Climate Law

Belgian Report

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Section A. Prevention and Management

Part I. Introduction

I 1. General Context

(1) Belgium is a founder member of the European Union (originally European Economic Community). Membership of the European Union has been of very great importance for the development of environmental policy and law in general and climate policy and law in particular. European climate law, in the form of directives, regulations and decisions are binding under the conditions and in the circumstances set out in the relevant provisions of the EC-treaty.

To understand this report, it is important to note that the Kingdom of Belgium is nowadays a rather complex federal state. In the early sixties of the last century, a state reform process started which gradually transformed Belgium, created in 1830 as a unitary state, into a federal state. In 1963 a so-called language border was established. The law recognised four language areas: the Dutch-speaking area, the French-speaking area, the German-speaking area, and the bilingual Brussels-Capital Region. In 1970, these areas were enshrined in the Constitution (art. 4). On the Flemish side, there was an increasing conviction that language equality as such was not sufficient. It was felt that the difference in language was accompanied by a difference in culture. This led to the demand for independent authority in cultural matters, without the intervention of French-speaking politicians and government officials. A so-called cultural autonomy was established in response to these Flemish demands. In 1970, the Constitution (art. 2) recognised three cultural communities: the Dutch, the French and the German cultural communities. In the following years, the cultural communities were granted their own parliament (cultural board), their own government (committee of ministers), and their own administration. In 1980, the cultural communities became the present *communities*:

the Flemish, French, and German-speaking communities. Their powers were extended to certain aspects of health care and social policy. In 1989, they also became competent for virtually all matters concerning education. The industrialisation of Belgium began and was most intensive in Wallonia, with emphasis on the coal and steel industry. The decline first of the coal-mining industry, and later of the steel industry, in the 1960s and 1970s, stirred up Walloon regionalism. The impression in Wallonia was that the unitary state, which was also governed by Flemish politicians and officials, was not sufficiently concerned with the economic crisis suffered in Wallonia at a time when Flanders was actually flourishing economically. Furthermore, there was little trust in the financial and economic decision-making centres elsewhere, particularly those situated in Brussels. Wallonia expressed the desire to obtain its own decision-making powers in socio-economic matters. In response to this demand in Wallonia, three *Regions* were created. In 1970, the principle of three regions was enshrined in the Constitution: the Flemish Region, the Walloon Region and the Brussels-Capital Region (art. 3). This principle was first elaborated for a provisional period (1974-1975), and acquired a more permanent character in 1980, at least as regards the Flemish and Walloon Regions. Owing to the coexistence of the communities on the one hand, and the regions on the other hand, the Belgian federal system is very complex. Hitherto, each new round of State reforms raised the question in Belgium whether the new state structure was or was not a federal system. The fourth reform of the State (1993) leaves no room for doubt that it is. The new Article 1 of the Constitution now actually stipulates that "Belgium is a Federal state constituted of Communities and Regions".

On the *federal level*, there is a Federal Government, a Federal Parliament (with two Chambers), re-elected every 4 years, a Federal Administration (comprising different Ministries or so-called Federal Public Services) and different Federal Institutions, such as the Federal Planning Bureau or the Federal Agency for Nuclear Control. Although powers have to a considerable extent been devolved to the Regions and Communities, the federal authority still holds some important powers. Federal government has all the powers which are not allocated to the Regions or Communities. Federal competencies include: police and civil protection; justice (including courts and tribunals); civil law; penal law; monetary policy (in the framework of the European economic and monetary union); economic, financial and trade law (including consumer protection law, public procurement regulations, and maximum state aid); some aspects of energy policy (nuclear power, power stations investment planning, heavy infrastructure for storing, distribution and production of energy, tariffs); traffic regulations (land, water, air) and some aspects of environmental policy, such as product standards, protection against ionising radiation and the protection of the North Sea.

Each Community and Region has its own legislative assembly (Council or Parliament), and executive body (Government), the composition and functioning of which are fixed by the Constitution and special-majority federal laws enacted in implementation thereof. Since the Communities and Regions overlap, the composition of the Community Parliaments is based on that of the Regional Parliaments, the sole exceptions being that of the "Council of the German-speaking Community" and the "Parliament of the Brussels-Capital Region", which are directly elected independently. The Communities and Regions are invested with legislative power equal to that of the federal legislature. In many areas, the Communities and Regions have sole authority to legislate by "decrees" (or "ordinances" in the Brussels-Capital Region) having the force of statutes throughout the territory for which they are responsible. Decrees may repeal, amplify, amend or replace statutory provisions in force in the allocated areas of responsibility. Like statutes, they escape review by the ordinary courts and the

administrative courts; for that reason they have been placed under the control of the Constitutional Court.

The legal equality of federal, community and regional statutes is a distinguishing feature of the Belgian federal system and averts the incidences of concurrent jurisdictions found in certain federal States which operate on the *"Bundesrecht bricht Landesrecht"* principle. In fact, in Belgian public law, concurrent jurisdictions are the exception to the general rule of exclusively divided jurisdictions between the federal authority and the federated entities. The responsibilities of the Communities and Regions, albeit restrictively allocated, are very broad. The Communities have responsibility for cultural affairs, education, personalised services, and the use of languages in certain matters. The Regions have exclusive or partial jurisdiction over land use and planning, environmental and water policy, rural redevelopment and nature conservation, housing, agricultural policy, economic policy, energy policy, local authorities, employment policy, public works and transport. The State reform of 1993 invested the Communities and Regions with extensive jurisdiction in international relations, which some observers claim has left a confederate imprint on the State set-up[1].

As far as climate policy and law is concerned, this is a mixed competence. Depending on the subject matter, the federal government or the regional governments will be competent. However, a co-ordinating mechanism was set up in the form of a *National Climate Commission* consisting of 4 representatives of the federal government and of the 3 regional governments[2]. This Commission coordinates climate change policies in Belgium, works out a Belgian "burden sharing" agreement, prepares the Belgian position in international negotiations and develops a National Climate Plan.

(2) Belgium has ratified the UN Climate Change Framework Convention 1992[3] and the Kyoto Protocol[4].

(3) There has not been any particular reluctance to participate, together with the European Community and its Member States, in the UNFCC, the Kyoto Protocol and follow-ups of protocols or COP's.

I 2. Presentation and evaluation

(4) Belgian climate legislation consists mainly of the transposition and further implementation of international and EU climate legislation. There are also some additional federal or regional measures.

[1] L. LAVRYSEN, "Chapter 2. Belgium" in L.J. KOTZE & A.R. PATERSON, *The Role of the Judiciary in Environmental Governance. Comparative Perspectives*, Kluwer Law International, 2009, 86-88.
[2] Co-operation Agreement of 14 November 2002, *Moniteur belge*, 15 July 2003. The *Moniteur belge* can be consulted on www.moniteur.be
[3] *Moniteur belge*, 19 March 1996
[4] *Moniteur belge*, 26 September 2002.

(5) The Belgian approach appears to be compatible with the options taken at the international and European level. Belgium is an Annex I country under the Kyoto Protocol having, together with its EU-15 partners, a reduction target of 8% for the period 2008-2012 compared with 1990. However, under the EU burden-sharing agreement (Decision 2002/358/EC), the reduction target for Belgium is 7.5%. The EU burden sharing was followed by an intra-Belgian burden sharing. According to an agreement of March 2004, the Flemish region has a target of – 5.2%, the Walloon region – 7.5% and the Brussels Capital Region + 3.475%. To comply with the international/EU reduction target, the federal government, in turn, has to take emission reduction measures within its competence of 4.8 million tonnes of CO_2-eq and to buy on the international market emission credits covering an emission of 12.3 million tonnes of CO_2-eq in the period 2008-2012 (a yearly average of 2.46 million tonnes).

