall period)	<ul style="list-style-type: none"> • BHG: 2 199 • WG: 8 358 • VG: 16 959 	9	<ul style="list-style-type: none"> • BHG: 2 311 • WG: 7 307 • VG: 25 093 	<ul style="list-style-type: none"> • BHG: 10 • WG: 7,9 • VG: 13,3



A. The Brussels-Capital Region

Brussels' objective will be achieved and even slightly exceeded. It is important to note that the calculations are based on a conservative model.

Indeed, some measures cannot be modelled; these are measures which concern mainly awareness-raising or information. Therefore, these have not contributed to the evaluation of energy savings, although such measures do have a definite impact.

Furthermore, the energy saving goal was defined in absolute terms. Given that the RBC has experienced an explosion in its population, an additional effort is required to cater for the increase in consumption generated by this rapidly expanding population. By the end, the savings made by inhabitant greatly exceed 9% of final energy consumption for the 2008-2016 period.

B. The Walloon Region

With a view to integration into the Belgian NEEAP2, the figures given above for the Walloon Region represent energy savings made in 2010 or estimated by 2016 in Wallonia, expressed as final energy. In its regional EEAP2 in the appendix, the Walloon Region had opted to meet the Commission's wish and to report in terms of equivalent primary energy.

What regards the Walloon Region, the intermediate target for 2010 has been achieved and even exceeded (128% of the target – i.e. 3.8% of reference consumption) thanks to the role played by early actions. The



majority of these early actions are the allocation, from 2005, of subsidies in the building sector and in the renewable energy production.

The Walloon Region estimates at this stage to achieve 87% of its target for 2016 (i.e. 7.9% of the reference consumption) :

On the one hand, 80% are due to pursuing or reinforcing existing measures clearly listed and estimated according to European Commission's recommendations within a centralised data base. Measure datasheets from the Walloon EEAP in annex give the corresponding data, as well in primary as in final energy.

On the other hand, 7% can be added due to additional measures, through the adoption in May 2011 of the "Plan Pluriannuel de la Première Alliance Emploi-Environnement" (Multi-annual Plan of the First Employment-Environment Alliance) (AEE), which is mainly dedicated to the reinforcement of energy measures and incentives within the building sector. The measures of this new multi-annual plan haven't yet been completely detailed and thus evaluated with the accuracy corresponding to the methodology implemented in the data base which permitted the elaboration of the NEEAP2 measure datasheets. However, a first evaluation of the AEE's potential enables to add about 7% to the initial 80% coming from already implemented measures.

Another opportunity for energy saving which has not yet been taken into account is the planned pursuit of voluntary agreements with the industry. Voluntary agreements of 2nd generation are currently being discussed, but have not been included in the forecasts.

It should also be noted that it was not possible to quantify all the mechanisms set up for drawing up the forecasts (for example, the EPBD impact is underestimated because it does not take account of apartment blocks and tertiary buildings, nor renovation).

Therefore, the figure of 87% is an underestimation of the actual saving which should be achieved by 2016.



C. The Flemish Region

Calculations show that the final savings in 2010 are almost double the absolute interim target. The savings target for 2016 is also substantially exceeded: savings amount to almost one and a half times the absolute target. In the first action plan, expected savings in 2016 amounted to only 107% of the target.














The target being exceeded compared to the first action plan is the result of:

- the addition of three measures already implemented when submitting the first action plan but whose savings were not estimated at that time: the insulation regulations for homes with an application for a planning permit between 1 September 1992 and 31 December 2005, the benchmark agreements with the companies not covered by the emissions trading directive and the financial incentives for photovoltaic panels;
- the addition of two measures in force since 1 January 2009: the Flemish additional subsidy for installing roof insulation in homes and the reduction in property tax for new homes that perform better than the norm;
- the success of premiums for energy-saving measures that the network operators award as part of their RUE public service obligations and the strengthening and expansion of these obligations;
- tightening of the energy standards in new construction.

3.2 End-use measures and final energy savings

3.2.1 Calculation methodology

Tabel 4: Overview of calculation methodology of final energy savings from measures under the ESD

Sector		BU of TD	Calculation methodology
Buildings sector		TD + BU	IBGE-BIM forecast model (fixed-source)
		BU	Harmonized methodology of the commission BU- formulas 2.2, 2.3, 2.4, 2.5 and 2.7
		BU	harmonised methodology: BU formula 2.3
Buildings sector 20%		BU	Harmonized methodology of the commission: BU - formulas 2.2, 2.4, 2.5, 2.7
Industry		BU	Methodology as defined in voluntary agreements with the industry
		BU	Own methodology
Energy sector		BU	Own methodology
		BU	Harmonised methodology: BU formulas 2.2, 2.4, 2.7 European default values own methodology, see annex to Flemish action plan
Mobility		TD + BU	IBGE-BIM forecast model (transport)
		BU	Own methodology
		TD	Harmonised methodology: TD indicators P8, P9, P10, P11, P12 and P13 with M7
Horizontal		BU	Own methodology
Agriculture		BU	Own methodology, see annex to Flemish action plan



A. The Brussels-Capital Region

The calculation of the total gain in energy efficiency has been made using two IBGE-BIM projection models: a first fixed-source projection model and a second projection model relating to transport.

IBGE-BIM developed its first projection model for energy demand and atmospheric emissions from fixed sources. In this model, variations in consumption in the energy vectors used in the Brussels-Capital Region and their associated emissions are determined by the variation in the parameters that define the consumption of each sector. For example, the residential sector is defined by the following parameters: the population and the average household size (defining the net need for new housing), the climate (in degree-days), the demolition and the rate of renovation. The projected improvement in energy efficiency for renovation depends on the typology of the building stock, composed of several types of housing (apartment or house, 4 age brackets for the building concerned, 7 energy vectors used for heating, central or decentralised heating system, occupation by the owner or a tenant). The model has been calibrated for each sector using the annual regional energy balances from 2000 to 2008.

The second model allows annual projections of the fuel consumption of transport and emissions of atmospheric pollutants to be calculated. The projections cover the period 2007- 2030. This forecasting model is based on the COPERT IV European methodology for calculation of emissions.

The Commission moreover requests that at least 20% of the calculation of energy savings be carried out by means of the bottom-up methodology. To fulfil this request, an additional bottom-up analysis has been performed using the formulas proposed by the Commission on a limited number of measurements. The results of the calculations made for the three programmes "Energy Subsidies", "Exemplary Buildings" and "Local Action Plans for Energy Management", listed in attachment in the BCR plan, fulfil this requirement.



B. The Walloon Region

The Walloon Region has chosen the bottom-up methodology for estimating its measures, doing this at the level of each individual action contributing to the measures. For this purpose, all the data related to any individual file (collected from various management programmes of the Walloon Public Service) have been gathered into a central database.

Whenever a formula was recommended by the Commission, this formula has been used. If not, an alternative formula has been established, based on the same approach as the Commission's formulas. Like for these Commission's formulas, the alternative formulas which are used are generally based upon the penetration of a specific technology for energy saving. Assumptions made regarding the equipment lifetime are those which are recommended by the European Commission.

For the building sector, the formulas proposed by the Commission have been used : the B1 Measure datasheet uses formula BU 2.3, the B4 and B5 measure datasheets use formulas BU 2.2, 2.4, 2.5 and 2.7.

For the industry sector, energy savings are mainly calculated according to the methodology which has been defined in the frame of Voluntary Agreements with the industry. Even if calculated on the basis of an actual consumption versus a reference consumption, this methodology can be regarded as a bottom up methodology, because of the very fine segmentation, adherent federation by adherent federation, excluding the factories involved in ETS agreements.

For the energy sector, the inputs are the data regarding the Green Certificates allocation (installed MW and produced MWh) directly collected from the official regulator on the gas and electricity markets (CWAPE).

For the transport sector and public lighting (horizontal measure), the savings are evaluated on basis of an own methodology.



C. The Flemish Region

Because of the strong interaction between the large number of underlying individual measures, savings of the transport sector policy are calculated top-down according to the harmonised methodology recommended by the EC ('Recommendations on Measurement and Verification Methods in the Framework of the Directive 2006/32/EC on Energy End-Use Efficiency and Energy Services').








Savings of all other energy saving measures (in the buildings sector, industry, energy, horticulture) are calculated bottom-up because the input data for each individual measure are available. The recommended harmonised calculation methods, duration periods and default values are used. If harmonised methods are lacking or if the Flemish data are not available for the application of harmonised methods (only one case, namely in the case of relighting/new lighting), specific calculation methods are used and described in the annex to the Flemish action plan.





3.2.2 All individual measures








This section provides an overview of all policies in Belgium, undertaken by the four different government agencies. For individual measures, reference can be made to separate sheets that can be found in federal and regional energy efficiency action plans (see APPENDIX)








3.2.2.1 Measures in the buildings sector

Table 5: Overview of individual measures in the buildings sector

	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	1.2.1	Banning access to the Belgian market for household appliances B, C and D (dishwashers, refrigerators, freezers and dryers)	Buildings	1.2 Minimum equipment energy performance standards	Not implemented		
	1.2.2 + 1.2.3	Strengthening Minimum Energy Efficiency Standards for household appliance and for appliances in stand-by and off mode	Buildings	1.2 Minimum equipment energy performance standards	Start: January 2009		
	2.2.1	Broadening, strengthening and reviewing the labelling system for electric appliances	Buildings	2.2 Energy Labelling	19/05/2010		
	3.2.3 + 3.2.3.1	Tax deduction for energy saving measures in residential buildings	Buildings	3.2 Tax rebates and other fiscal incentives	Start: 01/01/2003 End: 31/12/2009 31/12/2012		
	3.2.3.2	Tax deduction for the construction or purchase of a new low energy, zero energy or passive building and for the complete or partial renovation of a property into a low energy, zero energy or passive building	Buildings	3.2 Tax rebates and other fiscal incentives	Start: 01/01/2007 (passif house) 01/01/2010 (zeroenergybuilding)		
	3.3.1	Foundation for Reducing the Total Cost of Energy in Residential Buildings	Buildings	3.3 Loans (soft loans and/or subsidies)	Start: 2007 Ende: 2012		
	B 1	Act structurally on the demand through progressive reinforcement of the requirements of the EPB (building energy performance) regulations:	New buildings, existing buildings, heating and cooling of buildings	1. Regulation: 1.1 Building Codes and Enforcement	Starting in 2008	0	Final: 1061
Inspection of technical facilities		2011				Primary: 1254	
Energy certificate		2011					

