

The Kyoto Policy of Belgium

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THE KYOTO POLICY OF BELGIUM

Karel VAN HECKE & Tania ZGAJEWSKI



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Introduction

Since the start of negotiations on the Kyoto Protocol, the Belgian authorities have always taken a favourable position towards an ambitious climate change regime, both at international and European level. This is obviously linked to the perception of a series of threats in Belgium.¹ However, the Belgian position also results from the clear awareness that a global threat calls for a global solution. In the context of the Kyoto Protocol, the Belgian authorities have assumed ambitious commitments within the European Union. The start of the first commitment period (2008-2012) of the Protocol offers an excellent moment to evaluate the results so far. In this perspective, the present note recalls Belgium's reduction commitment (§ 1) and describes the institutional structures put in place (§ 2), the general policies and measures taken at the federal and regional levels² (§ 3) and finally the results obtained (§ 4).

Karel VAN HECKE & Tania ZGAJEWSKI³

1. To get a overview of these threats, see the 2004 report entitled *Impact of climate change in Belgium* by the Université Catholique de Louvain. This report analyses the potential impact of climate change in Belgium. Although the report finds that the initial impact of global warming would be relatively limited in Belgium, the identified possible consequences are worrying. Belgium would be confronted with an increased risk of flooding, a heavily affected coastal area, less biodiversity and considerable health risks. The summary in English is available from http://www.astr.ucl.ac.be/users/marbaix/impacts/docs/GP-rep04-Sum_2-EN.pdf.

2. One must emphasize that it is impossible to mention all initiatives taken at all levels. For example, as CO₂ is the main source of difficulty in Belgium, some initiatives regarding other GHG gases than CO₂ are sometimes not mentioned in this paper.

3. Karel VAN HECKE is Research Fellow at EGMONT – The Royal Institute for International Relations and Tania ZGAJEWSKI is Director of HERA and Senior researcher at the University of Liège. This comment does not in any way represent a position of the institutions to which they belong. The authors thank Professor Franklin DEHOUSSE for his observations.

1. The Objective for Belgium under the Kyoto Protocol

The Kyoto Protocol was signed and ratified by Belgium respectively in April 1998 and in May 2002.⁴ It entered into force in February 2005. As a country included in Annex B to this Protocol, Belgium is committed to a specific greenhouse gas (GHG) emission reduction.

Under the Kyoto Protocol, the European Community pledged to reduce its GHG emissions by 8% below 1990 levels by 2008-2012. This overall target has been redistributed among the then 15 Member States, including Belgium.⁵ This redistribution, commonly called the “EU burden sharing agreement” (BDS), is laid down by Decision 2002/358/EC⁶ and Decision 2006/944/EC⁷. These decisions define for each Member State its assigned amount of GHG emissions, equal to a percentage. According to this BDS, Belgium must reduce its GHG emissions by 7,5% by 2008-2012 compared to 1990 levels. This means a reduction from 146,9 million tonne (Mt) CO₂-eq. to 135,9 Mt CO₂-eq. by the period 2008-2012.

To assist its Member States in complying with their respective targets, the EU has established the Emissions Trading Scheme (ETS) within the Community.⁸ This ETS, cornerstone of the EU climate policy, is based on Directive 2003/87/EC (the ETS Directive)⁹. The scheme, which entered into force on 1 January 2005, is a system under which thousands of CO₂-emitting installations in Europe receive a limited amount of allowances to emit carbon dioxide. Companies can trade these CO₂ emission allowances in function of their needs. There are two trading phases: the first one covers the period 2005 to 2007 and the second one the period 2008 to 2012. Member States are competent for drafting a National Allocation Plan (NAP), to be approved by the European Commis-

4. See the federal law of 26 September 2001 (OJ, 26 September 2002), the Flemish decree of 21 February 2002 (OJ, 23 March 2002), the Walloon decree of 21 March 2002 (OJ, 3 April 2002) and the Brussels-Capital ordinance of 19 July 2001 (OJ, 9 November 2001).

5. This redistribution was made in accordance with Article 4 of the Kyoto Protocol.

6. Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the UNFCCC and the joint fulfilment of commitments thereunder (OJEC 2002, L 130/1).

7. Commission Decision 2006/944/EC of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the Kyoto Protocol pursuant to Council Decision 2002/358/EC (OJEU 2006, L 358/87).

8. The European Commission has recently published its proposal to reform the ETS. This proposal is available from http://ec.europa.eu/environment/climat/emission/pdf/com_2008_16_en.pdf.

9. Directive 2003/87/EC of the European Parliament and of the Council, of 13 October 2003, establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJEU 2003, L 275/32).

sion, in which they allocate allowances to the installations on their territory. As far as the allocation method is concerned, the ETS Directive provides that allowances must be allocated free of charge. However, Member States are allowed to auction up to 5% of allowances in phase one and up to 10% in phase two.¹⁰

10. Article 10 of the ETS Directive.

2. The Framework to reach this objective

Belgium is a federal country with a complex division of competences between the federal state and the regions. In line with this division of powers, climate policy is carried out at different levels of government. For instance, the federal government is competent for potential climate policy instruments such as taxation, whilst environmental legislation is generally a regional competence. As a consequence, climate change policy in Belgium is characterized by a high degree of cooperation agreements and consultation structures between the various entities.

2.1. The National Climate Plan and the National Climate Commission

In 2002, the federal government and the regions adopted the National Climate Plan 2002-2012. This plan defines a number of general principles and gives an overview of all the policies and measures decided by the Federal government and the three regions at that time. For that reason, the National Climate Plan is more a compilation of past measures rather than a real common policy plan.

Together with the plan, the regions and the federal government also adopted a cooperation agreement on climate change.¹¹ This agreement concerns the establishment, the execution and the follow-up of the National Climate Plan. It also creates the National Climate Commission (NCC) for its implementation.

The NCC is composed of four representatives of each government and disposes of a permanent secretariat.¹² It gathers twice a year and decides by unanimity. It is responsible for the internal coordination and evaluation of the National Climate Plan and for the implementation of international reporting obligations.

It should be noted that, apart from the National Climate Commission, other structures have been put in place to coordinate the regional and federal climate

11. Federal law of 11 August 2003 (OJ, 15 July 2003), Flemish decree of 10 July 2003 (OJ, 18 September 2003), Walloon decree of 13 November 2003 (OJ, 5 December 2003) and Brussels-Capital ordinance of 22 May 2003 (OJ, 27 June 2003).

12. This secretariat is provided by the Interregional Cell for the Environment (CELINE – IRCEL) which was created in 1995. It is composed of civil servants from every region.

efforts: the Interministerial Conference on the Environment¹³ and the Coordinating Committee for International Environment Policy.¹⁴

2.2. The internal burden-sharing agreement

The NCC was given the task to present a proposal on the distribution of Belgium's target of 7,5% among its regions. This soon proved to be a difficult task as the regions could not agree on such a burden-sharing. The Flemish region argued that emission reductions should happen in the region of Belgium where they were the most economically viable. In Flanders, with its large presence of energy-intensive (particularly chemical) companies, this would not be the case. It was easier for the Walloon region to reduce its emissions because most of the Walloon heavy industry still existed in 1990, the base year of Kyoto.

An agreement on the burden-sharing was finally concluded in March 2004 after about two years of heavy discussions.

This burden-sharing agreement determines separate targets for each of the regions. The Flemish region and the Walloon region have to reduce their GHG emissions by respectively 5,2% and 7,5% while the Brussels-Capital region can increase its emissions by 3,475% compared to 1990 levels during the period 2008-2012.

Taking into account this burden-sharing, Belgium assigned more emission rights to its regions than available under its Kyoto target. To compensate this deficit, it was agreed that the federal government would acquire emission allowances as a result of the use of flexible mechanisms under the Kyoto Protocol equivalent to 2,46 Mt CO₂-eq. per year.

The internal burden-sharing agreement to attain the Kyoto reduction target of 7,5% can thus be presented as follows¹⁵:

13. The Interministerial Conference on the Environment plays also an important role in Belgium's climate policy. It provides the forum for consultation between federal and regional environment ministers. When climate change is on the agenda, other ministers can also participate.