I 3. Short evaluation

(6) According to the *Fourth National Communication on Climate Change under the United Nations Framework Convention on Climate Change* (2006)[5] and the *2007 Report on Emissions of Greenhouse gases in Belgium*[6], greenhouse gas emissions were estimated to represent 145.8 Mt CO_2-eq in 1990; these emissions have fallen to 143.8 Mt CO_2-eq in 2005 (- 2.1%), 135.9 Mt CO_2-eq in 2006 (- 6%) and 131.3 Mt CO_2-eq in 2007 (- 8.3%)[7]. According to the first estimates, it is also expected that in 2008 and 2009 Belgium will largely meet its Kyoto target, helped in that respect by the financial-economic crisis and the decrease of industrial activity resulting from that crisis. The share of greenhouse gases in Belgium is as follows: CO_2 counts for 85.5%, CH_4 for 5.8%, N_20 for 7.6% and F-gases for 1.1%.

(7) As far as the share of the main sectors is concerned, the distribution is as follows: manufacturing industry (combustion) 20.9%, energy industries 20.5%, residential and commercial 20.3%, transport 17.7%, manufacturing industry (process) 9.7%, agriculture 7.8%, others 1.7% and waste 1.4%.

(8) With 10.4 million people, Belgium has a high population density of 341 inhabitants per km^2. The country is characterised by a wide scattering of quasi-urban settlements on rural land. The five largest cities, Brussels, Antwerp, Ghent, Liège and Charleroi, form a part of larger conurbations of at least one million inhabitants. Belgium is situated along an axis of regions extending from England to the north of Italy that have been densely populated and developed since the Middle Ages. The Belgian economy is one of the most open in the OECD area. The per capita GDP is well above the OECD European average. Services account for more than 52 percent of GDP and manufacturing almost 22 percent; of the latter, food products (4.1 percent of GDP) and chemicals (3.8 percent) are the major branches. Agriculture, hunting, forestry and fishing represent 2.1 percent of GDP. Belgium is the world's ninth biggest exporter. Exports of goods are dominated by machinery and transport

[5] http://www.climat.be/IMG/pdf/NC4_ENG_LR.pdf
[6] http://www.climat.be/IMG/pdf/Broeikasgasemis sies_2007.pdf
[7] *Belgium's Greenhouse Gas Inventory (1990-2007). National Inventory Report submitted under the United Nations Framework Convention on Climate Change*, April 2009, p 9; REKENHOF, *Federaal klimaatbeleid. Uitvoering van het Kyotoprotocol. Verslag van het Rekenhof aan de Kamer van Volksvertegenwoordigers*, Brussels, June 2009, 7.

equipment (90 percent of the cars made in Belgium are exported), other manufactured goods (for example, gemstones) and chemicals. In a country as densely populated and economically developed as Belgium, pressures on the environment are significant. As much as one-fourth of the territory is built-up or covered with dense networks of roads, railways and navigation canals. Industry, heavy freight and passenger traffic, and intensive livestock production and crop cultivation also put pressure on the air, soil, water resources and natural environment. In this context, making development economically, environmentally and socially sustainable is a challenge. Because of Belgium's very open economy (exports reaching 83 percent of GDP and imports 81 percent) and its location, there are many physical and economic interdependencies between Belgium, its European partners and beyond. According to the *2007 OECD Environmental Performance Review*[8], Belgium is still catching up on the environmental backlog from the past. Energy use, material use and pollutant emission intensities (i.e. per unit of GDP) remain relatively high. Belgium made progress over the last decade in decoupling environmental pressures from economic growth for some conventional pollutants (such as SO_x and NO_x emissions) and for water abstractions. There is, however, still a need to decouple road freight transport from economic growth, as the increase in road freight transport is a major cause for concern. Energy intensity (total primary energy supply per unit of GDP) is still considerably higher than in neighbouring countries. Integration of environmental concerns into energy policy is lagging behind[9].

(9) The *National Climate Plan 2009-2012*[10] elaborated by the National Climate Commission, defines 11 strategic axes, of which 6 sectoral and 5 horizontal. The sectoral axes are the following: 1) optimisation of energy production; 2) rational energy use in buildings; 3) adaptation of production processes; 4) development of sustainable means of transport; 5) encouragement of sustainable management of ecosystems in agriculture and forestry, 6) greater efforts in waste management. The horizontal axes are: 7) greater efforts in climate change research; 8) awareness- building among all stakeholders in Belgium; 9) more direct involvement of public authorities in the reduction of GHG emissions; 10) introduction of flexible mechanism; 11) integration of the climate dimension in development co-operation policies. Within these axes various measures are listed, with indication of their phase of implementation. A mix of policy instruments is put forward, without any clear preference for a particular type of measures (command and control, financial aid, taxation, flexible mechanism, voluntary agreements). The nature of the policy measures used depends on the specific problem one wishes to address.

(10) The attitude towards climate change problems has dramatically changed in recent years. Since the beginning of this millennium the consequences of global warming can be seen increasingly in daily life. The hot summer of 2006, coupled with very mild winters in recent years and more frequent periods of heavy rain and flooding, are seen as indicators that climate change is not a thing of a distant future, but is already taking place now. The release of Al Gore's film "An Inconvenient Truth" in 2006 also played an important part in raising awareness. One can say that since 2007 climate change has become a hot issue and a major societal concern.

[8] OECD, *Environmental Performance Reviews: Belgium* (Paris, OECD, 2008), 35-39.
[9] L. LAVRYSEN, "Chapter 2. Belgium" in L.J. KOTZE & A.R. PATERSON, *The Role of the Judiciary in Environmental Governance. Comparative Perspectives*, Kluwer Law International, 2009, 88-90.
[10] http://www.climat.be/IMG/pdf/NKP_2009-2012.pdf

Part II. Essence of Climate Law

II 1. What is climate law?

(11) Climate change law is both based on environmental principles (precautionary principle, polluter pays principle, integration principle…) and on economic concerns (use of flexible instruments, emission trading, use of other economic and voluntary instruments). The level of ambition is clearly guided by economic concerns.

(12) According point 12 of Annex III of Directive 2003/87/CE (as amended by Directive 2004/101/CE) the National Allocation Plan shall specify the total amount of CERs and ERUs that can be used by operators within the European Emission Trading Scheme as a percentage of the total amount assigned to each installation. These percentages shall be consistent with the *supplementarity obligations* under the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol. According to Art. 11*b* of Directive 2003/87/EC, CERs and ERUs that stem from nuclear installations may not be used in the period 2005-2012. CERs and ERUs that stem from land use, changes in land use and forestry activities, may not be used either. The Communication of the Commission of 22 December 2005[11] provides further guidance on this point. The Co-operation Agreement of 19 February 2007 between the federal state and the regions concerning the implementation of certain provisions of the Kyoto Protocol states that the use of flexible mechanism by Belgium should be consistent with the supplementarity obligations under the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol (art. 3, § 3). Each year the National Climate Commission proposes to the different authorities activities and priority countries with the aim of ensuring a geographical spread of project activities. Those activities should contribute to *sustainable development aims of developing countries* (art. 3, § 2). Further conditions are specified in Art. 8 of said Co-operation Agreement. According to the *Belgian National Allocation Plan for CO_2-emission allowances 2008-2012*, the federal government and the regions will purchase a total of 35.21 Mton CO_2 eq CERs, ERUs or AAUs in the period 2008-2012. This means an average of 7.04 Mton CO_2 eq per annum. However, according to a recent audit by the Court of Auditors[12], there is great uncertainty about the total amount of emission rights to be purchased, there is no clear view on the cost effectiveness of the policy, the need to purchase such rights seems to be over-estimated, and there is insufficient collaboration in this field between the federal government and the government of the regions.

II 2. Political play of enterprises

(13) Although in Belgium we have to a large extent 3 different regional regimes, together with some uniform federal legislation for the whole country, the differences between these regimes are not so important, because European legislation, on the one hand, and internal co-

[11] COM(2005) 703 def.
[12] REKENHOF, *Federaal Klimaatbeleid. Uitvoering van het Kyotoprotocol. Verslag van het Rekenhof aan de Kamer van Volksvertegenwoordigers*, Brussels, June 2009, p. 48-50.

operation agreements between the federal and the regional governments, on the other hand, ensures a relative high degree of harmonisation.

(14) There are no indications that (at present fairly minor) differences in climate change policies between the regions influence movements of companies from one region to another. Such movements are influenced more specifically by other factors such as the availability of industrial land, land use policies, availability of work force, mobility issues, the possibility of receiving state aid in the framework of European regional policies, etc.