		Passive standard for new buildings and low-energy standard for substantially renovated buildings			2015		
	B 2	Impose a plan for reduction of energy consumption on major consumers ("PLAGE": Local Action Plan for Energy Management)	Big owners, big heating and cooling installations (tertiary sector)	1. Regulation	Starting in 2012	0	Final: 306 Primary : 434
	B 3	Make performance of an energy audit mandatory for any building of more than 3500 m² not allocated to housing upon renewal of its environmental permit	Middle to big buildings, middle to big heating and cooling installations (tertiary sector)	1. Regulation	Starting in 2011	0	Final: 286 Primary: 425
	B 4	Grant energy subsidies for: Insulation Passive construction and low-energy renovation heating systems efficient household appliances means of production of renewable energy cogeneration etc.	New buildings, existing buildings, heating and cooling installations	3. Financial instruments: 3.1 Subsidies (Grants)	Starting in 2004		
	B 5	Develop mechanisms for financial support of sustainable renovation of buildings: 'green' social loan residential third party investor tertiary third-party investor use of the Fund for the Reduction of Overall Energy Costs (FRCE)	New buildings, existing buildings, heating and cooling installations	3. Financial instruments: 3.3 Loans (soft and/or subsidised)			






	B 6	Act structurally on the supply by stimulating the sustainable building sector: Employment-Environment Alliance - 1st theme: sustainable construction Ecobuild Cluster Specialised training in design and realisation of buildings Expert advice on energy and sustainable building (Sustainable Building facilitator) for professionals	Building professionals	2. Information and mandatory information measures: Focused information campaigns Information Centres Training and education	Since 2000		
	B 7	Develop and promote exemplary buildings - BATEX (with virtually zero consumption and of high environmental quality)		2. Information: 2.6 Demonstration (3.1 Subsidies)	Starting in 2007, with several calls for proposals	0	Final: 210 Primary: 309
	B 8	Introduce labelling and certification for sustainable buildings		2. Information: 2.2 Energy labelling Centres	Date to be set		
	B 9	Introduce a minimum energy performance threshold for rental housing (through modification of the Brussels housing code)	Tenants and owners	1. Regulation: 1.1 Building Codes and Enforcement	Starting from 2015		
	B 10	Assist households proactively with regard to energy and eco-construction to improve the quality and energy comfort of their residence	General public	2. Information and mandatory information measures: 2.3 Information Centres		0	Final: 123 Primary : 140
	B 1	Thermal regulation for buildings	Heating, water heating, electricity use in residential and in tertiary buildings	1. Regulation	Start: 1996 End: indefinite	Final: 330 Primary: 345	Final: 654 Primary: 683
	B 2	Training and information - Buildings	Heating, water heating,	2. Information and mandatory information	Start: 2002 End:	Included in B4	Included in B4



			electricity use in residential and in tertiary buildings	measures	indefinite		
 Wallonie	B 3	RUE information in public building	Heating, water heating, electricity use in public buildings	2. Information and mandatory information measures	Start: 2007 End: indefinite	Included in B5	Included in B5
 Wallonie	B 4	Financial incentives for RUE investments in buildings	Heating, water heating, electricity use in residential , and in tertiary buildings	3. Financial instruments	Start: 2005 End: indefinite	Final: 1310 Primary: 1364	Final: 2878 Primary: 2995
 Wallonie	B 5	Subsidies for RUE investments in Public Buildings	Heating, water heating, electricity use in public buildings	3. Financial instruments	Start: 2004 End: indefinite	Final: 162 Primary: 179	Final: 381 Primary: 411
 Wallonie	B 6	Public service obligation – gas and electricity invoices	Heating, water heating, electricity use, through suppliers and DNO	7. Energy saving mechanisms and other combinations of previous (sub)categories	Start: 2006 End: indefinite	Included in B4	Included in B4
 Wallonie	B 7	Potential impact of AEE (Employment Environment Alliance)	Electricity and heating consumption in buildings		Start: 2012	Final: 0 Primary: 0	Final: 606 Primary: 661
	B 1.	Insulation and energy performance regulations for buildings	New buildings and existing buildings with an application for a planning permit	1. Regulation 1.1 Building Codes and Enforcement	01/09/1992 – no end date	Final: 1727 Primary: 1821	Final: 3674 Primary: 3688
	B 2.	Reduction in property tax	All new buildings that perform better than the energy	3. Financial instruments 3.2 Tax rebates and other taxes	01/01/2009 – no end date	Final: 24 Primary:	Final: 80 Primary:

			performance norm	that stimulate reduction of energy end-use consumption		18	59
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3.2.2.2 Measures in industry and SMEs


Tabel 6: Overview of individual measures in the industry and SMEs








	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	3.2.7	Tax deduction for energy-saving investments in businesses		3.2 Tax rebates and other fiscal incentives	Start: 2004, 2001, 2014		
	I 1	Promote good practices (ecodynamic enterprise label)	Any organisation (including public sector and non-commercial), with limitations for micro-enterprises	4. Voluntary agreements and cooperative instruments: 4.1 Industrial Companies 4.2 Commercial or Institutional Organisations	Since 1999		
	I 2	Offer assistance with regard to energy-saving investments	Non-public enterprises	3. Financial instruments			
	I 3	Promote the emergence of new business models: Brussels Sustainable Economy (BSE)	Businesses in transition, new businesses and products	2 and 4. Information and mandatory Voluntary agreements and cooperative instruments information measures			
	I 1	RUE information measures for industry	Companies' electricity and heating consumptions	2. Information and mandatory information measures	Start: 2004 End: indefinite	Included in I2	Included in I2
	I 2	Subsidies for industry investment (excluding building)	Companies' electricity consumption	3. Financial instruments	Start: 2005 End: indefinite	Final: 13 Primary: 20	Final: 21 Primary: 30
	I 3	Voluntary Agreements excluding ETS	Electricity consumption and business processes	4. Voluntary agreements and cooperative instruments	Start: 2004 End: 2010 or 2012	Final: 788 Primary: 1048	Final: 788 Primary: 1048



	I 1.	Audit agreement	Utilities and processes in medium-sized, energy-intensive companies with a yearly primary energy consumption between 0,1 and 0,5 PJ that are not covered by the emissions trading directive	4. Voluntary agreements and co-operative instruments 4.1 Industrial companies	10/06/2005 - 10/12/2013	Final: 1249 Primary: 1993 for both audit and benchmark agreement	Final: 1760 Primary: 2640 for both audit and benchmark agreement
	I 2.	Benchmark agreement	Utilities and processes in large, energy-intensive companies with a yearly primary energy consumption from 0,5 PJ on that are not covered by the emissions trading directive	4. Voluntary agreements and co-operative instruments 4.1 Industrial companies	From 2003 to end 2012	Final: 1249 Primary: 1993 for both audit and benchmark agreement	Final: 1760 Primary: 2640 for both audit and benchmark agreement

3.2.2.3 [Measures in the energy sector](#)

Tabel 7: Overview of individual measures in the energy sector









	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	E 1	Organise the energy market and impose public service missions		1 and 6. Regulation Energy saving mechanisms and other combinations of previous (sub)categories: 6.1 Public service obligation for energy companies on energy savings	Since 2007		









				including "white certificates"			
	E 2	Develop sources of renewable energy and cogeneration through Green Certificates		3. Financial Instruments	Since 2005		
	E 3	Recover waste		2. Information and mandatory information measures: 2.7 Exemplary role of the public sector	Several successive projects starting in 2008		
	E 1	Subsidies for cogeneration	Electricity and heating consumption of households and companies	3. Financial instruments	Start: 2004 End: indefinite	Final: 144 Primary: 144	Final: 269 Primary: 269
	E 2	Subsidies for cogeneration in <u>the public sector</u>	Electricity and heating consumption in the public sector	3. Financial instruments	Start: 2005 End: indefinite	Final: 38 Primary: 38	Final: 82 Primary: 82
	E 3	Green Certificates for renewable electricity and high yield cogeneration	Electricity consumption of households	7. Energy saving mechanisms and other combinations of previous (sub)categories	Start: 2004 End: indefinite	Final: 111 Primary: 278	Final: 644 Primary: 1611
	EE 4	Training and information - Energy	Heating, water heating, electricity use in households or companies	2. Information and mandatory information measures	Start: 2004 End: indefinite	Included in E1 and E2	Included in E1 and E2
	E.1	Imposing RUE-public service obligations on the electricity distribution grid operators, in combination with a subsidy from the Flemish government for roof insulation	-New and existing buildings -Heating, hot water generation, ventilation, lighting, appliances, ...	7. Energy saving mechanisms and other combinations of previous (sub)categories 7.1 Public service obligation for energy companies on energy savings 3. Financial instruments 3.1 Subsidies	01/01/2003 -no end date	Final: 5037 Primary: 6369	Final: 10.500 Primary: 12.885

				(grants)			
	E.2	Promotion of qualitative cogeneration (CHP) via cogeneration certificates	Heating, hot water and steam generation, electric appliances	7. Energy saving mechanisms and other combinations of previous (sub)categories 7.1 Public service obligation for energy companies	01/01/2005 - no end date	Final: 852 Primary: 1044	Final: 1407 Primary: 1032
	E.3	Promotion of photovoltaic solar panels via green certificates, preceded by subsidies	Electric appliances and lighting	7. Energy saving mechanisms and other combinations of previous (sub)categories 7.1 Public service obligation for energy companies on energy savings 3. Financial instruments 3.1 Subsidies (grants)	01/01/1998 - 2020	Final: 474 Primary: 1185	Final: 571 Primary: 1427

