

SANITATION COUNTRY PROFILE

BELGIUM

Decision-Making

Programmes and Projects

Status

Capacity-Building, Education, Training and Awareness-Raising

Information

Research and Technologies

Financing

Cooperation

Decision-Making: Institutional context of Belgium: The Kingdom of Belgium is a constitutional monarchy. The 1993 reform of the Belgian Constitution was the latest in a series of constitutional changes (others occurred in 1970, 1980 and 1988) which have transformed the country into a federal state made up of three Communities and three Regions. The three Communities are the French Community, the Flemish Community and the German-speaking Community. The three Regions are the Walloon Region, the Flemish Region and the Brussels-Capital Region.

Decision-making power is shared by the Federal Government, the three Communities and the three Regions, which are equal in law and exercise their responsibilities independently in various fields. The Federal Government is responsible for justice, social security, monetary and fiscal affairs and national defence.

The three Communities deal with cultural matters, education, use of languages and “person-related matters” such as some aspects of health.

The three Regions have authority in respect of socio-economic matters such as zoning and planning, housing, agriculture, employment, energy and public works.

The Federal Government and the Regions have shared competence in the field of foreign policy, economy, transport and the environment. Regarding foreign policy, each entity has external competence concerning their internal competence.

The Federal Government, communities and regions each have their own parliament and government, although the Flemish Community and the Flemish Region have merged their parliaments and government.

Co-ordination for international policy: In Belgium, The Ministry of Foreign Affairs has a topical co-ordination division for co-ordinating consensus on environmental matters among Federal, Regional, and Community authorities. It also co-ordinates the drafting of the Country Profile of Belgium for the Commission on Sustainable Development. In terms of coordination on sustainable development policy, several coordination mechanisms exist on the federal and regional level. On the other hand, Cross-sectorial and inter-departmental co-ordination has been initiated between the Federal Government and the three Regional Governments in the context of co-operation on international environmental policy. The Co-ordination Committee for International Environmental Policy (CCIEP) was established and became fully operational in 1995. It systematically reviews the relationship and overlaps between international agreements, and is charged with co-ordination and consultation activities to ensure vertical and horizontal integration regarding environmental policy. It also advises the Inter-ministerial Environment Conference on the Belgian international environmental policy.

Federal State: Although all environmental issues are in essence the competence of the regions, the federal government keeps the authority regarding: (i) product norms and eco-taxes, (ii) protection against ionising radiation incl. R.A.-waste, (iii) the transit of waste and (iv) the coastal waters from the low tide line on and territorial waters.

Radioactive Waste: The management of radioactive waste is the responsibility of the Belgian Agency for Radioactive Waste and Enriched Fissile Materials (Niras/Ondraf). The management of the nuclear fuel cycle rests with the private company Synatom. The Government has two representatives on the Governing Board of Synatom. Each installation in the field of nuclear waste has to be authorised by the competent safety authorities.

The procedure includes consultation of the local community, a National expert commission, and in some cases the European Commission. Belgium has introduced a complete management programme for its

radioactive waste. This management considers several steps, from production to final disposal: a) limitation of waste quantities at the production site by sorting, identification, decontamination, etc.; b) chemical stabilisation and volume reduction by chemical treatment, incineration, super compaction; c) conditioning of the treated waste in a stable matrix to limit dispersion; d) temporary storage in appropriate buildings with adequate shielding and safety provisions; and e) proposed final disposal facilities based on a multi-barrier concept.

Brussels Capital Region: The Administration of Infrastructure and Mobility (AED) is responsible for the design, realisation and operation of large-scale hydraulic projects while the Brussels Institute for Management of the Environment (IBGE-BIM) is the competent authority for supplying permits, controlling water discharges, collecting taxes on industrial discharges and interventions in collaboration with the AED on "blue network" projects. The IBGE-BIM is also responsible for the reporting to the EC.

The Brussels Inter-Commune Drains Authority (IBrA) has been set up by the 19 local authorities of the Brussels-Capital administrative region together with the water provider Brussels Inter-Commune Water Company (CIBE) to collect and control waste water and rainwater for the purpose of returning it to the natural environment, with or without treatment.

Aquabru is an association federating the different stakeholders involved in water services and water uses. IBGE-BIM is the competent authority for waste management.

Flemish Region: Basic sanitation: The institutional framework of the water policy in Flanders is described in the decree of July 18th, 2003 on Integrated Water Policy (Belgian Law Gazette, 14.11.03). This decree contains inter alia the juridical implementation of all regulations of the European Water Framework Directive (cf. Freshwater country profile). The existing environmental legislation on water will be progressively integrated into the Decree through specific implementing orders. The Decree on General Issues of Environmental Policy (1995) establishes general rules on how to protect the environment and creates a framework to establish quality objectives. The Decree on environmental licenses (1985) establishes the framework for licenses, like discharges of wastewater. In application of this Decree, the VLAREM regulation (1995) contains the conditions for discharges of wastewater.

The Flemish Environment Agency (VMM) is covering water quality of surface water and effluents, including standards, sanitation programs of industrial, agricultural – including diffuse emission - and urban waste water and waste water levies.

The Flemish regulation on urban waste water treatment is an application of the EU Council Directive 91/271/EEC of 21.05.1991 concerning UWWT. The whole territory of the Flemish region has been designated as sensitive area in compliance with this directive.

The Flemish Land Company and Manure Bank (VLM, <http://www.vlm.be>) covers land consolidation, nature development, agricultural pollution and the manure bank.

The Flemish Environment Holding Company was created in 1990 (51% public/49% private) to promote investments in the environment sector. In 2002 this company is integrated with the Flemish Participation Company (VPM). Its daughter AQUAFIN, also founded in 1990 is the license holder for the construction and operating of the sewage treatment infrastructure (a supra-municipal infrastructure of sewer collectors and urban wastewater treatment plants).

Solid waste: The Flemish Public Waste Agency (OVAM) is the competent authority for solid waste. The Decree of 2 July 1981 with regard to the prevention and management of waste substances, better known as the Waste Decree, lays the foundation of a co-ordinated and permanent waste policy in Flanders at managerial level. By repetitive amendments, the decree evolved gradually from final removal or

destruction of waste to prevention and useful application. VLAREA (Flemish Regulation concerning Waste Prevention and Management, 1998, last update and amendment in 2004) implements the Waste Decree and integrates a number of implementing decisions into a convenient whole.