(15) To our knowledge there are in Belgium no scientific studies on "economic climate migration".

(16) Where there is a migration of industries that is relevant to climate change policies (e.g. steel industry, car industry), it should be observed that it is generally a migration of industries from Belgium towards non Annex I parties. It is, however, unclear to which extent climate change policies are a decisive factor in such relocation decisions, since other factors seem to be of equal or even higher importance (globalisation, high labour costs, overproduction, development of new markets…).

Part III: International (and EC Community) Law

III 1.Transposition of supranational obligations in the national regime

(17) The UNFCCC has been approved and ratified by Belgium[13]. The same is true for the Kyoto Protocol[14]. Under Decision 2006/944/EC, Belgium must reduce its GHG emissions by 7.5 % compared with 1990. Since the competences for the implementation of these international and supranational obligations are partially a competence of the federal government and partially of the regions, a Co-operation Agreement[15] was elaborated between federal and regional governments. The *Co-operation Agreement between the Federal State and the Flemish, Walloon and Brussels Capital Regions of 14 November 2002 concerning the elaboration, implementation and follow-up of a National Climate Plan and concerning reporting in the framework of the UNFCCC and the Kyoto Protocol*[16] establishes a National Climate Commission, supported by a permanent secretariat. This Commission has to evaluate on a yearly basis the co-operation between the different governments on climate change policies, work out an intra-Belgian "burden sharing" proposal, advise on the position Belgium should adopt in international and European negotiations, and prepare the use of flexible mechanisms. The Commission also supervises data collection, exchange of information and reporting. The Commission has also to work out a National Climate Change Plan, in which the federal and regional plans are integrated. A second *Co-operation Agreement* was concluded on *19 February 2007 concerning the implementation of certain provisions of the*

[13] Act of 11 June 1995, *Moniteur belge*, 19 March 1996
[14] Act of 26 September 2001, *Moniteur belge*, 26 September 2002.
[15] A sort of internal treaty approved by federal and regional parliaments.
[16] *Moniteur belge*, 15 July 2003

Kyoto-Protocol[17]. This Agreement concerns the effective participation in the flexible mechanism of the Kyoto Protocol and establishes the criteria and approval procedure for project activities.

(18) The different co-operation agreements have force of law (statute) since they have been approved by the federal and regional parliaments. In the hierarchy of norms, ratified treaties and EC law take precedence over domestic law.

(19) In the Belgian federal system, policies and measures to reduce greenhouse gas emissions are mapped out at different levels of responsibility based on the division of powers between the federal government and the regions (see paragraph 21). Each level of power establishes its own priorities in environmental and climate policy. Coordination bodies have been set up to harmonise and create synergy between the policies implemented by the federal government and the three regions, the *National Climate Commission* being the most important. The general context for the preparation of climate change policies and measures is consequently determined by the plans established by the federal and regional authorities setting out policy objectives and strategies. On the *federal level,* every 4 years a *Federal Plan for Sustainable Development* is drawn up. One of the six areas is the limitation of climate change and the more intensive use of clean energy. This plan has an indicative value. Each of the regions also works out its own periodical climate plans, most of the time as part of its *regional environmental policy plan*, which has a similar legal status as the Federal Plan for Sustainable Development. Except where the decisions of the National Climate Commission are laid down in a Co-Operation Agreement approved by the different Parliaments, its decisions are not legally binding and cannot therefore be challenged in Court. Its decisions and the said plans are generally followed and implemented by legally binding decisions taken by the various authorities in the form of Acts of the federal or regional parliaments and executive orders and decisions issued by the various governments. These acts, regulations and decisions can be challenged in court. The Constitutional Court is competent to review the conformity of federal or regional acts with the constitution and, as the case may be, with relevant provisions of international law. An example of this can be found in the Court's judgment no. 92/2006 of 7 June 2006 dismissing the action for annulment instituted by a steel company of the Walloon Decree (regional act) of 10 November 2004 introducing an Emission Trading Scheme for the implementation of Directive 2003/87/EC[18]. The arguments used by the Court are very similar to the arguments used later on by the ECJ in a similar French case[19]. Regulations and individual decisions (e.g. the decision to allocate allowances to individual companies) can be challenged before the Supreme Administrative Court (Council of State). Questions of both substance and procedure can be raised before that Court, including conformity of the regulations and individual administrative decisions with higher legal norms, including international and European law.

(20) In the procedure to adopt the Federal Plan for Sustainable Development and the regional environmental policy plans there is ample room for public participation. A public enquiry is organised on the draft plans, during which the public can inspect the drafts and raise

[17] *Moniteur belge*, 11 April 2008.
[18] Constitutional Court, Nr. 92/2006, 7 June 2006, *sa Cockerill Sambre and sa Arcelor* v. *Walloon Region*, www.const-court.be
[19] ECJ, 16 December 2008, C-127/07, *Société Arcelor Atlantique et Lorraine*

objections or formulate suggestions. Advisory bodies, representing the various stakeholders, can deliver an opinion. The National Allocation Plan, composed of one federal and three regional plans, is subject to a rather limited form of public participation in conformity with Art. 9 (1) of Directive 2003/87/EC.

III 2. State structure (if relevant)

(21) The division of competences between the Federal State and the Regions related to climate change can be summarised as follows[20]:

Federal Government

Environmental Policy
- Protection against ionising radiations and nuclear waste management
- Protection of the Belgian part of the North Sea
- Product standards
- Transit of waste

Energy Policy
- Indicative Programme for the electricity sector
- Nuclear fuel cycle and related R & D programmes and nuclear fusion research
- Large storage infrastructure
- Transmission and production of energy
- Tariffs
- Offshore energy

Other relevant policies
- Main taxes (income, VAT…)
- Traffic regulations
- Railways
- National Airport

Regional Governments

Environmental Policy
- Protection of the environment (water, air, soil, noise, non-ionising radiations..)
- Water management
- Environmental licensing
- Waste Management (including import and export of Waste)
- Land use planning
- Nature conservation

Energy Policy:
- Distribution and transmission of electricity through networks with maximum voltage of 70 kV
- Public distribution of gas
- Use of methane and blast furnace gas
- District-heating equipment and networks

[20] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 46; E. DE PUE, L. LAVRYSEN & P. STRYCKERS, *Milieuzakboekje 2009*, Wolters Kluwer Belgium, Mechelen, p. 13-25.

- Use of waste products from coal tips
- New and renewable sources of energy
- Recovery of waste energy from industry or other uses
- Rational use of energy

Other relevant policies:

- Public transport (except railways and national airport)
- Road infrastructure
- Agricultural policy
- Regional taxes (water, waste…)

(22) Within their sphere of competence, the regions are allowed to work out their own climate change policies and laws, within the boundaries set by international and European law and taking into account legally binding co-operation agreements concluded amongst them or with the federal government.

(23) *International competencies of the regions and communities:* Prior to the 1993 State reform, the division of international jurisdiction between the federal authority and the constituent subunits had been a source of much controversy. The new provisions put in place by the 1993 (art. 16 of the Special Act of 8 August 1980 as amended by the Special Act of 5 May 1993) reform are based essentially on two core principles: one is to extend the internal autonomy of the federated entities as widely as possible into the international arena, while preserving the coherence of Belgian foreign policy; the other is to strengthen federal authority jurisdiction over the implementation of international and supranational law by the federated entities. There is no question that the extended jurisdiction of the communities and Regions is to be seen most in the conclusion of treaties. *Treaties falling within the exclusive jurisdiction of a Community or a Region* are concluded by its Government and approved by its Parliament. The Community or Regional Government concerned must, however, inform the federal Cabinet that negotiations have been entered into; the Cabinet then has thirty days in which to notify its objections to the proposed treaty, the effect being to suspend negotiations. The matter is then referred to the Inter-Ministerial Conference on Foreign Policy (now ICFP), which consists of the relevant ministers of the federated and federal Governments. They must then reach a consensus within thirty days on whether negotiations should proceed further or not. If the ICFP fails to reach a consensus, the King may confirm the suspension of negotiations on four grounds. To avoid undue encroachment on the autonomy of the federated entities, these grounds are based on objective, exhaustively enumerated criteria. They can be reduced to two main alternatives:

- either Belgium does not recognize, or does not maintain diplomatic relations with, the country concerned, or it transpires from a decision or an act of the federal State that relations with that country are seriously disrupted; or
- the proposed treaty is incompatible with Belgium's supranational or international obligations.