3.2.2.4 Measures in the transport sector

Tabel 8: Overview of individual measures in the transport sector


	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	3.2.2	Tax reduction for energy saving measures in residential buildings		Start: 01/01/2010 End: 31/12/2012	3.2 Tax rebates and other fiscal incentives		
	3.2.4	Free transport between home and work		Start: 2001, 2002	3.2 Tax rebates and other fiscal incentives		
	3.2.5	Promoting cycling to and from work by offering tax relief		Start: 1998, 2010	3.2 Tax rebates and other fiscal incentives		
	4.2.2	Promoting employee commuter plans		Start: April 2003	4.2 Commercial or institutional organisations		
	T 1	Reinforce planning tools via travel plans for: businesses activities schools		Since 2004 (businesses) As of 2011 the measure is to be strengthened and expanded	1. Regulation 6.2 Voluntary agreements and cooperative instruments		Finale: 325,78 Primaire: 325,78
	T 2	Internalise certain external costs of transport and encourage the purchase of less polluting vehicles			2. Information and mandatory information measures 3. Financial Instruments		
	T 3	Develop environmental management of public roads and create low-emissions areas			1. Regulation 4. Voluntary agreements and cooperative instruments		
	T 4	Encourage 'soft' modes of transport			1. Regulation 3. Financial instrument 4. Voluntary		

					agreements and cooperative instruments		
	T 5	Increase the supply and attractiveness of public transport			1. Regulation 4. Voluntary agreements and cooperative instruments		
	T 6	Manage the on- and off-road parking policy			1. Regulation		
	T 7	Develop plans for target sectors (taxis, freight)			1. Regulation 4. Voluntary agreements and cooperative instruments		
	T1	SRWT (Walloon Public Transport Company) management contract	Fuel consumption for passenger transport	4. Voluntary agreements and cooperative instruments	Start: 2008 End: indefinite	Final: 6 Primary: 6	Final: 6 Primary: 6
	T 2	Saving measures for transport in the public sector (excluding SRWT)	Fuel consumption for passenger transport	4. Voluntary agreements and cooperative instruments	Start: 2008 End: indefinite	Final: 243 Primary: 243	Final: 139 Primary: 139
	T 3	Training and information - Transport	Fuel consumption for passenger and freight transport	2. Information and mandatory information measures	Start: 2007 End: indefinite	Included in T1, T2 and T4	Included in T1, T2 and T4
	T 4	Financial incentives or funding devoted to transport	Fuel consumption for passenger and freight transport	3. Financial instruments	Start: 2008 End: indefinite	Final: 233 Primary: 233	Final: 645 Primary: 645
	T.1.	Mobility management measures and measures that bring about a shift in the choice of transport	Transport	17/10/2003 - end 2012	7. Energy saving mechanisms and other combinations of previous (sub)categories	Final: 639 Primary: 795	Final: 5010 Primary: 5183

	T.2.	Development of a more eco-friendly fleet by adapting traffic charges	Transport	01/01/2013 - no end date	3. Financial instruments 3.2 Tax rebates and other taxes (also tax increase) that stimulate reduction of energy end-use consumption	Not yet applicable	Unknown
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3.2.2.5 [Measures in agriculture](#)




Tabel 9: Overview of individual measures in the agriculture sector

	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	A.1.	Subsidies for energy saving measures in horticulture (cultivation under glass)	Mainly heating of greenhouses, CO2-dosage, conditioning, lighting,...	Van 2001 - no end date	3. Financial instruments 3.1 Subsidies (grants)	Final: 816 Primary: 816	Final: 2091 Primary: 2091

3.2.2.6 [Horizontal measures](#)



Tabel 10: Overview of individual horizontal measures











	No	Title of the energy saving measure	end-use targeted	Category	Duration	Energy savings expected in	
						2010 (GWh)	2016 (GWh)
	H 1	Develop sustainable neighbourhoods: with renovation, new construction and public initiatives		4. Voluntary agreements and cooperative instruments			
	H 2	Information on and increased awareness of environmental and energy issues		2. Information and mandatory information measures			







 Wallonie	H 1	Training and information – horizontal	All uses and all types of public	2. Information and mandatory information measures	Start: 2004 End: indefinite	Included in other measures	Included in other measures
 Wallonie	H 2	Public lighting (including EPURE) + trafficlights	Public lighting and signalling	3. Financial instruments	Start: 2005 End: indefinite	Final: 194 Primary: 484	Final: 195 Primary: 488
 Wallonie	H 3	Energy Fund and other horizontal funding	All uses and all types of public	7. Energy saving mechanisms and other combinations of previous (sub)categories	Start: 2005 End: indefinite	Included in other measures	Included in other measures





3.3 Public sector


Tabel 11: Overview of individual measures in the public sector (exemplary role)

No	Title of the energy saving measure
 5.2.1 + 5.2.2	<p><u>Fedesco</u> :</p> <p>A public ESCO, founded in September 2005 on the initiative of the federal government.</p> <p>Royal Decree of 9 January 2007 grants Fedesco the 'exclusive' right to work for the federal government, according to the principle of third party financing.</p> <p>The following tasks were assigned to Fedesco: awareness campaigns regarding energy savings, relighting, window films, energy care (quick win measures in public buildings), energy registry, HVAC projects, CHP projects, and roof and heating ducts insulation.</p> <p>On the initiative of Fedesco and the Energy Magazine, Belesco was founded, a non-profit organisation grouping together the key players (BE public and private organisations) in the budding market of energy services.</p> <p>Fedesco co-operates with the Federal Buildings Agency for the realisation of certain projects that encourage reduction in energy consumption.</p>
	<p><u>Emas label, Eco-Management and Audit Scheme:</u></p> <p>Environmental management system, included in their internal policies by more and more federal institutions</p>

	3.2.4 + 3.2.5	<p><u>Transportation residential-work :</u></p> <ul style="list-style-type: none"> • <u>Free transport between home and work place:</u> 70,000 federal civil servants receive a free season ticket for rail commuting • <u>Promoting bicycle use to and from work through tax reductions</u> (1 January 1998): commuter travel by bicycle is exempt from taxes and social security (0.15 Euro / km)
	P1	Define strict criteria for Rational Energy Use (RUE) for all real estate investments by public or assimilated entities receiving funding from the Region
	P2	<p>Improve the EPB of public buildings:</p> <ul style="list-style-type: none"> • passive standard for new buildings • low-energy standard for heavy renovation projects • green energy production equal to 30% of their consumption <p>mandatory display of energy certificate</p>
	P3	Review the investment logic for public housing (SDRB, SLRB, Housing Fund, etc.) and include the logic of occupation cost and increase the energy efficiency of social housing
	P4	Encourage PLAGE projects in schools and public buildings
	P5	Increase Travel Plans for public companies
	P6	Improve the environmental performance of public authority vehicles
	P7	Increase the sustainable purchasing policy
	P8	Implement a global improvement plan for light efficiency
	B2	<p><u>Training and information in Buildings:</u></p> <ul style="list-style-type: none"> • RUE investment subsidies in public buildings (UREBA), especially support for audits, feasibility studies and the set up of energy accounting • Training of Energy Managers in public institutions • Creation of the "Maison de l'Habitat Durable" (Sustainable Housing Center),

		simultaneously an information centre and technological showcase.
 Wallonie	B3	<u>RUE information in public buildings</u> <ul style="list-style-type: none"> • Insertion of environmental clauses in public market specifications and guides on good practices for the administration staff • SPW “Plan de Développement Durable “ (Sustainable Development Plan), with its specific sections on purchases and energy management • “Charte des Communes Energ-Ethiques” (Energ-Ethical Communes Charter) including Energy Advisors services within municipal administrations
 Wallonie	B5	<u>Subsidies for RUE investments in public sector buildings</u> <ul style="list-style-type: none"> • Subsidies in RUE investments in public buildings (UREBA), especially those concerning the outer shell of buildings, heating and lighting systems, regulation and blinds, transformers and batteries, insulation of piping, etc. • Energy priority renovation plan for social housing (PIVERT 2011-2014) • Subsidies for the construction or renovation of energy efficient social housing
 Wallonie	E2	<u>Subsidies for cogeneration in the public sector</u> <ul style="list-style-type: none"> • Subsidies for RUE investments in public buildings (UREBA), especially subsidies for cogeneration.
 Wallonie	H2	<u>Public lighting (including EPURE) + traffic lights</u> <ul style="list-style-type: none"> • Subsidies for energy efficiency in public lighting (EPURE) • Measures to reduce electricity consumption of public lighting (motorways and regional and municipal networks) and traffic lights • Third-party investment mechanism via SOWAFINAL to replace mercury vapour lamps used for public lighting
 Wallonie	T1	<u>SRWT (Walloon public transportation company) management contract</u> <ul style="list-style-type: none"> • Modernisation of public transport companies’ rolling stock • Car sharing stations (CAMBIO) • Interoperability of travel tickets between different operators
 Wallonie	T2	<u>Saving measures for transport in the public sector (excluding SRWT)</u> <ul style="list-style-type: none"> • Improvement and promotion of public transport in the Walloon region via the federal level • Insertion of environmental clauses in public authorities’ specifications • “Mobility” section of the SPW “Plan de Développement Durable” (Sustainable

		Development Plan)
	2.3.1.1. a)	<u>Energy management in the buildings of the Flemish government</u> <ul style="list-style-type: none"> • Action plan 2006-2010: defining roles and responsibilities concerning energy management, monitoring and analyzing energy consumption, implementing energy saving measures, awareness raising of officials, the alignment of procurement procedures and introduction of environmentally friendly energy • Possible actions new plan : pioneering the Flemish government with regard to near-zero energy buildings, setting up pilot projects, more attention to internal and external communication and 100% sustainable procurement by 2020
	2.3.1.1. b)	<u>Environmental management of the vehicle fleet of the Flemish government</u> <ul style="list-style-type: none"> • Action plan 2007-2010: encouraging telework, centralisation of government buildings in the vicinity of stations, providing service bicycles, providing a free subscription to public transport, environmentally friendly expansion of the bus fleet of De Lijn, setting ecoscore threshold standards for purchase of official vehicles and implementing a pilot project on energy efficient driving. • Potential actions new plan: extensive awareness raising, further deployment of telework, increasing ecoscore threshold standards for purchase of service vehicles and phasing out of old service vehicles, launching a pilot project for electric cars, generally offering a training in energy efficient driving and the provision of car pools in the Flemish administrative centres.
	2.3.1.2.	<u>Co-operation agreement between the Flemish government and local authorities in the field of environmental policy</u> <ul style="list-style-type: none"> • Co-operation agreement 2002-2007: involvement of local authorities to work around themes such as energy and mobility, in exchange for financial support (three ambition levels). • Co-operation agreement 2008-2013: involvement of local authorities to at least execute the basic provisions for several themes such as energy and mobility in exchange for a basic compensation. In addition, an optional level of distinction and project funding was provided.
	2.3.1.3	<u>Role model function of schools</u> <ul style="list-style-type: none"> • Flemish subsidies for energy saving investments in schools. • Lowering the required E-level to E70 for subsidised new school construction and setting up a pilot project for the construction of 25 new passive schools. • Flemish subsidies for starting up energy accounting, conducting energy audits, installing oil fuel counters and adjusting the heating system. • Providing information on RUE to teachers, students, building managers and the provision of training