14. The Coordinating Committee for International Environment Policy exists since 1995 and consists of representatives of the federal and regional administrations and ministries of the environment. Its task is to prepare the Belgian position in European and international negotiations on climate matters.

15. The table is drawn from the draft Belgian National Allocation Plan for the second ETS phase, available from http://ec.europa.eu/environment/climat/pdf/nap_belgium_final.pdf.

(Mt CO ₂ -eq.)	1990 emissions	Reduction target	2008-2012 annual average quantity of allowances
Flemish Region	88	-5,2%	83,4
Walloon Region	54,8	-7,5%	50,7
Brussels-Capital Region	4	+3,475%	4,2
Federal government	-	-	-2,46
Total for Belgium	146,9	-7,5%	135,9

Furthermore, the internal burden-sharing agreement provides that the federal government would support the regional reduction efforts by adopting additional measures with the aim of reducing at least 4,8 Mt CO₂-eq. per year.

2.3. The EU Emissions Trading Scheme

In Belgium, more than 300 companies participate in the ETS. It is estimated that these companies represent 40% of CO₂ emissions in Belgium.¹⁶

2.3.1. *The National Allocation Plans*

Due to the federal structure of Belgium, competences regarding the reduction of greenhouse gas emissions are divided between the federal state and the regions. Taking into account the ETS directive, the regions are responsible for the allocation of CO₂ allowances to the installations on their respective territories, except the support and safety installations of nuclear power plants whose allocation falls within the exclusive competence of the federal government.¹⁷ In that perspective, the three regions each draw up their own allocation plan. These three allocation plans are approved by the National Climate Commission and are then joint together to constitute the National Allocation Plan of Belgium, to be approved by the European Commission.

16. Report of 29 March 2006 by the Federal Parliament's commission of health, environment and societal renovation on 1 year Kyoto Protocol, p. 4. See <http://www.dekamer.be/FLWB/PDF/51/2378/51K2378001.pdf>.

17. However, in accordance with Article 29 of the ETS Directive, the federal government decided to exclude these installations from the scope of application of the scheme for both phases. See <http://presscenter.org/archive/other/104222/?lang=nl&prLang=fr>. and <http://presscenter.org/archive/20060714/8f2390434d23779a52b27526bb7c69fa/?lang=nl&prLang=fr>.

The NAP for the first phase 2005-2007 was without any significant problems approved by the European Commission in 2004.¹⁸ Over the three years, a total amount of 180,9 Mt CO₂ was allocated to 310¹⁹ Belgian installations.²⁰

For the second phase of the scheme (2008-2012), Belgium proposed to allocate an amount of 63,3 Mt CO₂ per year to its installations. In January 2007, the European Commission decided not to raise any objections to the proposed NAP, provided that Belgium made some amendments.²¹ The most important amendment was that, instead of the proposed 63,3 Mt CO₂, Belgium had to allocate maximum 58,5 Mt CO₂. This imposed ceiling meant that Belgium had to reduce its allowances by 4,8 Mt CO₂ per year.

Unlike some Member States, Belgium decided not to lodge an appeal before the European Court of Justice against the decision of the European Commission. Instead, the National Climate Commission asked the European Commission in February 2007 to review its decision and to allow an additional 2,4 Mt CO₂ to the imposed ceiling of 58,5 Mt CO₂. This request, however, was rejected.

After months of negotiations, the regions and the federal government finally reached an agreement on 1 February 2008 on the redistribution of the Commission's imposed ceiling.²² According to the agreement, the required extra reduction of 4,8 Mt CO₂ is divided on a 50/50 basis: both the Flemish and the Walloon region must reduce their allocation by 2,4 CO₂ per year. This principle is nonetheless surrounded by a lot of complex modalities, which make a global evaluation of the agreement at this point nearly impossible. The agreement also provides two modifications: coal-, oil- and gas-fired power stations will no longer receive their allowances for free whilst the federal tax²³ on allowances is repealed.

18. Commission Decision of 20 October 2004 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by Belgium in accordance with Directive 2003/87/EC of the European Parliament and of the Council, C (2004) 3982 final, available from http://ec.europa.eu/environment/climat/pdf/belgium_final_en.pdf.

19. Application of the Emissions Trading Directive by EU Member States, EEA Technical Report, No. 4/2007, European Environment Agency, p.16.

20. It should be noted that almost all NAPs for the first phase over-allocated allowances. This over-allocation was identified as the main problem of the ETS. In Belgium, the over-allocation amounted to 7 Mt CO₂ per year. See Greenhouse gas emission trends and projections in Europe 2007 – Tracking progress towards Kyoto targets – EEA report n° 5/2007, p. 49.

21. Article 2 of Commission Decision of 16 January 2007 concerning the national allocation plan for the allocation of greenhouse gas emission allowances notified by Belgium in accordance with Directive 2003/87/EC of the European Parliament and of the Council, available from http://ec.europa.eu/environment/climat/pdf/be_nap_decision_en.pdf.

22. See the press release on the council of ministers of 1 February 2008, available from <http://www.residencepalace.be/nl/persberichten.html?c=5b06c2b5a631d5a5e6a59c826dbd0b1e>

23. This federal tax, which existed since 2007, amounted to 0,1 euro per allowance.

2.3.2. *Cooperation agreement on the national ETS register*

Under the ETS, Member States are obliged to establish a registry in the form of a standardised electronic database in order to keep account of the allowances.²⁴ In Belgium, the federal government and the regions concluded in September 2005 a cooperation agreement on the organisation and administrative management of the national register.²⁵ Since November 2005, a fully operational registry is in place.²⁶ In February 2008, it was decided to replace the 2005 agreement by a new cooperation agreement on the ETS register.²⁷

2.4. **Cooperation agreement on Kyoto's flexible mechanisms**

The federal government and the three regions concluded in February 2007 a cooperation agreement on the implementation of the project-based flexibility mechanisms²⁸ in Belgium.²⁹ This cooperation agreement puts in place the necessary structures for the use of the flexible mechanisms by the regions and the federal government. It establishes the National Climate Commission as the Focal Point for JI projects and as the Designated National Authority for CDM

24. Commission Regulation (EC) 2216/2004, of 21 December 2004, for a standardised and secured system of registries pursuant to directive 2003/87/EC of the European Parliament and of the Council and Decision No 280/2004/EC of the European Parliament and of the Council (OJEU 2004, L 386/1). This Regulation refers to Decision of the European Parliament and of the Council 280/2004/EC, of 11 February 2004, concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol OJEU 2004, L 49/1.

25. Cooperation agreement of 23 September 2005 between the federal state, the Flemish region, the Walloon region and the Brussels-Capital region on the organisation and the administrative management of the standardised and normalised registry system of Belgium in accordance with Directive 2003/87/EC of the European Parliament and Council and Decision 280/2004/EC of the European Parliament and Council (OJ 14 October 2005).

26. See www.climateregistry.be.

27. See the press release on the council of ministers of 1 February 2008, available from <http://www.residencepalace.be/archive/20080201/ff0c7fb62644189c56411b3550d0187a/?lang=nl&prLang=fr>.

28. These mechanisms, established under the Kyoto Protocol, are the Clean Development Mechanism (CDM) and Joint Implementation (JI). They allow countries to meet their binding commitments by implementing projects that reduce emissions in other countries, respectively in developing countries (CDM) and in industrialised countries (JI).

29. For the text of the agreement, see <http://www.dekamer.be/FLWB/pdf/51/3086/51K3086001.pdf>. At the end of January 2008, only the Flemish region has approved the agreement (see <http://jsp.vlaamsparlement.be/docs/stukken/2006-2007/g1314-4.pdf>). The Walloon and the Brussels-Capital regions are expected to give their approval any time soon.

projects.³⁰ It also defines the criteria to determine which government is competent for approving CDM and JI projects.

According to the Kyoto Protocol, the acquisition of emission rights through flexible mechanisms must be supplemental to domestic reduction policies and measures.³¹ The cooperation agreement on flexible mechanisms confirmed this principle, stating that the use of such mechanisms by Belgium must comply with the obligation of supplementarity.³²

30. Countries that participate in CDM and JI must respectively designate a *national* authority and a focal point. See Decision 3/CMP.3 (Modalities and procedures for a clean development mechanism) and Decision 9/CMP.1 (Guidelines for the implementation of Article 6 of the Kyoto Protocol).