If, notwithstanding these various obstacles, the treaty is concluded and enters into force, the King may suspend its execution, but only on the same two grounds as above. In such case, the procedure is identical in all respects to the treaty-making process as described above.

In order to take effect in the Belgian legal system, *so-called « mixed » treaties*, i.e., those crossing areas of federal, Community and/or Regional jurisdiction, must be assented to by all the legislative assemblies concerned, federal and federated alike. If an instrument such as the

UNFCCC or the Kyoto Protocol, for example, impinges at once on federal, Community and Regional matters, the assent of nine different legislative assemblies - federal, Community and Regional - will be required. The withholding of assent by any one of those assemblies, therefore, would effectively prevent the federal Government from ratifying the treaty.

Because of the complex issues involved, the special legislature laid down the procedure for concluding mixed treaties in a mandatory cooperation agreement between the federal authority and the federated governments. The procedure laid down by the Cooperation Agreement of 8 March 1994 can be summarized as follows. Where the federal Government plans to negotiate what may be a mixed treaty, it must first notify the ICFP of its intentions. Likewise, where a Region or Community considers that negotiations should be engaged with a view to concluding a mixed treaty, it can refer the matter to the Inter-Ministerial Conference on Foreign Policy with a request that the Federal Government take steps to that end. Within sixty days of being informed or receiving the request, the ICFP must decide whether it is a mixed treaty, determine the composition of the Belgian delegation and the joint position to be argued. The representatives of the authorities concerned negotiate on an equal footing, the federal Ministry of Foreign Affairs acting as coordinator. A Community or Region is always free to inform the ICFP that it will not be taking part in the negotiations, which will not prevent the others from moving forward. The question will then arise as to what advantage accrues to the other parties in signing a treaty which will not be implemented in the legal system of the entity concerned. The foreign State may ask itself the same question. Mixed treaties are signed by the federal Minister for Foreign Affairs or by a representative invested with full authority, as well as by the Minister appointed by the Government of the Communities and/or Regions concerned, or by a representative invested with full authority. Mixed treaties are ratified by the Crown, *but not until all the legislative assemblies concerned have assented to them.* As we have seen, however, if a community or Region takes no part in the negotiations, the other Belgian authorities can continue negotiations with the foreign State after it has been informed by the federal Minister for Foreign Affairs that the treaty may not be implemented in the legal system of the entity concerned. If the foreign State does not see this as reason to abandon the negotiations and the treaty is nevertheless concluded, Belgium will issue a reservation at the time of signature that the treaty will not apply to part of its national territory. There should be no illusions, however, about the increasing reluctance of international practice to accept a restriction of the effects of a treaty to part of the territory of the contracting State. States have very little leeway in this respect for multilateral treaties like those concluded within the European Union or human rights treaties, in particular.

The *representation of Belgium abroad* follows the same principle of extending Communities' and Regions' domestic powers into the sphere of foreign representation, while ensuring a minimum measure of coherence in Belgium's foreign policy. As a result of the constitutional principle that international relations are conducted by the Crown, the decision to recognize foreign States and maintain diplomatic relations with them falls to the King. Under Article 107 of the Constitution, the Crown also holds the power of appointment to foreign relations posts.

Consequently, neither Communities nor Regions can establish their own diplomatic or consular representation abroad. This does not prevent them from appointing their own foreign representatives, including economic or commercial attachés, and instructing them directly under the cooperation agreements concluded with the federal authority (see the cooperation agreement of 18 May 1995, and the cooperation agreement of 17 June 1994 concerning regional economic and commercial attachés). However, these representatives are subject to the authority of the head of mission appointed by the federal authority, who is thereby invested with management and coordination duties. The Communities and Regions obviously

can appoint, and have appointed, representatives with fully independent powers abroad and to international institutions, but they have no diplomatic or consular status.

Representation of the Communities and Regions in *international and supranational organizations* is also governed by cooperation agreements concluded between the federal entities and the federated entities. The European Union is, of course, a special case. European Union matters (see the cooperation agreement of 8 March 1994 in the representation of the Kingdom of Belgium within the Council of Ministers of the European Union) are dealt with through a central coordinating body within the federal Ministry of Foreign Affairs' Directorate for the Administration of European Affairs. It calls regular consultation meetings with the representatives of the Communities and Regions. The positions to be argued within the Council of Ministers of the European Union are decided by consensus. If no consensus can be reached, the matter can be referred to the ICFP. If no agreement is reached or in urgent cases, the representative in the Belgian seat on the Council of the European Union « may on that occasion only adhere 'ad referendum' to the position most likely to address the general interest ». Belgium's final position will then be notified to the presidency after the matter has been settled internally, within three days at the most. Since Article 146 of the Maastricht Treaty allows Member States to be represented on the Council of Ministers of the European Union by ministers sent from the governments of their federated entities, there is nothing to prevent the Belgian State being represented at Council meetings by a member of the Community or Regional Governments (see also Article 81, § 6, Special Institutional Reform Law of 8 August 1980). The cooperation agreement of 8 March 1994 subdivides European Councils of Ministers into four categories. In category I - exclusively federal matters (finances, budget, justice, development, etc.) - Belgium is represented by the federal authority alone. In category II - areas of shared competence (agriculture, health, energy, environment, etc.) - the Belgian federal representation is assisted by a representative of the Communities or Regions. The opposite obtains for category III matters (industry and research), while category IV meetings - matters which are exclusively of Community (culture, education, etc.) or Regional (housing and regional planning) competence - the Belgian representation to the Council is through a Community or Regional Minister. These different arrangements do not detract from the general rule that each Member State has only one spokesman and one vote on the Council. The Belgian delegation is therefore headed by one Minister only from the federal or a federated authority as the case may be. The Communities and Regions take part according to an agreed system of rotation.

As regards *the representation of Belgium in organizations other than the European Union*, a further distinction must be made between international organizations which deal with matters regarded as mixed competences from the viewpoint of the Belgian legal system, and those whose areas of concern relate exclusively to matters within the competence of the Communities or Regions. Representation to organizations in the first category is governed by the framework co-operation agreement of 30 June 1994 which lists the international organizations concerned by name – essentially the Council of Europe, the OECD and organizations in the UN system. The agreement requires the federal authority and the federated entities to hold preliminary consensus consultations to work out a joint position to be argued at meetings of the international organization, and to settle the composition of the Belgian delegation in which all authorities concerned by the agenda can be represented. If no joint position can be agreed, and if the prevailing rules of the international organization prevent the « ad referendum » procedure from being used, or if no agreement is reached by consensus consultations, the head of the Belgian delegation may, on that occasion only, abstain. The Belgian ministerial delegation will be headed by a federal Minister or a Minister

of a federated authority, depending on the agenda. The Communities and Regions may also have their own representative in Belgium's permanent representation to the international organizations concerned.

The extension of the participation « rule » which is inherent in federalism to supranational and international laws which impinge on the jurisdiction of the federated entities clearly stems from a concern to preserve the autonomy of the federated entities, itself another key element of federalism. Such participation also facilitates and optimizes the incorporation of international and supranational rules into the Belgian legal system. Indeed, in matters falling within their jurisdiction, the Communities and Regions have the sole power and responsibility for implementing those rules within their own spheres of competence. The principle of the unity of the State, however, dictates that the Belgian State bears sole responsibility for the faults by execution and omission on the part of its federated authorities, which has earned Belgium a series of adverse rulings from the Court of Justice of the European Communities for failure to implement European directives. For that reason, in a textbook application of the lessons of comparative federal law, the institutional reforms of 1993 allow the federal authorities to act temporarily in the place and stead of the defaulting Community or Region to comply with a ruling against the Belgian state by an international or supranational court or tribunal. This power of substitution is, however, subject to fairly strict conditions, such as the requirement of a previous adverse judgement, designed to preserve the autonomy of the federated entities, so that it might reasonably be wondered whether it will not in practice be confined only to extreme cases. In the converse case - where the communities or Regions might wish, in matters falling within their jurisdiction, to assign a legal person with distinct legal personality before a supranational or international court or tribunal - the legal obstacles to direct access to such courts by the federated entities are the reason for the rule that, in such cases, it is for the federal State to institute proceedings in such courts and tribunals at the instance of the Regional or Community Government concerned. This procedure could be particularly applicable to proceedings in the Luxembourg Court of Justice against European Community instruments which allegedly encroach on Community or Regional competencies.