	2.3.1.4	<p><u>Energy performance certificates for public buildings</u></p> <ul style="list-style-type: none"> • Requirement for buildings larger than 1,000 m², which are often frequented by the general public, to have an energy performance certificate by 1 January 2009. New public buildings must formulate an energy performance certificate within 15 months of having been commissioned. • Draft decree which states that from 1 January 2013, buildings larger than 500 m² often frequented by the general public, and from 1 January 2015, all public buildings larger than 250 m², must display an energy performance certificate.
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3.3.1 Exemplary role of public sector



A. Federal Government

Fedesco is a public Energy Services Company (ESCO) set up in September 2005 on the initiative of the federal government as a limited company governed by public law. It carries out energy savings projects in the federal government buildings. Fedesco applies the principle of third-party financing. Its expertise consists in analysing the needs, identifying and benchmarking of potential buildings, as well as following up the technical stages of projects. For some of these projects Fedesco works with “La Régie des Bâtiments – De Regie der Gebouwen” (the Belgian Buildings Agency), the estate expert of the Federal Government, which also sees energy efficiency as a priority. Fedesco also plays an essential role as the ‘federal knowledge centre for energy efficiency’.

Belesco was set up by 20 Belgian private and public organisations on the initiative of Fedesco and the Energy Magazine. It is a non-profit organisation gathering the main operators on the recently created energy services market with a view to sharing experiences and disseminating information about ESCOs.

Federal bodies are keen to be awarded the Eco-Management and Audit Scheme (EMAS) label. By implementing environmental management the federal authorities can play an exemplary role.

70.000 civil servants have access to free home-to-work train transport. Civil servants can also apply for a cycling allowance of 0.20euro/km. Public sector employees are thus encouraged to use sustainable and energy efficient means of transport such as public transport and bicycles.



B. The Brussels-Capital Region

The BCR puts particular emphasis on the exemplary role of the public authorities. It has in fact formulated high specific requirements with regard to energy and environmental performance and production or use of renewable energy, especially in the building and transport sectors (public service vehicles).

With regard to public buildings, all public buildings must already fulfil the passive standard for construction and the low-energy standard for major renovation. In addition, existing buildings must display their energy consumptions as of 2011. The public sector also ensures that measures are taken to improve energy efficiency at a good cost/efficiency ratio. For example, in implementation of a PLAGE, the first step consists of compiling an energy cadastre for the building stock in question so as to establish an action plan taking account of high-priority buildings.

The emphasis put on an exemplary role is also expressed in the implementation of a sustainable purchasing policy, through which the public authorities are encouraged to take into account the total cost of a product or service throughout its entire lifecycle, and not just the purchase price. To facilitate implementation of its

sustainable purchasing policy, Brussels Environment has developed various tools such as model specifications for several groups of products, technical guides for the incorporation of sustainable criteria into specifications, etc. In 2009, Brussels Environment launched a help desk for all Brussels public officials with questions on the incorporation of ecological criteria into their specifications. Finally, exchange of the best practices between public sector organisations in the Brussels-Capital Region is facilitated by information sessions and training courses .

The Brussels-Capital Region regularly informs the public and businesses of its activities and its role as an example using several means of communication, the most important of which are the website of Brussels Environment and the various explanatory brochures on specific activities. In addition, several regional organisations have obtained the ecodynamic enterprise label and take advantage of the communications plan specific to this recognition and/or communicate their special initiatives. In this regard, a milestone, the construction of the new IBGE-BIM headquarters (16,000 m²) with the passive standard, will offer a strong and tangible testimony to the action taken in the public sector.



C. The Walloon Region

To establish the credibility of its effective and sustainable energy management policy and obtain everybody's support for the objectives which have been defined, the Walloon Region must set itself as an example. Especially since its various consumptions are by no means insignificant.

Many actions are thus being taken in Wallonia to ensure this exemplary role. In the measures shown in the table above, attention should be paid, among other things, to the different UREBA grants, designed to support energy-saving investments in public buildings. Reference should also be made to the proactive approach of the many municipalities supporting the "Charte des Communes Energ-Ethiques" (Energy-Ethical Charter of Communes) and which benefit from the Region's support via Energy Advisers. The Walloon Government has also undertaken a series of energy actions in the real estate management of the Region's public buildings (CAMET's pilot experience, energy audit campaign, appointment of energy managers, set up of a guide to good practices, etc.).

Communication to citizens and/or companies on the exemplary role and actions of the Walloon public sector are carried out through different media, including, among others, television adverts, participation in trade fairs, the website <http://energie.wallonie.be>, the Energy+ CD-ROM, various widely disseminated free publications, the "Guichets de l'Energie" (Energy Offices) and Facilitators networks which give out advice and RUE information, particularly in the public and tertiary sector. Some municipalities have also set up their own information and subsidy policies.

In order to set an example, the Walloon Region will apply as early as in 2012 (i.e. 2 years ahead of what is imposed for other buildings) the "low-energy" requirement for all new public buildings, as well as for issuing grants, contributions or any other form of aid for real estate investment granted by the Region to other public or similar organisations.



D. The Flemish Region

The Flemish government, schools and local authorities are making significant efforts with regard to reduction of their final energy consumption in order to at least do as well as the target groups on which they focus, and in doing so contribute to the awareness of individuals, businesses and organisations.

The 2006-2010 plan 'Energy management in Flemish government buildings' included measures to reduce energy consumption in Flemish government buildings in 4 steps. The Flemish Government formulated the goal of reducing energy consumption of Flemish government buildings by 2014 in relation to the reference year 2009. The action plan 2007-2010 'Environmental management of the vehicle fleet of the Flemish government' included measures to reduce the number of journeys by civil servants using cars and to improve energy performance of the vehicle fleet of the Flemish government. New action plans will be drawn up to increase efforts regarding energy management in buildings and the vehicle fleet of the Flemish government.

Local governments engage in a co-operation agreement with the Flemish government to actively work on the themes of energy management and mobility, in exchange for financial compensation. In addition, the Flemish government undertakes a number of initiatives to support local government (subsidy for renewable energy technologies, obligations imposed on distribution grid managers, ...).

Schools are assisted in their efforts to handle energy rationally through subsidies for energy control, energy - saving investments and energy-efficient new construction and through information and education.

Public organisations are required to have an energy certificate for their buildings larger than 1000 m², which are often frequented by the general public. Following the new European directive on energy performance of buildings, in future smaller public buildings will also have to display a certificate.

3.3.2 Specific measures for public procurement

The Regions, the Federal and the public sector in general are major consumers of goods and services (vehicles, buildings, equipment, etc.). They ensure that when making purchases they opt for goods which are energy effective. For this, they adapt their specifications in such a way as to limit the energy consumption of their pool of vehicles, buildings and facilities.



A. The Federal Government

The Belgian federal government pursues the objective of the European Council and the European Commission to realise 50% sustainable procurement procedures for all federal public contracts, in relation to various product and service groups and vehicles. The circular P&O/DO/1 (27 January 2005) explicitly states that the federal government should fulfil an exemplary role. Therefore, all contracting authorities in the federal government departments, governmental programming services and the public utilities subject to the authority, control or supervision of the State, must apply the ecological and ethical regulations stated on the website <http://www.gidsvoorduurzameaankopen.be>. This website is an online tool that should assist governments in effectively making their public procurement contracts sustainable. The Federal Action Plan for Sustainable Procurement (2009-2011) aims among other things the update and renewal of this Guide.

Practical support for purchasers at federal level is provided by the unit Purchasing policy and Advice of the FPS Personnel and Organisation. It oversees the development, advising and assisting in the implementation of appropriate techniques for efficient and effective procurement of goods and acquisition of services. More information about this can be found on the website: <http://www.publicprocurement.be/portal/page/portal/pubproc>

The federal government possesses important mechanisms to accelerate the integration of sustainable criteria regarding public procurement contracts in the sustainable development units, i.e. entities within each federal government department that are tasked among other things with raising awareness about sustainable development and the sustainability of public procurement contracts, as well as in the EMAS requirement for the federal government.

The Federal Government plans a gradual shift of their fleet of vehicles towards clean and energy efficient vehicles. This is planned through a renewal of the car fleet of the federal administrations, using voluntary agreements between federal governments.



B. The Brussels-Capital Region

The Brussels Region, wishing to set an example, meets most of the eligible measures for energy efficiency in the field of public procurement contracts. The actions implemented here correspond to points a), b), c) from the list in Appendix VI of the ESD directive.

For the buildings section, financial means for public or assimilated entities provide for a priority action on the energy efficiency of buildings with stricter eligibility criteria than the minimum imposed by EPB legislation.

Table 12: Example of minimum values for heat loss from windows showing that value for public authorities is lower and therefore more strict⁴

Building element	EPB value	Public authority value
Windows	UW max = 2.5 W/m ² K	UW max = 2 W/m ² K
Glazing	Ug max = 1.6 W/m ² K	Ug max = 1.1 W/m ² K

Also, very strict standards have been imposed (passive for new buildings and low energy for large-scale renovations) for all real estate investments by organisations which are dependent on the Region.

For the mobility sector, the Brussels Region imposes purchasing standards (based on the Ecoscore) for all vehicles purchased or leased ("clean vehicle" decree of 28 May 2009). It has also imposed on the STIB, in its management contract, several actions concerning energy efficiency, such as training for drivers on cleaner driving techniques, having exemplary company travel plans⁵.