31. Article 6.1(d) of the Kyoto Protocol.

32. Article 3, § 3 of the cooperation agreement on flexible mechanisms.

3. The Measures

3.1. Measures taken at the federal level

According to the internal burden-sharing agreement, the federal government pledged to take internal measures to reduce at least 4,8 Mt CO₂-eq. per year and to buy emission allowances equivalent to 2,46 Mt CO₂-eq. per year over the period 2008-2012. This means that the federal government decided to realise two thirds of its reductions via domestic measures and policies, while one third of the reduction commitment will be generated through the use of the flexible mechanisms. The domestic measures and the flexible mechanisms are expected to use respectively about 77% and 23% of the budget.³³

3.1.1. *The federal climate plan*

During a special council of ministers in Raversijde in 2004, the federal government adopted the federal climate plan. The plan consists of a number of measures that aim to reduce GHG emissions. The plan has been further complemented by a series of measures taken at the council of ministers in Leuven in March 2007.

The following measures at federal level are the most important:

(a) *The Thornton-project*

The Thornton-project involves the construction of an offshore windmill farm in the North Sea. It should lead to a reduction of about 2 Mt CO₂. After eight years of legal, administrative and technical problems³⁴, the construction finally started in May 2007. The windmills are expected to start generating electricity as soon as September 2008. The cost of the project is estimated at 900 million euros.

33. Answer by the federal Minister for the Environment to a parliamentary question, 7 March 2007, see <http://www.dekamer.be/QRVA/pdf/51/51K0157.pdf>

34. See, in this context, Judgment n° 193/2006 of 5 December 2006 by the Constitutional Court.

(b) *Transformation from carbon power to biomass in electricity stations*

The federal government envisages the transformation of two carbon-based electricity stations (in Mol located in the province of Antwerp and Les Awirs located in the province of Liège) into biomass-based stations by 2009. This measure is expected to save 1,2 Mt CO₂ emissions.

(c) *Introduction of bio-fuels in the transport sector*

The federal government aims at increasing the market share of bio-fuels to 5,75% by 2010. This should lead to a reduction of 0,5 Mt CO₂ emissions. In 2006, the federal government decided to lower the excise duties on petrol and diesel that are blended with a certain amount of bio-fuels.³⁵

(d) *Fiscal incentives*

Cars with low CO₂ emissions receive a favourable fiscal treatment.³⁶ The fiscal advantage is 15% of the price for cars that emit less than 105g CO₂/km (with a maximum of 4.270 euros) and 3% for cars that emit between 105 and 115 g CO₂/km (with a maximum of 800 euros). The federal government also publishes an annual guide in which it describes the cleanest cars on the market.

There are also a number of fiscal measures to encourage energy efficient investments in the housing sector. There is, for instance, a tax reduction for expenses from energy saving measures, such as the replacement of old boilers, the installation of heating systems based on solar energy, the installation of photovoltaic panels, roof insulation, etc.³⁷ In addition, taxpayers who construct or purchase passive houses or transform real estate into a passive house receive a tax reduction.³⁸

35. Federal law of 10 June 2006 (OJ, 16 June 2006) and royal order of 27 October 2006 (OJ, 31 October 2006).

36. See Article 84 of the federal program law of 27 April 2007 (OJ, 8 May 2007).

37. The tax reduction amounts to 40% of the expenses, with a maximum of 2600 euros. See Article 78 of the federal program law of 27 April 2007 (OJ, 8 May 2007).

38. The tax reduction amounts to 600 euros per taxable period and per house. See the federal law of 27 April 2007 on the introduction of tax reduction for passive houses (OJ, 10 May 2007).

(e) *Third party financing for investments in energy efficiency*

The federal government created Fedesco, a fund that aims to finance energy efficiency projects in public buildings.³⁹ Fedesco works as an ESCO (Energy Services Company) providing third party financing for such projects. It also offers services like energy efficiency audits, energy accountancy and awareness campaigns.

At the end of 2005, the federal government also established the fund for the reduction of the global energy-cost⁴⁰. This fund aims at providing cheap loans to low-income persons⁴¹ in order to finance energy-saving investments.

According to the federal climate plan, third party financing should reduce between 130.000 and 180.000 tonne CO₂ emissions.

3.1.2. *The use of flexible mechanisms by the federal government*

The federal government committed to acquire emission credits equivalent to 2,46 Mt CO₂-eq. per year over the period 2008-2012. It decided to follow a schedule with regard to the acquisition of these credits.⁴²

Until 2007, emission credits had to be obtained from investments in Joint Implementation (JI) and Clean Development Mechanism (CDM) project activities. In this context, one CDM project⁴³ has been approved by the federal government and another one⁴⁴ is in the pipeline. The federal government also decided to

39. See <http://www.fedesco.be>.

40. In Dutch: 'Fonds ter reductie van de globale energiekost (FRGE)', in French: 'Fonds de réduction du coût global de l'énergie (FRCE)'. See the federal program law of 27 December 2005 (OJ, 30 December 2005).

41. For the criteria, see the royal order of 2 June 2006 (OJ, 6 July 2006).

42. Report of the parliamentary commission on health, environment and societal renovation on the internal-burden sharing agreement, available from <http://www.dekamer.be/FLWB/PDF/51/1034/51K1034001.pdf>.

43. In November 2006, after a first tender for a CDM/JI project was launched, the federal government chose its first CDM project. This project concerns the acquisition of emission rights from a geothermic electricity power station in El Salvador. Over the period 2007-2012, the project should generate between 183.000 and 262.000 emission rights. See http://www.climatechange.be/climat_klimaat/pdfs/firstBelgCDMcontrElSalv.pdf.

44. In February 2007, the federal government launched its second CDM/JI tender, with an initial budget of 22 million euros. The deadline for the tender is November 2007. See *Belgium buys your carbon credits*, The second Belgian JI/CDM tender – How to participate, General introduction folder, available from http://www.climatechange.be/jicdmtender/IMG/pdf/EN_Folder_WEB.pdf.

invest 25 million euros in the KfW Carbon Fund.⁴⁵ As from 2008, it also has the possibility to directly acquire CDM and JI credits on the international market.

The acquisition of CDM and JI credits is financed through the so-called Kyoto fund. Established in 2002, it benefits from a yearly budget of 25 million euros. It is mainly financed by consumers' contributions on electricity bills. Should the Kyoto fund not suffice to acquire the necessary CDM and JI credits, the federal government has, as from 2008, the possibility to make use of International Emissions Trading (IET), the third flexible mechanism of the Kyoto Protocol.⁴⁶

3.2. Main measures taken by the Flemish region

The emission of greenhouse gases in Flanders increased from about 88 Mt CO₂-eq. in 1990 to almost 91 Mt CO₂-eq. in 2004.⁴⁷ Particularly the transport sector and the energy-intensive industry were responsible for this rise.

In accordance with the internal burden-sharing agreement, the Flemish region has to reduce its GHG emissions by 5,2% in the period 2008-2012 in comparison with 1990 levels.

3.2.1. Framework plans

(a) The first Flemish climate policy plan

In June 2002 the Flemish government took a first step towards fulfilling its Kyoto target by adopting the Flemish Climate Policy Plan (FCCP).⁴⁸ The plan, which covered the period 2002-2005, constituted the first Flemish strategy plan to reduce GHG emissions. For that purpose, the FCCP 2002-2005 included a number of projects and measures. The plan's short-term objective was to stabi-

45. Carbon funds, often managed by international banks, acquire emission credits from CDM and JI projects on behalf of the fund participants. See http://www.kfw-foerderbank.de/EN_Home/Carbon_Fund/News.jsp.

46. IET is a non-project flexible mechanism. Industrialised countries can simply buy emission credits (AAUs) from other industrialised countries that have excess credits. See Article 17 of the Kyoto Protocol.

47. The Flemish Climate Policy Plan 2006-2012, p. 25, available from <http://www.lne.be/themas/klimaatverandering/klimaatconferentie/vlaams-klimaatbeleidsplan-2006-2012/flemish-climate-policy-plan-2006-2012>.