As can be seen, the fourth State reform of 1993 invested the Communities and Regions with extensive jurisdiction in internal relations, which some observers claim has left a confederal imprint on the State set-up. It must be stressed, however, that the Crown retains the conduct of the federal authority's international relations, that it is in charge of defence policy and diplomatic representation proper, notwithstanding the various arrangements for consensus consultations, not to say constraint, which enable the Sovereign to maintain the coherence of Belgian foreign policy. The principle of allegiance to the federation, however, is what will mostly orchestrate the working of this new, equally subtle and delicate, balance designed to preserve the exclusive Regional and Community jurisdictions[21].

The *organisation of international and European Climate Change Policies within Belgium* can be described as follows. The *Interministerial Conference for the Environment (ICE),* which is made up of the Federal Minister for the Environment, the Environment Ministers of each of the three regions and the Federal Minister for Science Policy, but can be extended to include other Ministers according to the issues being addressed, focuses on matters for which intergovernmental cooperation is required. It plays a key role in climate policy. The decisions of the ICE are prepared and implemented by different working groups, which are answerable

[21] L. LAVRYSEN, "Autonomy of Regions and Communities: the Belgian Experience", Workshop on the role of the Constitution in the Spanish Transition, 25 Years of Experience (1978-2003), Madrid, 23-24 January 2004, European Commission for Democracy through Law (Venice Commission), CDL-JU(2004)002, 5-7.

to the *Coordination Committee for International Environmental Policy (CCIEP)*, comprised of representatives of the different departments of the Federal and Regional public administrations concerned. The CCIEP is the main body responsible for coordinating international environmental policy, with the exception of matters related to European environmental policy, which is the responsibility of the Directorate-General for Coordination and European Affairs (DGE) of the Federal Public Service Foreign Affairs, External Trade and Development Cooperation. DGE plays a pivotal role, providing coordination for follow-up of Belgium's European policy, and consulting and collaborating with the partners of the federal and federated entities. It approves Belgium's positions at meetings of the Council of the European Union. The ICE and the CCIEP operate on the principle of consensus, which rules out unilateral decisions. The principal CCIEP working group dealing with climate policy is the Greenhouse Effect Coordination Group[22]. It is made up of representatives of all the federal and regional administrations and policy units as well as the federal and regional cabinets concerned with Belgian and international climate policy. This group's main task is to participate, by providing coordination for Belgium, in the development of strategy papers, decisions, recommendations, legislation and other European and multilateral regulations on climate change or on policy in the broad sense when climate change is one of the subjects addressed. The Greenhouse Effect Coordination Group also maintains contacts with other relevant Belgian policy and consultation bodies. It organises consultation with stakeholders. The Coordination Group secretariat is provided by the Climate Change Unit of the Federal DG Environment, which also serves as the National Focal Point for the UNFCCC[23].

Part IV: Structure and Instruments of Energy and Climate Policies

IV 1. National climate policies and choice of energies (energy mix)

(24) Belgium has limited energy resources and is consequently highly dependent on other countries for supply, particularly since the end of the coalmining era (the last mine shut down in 1992). From the early 1970s, Belgium's overall energy policy objectives have concentrated on security of supply based on diversification of geographical sources and fuels, liberalisation of the electricity and gas market, energy efficiency, transparent and competitive energy pricing, and environmental protection. More recently, the Federal Plan for Sustainable Development (2004-2008) defined the key strategies in the field of energy policy related to climate change and more intensive use of clean energy[24].

(25) The market share of the different energy sources in primary energy consumption in 2003 was as follows: petroleum and petroleum products: 41.4%; natural gas: 24.7%; nuclear energy: 21.2%; solid fuels: 10.6%; renewable fuels: 1.1%; other: 1.0%. The main renewable energy sources used in Belgium are biomass and renewable recovery fuels. Renewable energy represents only a small share of primary energy generation in Belgium. This situation is

[22] There is also an Emissions Working Group that is in charge of preparing the national inventories of atmospheric pollutant and greenhouse gas emissions, in accordance with European and international reporting obligations.

[23] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 13

[24] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 45.

related to a number of factors, including the relatively low potential of this type of energy in Belgium. The small territory and the limited availability of hydraulic, geothermal and, to a lesser extent, solar resources, are obstacles to the development of renewable energy in Belgium. Directive 2001/77/EC on the promotion of electricity from renewable energy sources establishes an indicative target of 6% of electricity from renewable sources in gross electricity consumption, to be attained by 2010. Various wind energy projects, including offshore windmill farms, and small scale solar energy projects are being implemented.[25] According to the latest figures, the 6% target for 2010 will be met. Directive 2009/28/EC sets a share of renewable energy in gross end use of energy in 2020 of 13% (compared with 2.2% in 2005).

(26) Different policies are applied to foster the use of renewable resources. The Federal Act on the operation of the electricity market of 29 April 1999 contains different articles on public service obligations, the market for *green certificates* for electricity produced from renewable energy and the *construction of off-shore wind farms* along the Belgian coast. A new market mechanism has been set up, consisting in a system of 'green certificates' (GC). These are delivered to the 'green' producer. In addition, procedures guaranteeing priority access to the network are implemented for renewable electricity or electricity from high quality CHP. Electricity suppliers are obliged to buy a minimum volume of 'green' electricity (i.e. made from renewable energy resources: wind, hydro, solar, biomass, cogeneration). There are some differences between the non-cumulative GC systems implemented by the different entities. On the federal level, a system of minimum purchase prices for GCs was established by the Royal Decree of 16 July 2002. The grid manager is under an obligation to buy green certificates from producers of green electricity, generated by installations located on Belgian territory (maritime or continental), at a minimum fixed price. To stimulate off-shore wind energy, this minimum purchase price is set at a relative high level. The grid operator is obliged to purchase green certificates originating from the first 216 MW of off-shore installations. In the different regions a fairly high administrative fine is imposed on suppliers if they are unable to present a sufficient (and from year to year increasing) number of GCs. In addition to that, the Energy Chapter of the Federal Act of 20 July 2005 provides that the grid operator must contribute one third, with a maximum of € 25 million of the cabling costs for projects of 216 MW or more. Various challenges of the legislation favouring the use of green electricity, based on the violation of the constitutional principle of equality, were rejected by the Constitutional Court, which held that Belgium's obligations under the Kyoto Protocol and related European legislation provide justification for the differences in treatment between conventional and green electricity[26].

(27) Besides the system of green certificates, the obligation to buy minimum quantities of green electricity and the minimum purchase prices, discussed in paragraph 26, other types of incentives were created. In the different regions there is a support scheme for ecological investments, including investments in renewable energy and on the federal level there is a 13.5% tax abatement for RES investments for corporation tax purposes. There are grants for energy audits. For the residential sector there are different financial incentives for the rational

[25] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 23.

[26] See e.g. Constitutional Court, no. 159/2002, 6 November 2002, *Ipalle, Intradel, ICDI and IBW* v. *Walloon Region*; no. 25/2005, 2 February 2005, *nv Sourcepower.net and IVEKO* v. *Flemish Region;* no. 193/2006, 5 December 2006, *EDORO* v. *Council of Minsters*

use of energy and RES (tax abatements, subsidies, etc)[27]. In view of the implementation of Directive 2003/30/EC on the promotion of the use of bio-fuels and other renewable fuels in transport, certain quotas were allocated to producers of bio-fuels. They may market those fuels at a lower tax rate than that applicable to fossil fuels. This tax reduction is meant to compensate for the higher production costs of this type of fuel. The share of bio-fuels should increase to 5.75% in 2010. Recently an obligation to mix a certain amount of bio-fuels in gasoline was imposed to attain this objective.