In the circular of 5 February 2009, all the Brussels OIP (Public Interest Organisations) are obliged to follow a sustainable purchasing policy for supply and service public procurement contracts.

⁴ For the full list, see the decree of the Government of the Brussels Capital Region of 4 June 2009 defining the energy standards applicable to subsidised projects in construction belonging to municipalities and Public Social Welfare Centres (CPAS).

⁵ The STIB signs a management contract every five years with the Brussels-Capital Region defining its strategic objectives (mission, kilometre production, market share) and the amount of the subsidy.



C. The Walloon Region

In accordance with the directive 2006/32/CE, the Walloon public sector also takes measures to cost effectively improve energy efficiency and make larger savings in shorter timescales.

It is in this perspective that energy audits are carried out on regional buildings. The UREBA and EPURE programmes incite the public sector and local authorities to take measures based on the criteria of efficiency and rapid return. The Walloon Region also uses management contracts to impose similar measures on public organisations and companies to which it contributes. The SOWAFINAL has been appointed as the third-party investor for public lighting.

Alongside these general measures, the Walloon Region ensures that it makes sustainable choices for all its purchases. To that end, it has created a "Sustainable Development" working Group within its administration: communication/awareness-raising, mobility and sustainable clauses/purchases. Major work on integrating energy and environmental clauses in its building and vehicle specifications is on the way of being finalised. Note that public specifications sometimes serve as a basis for private specifications...

The Walloon Region considers that with these measures it meets obligations a, b, d and e of appendix VI.

The exchange of best practices between public sector organisations in the Walloon Region is already a reality. Firstly, in-house, through the SPW "Sustainable Development" working group, the drawing up of a "Good practices guide in the field of energy saving and environmental respect" for the administration's staff, and the dissemination of information and advice as much for the public sector as for citizens or the private sector. The exchange of good practices "externally" between the State and federal Regions is also "institutionalised" through ENOVER/CONCERE consultative groups. For example, an agreement protocol has been concluded between Regions with a view to the common adoption of the ECOSCORE method for the allocation of vehicle contracts.



D. The Flemish Region

The Flemish Region has implemented measures b), c) and f) from the list of Annex VI of the Directive on energy efficiency.

The Flemish Government approved the Flemish Action Plan for Sustainable Procurement on 5 June 2009. The Flemish government is committed to 100% sustainable procurement by 2020. To achieve this it will draw up and implement four consecutive action plans.

The following instruments are recommended to support the Flemish entities in their procurement:

- product testing of the Flemish Public Waste Agency (OVAM) (www.producttest.be), with a list of energy criteria which can be added to estimates;
- environmental procurement guide, funded by the Department of Environment, Nature and Energy (www.milieukoopwijzer.be), with a hierarchy of energy criteria and a list of suitable products and suppliers;
- the Guide to Sustainable Procurement (www.gidsvoorduurzameaankopen.be) of the federal government with sustainability criteria for certain product groups. In 2010, the Flemish Government set up a partnership with the federal policy level in order to align federal and Flemish criteria development;


- the catalogue of IT services with ICT products that meet environmental and energy criteria;
- the guide "[Valuation of office buildings - on the road to sustainable housing for the Flemish Government](#)" including energy criteria is part of each estimate for construction, renovation or rental of public buildings (see www.vlaanderen.be / sustainable office);
- the Circular of 23 December 2008 on use, acquisition and disposal of official vehicles with ecoscore threshold values per class of vehicles. The master contracts for service vehicles of the Facility Management Agency contain ecoscores. All vehicles available on the Belgian market can be found with their ecoscore in the database www.ecoscore.be.



The local governments are also encouraged through the cooperation agreement to include energy efficiency as a criterion in public procurement.






3.4 Ensuring availability of advice and information





By virtue of article 7 of the DSE, Belgium must implement actions to:






- ensure that the information about promotional mechanisms about energy efficiency and the financial and legal frameworks adopted to achieve the indicated energy saving objective is transparent and widely disseminated among the market stakeholders concerned, but in accordance with the competences shared by the different levels of power (article 7.1);
- increase the promotion of energy efficiency in final uses (article 7.2, phrase 1);
- set up specific conditions and incentives to help increase information and advice about energy efficiency in final uses, which the market's stakeholders issue to the end customer (article 7.2, phrase 2).







	Chapter	Name of action	Target group
	5.2.1	<u>FEDESCO</u> <ul style="list-style-type: none"> • Knowledge centre on energy efficiency • Federal Awareness Campaign 'for energy savings in the workplace ' • Other campaigns related to energy efficiency • Collaboration with Energy Magazine (www.energymag.be) providing information about sustainable energy (energy efficiency, renewable energy, technologies ...). <u>BELESCO</u> <ul style="list-style-type: none"> • Platform between players in the market for energy services 	Federal public service, and other governments








	2.1.1	<p>(BE public and private organisations)</p> <ul style="list-style-type: none"> • Dissemination of knowledge regarding the energy services market to clients and to banks <p><u>Raising public awareness of energy-saving investments, i.e. by distributing brochures, CD-ROMs, magazines, maintaining internet sites:</u></p> <ul style="list-style-type: none"> • Buildings Agency publishes booklets of their completed projects • Communication campaign to publicise 'guide for sustainable development' • Informative websites: <ul style="list-style-type: none"> ○ 'www.energievreters.be' on energy efficient appliances and reduce power consumption within the home. Supported by the communication campaign 'Don't bring guzzlers into the house' and 'Think before you build'. ○ 'www.zuinigewagen.be' on energy efficient cars. Supported by the communication campaign 'CO2 guide of the drive-car-efficiently' • RD of 5 September 2001 on providing information on fuel consumption and CO2 emissions of new passenger cars in advertising 	Federal public service, and other governments Citizen
	2.1.2	<p><u>Promoting the use of bicycles:</u></p> <p>Focus on bicycle use in the management agreements with the NMBS Holding, Infrabel and the National Society of Belgian Railways (SNCB / NMBS):</p> <ul style="list-style-type: none"> • Increase number of bicycle parking facilities and enhance supervision of them. • Support the development of "cycling points" in stations, which promote the use of bicycles in combination with public transport (www.fietsenwerk.be). • Possibility of cheap bicycle hire in 35 Belgian stations (www.blue-bike.be and promotion campaign: 'just nipping by Grandma, or buy those funky boots') • Possibility of transport of bicycles in modified railway 	Citizen






		<p>carriages.</p> <ul style="list-style-type: none"> Ensuring better access to platforms for bicycles ... 	
	B 1	<u>Act structurally on demand through the gradual strengthening of EPB regulatory requirements (...)</u>	Private individuals, Companies Other
	B 4	<u>Grant energy premiums (...)</u>	
		<u>Develop financial support mechanisms for the sustainable renovation of buildings (...)</u>	
		Support measures set up for professionals: brochures and information on the IBGE-BIM website, telephone and e-mail helpdesk, basic and continuing training, seminars. Support measures for the general public: free advice for private individuals via the Urban Centre, free advice for professionals via the sustainable construction facilitator service, brochures, information on the IBGE-BIM website.	
	B 6	<p><u>Act structurally on the offering by stimulating the sustainable building sector (...):</u></p> <p>The Sustainable Building Facilitator offers office hours and general guidance on all themes concerning the management, renovation or construction of a sustainable building: energy, materials, water, territory, health and comfort, etc.</p> <p>The IBGE-BIM website offers reference tools and documents:</p> <p>The practical guide for the sustainable construction and renovation of small buildings which present challenges and choices available to professionals and deploy the relevant integrated technical solutions.</p> <p>The Sustainable Checklist enables a project to be put together and its sustainability assessed in 50 questions.</p> <p>The Memento, a guide for architects and public and private project developers which are behind projects for new neighbourhoods. The Memento offers an approach through questions which aims to produce the appropriate solutions within the proper context for each project.</p> <p>The IBGE-BIM supports the energy-environment unit of the Construction Confederation (CCB-C) which offers personal and free assistance on energy, the environment and sustainable construction. It organises training sessions, worksite visits and disseminates</p>	


		information documents via the website www.confederationconstruction.be/bruxellescapitale .	
	B 10	<u>Proactive support for households on energy and eco-construction to improve the quality and energy comfort of their homes:</u> Energy challenge: a website, a free telephone number and an online tool enabling all willing citizens to be the driving force for the spread of “everyday gestures” in their local environment, neighbourhood, residence, etc.	Private individuals
	I 1	<u>Promote good practices (eco-dynamic enterprise label):</u> In addition to official recognition (a numbered label valid for three years), all labelled companies are published on the IBGE-BIM's website. Each company may also complete a sheet which promotes its specific realisations and which is published on the same website. Every year, a large prize ceremony for new label winners and for the renewal of labels is organised. Information about the label and the participating company's realisations are published regularly in the IBGE-BIM's “enterprise” communication media.	Companies
	I 2	<u>Offer aid for energy saving investments:</u> Information available for companies at the Brussels Enterprise Agency and on the website http://www.ecosubsibru.be/	Companies
	T 1	<u>Increase planning tools through travel plans (...)</u> Since 2001, Brussels Mobility has organised training courses for mobility advisors (CeMa). The administration has also launched a platform enabling its mobility specialists to share their experiences and perfect their knowledge. Travel plan for companies: The Region (via Brussels Mobility) funds 50% of the cost of multimodal access sheets. The Region has set up several incentives, such as Bike to Work, to encourage the daily use of bicycles, the car-free day to encourage alternatives to personal cars, the bike experience to support bike lovers. A series of free training courses is also offered to companies. Ultimately, certain companies with a greater improvement potential will be the subject of an audit. Travel plan for schools: The presentation folders of school travel plans distributed to participating schools outlines the stages of the plan's implementation. This document also outlines a large number of possible actions to be	Private individuals, Companies, Other