48. The plan is available from <http://lucht.milieuinfo.be/uploads/klimaatbeleidsplan.pdf>.

lise GHG emissions in 2005 at 1990 levels. However, as indicated above, this stabilisation target was not reached.

(b) *The REU decree*

The so-called REU decree, adopted in 2004, constitutes the legal basis for the Flemish climate policy.⁴⁹ This decree outlines the framework in which the Flemish region aims to reduce CO₂ emissions, namely the promotion of rational energy use (REU, hence the name of the decree), the use of renewable energy sources and the application of the flexibility mechanisms under the Kyoto Protocol.

(c) *The second Flemish climate policy plan*

The Flemish government adopted in July 2006 the second Flemish Climate Policy Plan. This second plan encompasses the period 2006-2012 and has four objectives: (1) the achievement of the Flemish Kyoto target; (2) the continued elaboration of the Flemish vision and strategy for climate policy in the short, medium and long term; (3) the creation of the basis for further-reaching reductions after 2012 and (4) the continued development of new climate policy instruments.

The FCCP 2006-2012 announces a number of measures which should reduce approximately 80% of the emissions that the Flemish region needs to cut.⁵⁰ The rest of the emissions reduction will be acquired through the use of the flexibility mechanisms.

The Flemish Climate Policy Plan 2006-2012 identified a number of priorities and measures, of which the following are the most important.

First, mobility in Flanders should become more climate friendly and sustainable. For that purpose, the Flemish government intends to restrict the volume of road traffic, to make cars more environmentally friendly, to improve the road traffic management and to stimulate 'green' driving behaviour.

Second, rational energy use in buildings should become a reality. As such, a Flemish decree partially transposed Directive 2002/91/EC on the energy perfor-

49. Flemish decree of 2 April 2004 (OJ, 23 June 2004).

50. "Voortgang Vlaams Klimaatplan 2006-2012", March 2007, available from <http://www.lne.be/themas/klimaatverandering/klimaatconferentie/Voortgang%20VKP06-12%2C%20maart%202007.pdf>.

mance of buildings.⁵¹ According to this decree, the Flemish government will determine the requirements and standards with regard to energy performance, thermal insulation, indoor climate and ventilation for new buildings and renovation activities.⁵² The decree also allows the Flemish government to demand from the owners or users of a building to present an energy performance certificate.⁵³ Such a certificate comprises reference values allowing the assessment of the energy performance of the building and the comparison with other buildings.

Third, renewable and low-carbon energy sources to generate electricity and heat should be more extensively used in Flanders. Electricity suppliers must submit a certain number of renewable energy certificates (REC) as a proof that they provide a minimum amount of electricity that is generated through renewable sources.⁵⁴ Thus, by 2010, the minimum share of renewable energy should be 6%.

3.2.2. *The Flemish implementation of the EU ETS*

A 2005 order of the Flemish government provides the legal basis for the implementation of the EU Emissions Trading Scheme in the Flemish region.⁵⁵ This order notably outlines the procedure for adopting the Flemish allocation plan in the first phase. For the second phase, a new order has been adopted at the end of 2007.⁵⁶

The Flemish allocation plan under the ETS for the period 2005-2007 was approved by the Flemish government in February 2005.⁵⁷ The Flemish installations that are covered by the scheme were divided into two groups: industry and energy production. In total, 179 installations in Flanders received an amount of 100,6 Mt CO₂-eq. allowances.

For the second trading period of the ETS (2008-2012), the Flemish government proposed to allocate 196,3 Mt CO₂ allowances to a total of 178 Flemish installations.⁵⁸

51. Flemish decree of 22 December 2006 (OJ, 27 March 2007).

52. Article 4 of the Flemish decree of 22 December 2006.

53. Article 19 of the Flemish decree of 22 December 2006.

54. Flemish decree of 7 May 2004 (OJ, 8 June 2004). Note that this decree has been the object of legal proceedings before the Constitutional Court. See Judgment n° 25/2005 of 2 February 2005 and Judgment n° 150/2005 of 28 September 2005.

55. Order of the Flemish government of 4 February 2005 (OJ, 28 February 2005).

56. Order of the Flemish government of 7 December 2007 concerning tradable emission allowances for greenhouse gases (OJ, 27 December 2007).

57. Order of the Flemish government of 19 February 2005 (OJ, 28 February 2005).

58. See http://www.lne.be/themas/klimaatverandering/co2-emissiehandel/toewijzingsplan-2008-2012/tekst-van-het-plan/060830_vertaling_plan_08-12_vs_5_zonder_wijz.pdf.

As mentioned above (cf. point 2.3.1), the regions and the federal government agreed in February 2008 on the distribution of the extra effort required by the European Commission. According to the agreement, the Flemish region has to further reduce the number of allowances by 2,4 Mt CO₂ per year. This means that a total of 193,9 Mt CO₂ (instead of the proposed 196,3) will be allocated to Flemish installations over the second trading period.

3.2.3. *The use of flexible mechanisms*

The Flemish region has decided to make use of the flexible mechanisms to reach its Kyoto emission target. In order to acquire emission credits under these mechanisms, the Flemish government follows a certain schedule⁵⁹ which is comparable with the federal government's approach.

Until 2007, the Flemish government had the possibility to acquire CDM and JI credits from individual project developers or from carbon funds. This has effectively happened in the past months. The Flemish government has signed a contract for a CDM project with a company from Chile⁶⁰ and decided to participate in a number of international carbon funds⁶¹: in the Multilateral Carbon Credit Fund (MCCF) for 22 million euros, in the Carbon Fund for Europe (CFE) for 10 million euros and in the Asia Pacific Carbon Fund (APCF) for 20 million euros.⁶²

Since 2008, the Flemish government also has the possibility to directly buy CDM and JI credits on the international market. However, should the price of CDM and JI credits prove to be too high, the Flemish region could make use of international emissions trading and buy AAUs⁶³ on the international market.⁶⁴

59. Order of the Flemish government of 12 January 2007 (OJ, 23 February 2007).

60. The project concerns the installation of a gas collection system on a landfill site in Chile. According to the contract, the Flemish region will acquire 280 000 CDM credits for the price of 7 euros per unit. See the Ministerial order of 10 January 2007 (OJ, 24 January 2007).

61. The participation in these carbon funds is expected to generate 30% of the emission credits that the Flemish region needs.

62. The participation in the MCCF and the APCF is financed by the Flemish Climate Fund through the Flanders Participation Company (Participatiemaatschappij Vlaanderen).

63. Assigned Amount Units.

64. However, the acquisition of AAUs is only possible if no cheaper domestic reduction measures can be timely executed.

3.2.4. *Other initiatives*

(a) *The benchmarking covenant*

The Flemish government has concluded a benchmarking agreement with the industry in Flanders (the so-called ‘Covenant’)⁶⁵. Under this agreement, more than 170 of the most energy-intensive companies have committed to become the most energy efficient in the world by 2012. In return for their efforts, the Flemish government guarantees these companies until 2012 that they will not be imposed any additional measures concerning energy efficiency or CO₂. Moreover, the allocation of ETS allowances to companies participating in the covenant is based on the energy plans that these companies have developed under this agreement.

The above-mentioned agreement on the Belgian Nap for the second ETS phase risks to jeopardize the Flemish government’s capacity to allocate the covenant-based allowances. It is therefore possible that the Flemish government will revise the benchmarking agreement.

(b) *The mobility plan*

In 2003, the Flemish government adopted a mobility plan.⁶⁶ The plan contains a number of policy recommendations in terms of sustainable mobility. One of the objectives of the Flemish mobility plan is to reduce the emissions of greenhouse gas by transport. Concretely, the plan’s target is to stabilise traffic and transport related CO₂ emissions at 1990 levels by 2010.

(c) *Awareness campaigns*

The Flemish government has started several campaigns to raise awareness of the climate problem among Flemish citizens. The concept of a tonne-contract, for instance, allows Flemings to calculate how much CO₂ emissions they reduce by taking certain individual actions (for instance by taking the bike instead of the car).⁶⁷ Another campaign is the so-called ‘day of thick sweaters’.⁶⁸ It concerns one day in the year on which households, business and schools are encouraged to limit the use of energy. The next campaign will be held on 15 February 2008.