OVAM is also in charge of remediation of polluted soils. The legislative frame was founded by the Decree concerning Soil Remediation of 1995 of which VLAREBO (Flemish Regulation concerning Soil Remediation, 1996, last update and amendment in 2004) is the Implementing Order.

Landfills: In the Flemish legislation on waste and on environmental permits, provisions for waste to be landfilled are fixed. The acceptance criteria are based on European legislation. The legislation also includes criteria for landfills, impermeable layer, 30 years after-care and bank guarantee. The acceptance is based on the origin, nature and potential leachate of the waste. For some waste streams a landfill-ban is laid down. Each landfill has to fulfil a lot of conditions to prevent contamination of soil, groundwater and surface water.

The Flemish legislation can be consulted in English on:

http://www.emis.vito.be/wet_ENG_navigator/index.htm

Walloon Region: Basic Sanitation: As explained in fresh water profile, the Walloon legislation on water sanitation and especially urban waste water treatment is addressed in part III (anthropogenic cycle of water) of the Book II (water) of the Walloon environmental code.

The general regulation on UWWT is mainly the transposition of directive 91/271.

It must be noted that since 2001, all the Walloon territory has been designated as sensitive area in compliance with the 91/271 directive which means that all the WWTP of more than 10 000 p.e. must be equipped with a tertiary treatment.

Solid Wastes: In conformity with the requirements of the EU waste directive, the Walloon Region has hierarchised its waste management. Prevention is the first priority. However, the waste that is nevertheless produced must be recovered as much as possible, preferably in material form. Failing this, its use as a replacement fuel (energy recovery) is the next option. Finally, if recovery is neither possible nor advisable, the waste is disposed of.

In all cases, the management options chosen must be guaranteed safe for both human health and the environment. So, recovery is not always sought at all cost. For example, in the case of agricultural re-utilisation, measures of caution have been stepped up in order to avoid as much as possible all risks of contaminating ecosystems and to safeguard the quality of agricultural products.

Waste prevention and recovery also come up against technical and economic constraints that cannot be ignored, either. These constraints are linked to production and consumption patterns on the one hand and the intrinsic recovery processes on the other hand. The waste stocks or arising indicators tries to qualify the progress made by the region to achieve the quantitative and qualitative waste-reduction targets that it has set itself (amounts and harmfulness of waste generated). The nature and origins of the waste that is generated are analysed.

On 25 April 2002, the Walloon Government adopted a Decree laying down the obligation of recovering some wastes. This means that the former holders and producers of waste-generating products bear the cost of managing these wastes. This decree thus aims to increase the responsibility of sectors at the origin of waste production. A further aim is to promote the prevention of waste, as well as the recycling and re-use of waste, in order to limit drastically its consignment to landfills. The decree thus includes in a regulatory framework the environmental agreements that already governed the recovery of some wastes.

Since 1 January 2003, twelve types of waste are covered by this obligation, namely, used batteries and storage batteries, used tyres, paper refuse, expired drugs, end-of-life vehicles, wastes from electrical and electronic equipment, lighting equipment, electrical and electronic tools, toys and control and measuring instruments, used oils and lubricants, used agricultural plastics and photographic wastes

Programmes and Projects: Brussels Capital Region: *Basic Sanitation:* A progressive rationalisation of the water sector in the Brussels region is taking place. This evolution should lead to the creation of a unique public actor (by fusion and integration of existing inter-municipalities) that will control all aspects of the water technical cycle (production of drinking water and its distribution, water discharge, sanitation). The Development of a « blue network », aims at separating sewage water and rainwater by connecting the latter into new or existing surface water. It also aims at ecologically restoring some sectors of rivers and wetlands, implementing special protection measures and land use rearrangement.

The Brussels Inter-Commune Drains Authority (IBrA) and local authorities are in charge of collecting and returning waste water and rainwater into the natural environment, with or without treatment. Currently, it is estimated that 90% of inhabitants are connected to the sewage system. It is previewed that by the year 2015, 100% of inhabitants will be connected. In the Brussels Region, the sewage system collect at the same time waste water and rain water (mixed water).

One of the major objectives of the Brussels Region in the next few years is the construction of adequate sewerage and wastewater treatment facilities:

- The southern purification station (360 000 equivalent habitants) is already operational since four years.
- The construction of the main water treatment plant with a 1.1 million equivalent habitants capacity for the northern part of the Region is foreseen by the year 2006. The preparatory designs for the construction are under way. The AQUIRIS group build the station and the main collectors (7 Km through the city, between Senne and Canal Bruxelles-Charleroi). That purification is established on the newest technology, including denitrification and dephosphatation.

Solid waste: The Brussels Capital Region has established a waste management plan for the period 2003-2007 (<http://www.ibgebim.be/francais/contenu/content.asp?ref=1533>, or http://www.ccib.be/site/common/News/ibge_21,).

Flemish Region: In the third quinquennial Environmental Policy Plan 2003-2007, called “MINA3” (cf. freshwater country profile) for each of the 12 themes at least one long-term objective (2015/2030) and several objectives for the planning cycle have been defined. The sanitation related themes are the following: (i) pollution by fertilisers and manure or eutrophication, (ii) dispersion of dangerous substances, (iii) soil and sediment pollution, (iv) pollution by waste, and (v) water pollution.

Basic sanitation: The Flemish environment agency is in charge of the General Water Quality Plans (AWP) as the ‘quality’-component of the integrated water policy plan. It evolved from a pure water treatment programme – with the sole aim of establishing waste water treatment programmes, particularly UWWTP – towards integrated water quality plans. There are three levels: (i) the general policy level for the whole Flemish territory which is at the same time the input to the global Environmental Policy Plan 2003-2007; (ii) the sub-basin level containing the analysis of the status of the environment, instruments and future developments and scenarios; and (iii) the local or municipal level with concrete guidelines and actions.

For sanitation a coverage of 100% is envisaged. In general public collection and treatment is envisaged for approximately 80 % of the households, but if public sanitation is not foreseen, individual treatment is obligatory. Pursuant to the implementation of the Urban Wastewater Directive, the Flemish government started investments in wastewater collection and treatment plants based on 5-year investment plans. The last phase of investments has been started to upgrade the remaining treatment plants with a capacity of

over 10.000 p.e. and to build the remaining missing treatment plants with a capacity over 2.000 p.e.. New investments will focus on optimising existing infrastructure.