		<p>implemented.</p> <p>Travel plan for activities:</p> <p>Guide for major events published on the IBGE-BIM website: informs site managers and events organisers about the tools available for reducing motor traffic to events and stimulate the use of alternative methods of transport.</p>	
		<p><u>Internalise certain external transport costs and encourage the purchase of less polluting vehicles:</u></p> <p>The Ecoscore gives an idea of the vehicle's overall ecological impact. This information is available on the website www.ecoscore.be, in a brochure and in the presentation given to companies on the subject of clean vehicles.</p> <p>Information about the Bruxell'Air premium (for residents giving up a personal car) is available on a specific website:</p> <p>NL http://www.brusselair-premie.be/homepage.php</p> <p>FR http://www.prime-bruxellair.be/homepage.php</p> <p>Information is also available on the STIB and the IBGE-BIM website.</p>	<p>Private individuals, Companies, Other</p>
		<p><u>Increase the offering and the attractiveness of public transport:</u></p> <p>Communication campaigns by the STIB and other public transport companies present in the Region (posters, adverts, E-News, etc.)</p> <p>Brochures and advice on soft mobility on the Brussels Mobility and IBGE-BIM websites.</p>	<p>Private individuals, Companies, Other</p>
		<p><u>Organise the energy market and impose public service missions:</u></p> <p>The distribution network manager and suppliers are obliged to promote the rational use of energy through information, demonstrations and the provision of equipment, services and financial aids for the benefit of municipalities and other end customers.</p>	<p>Private individuals, Companies, Other</p>
		<p><u>Develop sustainable neighbourhoods (...)</u></p> <p>Through stimulation actions, ongoing information, support and guidance, the "Sustainable neighbourhood" facilitator provides access to the tools needed for the setting up of a sustainable neighbourhood.</p>	<p>Private individuals, Companies, Other</p>
	B 1	<p><u>Thermal regulation for buildings</u></p> <ul style="list-style-type: none"> Energy certification for buildings 	<p>All</p> <p>private individuals; companies;</p>

			public sector
 Wallonie	B 2	<u>Training and information Buildings:</u> <ul style="list-style-type: none"> • Promotion of RUE via different media and/or organisations (TV, Internet, CD-Roms, publications, trade fairs, seminars, theme days, etc.) • Networks of RUE information centres (Guichets de l'Energie - Energy Offices) and Facilitators specialised by technical field and/or targeted public • Energy audit and energy accounting subsidies for companies (AMURE) or associations (UREBA) • Organisation of or subsidies for training (EPBD, RUE, audits, energy managers, FRIA...) and development and provision of tools (software) 	All private individuals; companies; associations
 Wallonie	B 3	<u>RUE information in public buildings</u> <ul style="list-style-type: none"> • SPW's Sustainable Development Plan, mainly for its "Communication/awareness-raising" orientation • Energy Advisors in communes • Environmental clauses in public specifications and Guide to good practices for the administration's staff 	Public sector and, indirectly, private individuals
 Wallonie	B 5	<u>Subsidies for RUE investments in public sector Buildings</u> <ul style="list-style-type: none"> • Subsidies for energy efficient social housing 	Public sector
 Wallonie	B 6	<u>Public service obligation – gas and electricity invoices</u> <ul style="list-style-type: none"> • Consumption statistics on invoice, dissemination of RUE information, maintenance and improvement of public lighting 	Companies; public sector and associations
 Wallonie	E 3	<u>Green certificates for electricity production from renewable sources and from high yield cogeneration</u> <ul style="list-style-type: none"> • Reverse rotation electric meters for small installations 	Private individuals
 Wallonie	E 4	<u>Training and information - Energy</u> <ul style="list-style-type: none"> • Cogeneration promotion seminars • Cogeneration Facilitator 	All private individuals; companies; public sector and associations

 Wallonie	H 1	<u>Training and information – Cross-cutting</u> <ul style="list-style-type: none"> Promotion of RUE via different media and/or organisations (TV, Internet, CD-Roms, publications, trade fairs, seminars, theme days, etc.) "Energy Pooling" structures with the Chambers of Commerce and Industry Mobility Plans for Economic Activity Zones (PMZAE) 	All private individuals; companies; public sector and associations
 Wallonie	H 2	<u>Public lighting (including EPURE) + traffic lights</u> <ul style="list-style-type: none"> Reduction in regional and municipal public lighting consumption 	Public sector
 Wallonie	H 3	<u>Energy Fund and other cross-cutting funding</u> <ul style="list-style-type: none"> Some energy premiums (boilers) are directly granted by DNO 	All private individuals; companies; public sector and associations
 Wallonie	I 1	<u>RUE information measures for industry</u> <ul style="list-style-type: none"> Promotion of RUE in industry via seminars and publications Energy facilitator in industry Promotion of sustainable development industrial zoning 	Companies
 Wallonie	T 1	<u>SRWT (Walloon public transport company) management contract</u> <ul style="list-style-type: none"> Interoperability of travel tickets between different public transport operators 	All private individuals; companies; public sector and associations
 Wallonie	T 2	<u>Saving measures for transport in the public sector (excluding SRWT)</u> <ul style="list-style-type: none"> SPW's Sustainable Development Plan through its mobility section Promotion of soft mobility and teleworking in administrations Environmental clauses for the purchases of public authority vehicles 	Public sector
 Wallonie	T 3	<u>Training and information - Transport</u> <ul style="list-style-type: none"> Promotion of alternative mobility through different media and/or organisations (publications, theme days, cyclist 	All private individuals;

		<p>licence, etc.)</p> <ul style="list-style-type: none"> • Creation of Mobility Units within various organisations, Communal Mobility Plans (PCM) or mobility plans for schools, etc. • Creation of the "Maison des Cyclistes" (Cyclists House) and the "Maison du TEC" (Public Transport by Bus House" 	<p>companies; public sector and associations</p>
	T 4	<p><u>Financial incentives or funding devoted to transport</u></p> <ul style="list-style-type: none"> • Free subscription to public transport in exchange for a car's license plate return 	<p>Private individuals</p>
	2.4.1.1.	<p><u>Promotion of RUE and environmentally friendly energy in the home</u></p> <ul style="list-style-type: none"> • Promotion of RUE through various channels (publications, media campaigns, free publicity, attendance at construction conferences, the annual campaign of the Energy Month during October, the website www.energiesparen.be and three digital newsletters). • Appointment of energy consultants to raise awareness with and inform citizens, contractors and architects about RUE. • Promote advice on energy conservation through various instruments such as accreditation of energy experts to perform energy audits, energy performance certificates, energy scans and heating audits. 	<p>Individuals</p>
	2.4.1.2	<p><u>Promotion of environmentally friendly driving and environmentally friendly vehicles</u></p> <ul style="list-style-type: none"> • Various awareness campaigns (ECODRIVEN, Easy on the Road, Move for Climate). • Development of the concept 'ecoscore' of a vehicle based on emissions and energy use 	<p>Individuals</p>
	2.4.2	<p><u>Promotion of RUE and environmentally friendly energy in the company</u></p> <ul style="list-style-type: none"> • Subsidising energy consultants in sector organisations to disseminate knowledge and advice on RUE. • Development of a tool for self-evaluation of energy consumption within the company and of an online reference database of implemented energy saving measures that may be consulted. 	<p>Companies (especially agricultural and horticultural, self- employed and SMEs)</p>
	2.4.3	<p><u>Encouraging environmental management in education</u></p> <ul style="list-style-type: none"> • Project 'Environmental Management in School' (MOS) for 	<p>Education (pupils, teachers, management,</p>

		<p>primary and secondary education, with option to work around the themes of energy and mobility.</p> <ul style="list-style-type: none"> Project 'Ecocampus' for higher education, working on three themes: environmental management in student life, environmental management on campus and in the course. 	parents)
	2.4.4	<p><u>Supporting youth and adult groups in the integration of environmental and energy management in their operation</u></p> <ul style="list-style-type: none"> Guiding youth groups through the project 'JeROM' (Youth, Space, Surroundings and Environment). (Financial) support for various (development) projects. Development of a digital guide concerning internal environmental management and of the database 'Environmentally Enlightened Consumption' with an overview of all courses, lectures or workshops that help reduce the ecological footprint. 	Associations



A. Federal Government

With regard to the exemplary role of the federal authorities, Fedesco and Belesco are important knowledge centres. They can provide competent and concerned entities with a lot of information and knowledge on ESCO's and how ESCO's work.

The Programmatory Public Service for Sustainable Development and the Federal Public Service for the Environment jointly carried out a communication campaign in order to promote the guidebook for sustainable purchases.

The FPS for the Environment created the website 'www.energievreters.be (NL) and www.energivores.be (FR)' as a tool for calculating online the carbon footprint of appliances, promoting energy efficient appliances and giving advice with a view to reducing the energy consumption of buildings, electronic appliances and vehicles. The website 'www.zuinigewagen.be' (NL) and www.voitureeconomie.be (FR) promotes the purchase of energy efficient cars. These websites go alongside with communication campaigns such as 'Haal geen energievreters in huis'/' Evitez des énergivores chez vous' ("Do not let energy guzzlers into your home") concerning energy efficient household appliances, 'Denk eraan voor je bouwt/verbouwt'/' Avant de construire/rénover, réfléchissez' ("Take this into account before having your house build") as regards roof insulation and 'CO2-gids van de auto-rij zuinig ... een troef voor u en de natuur'/' GUIDE CO2 DE LA VOITURE Roulez économe... un plus pour vous et la nature!' ("The CO2 guidebook for cars – driving energy efficiently is good for you and the environment").

The Royal Decree of 5 September 2001 provides that consumers must be given the necessary information regarding fuel consumption and CO₂ emissions when a new passenger car is marketed.

NMBS Holding, the Belgian national railway company, supports the development of cycle hire facilities in railway stations, thereby stimulating the use of cycles in combination with public transport (www.fietsenwerk.be (NL/FR)). 35 Belgian stations offer the possibility to hire a cycle very cheaply that can be returned at the end of the day at another station (www.blue-bike.be). This is being promoted by the

campaign: 'nog snel even langs de bomma te gaan, of die hippe botten te kopen' ("Off to Granny's or to buy those cool boots").