65. For the version in Dutch, see <http://www.benchmarking.be/docs/BMconv%2002.11.29.doc>.

66. See <http://www.mobielvlaanderen.be/pdf/mobiliteitsplan/beleidsvoornemens.pdf>.

67. See <http://www.lne.be/themas/klimaatverandering/toncontract>.

68. See <http://www.lne.be/campagnes/dikke-truiendag>.

3.3. Main measures taken by the Walloon region

The 2004 internal burden-sharing agreement states that the Walloon region has to reduce its GHG emissions by 7,5% compared to its 1990 level for the period 2008-2012. This means that emissions must decrease from 54,8 Mt CO₂-eq (in 1990) to 50,7 Mt CO₂-eq. in 2008-2012. It should be noted that in a business-as-usual scenario, so without any reduction efforts, GHG emissions in the Walloon region are estimated to rise by 5% between 1990 and 2010.⁶⁹

According to the Walloon region's 2001 climate change action plan (see point 3.3.1.a.), a reduction of GHG emissions (-1,85%) has already been observed during the period between 1990 and 1999 in the Walloon region. Data on GHG emissions seem to confirm such an analysis. They show that such emissions have largely decreased in the Walloon region since 1990. In 2004, indeed, the Walloon region knew a GHG emission reduction between 6,14%⁷⁰ and 5,4%⁷¹ from its 1990 level. The shutdown of iron and steel furnaces and coke refineries in energy industries, together with a switch to natural gas, explain the greater part of the decrease. The development of biogas recovery in the waste sector and the growing use of biomass fuels in cement kilns have also contributed to the trend in recent years.

Nevertheless, in spite of these positive results, emissions from road transport and space heating sectors have continued to grow, as in the other two regions of Belgium. In addition, the world's largest steelmaker "Arcelor-Mittal" intends to re-fire High Furnace N° 6 (HF6) in Seraing because of the strong demand for steel works.

3.3.1. *The framework plans*

(a) *The 2001 climate change action plan*

The Walloon government approved on 19 July 2001 an "Action Plan for the Walloon region on climate change (called hereafter "2001 Climate Change Action Plan").⁷² This 2001 Climate change Action Plan intends to reduce the

69. See p. 40 of the 2001 Climate Plan.

70. See the Walloon region allocation Plan for the period 2008-2012 (p.5). See the web site http://environnement.wallonie.be/air/emission_trading/plan_co2_2008_2012.pdf. See also Press release of the Walloon government dated 15 March 2007 "Lutte contre le réchauffement climatique: 82 mesures au profit des générations futures!", http://gov.wallonie.be/code/fr/comm_detail.asp?Primary_Key=1829.

71. See http://environnement.wallonie.be/eew/downfile.aspx?dwn=dossier_AIR_guns.pdf&dir=rap_dsci.

72. This Action Plan can be found on the web site: <http://energie.wallonie.be/servlet/Repository/PlanClimatWallon.DOC?IDR=473>.

GHG emissions of the Walloon region by 7,5% from the 1990 levels for the period 2008-2012. It contains 89 measures which affect all the economic sectors emitting GHG. These measures aim at short-, medium- and long-term reduction actions (for the latter, results could only be seen after the period 2008-2012). Domestic GHG reduction actions have been given priority. They must allow to maintain the competitiveness of the Walloon enterprises on the global market and must make sure not to hinder the economical development of these enterprises.⁷³ They are supplemented by the three flexible mechanisms of the Kyoto Protocol, without which it would be technically, economically and socially difficult for the Walloon government to fulfil its reduction commitments.

(b) *The 2007 air-climate plan*

The Walloon government adopted on 15 March 2007, an action program “Air-Climate” (hereafter “Air-Climate Plan”).⁷⁴ This Air-Climate Plan integrates elements of the 2001 Climate Plan. It aims at bringing remedies to the global problem of atmospheric pollution of which climate warming is one of the central aspects. It contains 82 priority measures, among which 40 are considered as immediate priorities. They affect all sectors of human activity (industrial, household, production and provision of energy, transport-infrastructure, waste, agriculture, silviculture,...). It was submitted to a public consultation from 27th March to 20th May 2007. Critics are strong towards it.⁷⁵

Within this framework, and on the basis of two identified actions, several decisions have already been taken by the Walloon government.⁷⁶

73. See p. 39 of the 2001 Climate Plan.

74. This plan is accessible on the web site of <http://air.wallonie.be>.

75. See on those critics: the web site <http://www.iewonline.be/spip.php?article178> of Inter-Environnement Wallonie; avis A.870 du Conseil économique et social de la Région Wallonne relative au projet de plan Air-Climat, <http://www.cesrw.be/pics/200766112429cUF.pdf>; avis CWEDD/07/AV.688 du 15 mai 2007 on http://www.environnement.wallonie.be/cgi/dgnre/generateur/sites/Modules_NTL/Donnees/cwedd/Documents/Media_NTL851/Plan_Air-climat.pdf.

76. On the basis of the identified action “the region shows the way ..”, the Walloon government has recently decided to conclude a public procurement contract aiming at feeding exclusively with green electricity the 300 administrative buildings belonging to the Walloon region. The Walloon government has also decided to switch off lights on the regional motorways during the night. Decision has also been taken to encourage private individuals to replace their old car by a new less-polluting car through the granting of a subsidy. A penalisation is also foreseen in case the new car is more polluting than the old one. On the basis of the identified action “fiscal incentive”, the government has also decided that traffic lights on the roads will function with bulbs whose life duration is three times more important and which allow a 50% energy economy.

3.3.2. *The regional implementation of the EU ETS*

The ETS directive was transposed in the Walloon law by a decree of 10 November 2004⁷⁷, modified later by another decree of 22 June 2006⁷⁸. Pursuant to this legislation, a regional allocation plan was adopted by the Walloon government on 27 January 2005.⁷⁹ 128 corporations received a maximum CO₂ emission quota based on energy audits performed at each site.

However, as explained above (cf. point 2.3.1), the European Commission did not accept the draft national allocation plan for the period 2008-2012 and the regions had to negotiate the redistribution of the allowances. The re-opening of High Furnace No. 6 in Seraing at the request of the world's largest steelmaker, "Arcelor-Mittal", further complicated these negotiations as the rejected NAP for the second phase did not foresee the re-launch of these activities. Arcelor-Mittal requested an extra amount of 4 Mt CO₂ allowances per year.

On 1 February 2008, an agreement between the regions was eventually reached. According to this agreement, the Walloon region has to reduce the proposed number of allowances by 2,4 Mt CO₂. It was also agreed that Arcelor-Mittal will acquire 1,4 Mt CO₂ by itself whilst the Walloon region will provide the remainder of the needed allowances. In addition, the federal region pledged to provide 600.000 Mt CO₂ per year to the Walloon region.

Each operator concerned by the regional allocation plan must, at the end of each year, submit a declaration of the GHG produced by his installation during the year. This declaration is verified by a certified organism. An order of 10 November 2005 of the Walloon government determines the sectoral conditions related to the installations having an activity emitting CO₂⁸⁰ and an order of 12 January 2006 of the Walloon government concerns the verification of the declarations of specified GHG emissions.⁸¹

77. OJ, 2 December 2004. Note that this decree has been the object of legal proceedings. See Judgment n° 92/2006 of 7 June 2006 by the Constitutional Court.

78. OJ, 12 July 2006. This decree is complemented by three orders of 27 January 2005 (OJ, 10 February 2005); two orders of 23 February 2006 (OJ, 16 March 2006); and two orders of 1 February 2007 (OJ, 16 February 2007). Each of them fixes GHG emission quotas.

79. This plan is accessible on http://environnement.wallonie.be/air/emission_trading/plan_co2_final_janvier05.pdf.

80. OJ, 2 December 2005.

81. OJ, 1 February 2006.

3.3.3. *The carbon fund*

To fulfil the regional GHG reduction commitment, the Walloon Government has decided in December 2004 to participate to the World Bank CDCF (Community Development Carbon Fund)⁸² for USD 5 millions which should deliver 0,5 Mt CO₂-eq. in 2008-2012⁸³. The Walloon Government considers that this will create +/- 100.000 certified emission reductions (CERs) a year for the 2008-2012 period.