In 2000 a Reduction Programme on discharge of dangerous substances was adopted. This resulted in a broader set of quality standards, an extended monitoring network and an additional stimulus for discharge permit reviews.

Solid Wastes: Specific waste management plans are operational for different types of waste: organic and biological, building and demolition waste, municipal waste, industrial waste of small companies, and packaging waste.

A lot of progress is made through the Flemish waste disposal policy. This policy resulted in a large decrease of the share of waste disposal in the emissions of several pollutants. Selective collection of household waste kept rising: in 2001 67% of the waste was selectively collected (objective 2001: minimum 52 %) and 185 kg/inhabitant was collected non-selectively (objective 2001: maximum 220 kg/inhabitant). However, the total household waste mountain kept on growing and exceeded the STT for 2001 by 9%. The Household Waste Implementation Plan 2003-2007 proposes, inter alia, actions to stimulate the use and re-use of sustainable and environmentally friendly products as an initiative for families to produce less waste.

An ever-increasing part of household waste got recycled or composted. 1998 was the first time that more waste was incinerated than landfilled, and this trend has continued. The authorities have therefore succeeded in making the incineration of household waste more attractive than land filling. They did this, inter alia, by charging higher levies on landfilling than on incinerating. The downside was that only a small part was re-used.

Hazardous Wastes: The Flemish region has a management plan for the prevention, the valorisation and the disposal of all wastes. A specific destruction programme is established for PCBs and PCTs, also for the collection and final treatment of medical waste.

Walloon Region: *Basic Sanitation:* Since 1980, building and maintenance of urban waste water treatment plants and collectors are not any more of the competence of the municipalities and have been entrusted to 8 inter-municipal companies which were directly financed by the Regional budget. The municipalities are only competent for the sewer system in compliance with the PASH (sub-basin sanitation-plans).

In the early 90, a waste water taxation system entered into force with the Decree of 1990 to reinforce the financing means. That was also an opportunity to face the challenge of the UWWT Directive 91/271/EC while at that moment the global capacity of UWWT plants (at least secondary treatment) was still less than 20% of the final target of 4.215.775 p.e. which is the sewerable load to be collected and treated by the end of 2005. But the taxation system didn't have an immediate effect and in 1999, the global capacity of UWWT was still limited at 38% of the 2005 target. Then the public water management company SPGE (Societe Publique de Gestion de l'Eau) was set up

for co-ordinating and financing the actions of the eight inter-municipal urban waste water treatment companies in the Walloon Region. It is worthwhile noting that since this company was created, the treatment capacity has obviously increased (30%).

On 1st January 2003, 127 UWWT plants with capacity of 2,000 p.e. or more were in service and can treat a polluting load of 2,142,925 p.e., or about 50% of the 2005 target. If we consider the nominal capacities of the treatment plants in construction (420,000 p.e.) and of those the plants for which contracts have already been awarded or financial commitments made (766, 000 p.e.), the remainder (886 850 p.e.) is about 20% of the target of 4.215.775 p.e. to meet by the end of 2005.

The Walloon Region has set itself the objectives of increasing its urban wastewater treatment capacity and improving the co-ordination between the stepped-up investments in priority sewer networks and the building of sewage treatment plants and laying of collectors. To this end, the Walloon Government gave itself two new tools in December 2002, i.e., a financing structure for priority sewer networks (under SPGE's management) and General Regulation on Wastewater treatment (RGA: Reglement General d'Assainissement), under which Sub-basin Wastewater Treatment Plans (PASHs: Plan d'Assainissement par Sous-bassins Hydrographiques) are to be carried out (see Highlights).

The gains made in the area of individual sewage treatment and the improvements attributable to small collective treatment facilities in certain areas should also enable the Walloon Region to increase its wastewater treatment rate

Solid Wastes: After the first plan 1991-1995, a second plan called "Walloon plan for waste management-

- Reduction by prevention	- 28,8%
- Selective collect	+ 65,2%
- Valorisation (including incineration residues)	+ 62,2%
- Incineration with energy recovering	+ 40%
- Landfilling (ultimate solution)	+ 5%

horizon 2010" was adopted by the Walloon Government on 15 January 1998.

Objectives and measures have been fixed for the different waste categories, tacking into account of the waste management hierarchy and principles contained in the Walloon Decree of 27 Jun 1996.

The main 2010 targets of this plan for the household waste are the following compared to the 1998 situation:

see detailed figures page 171 of the Walloon waste plan on <http://mrw.wallonie.be/dgrne/rapports/owd/pwd>

On 17 July 2003, the Walloon government decided to slightly adapt the Walloon waste plan. New prevention reduction targets has been fixed respectively at 10% for 2007 and 15% for 2010. Recycling and compost-biomethanisation of the organic fraction of household wastes should reach 60% by 2008

All regions:For packaging waste, a co-operation agreement between the three Regions and the packaging sector has been concluded in 1994 for recovering and recycling the packaging waste.

A body called "Fost Plus" (<http://www.fostplus.be>) has been set up. "Fost Plus" organises the selective collect and recovering of plastic, metals and drink cardboard boxes (PMC – blue bags) as well as glass, paper, cardboard for the inter-municipal companies competent for waste management.

For some waste flows, like used tires, used batteries, end-of-life-vehicles and waste from electric and electronic equipment, take-back agreements have been concluded between the 3 Regions and the sector, including in most cases a fee for the financing of the collection and recovery of the waste.

Status: Belgium has about 10.239.085 inhabitants (2000), spread over an area of 30,518 km². It is a very densely populated country with about 335 inhabitants per km². Its population is quite unevenly distributed. The highest population densities are found in the north and centre of the country, more especially within the quadrangle formed by the cities of Antwerp, Brussels, Ghent and Leuven, in which more than 40 % of the national population lives. By contrast, the population density south of the Charleroi-Namur-Liege axis is less than 80 inhabitants per km². Nowadays some experts argue that Belgium has reached virtual 100% urbanisation, even though the official figure is around 96-98%."