(28) Some of the proceeds of energy taxes and similar measures are earmarked for climate measures. On the federal level there is a Kyoto Fund that is partially funded from the proceeds of an energy tax. This fund finances federal climate change policies, including the use of the flexible mechanism of the Kyoto Protocol. There is a similar fund in the Flemish region that receives the proceeds of the green electricity certificates (penalties).

IV 2. Focused Instruments of mitigating CO_2 emissions

(29) Belgium is a party to the UNFCCC and the Kyoto Protocol.

(30) Belgium is a Member State of the EU.

(31) 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, amended by Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, is binding for Belgium[28]. The same is true for Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community from 2 February 2010 onwards.

The related Commission Regulation (EC) No 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, amended by Commission Regulation (EC) No 916/2007 of 31 July 2007 and Commission Regulation (EC) No 994/2008 of 8 October 2008,

[27] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 44-54; REKENHOF, *Federaal Klimaatbeleid. Uitvoering van het Kyotoprotocol. Verslag van het Rekenhof aan de Kamer van Volksvertegenwoordigers*, Brussels, June 2009, p. 17-28.

[28] See also : 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*; 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.

is applicable in Belgium. On 1 January 2012 it will be replaced by Commission Regulation (EC) No 994/2008 of 8 October 2008 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.

(32) Under the Kyoto Protocol and Decision 2002/358/EC, Belgium must reduce its GHG emission by 7.5% in the period 2008-2012. Till recently it was considered that it would be difficult for Belgium to realise this objective. Just implementing the existing European measures to reduce emissions was considered insufficient. However, the latest figures show that Belgium is on track with its reduction obligation. In 2005 the total emission of CO_2-eq was 143.8 Mt, or 2.5% below the reference year. In 2006 the total emission of CO_2-eq was 135.9 Mt, or 6% below the reference year and in 2007 the total emission of CO_2-eq was 131.3 Mt, or 8.3% below the reference year. According the Federal Planning Bureau, Belgium is able to virtually fully achieve its reduction obligation with domestic measures and only 1 Mt emission rights would have to be purchased on the international market[29]. See also paragraph (6).

(33) For the moment there is no trend to apply emission quota to other sources than those covered by Kyoto, except in the Flemish region, as far as manure from intensive livestock production is concerned, with a view to reducing the pollution of ground- and surface waters by nitrates[30], for the implementation of Directive 91/676/EEC.

(34) At present, the European quota system does not allow the use of CERs and ERUs stemming from land use, changes in land use and forestry (Art. 11*b*(3) of Directive 2003/87/EC). There is no Belgian sink policy.

(35) In accordance with Directive 2003/87/EC, installations that are subject to the emission trading scheme can use CERs and ERUs under the conditions specified in Art. 11*b*. For the application of those provisions in Belgium, please refer to paragraph (12). According to the National Allocation Plan 2008-2012, the limits within which those CERs and ERUs may be used vary from region to region (11% in the Flemish region, ranging from 24% for the energy sector to 7% for the industrial sector; 8% in the Brussels Capital Region and 4% in the Walloon Region).

IV 3. Emission trading scheme

(36) In Belgium, each of the three regions has its own emission trading legislation with a view to the implementation of Directive 2003/87/EC. As far as the *Flanders Region* is concerned, the main piece of legislation is the Executive Order of the Flemish Government of 7 December 2007 concerning emission trading of GHGs[31], which is based on the Decree (Act

[29] REKENHOF, *Federaal Klimaatbeleid. Uitvoering van het Kyotoprotocol. Verslag van het Rekenhof aan de Kamer van Volksvertegenwoordigers*, Brussels, June 2009, p. 7

[30] For an overview of this "nutrient emission rights" system, see: E. DE PUE, L. LAVRYSEN & P. STRYCKERS, *o.c.*, p. 492-494.

[31] *Moniteur belge*, 27 December 2007.

of the Regional Parliament) of 2 April 2004 concerning the reduction of the emission of GHGs in the Flemish Region by stimulating rational energy use, the use of renewable energy and the application of flexible mechanisms of the Kyoto Protocol[32]. Similar legislation exists in the two other regions. The regions closely follow the Directive in their legislation.

(37) The National Allocation Plan is elaborated by the National Climate Commission. It consists of the coordination and integration of 4 partial allocation plans, elaborated by the 3 regional governments and the federal government, each for the installations that fall under their competence. After adaptation in accordance with the remarks put forward by the European Commission[33], the initial allocation of allowances to the installations covered by the scheme [34] is done by the federal and regional governments, each for the installations under their competence and registered in the National Registry kept by the Federal Public Service for the Environment[35]. All transactions done by operators of installations which fall under the scheme will be registered in the National Registry. Operators of installations can trade in allowances within the European Union or outside under the conditions specified in Art. 12 and Art. 25 of Directive 2003/87/EC. Operators of installations that are subject to the emission trading system are subject to a self-monitoring obligation. They must report each year on their GHG emissions. Before sending the report to the competent regional authorities, the report must be verified by an independent and recognised verification bureau. The operators are obliged to surrender each year to the competent regional authority a number of allowances equal to the total emissions from that installation during the preceding calendar year as verified and these allowances are subsequently cancelled by the competent authority. The National Registry[36] is informed of the decisions taken and the accounts of the operator are adapted accordingly. Any operator who does not surrender sufficient allowances by 30 April of each year to cover its emissions during the preceding year shall be liable to pay an excess emissions penalty. The excess emissions penalty is EUR 100 for each tonne of carbon dioxide equivalent emitted by that installation for which the operator has not surrendered allowances. Payment of the excess emissions penalty does not release the operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year. As far as the Kyoto flexible instruments are concerned, the use of these is not reserved to the public authorities. Private operators can rely on these instruments to the proportion stipulated in the National Allocation Plan and under the conditions recalled in paragraph 12. The National Climate Commission acts as Designated National Authority and Focal Point. In the Flemish Region, where the need to acquire external emission credits for the period 2008-2012 was estimated to be 21.4 Mt. CO_2-eq, the Flemish Participation Corporation, a Public Holding, is in charge of acquiring those external emission credits. The Flemish Region is a member of the Multilateral Carbon Credit Fund and the Green Investment Schemes. The Brussels Capital Region and the

[32] *Moniteur belge*, 23 June 2004

[33] Commission Decision of 16 January 2007 concerning the national allocation of greenhouse gas emission allowances notified by Belgium in accordance with Directive 2003/87/EC of the European Parliament and of the Council

[34] According to the Belgian National Allocation Plan for CO_2-emission allowances 2008-2012 the emission allowances are allocated free of charge. Only the Flemish region will auction 922 kton of emission allowances during the trading period in one or several sessions. This corresponds to 0.29% of the total Belgian allocation for the period 2008-2012. Emission allowances in the reserve for new entrants which were not allocated can also be auctioned.

[35] Co-operation Agreement of 23 September 2005, *Moniteur belge*, 14 October 2005; Royal Decree of 14 October 2005, *Moniteur belge*, 21 October 2005.

[36] http://www.climateregistry.be/

Walloon Region participate in the Community Development Carbon Fund of the World Bank. Also individuals and companies not subject to the emission trading scheme can trade in emission allowances. Allowances will be cancelled at any time at the request of the person holding them. It seems that in practice this facility which allows individuals to buy allowances out of the market and contribute in this way to the reduction of emissions, and which seems popular in some Scandinavian countries, is rarely used in Belgium.

(38) The federal and regional legal systems for obtaining allowances closely follow the requirements of Directive 2003/97/EC and can be qualified as a public law system.

(39) The distribution of the allowances between the different operators is decided on the basis of the National Allocation Plan as adapted in accordance with the remarks formulated by the European Commission. The distribution shall be based on objective and transparent criteria, including those listed in Annex III of Directive 2003/97/EC, taking due account of comments from the public and the European Commission guidance on the implementation of the criteria listed in Annex III of said Directive.

(40) The Belgian allowance market is part of the EU allowances market. The European Climate Exchange (ECX)[37] is the leading marketplace for trading carbon dioxide (CO_2) emissions in Europe and internationally. ECX currently trades two types of carbon credits: EU allowances (EUAs) and Certified Emission Reductions (CERs). Other relevant players are Point Carbon[38] and BlueNext[39].