3.3.4. *Other initiatives*

(a) *The regional renewable energy/cogeneration scheme and the regional aid for green electricity production*

Aside from the ETS, the Walloon region has established a separate scheme dealing with the promotion of renewables through a “green certificate scheme (GCS)”. This GCS has the vocation to stimulate the development of new structures of production using renewable energy sources (for instance wind energy, solar energy, hydro power, energy from biomass, ..) or using the cogeneration technique (a mode of production of heat and electricity simultaneously requiring less fossil fuel) in order to reduce CO₂ emissions. This GCS is imposed through a Walloon decree of 12 April 2001 related to the organization of the regional electricity market⁸⁴ and details are given in an order of 4 July 2002 of the Walloon government related to the promotion of green electricity⁸⁵.

According to the Walloon decree of 12 April 2001 above⁸⁶, a regional production aid for green electricity can also be organized as an alternative to the GCS. To get the aid, the electricity producer must be in possession of green certificates (GC). A convention is concluded between the Walloon Minister of Energy and

82. The CDCF, a public/private partnership, was created in March 2003 by the World Bank in collaboration with the International Emissions Trading Association (IETA). This fund aims at providing carbon finance through the clean development mechanism (CDM) of the Kyoto Protocol. It targets small-scale projects and local communities in the developing world. Contributors to the CDCF support projects that measurably benefit poor communities and their local environment, and receive in return, certified emission reductions (CERs) from these projects. Host country project communities, meanwhile, benefit from clean water, improved health services, and jobs for women, and simultaneously invest in clean technologies that help reduce greenhouse gas emissions and mitigate climate change. To know more on the CDCF see the web site: <http://carbonfinance.org/docs/CarbonFundweb.pdf>.

83. See http://ec.europa.eu/environment/climat/pdf/nairobi2006_kyoto-invest.pdf.

84. OJ, 1 May 2001. This decree has been modified several times and is supplemented by 105 Walloon orders.

85. OJ, 17 August 2002. This order has been so far modified ten times.

86. OJ, 1 May 2001. This decree is supplemented by 105 Walloon orders.

the producer. This convention mentions the aid duration with a maximum of 120 months. This aid is brought in exchange of GC (x euros for one GC). In other words, the producer either sells his GC on the regional market or returns them to the Minister of Energy in exchange of a production aid. In that perspective, an order of 6 November 2003 related to the production aid granted to green electricity⁸⁷ has been adopted by the Walloon government. A Ministerial order of 24 May 2004 defines the procedures and modalities to introduce the request to get the production aid⁸⁸.

(b) The branch agreements

The incentives to reduce GHG emissions covered by the Kyoto Protocol are reinforced by voluntary branch agreements under which the main industry sectors made an undertaking to improve their energy efficiency. These agreements are characterized by 4 steps: (a) signature of a declaration of intent; (b) realization of an energy audit within the companies to prepare the GHG emission reduction plan; (c) elaboration of the branch agreement setting out targets in precise figures and signature; (d) implementation of the agreement and yearly report.⁸⁹

By order of 30 May 2002 of the Walloon government related to the granting of subsidies for the improvement of energy efficiency and the promotion of rational use of energy of the private sector⁹⁰, the companies which participate to a branch agreement are eligible for obtaining a preferential subsidy of 75% of the costs for the realization of the energy audit.

(c) The plan for sustainable management of energy

At the end of 2003, a Walloon plan for sustainable management of energy⁹¹ was adopted. It proposes ways of enhancing the policy of rational use of energy (RUE) and developing renewable energy sources (RES) and cogeneration from fossil fuel. RUE is promoted by various grants (notably for the realisation of energy audits, etc.) or tax deductions on investments (insulation of houses,

87. OJ, 11 February 2004.

88. OJ, 2 August 2004.

89. See the list of the signatories of such agreement on <http://energie.wallonie.be/servlet/Repository?IDR=5270>. See also the modalities of such agreements on http://energie.wallonie.be/servlet/Repository/Modalités_de_mise_e.PDF?IDR=372.

90. OJ, 2 July 2002. This order is called in French "AMURE".

91. Accessible on the web site http://energie.wallonie.be/servlet/Repository/Plan_pour_la_maitri.PDF?IDR=424.

replacement of old boilers and so on). The plan's target is to produce by 2010 8% of electricity from RES (compared with less than 2.6% in 2000), 15% of electricity from cogeneration (compared with 3.4% in 2000) and 9% of heat from RES (compared with 6% in 2000). Attaining that objective involves the promotion of green electricity through (a) eligibility (possibility for a client to choose his provider), (b) the attribution of a minimum quota of RES certificates (green certificates) and (c) aid mechanisms.

(d) The transport and mobility plan

The transport and mobility plan in Wallonia is a voluntary regional sustainable program which includes sustainable transport goals. The Walloon region adopted on 1 April 2004 a decree to support a mobility plan to be prepared in cooperation with the municipalities⁹².

(e) Energy efficiency of buildings

In addition to various financial incentives, the Walloon region adopted in April 2007 a Framework decree in order to promote energy efficiency of buildings⁹³. This Framework decree transposes the European Directive 2002/91/EC on the energy performance of buildings. The scope of application, the procedure, the framework and the sanctions are defined in this Framework decree. The latter will be integrated in the CWATUP which becomes the CWATUPE.

3.4. Main measures taken by the Brussels-Capital region

Taking into account the 2004 internal burden-sharing agreement between the federal and regional governments, the Brussels-Capital region is allowed to increase its GHG emissions by +3,475% (+0,142 Mt CO₂-eq.) compared to its 1990 level for the period 2008-2012. This means that the Brussels-Capital region is allowed to emit more GHG in 2008 than in 1990. This shows very well that within Belgium, compared to the other two regions, Brussels-Capital region's GHG emissions are negligible. This can be explained by its specificities (de-industrialization, limited territory, ..). This does not mean however that

92. Decree of 1 April 2004 related to mobility and local accessibility (OJ, 13 May 2004).

93. Framework decree of 19 April 2007 modifying the Walloon code of land planning, urbanism and inheritance (abbreviated in French: "CWATUP") in order to promote energy efficiency of buildings (OJ 29 May 2007).

Brussels-Capital's GHG emissions within its limited territory are not high. On the contrary, they are high and, since the 1990 base year, Brussels-Capital emissions have known such a strong growth that, despite the possibility to emit more (as determined by the 2004 internal burden-sharing agreement), the Brussels-Capital region is obliged to provide a reduction effort much more important to respect its commitment for the period 2008-2012.

In the Brussels-Capital region, GHG emissions are mostly due to heating in the residential sector and service industry (~70%) and road traffic (~20%).⁹⁴ More than 90% of these emissions are CO₂. The priorities in the Brussels-Capital region are thus the space heating and transport sectors.

3.4.1. *The air-climate plan*

In the Brussels-Capital region, the main sources of most atmospheric pollutants are also the sources of greenhouse gases. That is why, at the end of 2002, the Brussels-Capital government adopted a plan combining the structural improvement of air quality and the fight against climate change (hereafter "2002 air-climate plan")⁹⁵. This 2002 air-climate plan outlines the measures to be implemented until 2010 to improve the quality of the air and to reduce GHG emissions.⁹⁶ The main lines of actions of this 2002 air-climate plan are oriented towards the two main sources of pollution: energy consumption of buildings and of industries and road transport. It also indicates that the Brussels-Capital region gives preference in the implementation of flexible mechanisms to the use of the clean development mechanism.

3.4.2. *The regional implementation of the EU ETS*

The ETS directive was transposed in the Brussels-Capital law by order of 3 June 2004 of the government of the Brussels-Capital region⁹⁷. Pursuant to this legislation, a first regional allocation plan 2005-2007, initially elaborated by IBGE/BIM⁹⁸, was adopted⁹⁹. A draft for a second regional allocation plan for the

94. Belgium's fourth national communication on climate change under UNFCCC (2006), p. 31.

95. Decision G-31.55.0. See also http://www.ibgebim.be/francais/pdf/Air/PLANAC_complet.pdf.

96. The legal basis for this plan is the ordinance of 25 March 1999 on the evaluation and improvement of ambient air quality (OJ, 24 June 1999) which transposes European Directive 1996/62/EC. This ordinance has been modified by an order of 8 November 2001 (OJ, 4 December 2001, p. 41667) and an ordinance of 18 March 2004 (OJ, 30 March 2004, p. 17836).