The high density together with the very high degree of urbanisation, and high level of industrialisation has had its effect on the overall environmental quality. In the 1996 Habitat report it was already stated that

environmental degradation of rivers, watercourses and coastal areas of soil and subsoil including aquifers, of air, of green and forest areas, and the problems of waste, were all serious problems in Belgium.

Since then both the public and private concerns of environmental degradation have come to the fore strongly and substantial efforts to remedy problems have been undertaken. Far from being solved such problems are, in some domains, either stabilised or partially remedied. It is expected that further public policies as well as efforts of individuals and civil society in general will, in the coming years continue to be of high priority.

Brussels Capital Region: cf. chapter programmes and projects.

Flemish Region: *Basic sanitation:* In 1990 approximately 78 % of the wastewater from households was collected in sewer systems, but only 30 % was treated in a wastewater treatment plant. In 2002 the collecting rate increased up to 86% and 60% of the wastewater of households was treated in an urban wastewater treatment plant. By 2007 this figure should reach 80%. (For more information see <http://www2.vmm.be/servlet/be.coi.gw.servlet.MainServlet/standard?toDo=open&id=3564&&>)

Solid Wastes: The Flemish region has several reuse centres where a lot of consumer goods are restored and put on the second hand market; 320 container parks are put into place for the separate collection of municipal waste; the separate collection, recycling and other treatment of industrial waste is well developed; there are 20 composting plants; 12 installations for the incineration of municipal waste, and 28 landfills.

Hazardous Wastes: Flanders has 38 installations for the treatment, the conditioning and temporary storage for all types of hazardous waste.
See also Freshwater Country Profile.

Walloon Region: *Urban waste water treatment:* Cf. chapter Programmes and projects

Waste and sewage sludge: Every inhabitant of the Walloon Region produces 499 kilos of household waste per year (the non sorted part (grey bags) is now less than 200 kg/year). Another 6140 kilotons of waste are produced by industry, in addition to the 853 kilotons produced by other economic activities.

At present, waste generation is decreasing. Regarding hazardous waste and sewage sludge, this reflects an improved follow-up and intensification of cleaning efforts. On the other hand, for industrial and domestic waste, this reveals a limited implementation of the prevention principle. Production, distribution and consumption patterns have not been significantly modified in the perspective of reducing waste generation.

Meanwhile, consistent efforts have been implemented in order to improve waste management. Most industrial waste is recovered and separate collection of domestic waste makes progress. This results from specific efforts (extension of the door to door separate collection and the number of drop-off centres, application of the compulsory take-back rule for several articles). Nevertheless, the annual volume consigned to landfill sites (mostly raw waste) is still slightly increasing.

Finally, the environmental management of waste-treatment plants (landfill sites, incinerators) has been improved. On the other hand, in the absence of appropriate installations, waterways dredging has been strongly slowed down for about ten years, which poses problems in terms of navigation and flooding.

Capacity-Building, Education, Training and Awareness-Raising: Brussels Capital Region: To direct and develop the environmental policy of the Region of Brussels Capital, it is necessary to have reliable information on the state of the environment. The use of indicators is useful to direct the political decisions.

It also allows the comparison between cities or regions. That is the reason why it is interesting to develop a common approach and that various initiatives aiming at the elaboration of environmental indicators at the local level were born.

The IBGE-BIM is involved in some of these projects.

The RESPECT project: Network of exchanges and support for the environmental policies of regions financed at the European level.

The project Euroregion « Indicators of Sustainable Development » allowed to put in relation and to confront regional administrators (of 5 European regions) specialised in the creation of indicators in relation with environment.

Within the framework of the IDDU project (Indicators of urban sustainable development), the IBGE-BIM elaborated, by means of a network of Belgian cities, a set of indicators intended for the urban administrators. It is a question of one management tool of the city which aims at facilitating the decision-making and the evaluation of the progress towards the sustainable development at the local level.

The region is actively involved in raising awareness activities, essentially by financing NGOs which implement various activities linked to water.

The Region supports for 5 years a project entitled " Brussels by Water ". This project is developed by the association " Escaut sans Frontieres - Coordination Senne ". This project articulates mainly around 2 aspects:

- The educational Cruises " Brussels by Water ": More than 2000 participants every year coming from schools of all the municipalities of the Region of Brussels-capital. The program is adapted to the elementary and secondary schools. It concerns activities of sensitisation about water problems with a concrete and realistic approach of these problems.
- Distribution in 2003 of more than 1000 copies of the guide ' the Water in Brussels ' (guide understanding piece of information and activities to be made on the water).

The Parliament of young people from Brussels for water is another project supported by the Region and constitutes a good example of civil participation for water management. This parliament brings together young "parliamentarians" who are 8 to 18 years old and also adults who are involved in the various stages of the water policy. This parliament tries to make young people aware of good water management practices by giving them the possibility to build a solid and coherent action program to improve water management. The action plan is implemented and concrete actions have been realised. For more information, please consult the web site: www.lamaisondeleau.be

Another project: "Chercheurs d'eau" (Researcher of water) was set up in 2003 by the cell InforScience (promotion of the Sciences) of the Universite Libre of Brussels. The purpose was to take advantage of the period of construction of the Water-treatment plant of Brussels North to organise an operation on the theme of the Water and its management in a perspective of sustainable development. The global objective is to offer to the young people the possibility of approaching and of experimenting the scientific initiative, as well as of developing the active citizenship.

Flemish Region: The Flemish Region provides information to the public, stakeholders and youth by written (brochures, booklets and course materials for primary and secondary school) and electronic way (web site with on-line data on air and water quality). Brochures on sustainable water use and sanitation are already established for architects (2000), cattle breeders (2001) and municipalities (2002). The launch of these brochures is organised on provincial level by means of seminars or workshops.

All Flemish provinces have nature and environment centres and run environmental campaigns. A thematic centre provides tailor made information on sustainable water use, on request of any individual or organisation. Annual reports on water quality and discharges are made public through organised press conferences. Furthermore, awareness-raising campaigns are organised through printed (newspapers and magazines) and audio-visual media (TV and radio). The Centres for Environmental Education in Flanders provide workshops and symposia for professionals on ecological themes, such as small-scale wastewater treatment. The Provincial Institute for Environmental Education of Antwerp has educational sewage plants, and has held an exhibition on the wise use of water. Examples of the ways in which eco-tourism and nature-based tourism are being promoted include the annual 'Day of Heritage'.