(41) Only operators of installations subject to Directive 2003/97/EC which are established in Belgium can receive initial allowances from the competent authorities in application of the National Allocation Plan. There is a reserve for new entrants, but these allowances can only be allocated when operations are started in Belgium. Once allocated, the operators can trade in these allowances with all persons within the European Union and with persons in third countries, where such allowances are recognised in accordance with the procedure referred to in Article 25 of Directive 2003/97/EC[40] without restrictions other than those contained in, or adopted pursuant to that Directive.

(42) Articles 11(a) and 11(b) of Directive 2003/97/EC, as Amended by Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending

[37] www.europeanclimateexchange.com
[38] http://www.pointcarbon.com/
[39] http://www.bluenext.fr/
[40] "*1. Agreements should be concluded with third countries listed in Annex B to the Kyoto Protocol which have ratified the Protocol to provide for the mutual recognition of allowances between the Community scheme and other greenhouse gas emissions trading schemes in accordance with the rules set out in Article 300 of the Treaty.*
2. Where an agreement referred to in paragraph 1 has been concluded, the Commission shall draw up any necessary provisions relating to the mutual recognition of allowances under that agreement in accordance with the procedure referred to in Article 23(2)."

Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, links the EU ETS with the Kyoto Flexible Mechanism (see also paragraph 12).

(43) The emission trading scheme is part of current national (federal and regional) energy policy as explained in paragraphs 24- 28.

(44) In its judgment No. 92/2006 of 7 June 2006[41] on the Walloon Regional Act to implement Directive 2003/87/EC, the Constitutional Court ruled that the initial free distribution of allowances to operators of installations subject to the ETS for a period of 3 or 5 years does not entail that the operator becomes owner of those allowances and that he can use them as he wishes. That is only the case with allowances that are effectively allocated for a period of one year to the operators that are still active. Consequently, the court found no violation of the *property rights* enshrined in the Constitution and in Article 1 of the First Additional Protocol to the European Convention on Human Rights, while assessing the provision of the Regional Act that stipulates that the allowances provided for in the National Allocation Plan are cancelled for the coming years in four cases: a) when the installation is definitively closed down; b) when the operation of an installation has been suspended for at least two years; c) when due to a substantial change in the installation it is no longer subject to the ETS; d) when the environmental permit has been withdrawn. The cancelled allowances are, in such cases, added to the reserve for new entrants.
As far as *VAT* is concerned, according to the guidance provided by the European Commission the transfer of greenhouse gas emission allowances as described in Article 12 of Directive 2003/87/EC, when made for consideration by a taxpayer, is a *taxable provision of services* falling within the scope of Article 9(2)(e) of Directive 77/388/EEC. None of the exemptions provided for in Article 13 of Directive 77/388/EEC can be applied to these transfers of allowances[42]. As far as *corporation taxes* are concerned, the Belgian Commission for Accounting Standards has proposed two different methods for processing allowance transactions in the accounts of corporations: the so-called "gross-method" and the so-called "net-method", the first being more suitable for companies that are active on the market and the second for those who believe that they do not need to trade[43]. The two methods can lead to a different treatment of allowances for corporation tax purposes.

(45) All installations that are subject to the ETS are also subject to the respective regional environmental licensing systems. Applications to the competent regional authority for an environmental permit for an ETS-installation must include a description of: (a) the installation and its activities including the technology used; (b) the raw and auxiliary materials, the use of which is likely to lead to emissions of gases listed in Annex I of Directive 2003/87/EC; (c) the sources of emissions of gases listed in Annex I of Directive 2003/87/EC from the installation; and (d) the measures planned to monitor and report emissions in accordance with the guidelines adopted pursuant to Article 14 of Directive 2003/87/EC. The competent authority will issue an environmental permit to emit greenhouse gases from all or part of an installation if it is satisfied that the operator is capable of monitoring and reporting emissions.

[41] www.const-court.be
[42] http://ec.europa.eu/environment/climat/pdf/vat_guidelines.pdf
[43] http://www.lne.be/themas/klimaatverandering/co2-emissiehandel/overkoepelend/boekhouding/081126_cbn-advies_179-bis_nl.pdf

Such permits shall inter alia contain (a) monitoring requirements, specifying monitoring methodology and frequency; (b) reporting requirements; and (c) an obligation to surrender allowances equal to the total emissions of the installation in each calendar year, as verified, within four months following the end of that year.
There is no formal specific link between the ETS and EIA legislation, although the impact on the climate of projects that are subject to EIA must of course be studied in the EIS and the permit decision shall contain the rationale for it, taking into account the findings of the EIS and the comments and opinions of the public and environmental agencies that were received.

Section B. Adaptation and Preservation

Part V: Adaptation Strategies to Global Warming

V 1. General issues

(46) Vulnerability is the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change. Vulnerability is a function of climate variation, the degree to which the system responds to this variation, and its adaptive capacity. Accordingly, many factors are involved in its assessment, cumulating uncertainties from several sources. Knowledge of impacts in Belgium is still limited because very few impact studies are available, and issues are generally covered incompletely. In spite of the complexity of climate impact assessment, valuable information is progressively emerging on aspects of regional climate change, the main causes for concern, and possible adaptation measures[44].
Given a scenario of future global greenhouse gas emissions, the expected rise in average global temperature is relatively well known. That is not the case, however, for the regional distribution of climate change, in particular with regard to the water cycle. Belgium is also a small country on a climate zone scale and most climate models have a resolution between 50 and 300 km. It is therefore not easy to provide climate change projections for the country. A number of climate change simulations are now available, however, and these provide valuable information for Belgium[45]. From the IPCC Third Assessment Report a number of trends emerge: a) in the different scenarios, temperatures rise significantly by 2050 both in summer and in winter; b) by the end of the 21st century, the rise in average temperature in relation to the end of the 20th century would be between 1.5 and 7° C in summer; c) the projections for the change in precipitation until the end of the 21st century show a rise by 3 to 30% in winter and a change in summer between the status quo and a drop by up to about 50%. None of these scenarios explicitly include a climate policy: emission reduction might result in less climate change. Climate change might thus remain limited in Belgium, but only in a very optimistic scenario of world development and/or with effective mitigation policies. Climate change may exceed the top of the range of global emissions growth rapidly and/or the real climate behaves

[44] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 84
[45] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 85.

as foreseen in the models that show great changes. Some simulations show summer temperatures in Belgium at the end of this century similar to those of Southern Spain at the end of the 20th century, and at least one model produced summer maximum temperatures reaching 50°C. Typical 20th century cold winters will gradually disappear. The probability of severe heat waves is expected to rise significantly. There is considerable uncertainty over extreme winds and precipitation. A sea level rise of + 14 to + 93 cm for the period 1990-2100 seems possible. Changes in ecosystems are already being observed today, with species trying to adapt and/or move to the north. The arrival of new species adapted to the warmer climate may have adverse effects. An increase of less than three degrees in local temperature would have modest effects on agriculture in Belgium. Up to around 3°C, the expected impacts are quite limited. Adaptation measures such as changes in crop choices, changes in sowing dates, better recycling of organic matter in soils and possibly irrigation, may help reduce the effects of climate change for agriculture. Climate change exposes the coastal region to three main types of impact: floods during storms, coastal erosion, and deterioration or loss of natural ecosystems, including wetlands. The need for adaptation of infrastructure, energy & industry to severe heat is a new concern, and a lot of infrastructure is likely to be poorly adapted, e.g. certain roads, or power stations which rely on river water for cooling[46].

For the moment, there is no integrated national (comprising policies on the federal, regional and local levels) adaptation strategy, although several adaptation measures are being taken or are under consideration.

(47) From the multilateral budget, the Directorate General for Development Cooperation finances a number of environment-related programmes that deal with climate change, biodiversity and actions to combat desertification. This includes contributions to the GEF, UNEP, World Bank, European Development Aid, IFAD, the Rio Conventions and some other programmes not directly focused on climate change, but which have benefits in terms of mitigation or adaptation. The issue of adaptation is also present in the Belgian bilateral federal and regional official development assistance[47].

(48) For the moment there is no developed direct link between land use planning and climate change policies.