B. The Brussels-Capital Region

The IBGE-BIM uses different media to disseminate a wide range of information, among which are:

- the monthly publication (10 issues a year) "Ma Ville Notre Planète";
- the quarterly for professionals Bruxelles Environnement News (BEN);
- the monthly E-news for professionals;
- the monthly E-news for private individuals;
- its website www.bruxellesenvironnement.be, which has a large documentation base and which will soon be extended by a portal website "Bruxelles ville durable" to be put online. This website will highlight subjects concerning sustainable buildings, sustainable neighbourhoods, as well as the sustainable city. It will be trilingual in FR-NL-EN and will target another public than French or Dutch speakers, well represented in the Brussels Capital Region by expatriate workers (especially those working for international institutions).

Furthermore, in 2011, a 42-page brochure for the general public (available in FR, NL and EN) was published "Brussels, from eco-building to sustainable city". An outdoor exhibition on energy materials/eco-building/sustainable city project is also planned for autumn 2011 in front of the Cathedral "Saints Michel et Gudulle" near Brussels Central Station.

Also, different leaflets, brochures and manuals promoting the actions in a more targeted manner, as much for citizens as for professionals, such as the PLAGÉ manual (Local Energy Management Plan) for decision-makers and energy managers. In order to encourage soft transport methods (measure T4), there are also leaflets and brochures available, "Se déplacer autrement", "1.000 solutions et la vôtre" and "Mes déplacements et l'environnement", the web page "Eco-mobilité des ménages" by Brussels Environment, and the bicycle path map (€1 financed by the Region) which gives advice about cleaner driving methods, the choice of clean vehicles, the nature and impact of pollutants, including those on health.

Finally, large media communication campaigns (in the daily and weekly press, radio advertisements, posters, etc.) are carried out all year long to attract the public's attention to actions such as:

- The 2011 energy premiums;
- EPB certification;
- Model buildings call for projects;
- Encouragement of soft transport methods; communication campaigns on modal transfers for short journeys (television advert, radio advert, etc.), the campaign for the "20 millions de km" walk.



C. The Walloon Region

The descriptive datasheets for the Walloon measures provide details in their “eligibility” section of which measures participate in all or part of their actions in the obligations of article 7. Almost each measure includes “advice and information” type support actions.

Through the broadcasting of television adverts, brochures, and, above all, through the website <http://energie.wallonie.be>, the Walloon Region has developed over the past few years an active communication policy for private individuals on the different aspects of its energy policy, especially in terms of energy efficiency. Moreover, it has created the “Guichets de l’Energie” (Energy Offices), distributed all around the Walloon region, which provide information about existing techniques and the different support mechanisms available, especially for the residential sector. Suppliers and DNO also play a role in this information for end users through their obligation to provide statistical details of consumption on invoices and RUE information communication. Via the Energy Fund, they participate and even grant some premiums directly. Building professionals are trained and informed in order to be able to efficiently guide their customers in their technical choices and the procedures involved.

Facilitators also play a major information role in the Walloon Region. Their task is to advise legal entities and institutions when they undertake to improve the energy performance of their property and activities. They are energy specialists recognised for their expertise obtained from a wide range of projects.

The exemplary role assumed by the entire Walloon public sector also participates in promoting and disseminating information about everything concerning sustainable energy management. That is why the public sector is also the target of some specific communication measures about RUE.



D. The Flemish Region

Within the Flemish Region, action is undertaken towards various target groups regarding communication and consultancy relating to the rational use of energy.

According to the latest survey on energy awareness in households commissioned by the Flemish Energy Agency (2009), 92% of respondents were found to consider energy saving as important to very important. The relatively high level of energy awareness is partly due to the implemented communication campaigns.

Through publications, media campaigns, free publicity, attendance at construction conferences, the Month of Energy Saving (annual campaign during the month of October), the site www.energiesparen.be with a search tool for premiums and an investment calculator, and digital newsletters (on the energy performance regulation of buildings, the energy performance certificates and energy audit and on environmentally friendly energy), RUE is continuously a focus for which support is being created. In addition, various instruments encourage the provision of advice on energy conservation. Energy consultants were subsidised for the target groups households, construction professionals and businesses, whose main task is to disseminate knowledge and advice on RUE.

Specific educational projects were set up for the target group education in order to integrate environmental management into the daily operation of schools. For primary and secondary education the project Environmental Management at School (MOS) has been a great success. MOS helps the school to work in a pedagogically sound manner around a number of environmental issues, including energy and mobility. For colleges, a similar initiative was launched through the project Ecocampus.

Finally, a number of measures were undertaken to integrate environmental management into the operation of both youth and adult groups.

As well as focussing on rational energy consumption, several awareness campaigns were implemented to encourage environmentally friendly driving, such as Easy on the Road. The procurement of environmentally friendly vehicles was promoted through the development of the concept of 'vehicle ecoscore', based on emissions and energy consumption of cars.

3.5 Obligations of energy companies to promote energy savings in end-use consumption

According to article 6.2. of the directive on energy efficiency, Member States must choose one of the following requirements to be complied with by energy distributors and/or energy suppliers who:

1. ensure that their end-customers are offered energy services at competitive prices;
2. ensure that their end-users have access to energy audits carried out independently and/or measures to improve energy efficiency;
3. provide financing for funds and funding mechanisms focused on the delivery of energy efficiency measures.



A. The Brussels-Capital Region

Measure E.1 (Organise the energy market and impose public service missions) concerns, among other things, the public service obligations of suppliers or distribution network operators.

Concerning article 6,§1 of the ESD, the Government decrees defining the criteria and procedures for obtaining, renewing, transferring and withdrawing an electricity and gas supply authorization, require suppliers to communicate annually to the Brussels regulator (Brugel) the number of points debited as well as the quantities debited, distinguishing between professional and non-professional customers. Regional electricity transport network operators and electricity and gas network operators are also required to communicate information to the Brussels regulator.

Concerning article 6,§2,a) of the ESD, and more specifically points i) and ii), most electricity suppliers in the Brussels Capital Region supply energy services (audits, personalised energy saving advice, etc.) which they promote on their websites, in information brochures sent to customers, etc. Furthermore, the gas and electricity distribution network operator is obliged to promote the rational use of energy through information, demonstrations and the provision of equipment, services and financial aids for the benefit of municipalities and other end customers. To that end, in particular, the distribution network operator draws up a programme for the rational use of electricity for the benefit of municipalities.

Concerning article 6,§2,a) of the ESD, and more specifically point iii), holding an electricity supply authorisation gives rise to a the collection (monthly) of a fee paid by the person or legal entity benefiting from the authorisation, a part of which is devoted to the public service missions carried out by the distribution network operator and another part allocated to the "Energy Policy Fund", which is designed, among other things, to finance actions in the field of the rational use of energy and to ensure the functioning of the recognition of protected customers (article 11 of the ESD).

Concerning article 9,§2 of the ESD, the Region provides, via its IBGE-BIM website, a wide range of specific documents (model specifications, audit checklists, maintenance specifications, guidance-advice, RUE maintenance toolbox, etc.).

Concerning article 12,§1 of the ESD, the Region promotes various types of energy audits.

For private individuals, since 1 April 2008, the Brussels Capital Region has introduced an energy premium for people voluntarily carrying out an energy audit by a certified PAE (Energy Advice Procedure) auditor from the Region. The PAE energy audit consists of carrying out a detailed inventory of the energy performance of a mono—family home using specific PAE software. It enables users to cover all the points which could be improved in order to reduce energy consumption and make the right decisions about any renovation works to be carried out.⁶

Companies may also benefit from premiums for energy audits, feasibility studies, energy design studies and the implementation of energy accounting.

Other specific financial aids for companies, which may not be combined with the premiums mentioned above, and modular according to the company's size, are described in measure I.2 (Offer aids for energy saving investments).

Concerning article 12,§2 of the ESD, the Region promotes actions which do not give rise to a direct cost.

Private individuals may find energy self-audit tools on the IBGE-BIM website:

- A simple Self-Audit which only takes about ten minutes and requires you to answer a few questions about housing and personal energy consumption. After that, the user is able to discover a wide range of tips.
- A detailed Self-Audit, which enables the user to define in detail and by theme its way of using energy. This audit requires more time, but the tips given will be better suited to the person's specific situation.

Building professionals may also find several free tools adapted to different specific situations on the IBGE-BIM website:

- Handbook (devoted to the tertiary sector, the community housing sector and the hotel sector)
- Technical economic analyses (for the tertiary sector and the community housing sector)
- The Energy+ CD Rom (a series of information and tools to understand, scale and assess the economic interest of specific technologies, such as CHP or large solar heating systems. Very

⁶ In particular, the building's analysis concerns 5 points.

- Energy consumption (heating, hot water).
- External walls and their composition.
- The heating installation.
- The hot water production system.

The analysis of the ventilation system.

complete, it is of potential interest to operators as much as specialists). Version 6 is only available in French. Only version 1 is bilingual.

Concerning article 13,§1, EPB regulations impose the implementation of energy meters for new or assimilated buildings and large-scale renovations. The underlying philosophy is to be able to ensure the monitoring of a EPB unit's production and consumption (for example, fuel meter) and to be able to define the yield of large installations (for example fuel meter and energy meter for hot water).



B. The Walloon Region

The PAEE136 action from measure B6 brings together three public service obligations for suppliers or DNOs:

- a. obligation to give consumption statistics on gas and electricity invoices: this obligation, developed through the gas and electricity decrees and their executive orders, comply more specifically with article 13.3 b) and c) of the ESD;
- b. diffusion of any documents about the RUE as defined by the Minister: this obligation, developed through the gas and electricity decrees and their executive orders, complies more specifically with article 7.2 of the ESD;
- c. maintenance and improvement of the energy efficiency of municipal public lighting installations: the Walloon Government's decree of 6 November 2008 concerning the public service obligation imposed on distribution network operators in terms of maintenance and improvement of the energy efficiency of public lighting installations, provides particularly for, at the DNO's costs:
 - a public lighting survey (complete computer inventory) drawn up between 1 January 2009 and 30 June 2011, and then kept up-to-date;
 - from 2011, the realisation of an energy audit every 5 years to be sent to cities and towns concerning municipal lighting situated in the network operator's geographic area; the audit's report will include recommendations for reducing energy maintenance costs and consumption;
 - a 5-year programme to replace all the municipal public lighting low-pressure mercury vapour lamps.

This obligation contributes more specifically to meeting article 6.2.a of the ESD.