In the Flemish Community, school curricula (attainment targets) are being revised at all levels to incorporate environmental issues. Environmental health, safe drinking water, sanitation, food, ecosystems, recycling, and energy savings are issues covered as subject-related or cross-curricular themes at all levels of both the primary and secondary school curricula. Moreover, a multi-media educational package on water has been put together by the Flemish Environment Agency (VMM) for all educational levels in primary and secondary schools.

Flanders has been taken diverse initiatives concerning awareness-raising, training and education.

The project Environmental Care at School (ECAS, in Dutch 'MOS') was set up by the Flemish Environment Ministry in co-operation with the 5 Flemish provinces in September 2001 to encourage children and youth to experiment with environmental sound behaviour. In October 2003, ECAS launched a thematic manual on "Water" for primary schools. This compilation is a working instrument to convert schools into a water friendly place in an educational way. In September 2002, the Green School'-project was integrated in the ECAS -project. This project pays attention to and helps schools with the implementation process of the attainment targets of Environmental Education and other cross-curricular attainment targets in the primary and secondary schools (as mentioned before).

Another Flemish initiative concerns "Floepje", the name of a flying fish and the central figure of an environmental-educational project for children. The fish symbolises water and air. By means of picture books, videos, a dominoes game, a song and a puppet, the project aims at teaching young children an environment saving attitude. The project started in Flanders in 1996. In the framework of the bilateral co-operation between Flanders and South-Africa an adapted version in English was introduced in South-Africa in 2000. Meanwhile, the project was presented at the European Commission's Green Spider meeting of environmental communicators in Santorini, where it started its European career. The educational packages are now available in ten languages: Dutch, German, Italian, Bulgarian, Greek, Estonian, Hungarian, Romanian and Slovenian and are used in 13 European regions.

Another initiative concerns the "Milieuboot" (or the "Eco-ship"). This is an environmental organisation that dedicates itself through actions and projects to freshwaters. The Milieuboot is particularly aiming at a better water quality of rivers and canals and at the conservation of the nature around water. The organisation wants to make youth and adults aware of water pollution and water purification. Investigation, education, information and awareness-raising are keywords. The Milieuboot takes with it around 15000 youth and adults on a yearly basis to enjoy an educational discovery trip on the water. A scientific environment boat trip is also on the programme.

Furthermore, the Flemish government launched a number of campaigns (and will plan some in the future) aiming at the different categories of water users: households, industry and agriculture. The campaign "Water. Every drop counts" implies advertising spots on television and brochures for different target groups to inform all water users on how to deal with water in a sustainable way. Following the latter campaign, the Centre for Natural and Environmental education "De Helix" prepared an educational project for a broad public: families, associations, schools, local authorities, environmental educators,... Departing

from their personal living conditions and interests, the target groups were confronted with their own behaviour and the sometimes opposite concerns of the different water users. The objective was to stimulate a change in the behaviour of the target groups to reach a sustainable bond with water. The training of intermediates with a view to multiply the effect has also been an important objective.

Besides these campaigns, the Flemish Focal Point for Sustainable Water Use (“Steunpunt Duurzaam Water”) established a permanent water information desk, called “Waterloket”. The focal point provides information on sustainable water use, water pollution prevention and other water-related problems to all applicants. The service is free of charge and can be reached by telephone, e-mail and the Internet. The web site “www.waterloket.be” has been launched on World Water Day 2003. The information on the web site is grouped by target-groups: municipalities, households, agriculture and industry. Numerous links to web sites of water service providers help the user to find solutions for an important range of water issues, such as: water legislation, permitting, sustainable water use, water pollution, water quality, the collection of precipitation water and infiltration, individual or small scale waste water treatments.

Solid Wastes: A campaign for awareness on waste minimisation, “less waste”, has been developed including awareness for prevention at source, reuse, composting, that is, waste minimisation in a broad sense. The municipalities regularly inform the public about these initiatives for the prevention of domestic waste, the results of collections, and the processing methods. The Flemish Public Waste Agency (OVAM) targets school children with the “Be Smart, Avoid Waste” material (folder, binder, poster) and with a waste prevention Internet game.

Walloon Region: Networks as CRIE (Regional centre for initiation to environment) have been created. The CRIE network covers Wallonia as a whole and provides environmental education for youth and adult groups.

Eleven in number, these centres make it easier to co-ordinate ErE initiatives and to raise their profile among citizens. The CRIEs are dedicated to providing a service of public information, awareness raising and education to citizens on the environment and nature through a system of incentives and popular teaching materials. They are predominantly active in classes for students during term and during the holidays, as well as training programmes. While its activities are primarily oriented to young people, some programmes are also aimed at adults : teachers, seminar leaders, nature guides, forest rangers, etc. In addition, guided walks, exhibitions, open days and conferences organised by the CRIEs offer many opportunities for family activities.

Limiting the production of waste and improving its management is a permanent goal for Walloon Government and its administration. To achieve it, the DGRNE can initiate a series of preventative actions, which include information and awareness raising drives among the population, sorted waste campaigns and even research into technologies that produce less pollution.

On the other hand the IDEA-network exists to provide information on all the material available on different environment fields (including for waste) for teachers and local youth workers.

Information: Federal State: http://www.nirond.be/engels/1_index_eng.html : Belgian Agency for Radioactive Waste and Enriched Fissile Materials

Brussels Capital Region: Leaflets on water addressed to the large public has been edited by AED, IBGE/BIM, CIBE, IBDE. Official web sites:

- Brussels Institute for Management of the Environment: www.ibgebim.be
- Plan Regional de Developpement (Regional Development Plan) : www.prd.irisnet.be
- Conseil de l’Environnement de la Region de Bruxelles-Capitale (Committee for Environmental

- Affairs) :www.cerbc.be
- Intercommunale Bruxelloise d'Assainissement (The Brussels Inter Commune Drains Authority):
www.ibra.be
- Aquabru: Association des Eaux de Bruxelles (Association of Waters in Brussel):
www.aquabru.org
- Universite Libre de Bruxelles (Brussels University of the French Community) : www.ulb.ac.be -
Vrije Universiteit Brussel (Brussels University of the Flemish Community) : www.vub.ac.be -
Intercommunale Bruxelloise de Distribution de l'Eau (The Brussels Inter-Commune Water
Distribution Authority : www.ibde.be
- Compagnie Intercommunale Bruxelloise de l'Eau (The Brussels Inter-Commune Water Company):
www.cibe.be

Waste Management Plan 2003-2007 : http://www.ccib.be/site/common/News/ibge_21 or
<http://www.ibgebim.be/francais/contenu/content.asp?ref=1533>

Relevant documents: Rapport sur l'Etat de l'Environnement en RBC 2002 by IBGE-BIM.