V 2. Cost issues

(49) At the federal level, recent legislative changes[48] introduced cover against flooding and other natural hazards in household fire insurance policies. Unlike the previous situation, the cover against natural disasters is not provided by state funds, except when the global cost exceeds a threshold linked to the turnover of the insurance companies. While the new laws are not primarily targeted at adaptation to climate change, they may possibly have a dissuasive

[46] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 86-94.
[47] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 101-109.
[48] Acts of 21 May 2003 and 7 September 2005.

effect on residential construction in areas where the risk of flooding is higher, in particular if this results in higher insurance premiums[49].

(50) As indicated in paragraph 46 there is in Belgium for the moment no integrated national adaptation strategy, although several adaptation measures are being taken or are under consideration. Some of these measures will be discussed in the next section.

(51) Policies on water management will be discussed in paragraph 54. As far as agriculture is concerned, a slow but significant reduction in organic carbon content of most agricultural soils has been observed in Belgium. Although this is mainly a consequence of intensive farming, increased temperatures also contribute to the decomposition of organic matter in soil. This may affect the availability of water to plants and the fertility of soils, thus contributing to a reduction of yields. Recent progress in agricultural policy promoting better recycling of organic matter in soils, as well as more efficient use of mineral fertilizers, are helping to mitigate this problem. Heavy rains may also damage crops and contribute to soil erosion. An erosion combating policy is emerging[50]. As far as forestry is concerned, for approximately the last 15 years, the regional administrations in charge of forest management have encouraged the replacement of conifers such as spruce and Scots pine by other species better adapted to mild and rainy winters, e.g. Douglas fir and broad-leaved trees. Regulatory and financial incentives are used, in particular subsidies for planting in accordance with a guide to species adapted to the present climate. More generally, forestry practices try to favour the species best adapted to present-day local conditions, which constitutes a first step towards adaptation to future changes[51]. It seems that, so far, there are no strategies yet to adapt traffic and other infrastructures to climate change[52].

(52) Although the effect of climate change on ecosystems and biodiversity is being studied[53], no initiative has been taken yet to use nature conservation measures to update effects of global warming.

(53) The general principle of adaptation measures for the natural environment is that a healthy ecosystem will be better able to resist and adapt to climate change. Ecosystems have already severely deteriorated due to a range of pressures from human activities, including habitat fragmentation and various pollutants. Climate change is a long-term issue, so action must be considered with a long-term view. The desirable measures can be summarized in three groups: a) Further creation of protected areas. Buffer zones (with partial protection) and

[49] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 91-92.
[50] E.g. in the Flemish Region the Decree of 27 October 2006 on soil remediation and soil protection contains a Chapter on soil protection. It allows the Flemish government to give subsidies and other forms of aid to foster soil protection measures and measures to prevent and combat soil erosion.
[51] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 89-90.
[52] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 93.
[53] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 87-

migration corridors must facilitate the migration of species following changes in their habitats. It is important to protect areas taking future configurations of habitats, communities and ecosystems into account. Attention should be paid to areas that are less vulnerable to climate change than others and may become 'climate refuges'. b) Reduction of all non-climate stresses. Pollution and climate change have synergetic adverse effects. Actions against these factors may quickly have a positive impact on various aspects of the natural environment, in addition to reducing its vulnerability to climate change. c) Active and adaptable management. Current knowledge of future climate change impacts is limited: management needs to be flexible to respond to the actual evolution of problems. There is consequently a need for continued monitoring of the effects of climate change. For certain well-defined problems which cannot be addressed by general measures, specific measures may be considered. For example, this may involve active displacement of species which cannot migrate, as well as control of parasites, diseases and invasive species[54].

Part VI: Targeted Measures of Adaptation

(54) In the *Walloon Region* a new flood prevention plan was approved in 2003 (PLUIES plan). This global plan aims to improve knowledge of the risk of flooding, reduce and decelerate the run-off of water on slopes, improve the management of rivers, decrease vulnerability of zones liable to flooding, and improve crisis management. SETHY is responsible for real-time monitoring of watercourses, hydrology studies, coordination and flood alert. Its work is based on a network of stations measuring the level of watercourses and amounts of rain[55]. Rules banning the construction of buildings in areas prone to flooding have been imposed[56].
In the *Flemish Region* the Decree of 18 July 2003 on integrated water management aims, *inter alia*, to give once more sufficient space to water systems and to reduce the risk of flooding. Therefore water systems should be one of the structuring principles in land use planning. Different instruments are used to attain this aim. That includes, besides the establishment of stream, river and basin management plans and programmes, the establishment of "bank zones" ("*oeverzones*") around water courses in which stringent restrictions apply to all activities that can harm the functioning of the water system and the possibility of creating flooding areas that can be used to buffer water in periods of high tide. In the flooding areas that are created the government has a right of pre-emption. If a property in such an area is sold, the owner must first make an offer to the government. When due to the creation of a flooding area the proceeds of (mainly agricultural) land diminish, the government will compensate those losses. When due to the creation of a "bank zone" or a flooding area the owner suffers a major depreciation of his property, or when the viability of his undertakings are at risk, the Flemish government must purchase those properties with payment of full

[54] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 89.
[55] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 91.
[56] In the *Schéma de Développement de l'Espace régional* and in the *Code wallon de l'aménagement du territoire, de l'urbanisme et du patrimoine.*

compensation[57]. Art. 8 of this Decree also introduced the "water test" (*watertoets*). This "water test" is not only applicable to all kind of permits but also to all types of plans and programmes that can have harmful effects on water systems. The authority must ensure that such harmful effects are avoided or reduced as much as possible and when this is not possible, the harmful effects are repaired or compensated. To assist the authorities with this test, they may request a "water opinion" (*wateradvies*) from the competent authorities. Each permit or plan or programme must be reviewed against the basic principles of integrated water management and the relevant water management plans. The decisions must be well reasoned on this point and must contain a "water paragraph" (*waterparagraaf).* For activities that require an EIA or SEA, the "water assessment" must be a part of the EIS. These "environmental checks" are seen as an effective instrument for the integration of environmental concerns, especially in town and country planning, although some further improvements are still possible[58]. In specific situations, the process may lead to the rejection of a building project, even in areas previously marked as suitable for housing construction. Maps identifying flood risks have been prepared to facilitate the implementation of these measures[59]. The restrictions to property rights resulting from these measures and the system for compensation have been reviewed by the Constitutional Court for compatibility with the property rights enshrined in the Constitution and the European Convention on Human Rights and were declared compatible with those provisions[60].
For the moment there is also a comprehensive plan under construction to protect the Belgian coastline against floodings and rises of the sea level[61].
As indicated in paragraph 49, recent legislative changes have introduced at the federal level cover against flooding and other natural hazards in household fire insurance policies.

(55) Except for the measures that can be taken in the framework of the "bank zones" and the "flooding areas" under the Flemish Decree of 18 July 2002, as described in paragraph 54, there are no resettlement programmes linked to climate change.

(56) For the adaptation measures taken in agriculture and forestry, we refer to paragraph 51.

[57] E. DE PUE, L. LAVRYSEN & P. STRYCKERS, *Milieuzakboekje 2009*, Wolters Kluwer Belgium, Mechelen, 305-324. For more information on these issues, see: F. MAES & L. LAVRYSEN (eds), *Integraal waterbeleid in Vlaanderen en Nederland*, Die Keure, Bruges, 2003, 358.
[58] I. DE SOMERE, "Het enge sectorale beoordelingskader in de ruimtelijke ordening doorbroken ? Onderzoek naar de zin en onzin van watertoetsen, natuurtoetsen, habitattoetsen, enz.", *T.M.R.*, 2008/2.
[59] *2006 Belgium*, Fourth National Communication on Climate Change Under the United Nations Framework Convention on Climate Change, p. 91.
[60] Constitutional Court, Nr. 32/2005, 9 February 2005, *vzw Vlaams Overleg voor Ruimtelijke Ordening en Huisvesting* and *vzw Landelijk Vlaanderen* v. *Flemish Government*, www.const-court.be
[61] M. DE MUELENAERE, "Un vaste plan pour se protéger de "tempêtes millénaires". Le littoral a atteint la cote d'alerte," *Le Soir*, 13 August 2009.