The PAEE137 action from measure H3 concerns the Energy Fund. This fund is supplied in particular by a connection fee to the gas distribution network and electricity distribution network according to consumption, as well as by fines paid by electricity suppliers for not respecting green electricity quotas in their supplies. It finances the multi-annual programme (established by ministerial executive orders) of premiums and subsidies granted to different types of end customers (individuals, low-income households, legal entities, public housing companies, management agents, public bodies, non-commercial organisations) for the realisation of energy audits or measures to improve energy efficiency.

This obligation contributes more specifically to meeting the requirements of article 6.2.a of the ESD.

The actions PAEE024, PAEE134, PAEE135 and PAEE138 from the measure E3, concern the existing Green Certificate system in which electricity suppliers are obliged to produce a quota of certificates in proportion to their sales. The green certificates are issued to "green" electricity production installations (RES or quality cogeneration), especially those which produce auto-consumed electricity in the buildings and therefore accounted for as final energy savings in the frame of the ESD.

As a result, part of the green certificate system contributes more specifically to meeting the requirements of article 6.2.a of the ESD.

Through their articles concerning public service obligations, the electricity and gas decrees provide for:

- an accreditation for the Government to define the DNOs and suppliers obligations in terms of information and awareness-raising with a view to encouraging the rational use of energy (dissemination of messages about RUE to end customers, granting of premiums). The AGW (executive order from the Walloon Government) "Public Service Obligation" of 30 March 2006 has translated this obligation;
- the obligation, supported by suppliers (and by DNOs for residential customers which they continue to supply) to "take every measure favourable to the rational use of energy for all categories of customers", and DNOs must also "offer energy services at competitive prices, especially for socially disadvantaged residential customers". Non-compliance with this Public Service Obligation is punishable by the regulator and, if necessary, by the control authority. Furthermore, they must provide a minimum annual amount of information about premiums and tax measures supporting energy savings.

Article 12 of the directive insists on the need to provide end customers with computer programmes for carrying out energy audits (checklist), and on the opportunity for all end customers to resort to effective and high quality energy audit systems:

- in the Walloon Region, many end customers in different fields of activity already have access to the opportunity to carry out energy audits completely independently;
- moreover, the majority of these audits may benefit from a regional aid (AMURE and UREBA programmes, Energy Fund, PAE energy advice procedure, etc.), which, for the residential sector, may be combined with the federal tax discount;
- there are already checklists (Energy+ CD-Rom) for carrying out self-diagnoses, as well as the accounting software for companies (EPS Coach), available free of charge for end customers;
- furthermore, some network gas and electricity suppliers offer their end customers audits, questionnaires and computer programmes available on the Internet;

The gas and electricity decrees impose a public service obligation supported by DNOs for the realisation of energy scans at cost price for underprivileged users. Non-compliance with this Public Service Obligation is punishable by the regulator and, if necessary, by the control authority.



C. The Flemish Region

In the Flemish Region, regulations apply that meet the first 2 requirements mentioned in article 6.2 of the Directive.

Since 2003, the electricity distribution grid managers are required to achieve a certain amount of annual primary energy savings through the promotion of energy saving investments and intervention with their end-customers. The actions include a financial compensation and an awareness raising component. In addition there are also a number of specific action requirements, such as focusing attention on rational use of energy through raising awareness and provision of information, offering individual RUE advice to residential customers, performing energy scans for domestic customers (since 2007), organising specific information sessions for protected customers, and providing energy accounting to education, welfare and health provisions.

The grid managers are also required to support local governments in the development of local energy policy through the provision of energy accounting, energy audits, energy management systems and financing arrangements (eg. third party financing) for the implementation of energy saving measures.

In the period 2008 - 2010, the grid managers have supervised 2568 energy accounts of local governments, supported 593 energy audits, and financially supported 3978 energy saving investments (through premiums, interest-free loans and third party financing).

As part of their RUE public service obligations, the distribution grid managers under the umbrella of Eandis and Infrac, close ESCO-contracts with the partners (municipalities and cities) for work on buildings under their management. In the context of its ESCO service, Eandis currently has 507 contracts in 110 municipalities. These contracts account for a turnover of 22,575,103 euros (including VAT). Eandis will soon deliver ESCO activities to the autonomous municipal company Municipal Education Antwerp for study and project implementation in the context of boiler room renovations, installing insulation, high performance glazing and the renovation of lighting in some 50 schools. Infrac, which started providing these services a bit later, signed co-operation agreements with 33 municipalities. Currently, 112 feasibility studies are being held in those municipalities. To date, Infrac is executing one ESCO-contract for a sum of 53,000 euros (including VAT).

At the end of May 2007, an agreement was finalised between the Flemish government and Informazout association as well as several natural gas suppliers (Nuon, SPE-Luminus, Electrabel Customer Solutions). These organisations have committed to encourage their members to provide energy advice (referring to premiums and tax benefits, indicate energy efficient alternatives, ...) as part of their service offer.

3.6 Market for energy services

According to article 6.3 of the Directive on energy efficiency, Member States should ensure that sufficient incentives are available for market parties other than energy distributors and suppliers, for example energy services suppliers, installers, energy advisors and consultants to offer energy services, energy audits and energy efficiency measures.

The organisation of the "Printemps de l'Environnement" in 2008 by the federal government, with the support of the regions, which helped to review a series of questions

Several measures have been taken in Belgium to stimulate the ESCO market. First of all, many measures have been taken or are planned by public authorities:

- § The creation in 2005 of Fedesco by the federal government, then the creation by Fedesco of its Knowledge Centre in Energy services and third party investment. Fedesco also has the mission of stimulating development through presentations at dozens of conferences and seminars in Belgium and overseas.
- § The announcement of the creation of VEB (Vlaams Energiebedrijf) by the Flemish Region (in progress, the decree was approved at the start of 2011)
- § Other initiatives to create ESCO, STI (System of third party investors) or public energy service development platforms, especially by the region in Wallonia (in the process of being prepared)
- § the Brussels project (in the Brussels government agreement) to encourage energy service company development primarily devoted to municipal and regional public buildings
- § the creation of the ESCO activity by Flemish GRD Infrac and Eandis and both GRD Walloon Igretec and Tecteo

- Other measures have been undertaken with the collaboration of private and public actors
 - § The creation of BELESCO, the Belgian ESCO Association
 - § The participation of Fedesco and Cenergie in the European project European Energy Service Initiative
 - § The participation of Fedesco and Factor 4 in the IEA's DSM VI group of experts
 - § Winning the organisation of the 2008 edition of ESCO Europe, the sector's European conference held in Brussels in November 2008

Private actors have also been very active not only in creation and/or development of their ESCO business, including some members of BELESCO, but also in articles and reports in EnergyMag ,_ in the organization of the Energy Forum conference which, every year, gives a major place to market ESCO stakeholders and again in the organisation of the first International Performance Measurement Verification Protocol (IP MVP)/Certified Measurement Verification Professional Programme (CMVP) for Belgian stakeholders (which has enabled the certification of about ten Belgian CMVPs)

In order to evaluate the true impact of all these measures ,BELESCO is planning to create and manage a sort of project database in the medium/long-term. It also remains to define when a project may be considered to be an ESCO project or not.

It can be said that before 2005, there were almost no ESCOs, although certain types of energy saving services did exist, although without any performance or financial guarantees, with the exception of certain relatively unsuccessful attempts in the 1990s. Since the creation of Fedesco and the growing interest for the Belgian market, the number of stakeholders has continued to increase.

The value of global energy service contracts is unknown. Fedesco has signed €26 million of contracts, Eandis has also already committed to €22.6 million of projects. Infrac is only just starting. Among private stakeholders, a maximum of about twenty projects have been implemented.

Other more general measures also have the effect to stimulate the energy services market.

For the Brussels Capital Region, this result is achieved through some mandatory measures; recognized professions through EPB legislation (EPB counsel, EPB certifier , licensed heating installer, EPB heating advisor...), mandatory audits, etc. To ensure the necessary quality of services, accreditation systems are implemented for some professions (energy auditors).

The market is also stimulated through incentives such as energy subsidies (which include a substantial part for studies and audits), the Employment-Environment Alliance and an extensive program of training for stakeholders of all level.

Ultimately, certain professions also arise from legislation, although more indirectly. Hence, the mobility officer of several companies comes from the obligation to implement travel plans in companies and the energy manager may be engaged following the requirement for certain actors to implement an action plan for energy management.

Several measures mentioned earlier in the Flemish action plan are also incentives for the expansion of the energy services market and contribute to implementation of article 6.3 of the Directive:

- the benchmark and audit agreements with industrial companies;
- energy performance certificates regulation;

- mandatory heating audit;
- recognition of energy experts to provide tailored advice on energy saving in the home (EAP).

3.7 Measures to support EPBD implementation



The Brussels-Capital Region is not requested to provide substitution measures for the inspection of the heating systems' (article 14, paragraph 4, EPBD) nor air-conditioning systems' (article 15, paragraph 4, EPBD). Concerning the obligation of information by virtue of article 10 paragraph 2, reporting is carried out by means of the present document and its appendices.



Measures from article 14 and 15 of the EPBD has been transposed in the Walloon legislation, so the Walloon Region is not requested to provide substitution measures for the inspection of the heating systems nor air-conditioning systems. The reporting as requested by article 10 of the directive is done through this NEEAP in which the measure descriptive datasheets show if the measure contributes to the EPBD implementation.



The measures in articles 14 and 15 of the Directive on energy performance of buildings have already been converted into Flemish legislation. The Flemish Region does not have to implement any alternative measures concerning the inspection of heating and cooling systems.

Article 10 of the Directive on energy performance of buildings requires Member States to draw up a list of existing and, where appropriate, proposed measures and instruments, including those of a financial nature, not required under the Directive, but which promote the objectives of the Directive. In the Flemish Region, following measures promote the aims of the Directive on the energy performance of buildings:

- reduction in property tax for new buildings that perform substantially better than the standard;
- premium from the electricity distribution grid managers for homes with a lowered E-level;
- appointment of an energy consultant within the Flemish architect organization for raising awareness of individuals and for supporting the architects to properly implement the energy performance legislation.