Flemish Region: In 1992 the Flemish environmental authorities decided to establish one integrated environmental data bank composed of three 'pillars': (i) permits and levies, (ii) monitoring data, and (iii) soil data; the pillars are run respectively by AMINAL, VMM en VLM. In 2000 the strategic project "Milieu Management Informatie Systeem"

MMIS:http://www.vlaanderen.be/NASApp/cs/ContentServer?pagename=MVG_Portaal/Page/WeakIntegration/PopUp/PopUp&bron=http://mmis.milieuinfo.be/custom7_02.cgi?id_tab=3&urlWI=http://mmis.milieuinfo.be/custom7_02.cgi?id_tab=3) or "Environmental Management Information System" has been launched to integrate all data to one sound entity. Different steps has already been taken such as a collective business company data bank and others measures to attain a simplified administrative and environmental information service.

There are also the internet sites of the environment and its related administrations and para-regional agencies where the organization, policy and monitoring data can be obtained. Most of the internet sites have links with the other relevant sites of authorities and stakeholders.

The following web sites enable to find all competent authorities ,water and waste actors and data:

- <http://www.flanders.be/> : general information about Flanders
- <http://www.lin.vlaanderen.be/> : Department of Environment and Infrastructure of Flemish Ministry
- <http://www.mina.be/> : Environment, Nature, Land and Water Management Administration -
<http://www2.vmm.be> : Flemish Environment Agency (VMM)
- <http://www.aquafin.be/> : Aquafin, sewerage and UWWTP
- <http://www.ovam.be/jahia/Jahia/pid/5> Flemish Public Waste Agency (OVAM) -
<http://www.milieuinfo.be/> : environmental information and links - <http://www.milieubeleidsplan.be/> :
Environment Policy Plan
- <http://www.ciwvlaanderen.be/ciwhomepag.html> : Co-ordination Commission Integrated Water Policy
- <http://www.emis.vito.be/> / : Energy and Environment Information System of the Flemish Institute of Technological Research
- http://www.emis.vito.be/wet_ENG_navigator/index.htm : Flemish Environmental Legislation Navigator
- <http://www.mina.vlaanderen.be/milieueducatie/informatief/webwater.htm> : Natuur - Milieu - Educatie - Informatie Nature and Environment Education and Information (+ links to water actors & stakeholders)
- http://www.vlm.be/Wie+Zijn+Wij/VLM_E.htm : Flemish Land Agency

- <http://www.svw.be/watis/default.asp> : umbrella organization of water providers (+ links to all members)
- <http://www.waterloketvlaanderen.be> : Flemish Water Information Desk (+ links to water actors & stakeholders)
- <http://www.minaraad.be> : Environment and Nature Council
- <http://web.gisvlaanderen.be/gis/index.jsp> : GIS
- <http://www2.vmm.be/servlet/be.coi.gw.servlet.MainServlet/id1082019953584/standard/?toDo=open&id=8> : monitoring data on water

The Flemish Environment Agency (VMM) publishes annual reports on water quality of surface water and effluents (industrial and UWWTP)

The VMM is in charge of the annual Environment and Nature Reports or MIRA (Milieu-en Natuurrapport Vlaanderen):

- T-reports: the Theme-report describes the status of the environment and nature in Flanders, evaluates trends and the effect of the policy and measures;
 - S-reports (quinquennial): the Scenario-report describes the expected evolution of the environment and nature with unamended or actual policy and different scenarios of amended policy,;
 - BE-reports: description and evaluation of the environmental policy..
- <http://www2.vmm.be/servlet/be.coi.gw.servlet.MainServlet/standard?toDo=open&id=13&&>

The water authorities have also a central information desk “Waterloket” (see last paragraph of previous chapter) and publishes guidelines for water users (architects, cattle breeders ...)

The status of nature is described in the annual Nature Report of the Institute of Nature Conservation of the Flemish Community (<http://www.instnat.be/>)

Solid Wastes: Both for hazardous waste and for solid waste, the quantities and categories handled are declared by the waste handler in Flanders and the other regions and databases have been developed where these declarations are encoded.

Hazardous Wastes: A data collecting system has been developed. The Flemish Region has developed and uses a full-automated system (ASB) for the administration and control of imports and exports of waste, including on-line consultation by all maintenance forces and fulfilment of administrative requirements by waste producers and treatment plants.

A number of sustainable development indicators are presently under study and will cause no difficulties as soon sufficiently long time series of high quality data are available. This action must be also seen in conjunction with the development of ecological quality objectives within OSPAR. Finally, in OSPAR, Belgium is lead country for PCB's, Trichlorobenzenes and Dioxins.

Walloon Region: The Wallonia environment portal (<http://environnement.wallonie.be>) brings together important data by theme and makes various types of information available to the general public (briefings, links to reference sites, events, news, etc). The portal dedicated to the geographical information systems used at the DGRNE also helps users find and access information and cartographic data.

Wallonia publishes on an annual basis the “Environment dashboard of the Walloon Region. The 2003 dashboard is available on the environment portal in French and English. A summary of the dashboard is also available in four languages (F, Eng, Dutch and German).

The DGRNE organises and monitors the way in which the various waste flows are collected, processed and eliminated. Within this framework, the DGRNE fulfils administrative tasks (authorisation request

instructions, accreditation and registrations with respect to waste management operations, as well as indemnification claims with respect to damage caused by waste) and control tasks (applying tax on waste, planning industrial waste collection centres, monitoring the supervision of manufacturers obligations to accept returned goods, etc). The DGRNE has a stake in monitoring dump rehabilitation operations and improving land at contaminated obsolete industrial zones, which is an issue of growing importance among the population.