97. OJ, 23 June 2004.

98. In the Brussels-Capital region, the application of environmental law is administered and controlled by the Brussels Institute for Environmental Management (known as "BIM" or "IBGE").

99. http://www.ibgebim.be/francais/pdf/Entreprise/pab_septembre2004_fr.pdf.

period 2008-2012 was submitted by Belgium to the European Commission for approval.¹⁰⁰

However, as explained above (cf. point 2.3.1), the Commission did not accept the draft national allocation plan for the period 2008-2012 and the regions had to negotiate the redistribution of the allowances. On 1 February 2008, an agreement between the regions was eventually reached. The draft allocation plan of the Brussels-Capital region was thereby not modified.

In the Brussels-capital region, the ETS is imposed so far to 14 big combustion companies.¹⁰¹

3.4.3. *The carbon fund*

The Brussels government has decided in November 2004 to invest in the World Bank CDCF (Community Development Carbon Fund) for 9,5 millions US\$ by 2014, while applying the principle of supplementarity, that is to say in taking the commitment to resort to the flexibility mechanism for a maximum of 50% of its reduction effort. Its participation in the CDCF will deliver 0,9 Mt for the 2008-2012 period. The Brussels Government considers that this represents +/- 200.000 certified emission reductions (CERs) a year for the 2008-2012 period, representing 30% of the regional reduction effort.¹⁰²

3.4.4. *Other initiatives*

(a) *The 2004 regional renewable energy/cogeneration scheme*

Like the Walloon region, and aside from the ETS, the Brussels-Capital region established in 2004 a “green certificate Scheme (GCS)”.¹⁰³ The principle is quite simple. The electricity producer whose installation is certified by IBGE and whose installation allows a CO₂ economy equal or superior to 5% compared to installations of reference (classic installations) obtains a Green Certificate every time he spares x kg of CO₂ when producing electricity. All electricity providers in the Brussels-Capital region are obliged to buy annually Green Certificate allo-

100. http://www.ibgebim.be/francais/pdf/Actualités/PBA2_PlanAllocation_10_fr.pfd.

101. See the IBGE/BIM's 2006 activity report (p. 7) on the web site http://www.ibgebim.be/francais/pdf/IBGE/Rapport_activites_2006_Bruxelles_Environnement_IBGE.pdf.

102. See Allocation Plan 2008-2012 for the Brussels-Capital region (p. 10).

103. Order of the government of the Brussels-Capital region of 6 May 2004 related to the promotion of green electricity and of the cogeneration of quality (OJ, 28.06.2004).

wance in proportion to the volume of electricity that he sells. The Green Certificate allowance must be respected otherwise fines are imposed. In practice, this means that the electricity producer can sell his Green Certificates to the electricity providers at the market price. IBGE/BIM is in charge of the management of the GC System. Because of the lack of GC on the Brussels's GC market, an interchangeability mechanism has been organized with the Walloon GC market.¹⁰⁴ Finally an order of 29 March 2007 of the Brussels-Capital region's government has determined the GC quotas for 2008 and 2009 (2.5%), 2010 (2,75%), 2011 (3%), 2012 (3,75%).¹⁰⁵

In parallel to this scheme, an action plan "Energy" was launched in 2005 by the Minister of the Environment of the Brussels-Capital region to promote energy efficiency of buildings but also to promote more particularly the cogeneration technique.¹⁰⁶ The plan focuses on three points: (a) information/public awareness; (b) encouragement/experiment/demonstration; and (c) investment support (for companies and/or individuals).

(b) *The regional mobility plan*

The Brussels-Capital region's first mobility plan, called "IRIS Plan", was approved by the Brussels government on 1 October 1998. Its objective was to stabilize car journeys in the peak morning rush hour for 2005 at the levels of 1991, which would also reduce CO₂ emissions. This plan has not however reached its objectives.

The study of a new IRIS plan began in 2002. Experts on mobility have updated the data and have drawn the main trends for 2015 if new initiatives are not taken. Ten measures have been identified to elaborate a new IRIS Plan. But so far, no draft new plan has been tabled and no schedule to update the plan has been established.¹⁰⁷

(c) *The "econ-dynamic company" label*

The Brussels-Capital region has inaugurated a voluntary labelling called the "econ-dynamic company". In order to be given the label, the company signs a

104. See the Ministerial order of 3 May 2005 bearing recognition of Walloon green certificates (OJ, 17 May 2005).

105. OJ, 30 May 2007.

106. See http://evelyne.huytebroeck.be/IMG/pdf/20051117_cogeneration_dossier_presse.pdf. See also <http://evelyne.huytebroeck.be/spip.php?article77>. As concrete example, see also http://www.ibgebim.be/francais/pdf/Entreprise/Energie/07_PLAGE_Log.pdf.

107. See on the subject <http://www.weblex.irisnet.be/data/Crb/Biq/2005-06/00063/F/images.pdf>.

charter undertaking to respect a certain number of principles of ecological management related to energy, mobility and air quality. In 2006, there were 79 sites holding this label.¹⁰⁸

(d) *Brussels air allowance*

In 2006, an order of 7 September 2006 of the Brussels-Capital region related to granting conditions of the “Brussels Air allowance”¹⁰⁹ (in French: “Prime Bruxell’Air”) was adopted. This regulation falls within the more general framework of the 2002 Air Climate Plan and follows the agreement “Brussels Air” (in French “Bruxell’ Air”) taken between the minister in charge for environment and the minister in charge of mobility¹¹⁰. This text contains structural and emergency measures to be implemented in view to reduce atmospheric pollution due to road traffic. This “allowance Brussels Air” foreseen in the text should be given in exchange for the crossing of vehicle number plates and/or the demolition of polluting vehicles. The allowance takes the form of a metro/tram/bus subscription or a Cambio Start subscription¹¹¹ or a bicycle allowance, with the possibility to combine them, if necessary.

(e) *Energy efficiency of buildings*

In addition to various financial incentives, the Brussels-Capital region also adopted in June 2007 an ordinance in order to promote energy efficiency of buildings¹¹². This Framework decree transposes the European Directive 2002/91/EC on the energy performance of buildings.

108. See IBGE/BIM’s 2006 activity report (p. 5) on the web site http://www.ibgebim.be/francais/pdf/IBGE/Rapport_activites_2006_Bruxelles_Environnement_IBGE.pdf.

109. OJ, 19 September 2006.

110. To have more explanations see the web site: http://www.ibgebim.be/FRANCAIS/pdf/Actualites/Bruxell_air.pdf.

111. For more details, see the web site: <http://www.cambio.be>.

112. Ordinance related to the energy performance and the inner climate in the buildings (OJ 11 July 2007).

4. Conclusion

4.1. Present results

Will Belgium eventually reach its Kyoto target? The answer depends on the source, and on the method.

The 2006 EEA report on greenhouse gas emissions in Europe¹¹³ was not positive. On the basis of its Annex 8, the report noted that emissions in Belgium in 2004 amounted to 147,9 Mt, meaning an *increase* of 0,7% in comparison by 1990.¹¹⁴ The report concluded that, with the (at that time) existing measures, Belgium was not on track to meet its target. Even worse, emissions in Belgium would increase by 1.2% by 2010. The report further estimated that Belgium would only succeed in bringing its 2010 emissions 6,6% below 1990 levels, even if additional measures are taken and Kyoto mechanisms are used.¹¹⁵ In a reaction to this report, whose figures are however confirmed by the 2006 Belgium's report on demonstrable progress under the Kyoto Protocol¹¹⁶, the federal and Flemish ministers argued that the EEA report was based on outdated data¹¹⁷.