The DGRNE supervises all the operations of monitoring the transfer of dangerous waste, taking on coaching rule us avis the applicants.

An application handbook has been posted at : http://environnement.wallonie.be/publi/owd/manuel_ttd/ .
The DGRNE maintains precise data on waste (volume, type, consignee, notifying company, etc) and is also in a position to provide the Statistical Office of the European Communities – EUROSTAT – with any information it needs to better define and so better control the phenomenon.
See also fresh water country profile.

Research and Technologies: Brussels Capital Region: The Region set up two programs:

- Prospective Research for Brussels, which finances the projects of young researchers in subjects of importance for the Brussels region.
- Research in Brussels, a program which aims at welcoming in the region of Brussels-capital the researchers coming from the whole world.

Flemish Region: The Environmental Policy Plan 2003-2007 (MINA3) emphasizes the importance of policy sustaining instruments: (i) knowledge acquisition, (ii) information management, and (iii) reporting. In addition of the management of the research policy by a Support Center For Environmental Policy Sciences, a strategic cross sector research program is set up with the following items; (i) causality between abiotic and biotic factors and environmental quality, (ii) evaluation of environmental policy through survey, (iii) sustainable development and resource management, (iv) development and use of indicators, (v) economic and other instruments, (vi) environmental costs modeling, and (vii) development of new technologies and innovations. The consultation with the Research and Technological Innovation Department (IWT: http://www.iwt.be/iwt_engels/default.htm) will be improved and get a better structure.

The dispersion of dangerous substances is marked as one of the items that need a particular cross sector co-ordination.

The program of 2003 of TWOL (<http://www.mina.be/twol.html>) or Applied Scientific Research on the Environment treats a variety of water related items, inter alia: nitrogen leaching through soils, feasibility of environmental levies on the use of pesticides, priority substances of the WFD, ecotoxicity of effluents, pathways of dangerous substances, modelling of sewers, reduction of pesticides, monitoring strategies Waste related subjects are: sanitation techniques of polluted soils, leaching of waste and soils, sanitation of sediments, financial instruments and levies, waste selection, ... New tools are being developed concerning waste prevention and ecodesign.

The Flemish Institute for Technological Research (VITO) runs a Energy and Environmental Information System (see Information) with particular information on BAT for small and medium sized industry. VITO is also the research centre for establishing BAT and participates actively in the Belgian delegation in the EU IPPC BREFs Committee.

OVAM, the Flemish Public Waste Agency for waste management is promoting clean technologies with respect to water resources management and waste reduction through the Presti-project, <http://www.ovam.be/jahia/Jahia/pid/285#Doelgroep>).

Walloon Region: The Minister has invited the universities to work together in PIRENE (the program for integrated research on water and the environment). Eighteen services from seven Walloon universities work with the Walloon political and administrative authorities, and the water operators, based in the environment pole of the University of Liege.

The aim of this large and innovative project is to develop a model for each sub-basin to provide real assistance and input to those managing the integrated water cycle..

Financing: Brussels Capital Region: The principal sources of funding are:

- The water invoice which covers production, distribution, collection of waste water and treatment
- The endowment of the Regional budget for the Water Policy is used for the financing of the Regional administrations AED and IBGE

In 2003, the regional budget was used to finance principally the following works:

- Works in fight against the floods, the collection and purge of waste water (17,1 M€);

- Exploitation of the water-treatment plant of Brussels - South and the Stormbasins (6 M€); - Cleaning out of streams, restoration of banks, studies...

In addition, a fund for the financing of the water policy was created in 2001. This fund is intended to finance the repurchase of a collector (the end of 2006) and for the payments of the annual instalments of the future northern water treatment plant (50 M€/year).

The incomes of this fund are from 2 sources:

- The regional tax on the draining of waste water
- The financial participation of the Flemish Region in investment for collection and waste water treatment plant

Flemish Region: The total amount in 2001 of the financial means of the Flemish government for the environment policy was 832 million Euro. 57% of it came from the general budget while 43% came from the MINA-Fund. The receipts of the MINA-Fund came essentially (97 %) from environmental levies. Waste water levies are the most important source of income: 70%; the other levies are: waste (24%), extraction of groundwater (5%) and manure (1%).

The repartition of the financial means is the following: water management, 61.4%, nature protection and conservation, 21.3%; waste and soil management, 8.6%; general environment management, 6.2%; and manure management 2.5%.

Basic Sanitation: In 2002, the investment and operating budget for water treatment and sewerage amounts to €410 million Euro per year (350 mln for collectors and treatment and 60 mln for municipal sewerage) and is still growing. The income from waste water levies amounts to appr. 230 mln Euro..

Walloon Region: Urban waste water treatment: The SPGE's programme for 2000-04 budgets more than 1 billion Euro of investments for collecting and treating urban waste waters in the region's priority agglomerations, whereas the 1991 wastewater treatment budget did not exceed 25 million Euro.

All regions: In Flanders and Wallonia, the least favoured groups of the population are exempted from paying levies on wastewater. The least favoured groups of the population in the Brussels Region can fall back on social provisions and social institutions (CPAS or municipal social assistance institutions)..

Co-operation¹: Treaties of Ghent (2002): Belgium – comprising the co-signature by its three regions (Brussels Capital Region, Flemish Region and Walloon Region) - has signed in Ghent on December 3rd, 2002, together with France, Germany, Luxembourg and the Netherlands, two new treaties on integrated river basin management for the transboundary river basin districts Scheldt (BE, FR, NL) respectively Meuse (BE, FR, GE, LUX, NL). By these treaties, the international co-ordination of the river basin management plans for implementing the EU Water Framework Directive and flood prevention and protection is assigned to the International Scheldt and Meuse Commissions. The new treaties will replace the existing treaties of Charleville-Mezieres (1994) which scope was limited to the protection of the water quality of the main river.

More information:

- International Scheldt Commission: <http://www.isc-cie.com> - International Meuse Commission: <http://www.cipm-icbm.be>

Federal State:

1. Sustainable human development is the overall objective of the Belgian (international) development co-operation (BDC). This objective is to be achieved through effective poverty alleviation.

2. BDC considers the respect for the protection of the environment as one of the 6 criteria to in evaluating the relevance of supported interventions. The protection of the environment, together with gender and social economy, is indeed one of the 3 cross-sector issues to be considered in all bilateral interventions assessment. An environmental strategy paper providing guidelines on how to mainstream the environment in international co-operation at all levels was developed and presented to the parliament in 2003, together with the basic infrastructure development in development co-operation strategy paper, in direct charge of the water issues.

3. At the international level, under the overarching objective of poverty alleviation, water and its sustainable management are recurrent focuses of many programmes of BDC. Indeed, the annual financial contribution of BDC, made through the Directorate General for Development Co-operation (DGDC) in particular, to water related projects was close to 25 millions \$US in 2002. Belgium is committed to increase its investment in the water sector development in co-operation in order to achieve the amount of almost 38 millions \$US for 2005. The water sector includes water supply, including water for food security, sanitation, and integrated water resources management at watershed and river basins. The eligible projects include activities of monitoring and evaluation, education in water resources engineering and management, technical studies on different water management related topics, including water vulnerability and appropriate sanitation technologies, etc.

4. In the framework of the Belgian Trust Fund with the World Bank, the DGDC provides funding to support the development of the water supply and sanitation components in the Poverty Reduction Strategy Papers in African countries (0.8 million \$US per year). In addition, approximately 13 % of the Belgian annual contribution to the Global Environment Facility (7,7 million \$US/year) is allocated to projects to reverse the degradation of international waters.

5. The Belgian Development Co-operation supports also projects related to the management of water resources in arid and semi-arid areas such as the Tunisian integrated project for combating desertification and erosion, including irrigation water management. Indeed, the issue of desertification is increasingly being dealt with in the context of integrated programmes that combine poverty alleviation, rural development and food security. The investment of BDC in water management as related to desertification control, taking into account the direct bilateral aid, the financing of NGOs, multilateral contributions (IFAD, FAO, GEF, UNEP, UNDP, UNCCD), the support to Belgian universities and international research institutions (CGIAR), is estimated of 22,5 millions \$US per year.

6. The Directorate General for Development Co-operation (DGDC) contributes to the budgets of a limited number (20) of international organisations and funds, such as the European Development Fund (EDF), the Food and Agriculture Organisation (FAO), the Global Environment Facility (GEF), the International Fund for Agricultural Development (IFAD), the UNDP, the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), the World Health Organisation (WHO), among others. DGDC has momentarily still projects operational in 47 countries, but this number of partner countries is reduced today to 18 after having been reduced to 25 countries during the previous years.

7. About 15% of development co-operation assistance goes to the EDF, that is, approximately million US\$ 91.

8. Finally, Belgium is committed to a high level of environmental protection, and to an open, equitable, and non-discriminatory multilateral system. At OECD, UNEP, UNCTAD and the World Trade Organisation (WTO), Belgium has definitely positioned itself in favour of the adoption of core labour and social standards within trade agreements in order to expedite the achievement of sustainable development, namely in developing countries. Belgium believes that the multilateral trading system, and the WTO framework rules, should be supportive of multilateral agreements (MEAs) when they include restricted trade measures that may be necessary for environmentally related MD goals.

Brussels Capital Region: The Meuse and Scheldt Commissions are designated to operate as the co-ordination bodies required by the EU Water framework directive for these two International river districts. To concretise the principle of solidarity North-South and to defend the right of access to water for all, the Brussels Region supports an awareness campaign which has for federative subject "Water". This campaign is managed by the National Centre of Co-operation for Development (CNCD). This body develops every year information, educational and sensitisation campaigns about supporting developing countries from the South. The campaign: "Get wet for the Water" has for purpose to conceive and to spread tools of sensitisation on the subject: Water, Common good for humanity (leaflet introduced into the water invoice of the consumers, posters and radio commercials) as well as the organisation of a popular event at Place de la Monnaie on March 21st of this year (within the framework of the World Day of the Water).

Another project that merits to be mentioned concerns rehabilitation and installation, management and maintenance of wells and pumps in villages in the Democratic Republic of Congo.

Flemish Region: Transboundary co-operation via the River Commissions. Flanders – under the lead of Waterways and Marine Affairs Administration - is party to the bilateral Flemish-Dutch Technical Scheldt Commission and the Dutch-Flemish Meuse Commission of the various Water Treaties and agreements between the two riparian countries. The NVIWO or Dutch-Flemish Integrated Water Consultation co-ordinates the water policy of the transboundary non-navigable sub-basins; the leading Flemish authority is Environment, Nature, Land and Water Management Administration Commission for Transboundary Non-navigable Watercourses and to the International Conventions for the Protection of the Rivers Meuse and Scheldt.

The Meuse and Scheldt Commissions are designated to operate as the co-ordination bodies required by the EU Water Framework Directive for these two international river districts.

Development co-operation concerning water: Flemish development co-operation started getting shape in the 1990s, when Flanders obtained the constitutional competence to pursue its own foreign policy. Ten years later, instruments and budget are still limited and modest, allowing the Flemish minister of Development Co-operation to focus on a small number of priority countries and themes only. Water and sanitation are not included in the list of main priorities, but are nevertheless not totally omitted : both in South-Africa (more particularly in the Limpopo province) and at home (by financing education and awareness raising projects in Flanders), Flemish development co-operation pays attention to water and sanitation issues.

The establishment of the Flemish Partnership "Water for Development" (<http://www.watervoorontwikkeling.be>), under impulse of the Flemish Minister of Environment, sets the objective of giving an incentive from Flanders to the Millennium Development Goal with regard to safe water and to the WSSD sanitation goal.

This Partnership is a school example of a forum where both the policy fields of environment and development co-operation work in close co-operation with water companies, NGOs, universities and private companies towards the realisation of these goals.

Flemish and Walloon Regions: Co-operation on the sub-national level. On the Summit of Johannesburg, Flanders and Wallonia joined the Network of Regions for Sustainable Development, together with 20 other regions all over the world. Thereto, the Flemish and Walloon Regions subscribed principally the Gauteng Declaration, in which the regions take on engagements concerning sustainable development. The focus lies on the possibilities of co-operation on the sub-national level to help reaching the goals of

the World Top. At the same time the network wants to install a direct line of communication with the United Nations because multinational organisations haven't been paying attention yet to this policy level.

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