Since, new figures have been presented. According to Belgium's latest greenhouse gas inventory¹¹⁸ – the official annual report coming from the Belgian sources - the amount of GHG emissions were 2,6% below those of 2004 and 2.1% below base-year levels in 2005. Despite this decrease of 2,1%, the GHG emissions in Belgium in 2005 remain 3,6% above its linear Kyoto target path. This means that Belgium needs to reduce its GHG emissions by a further 5,4% below its base year levels in order to meet its Kyoto target by 2008-2012. The following figure shows the situation in 2005:

113. Greenhouse gas emission trends and projections in Europe 2006, EEA report No 9/2006.

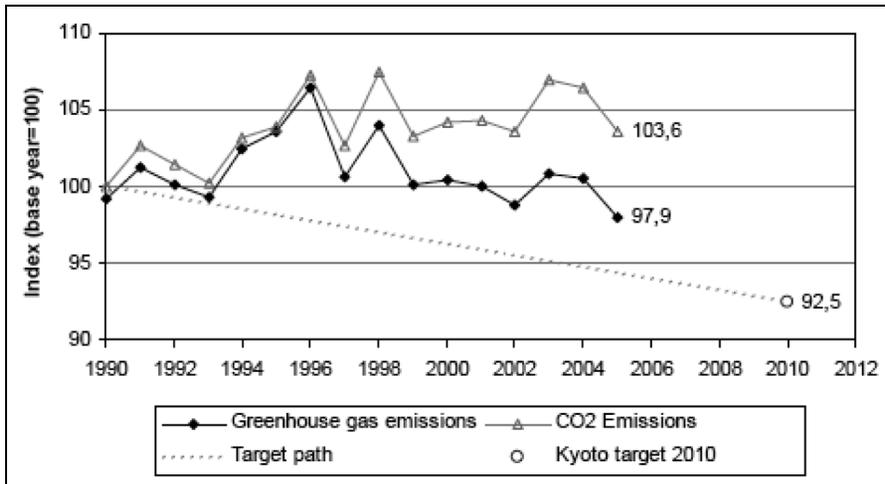
114. See Annex 8 to the 2006 EEA report, p. 2.

115. See Annex 8 to the 2006 EEA report, p. 32.

116. http://www.climatechange.be/pdfs/RDP_ENG%20LR.pdf. See p. 10 of this report.

117. 'België haalt Kyoto wel', De Standaard, 27 October 2006.

118. Belgium's greenhouse gas inventory (1990-2005) – National Inventory Report submitted under the United Nations Framework Convention on Climate Change, April 2007, available from http://www.climatechange.be/pdfs/NIR_BELG%202007_070419.pdf. See p. 18 of this inventory.



(Source: Belgium's greenhouse gas inventory (1990-2005))

Furthermore, according to the Federal Planning Bureau of Belgium, a decrease of the energy-intensity of the Belgian economy would stabilise greenhouse gas emissions in the period 2007-2012.¹¹⁹ Nonetheless, Belgium would exceed its Kyoto target by 4,3%. The Bureau estimates however that the reduction target could be attained provided that Belgium takes all intended measures and makes fully use of Kyoto's mechanisms.

This is also the conclusion of the latest report on Greenhouse gas emission trends and projections in Europe 2007, presented by the European Environmental Agency in November 2007.¹²⁰ According to this report, the EU-15 can meet, and may even over-shoot, its 2012 Kyoto target to reduce greenhouse gas emissions to 8% below 1990 levels if Member States implement now all additional policies being planned and use extensively the flexibility mechanisms of the Kyoto system. More specifically, for Belgium, the report adds that "*emissions in 2005 were one percentage point above the level projected in the 'with existing measures' scenario for 2010. Belgium will not achieve the Kyoto target with domestic measures (Belgium did not provide an additional measure projection). However, using the Kyoto mechanisms - Belgium plans to purchase Kyoto units of 7,0 million tonnes for each year of the commitment period - Belgium projects*

119. Perspectives économiques 2007-2012, Bureau fédéral du Plan, May 2007, available from http://www.plan.be/admin/uploaded/200705111357340.ef20072012_fr.pdf.

120. Greenhouse gas emission trends and projections in Europe 2007 – Tracking progress towards Kyoto targets – EEA report n° 5/2007.

to reach the Kyoto target”^{121,122}. In other words, without the use of the Kyoto flexible mechanisms, Belgium will not reach its Kyoto target. Belgium is not an exception. Most EU members will need to use (and sometimes strongly) the Kyoto flexible mechanisms to reach their target.

The domestic measures have thus in Belgium produced less results than anticipated. This is most probably why, in February 2007, Prime Minister Verhofstadt declared that extra efforts would be needed in the short-term in order to reach the Kyoto target.¹²³ For that reason, he announced the development of a “Kyoto-plus” plan and the launch of a consultation process between the regions. However, no official plan following this line has yet been tabled by the government. The then federal minister for the environment, Bruno Tobback, declared in the same month in the Belgian Senate that the biggest reduction efforts are currently done by the Walloon region.¹²⁴ He added that efforts in Flanders lagged behind and that emissions in the Brussels region were higher than expected.

As a result, the limited performance of the Belgian internal measures means that Belgium has not (yet) managed to decouple its economic growth and the intensity of its GHG emissions. This is particularly clear with the case of Arcelor-Mittal.

4.2. Possible improvements

Firstly, any research on this topic quickly encounters difficulties regarding the quality of information. Statistics often seem difficult to reconcile for various reasons. The information about federal and regional programs of action is not always regularly updated. Regional programs are often superposed (climate warming, energy, renewable energy, air pollution), which makes any evaluation difficult.

121. See the Annex to the 2007 EEA report related to Belgium Country Profile, p.3.

122. According to our evaluations, at federal level, 2,46 Mt per year (as foreseen by the internal burden sharing agreement) will be acquired. At the Flemish level, the second Flemish Climate Change Plan provided that the Flemish government purchases 21,4 Mt of Kyoto units over the period 2008-2012, i.e. 4,28 Mt per year. This is done through own projects and through the participation in carbon funds. At the Walloon level, 0,9 Mt must be purchased over the period 2008-2012 (through the participation in the Community Development Carbon Fund), i.e. 0,18 Mt per year. Finally, at the Brussels level, 0,5 Mt must be purchased over the period 2008-2012 (through the participation in the Community Development Carbon Fund), i.e. 0,1 Mt per year.

123. See the press release of 2 February 2007 by the council of ministers, available from <http://presscenter.org/archive/20070202/2bee51ceaa0d8e1133c4df7b4d3d4380/?lang=nl&cprLang=fr>.

124. <http://www.senate.be/www/?MIval=/publications/viewPubDoc&TID=50357495&LANG=nl>.

Secondly, the actions of Belgian authorities seem to have remained modest in some aspects (like in most other member States of the EU). ETS quotas of the first generation have been distributed quite generously. Initiatives regarding transport and heating still remain weak until now, although these two problems are heavy sources of greenhouse gases in Belgium. Actions regarding the improvement of efficiency in electricity production based on fossil fuels remain limited, as are also actions regarding the development of full renewable energy sources.

Thirdly, in this context, Belgium fights climate change at the same time on the federal and regional level. This approach constitutes an advantage to the extent that it allows the implementation of differentiated and possibly less costly strategies. On the other hand, it requires to take into consideration a more complex and thus often slower decision-making process. In this respect, the establishment of the National Allocation Plan for the second phase of the EU ETS has certainly suffered from the electoral agenda. Recurring uncertainties with regard to the distribution of CO₂ emission rights between the three regions have been the consequence. This situation was at the same time harmful to business investments and to GHG reductions. It must also be said that the scattering of responsibilities in the field of energy policy is mentioned by some observers as a hindrance.

Fourthly, according to certain studies, the cost of internal reduction measures in Belgium will be substantially higher than the use of the flexibility mechanisms under Kyoto. Until now, this approach does not seem to have benefited from sufficient attention in the context of the objectives that have been defined by the European Council in 2007.

As a general conclusion, it is necessary to take into consideration all the lessons of this period. To reach the new objectives adopted by the European Council in March 2007 (20% or 30% reduction of GHG emissions in 2020), Belgium will need to make more intensive efforts. This will not be possible if the problems which appeared in the last years are not solved.