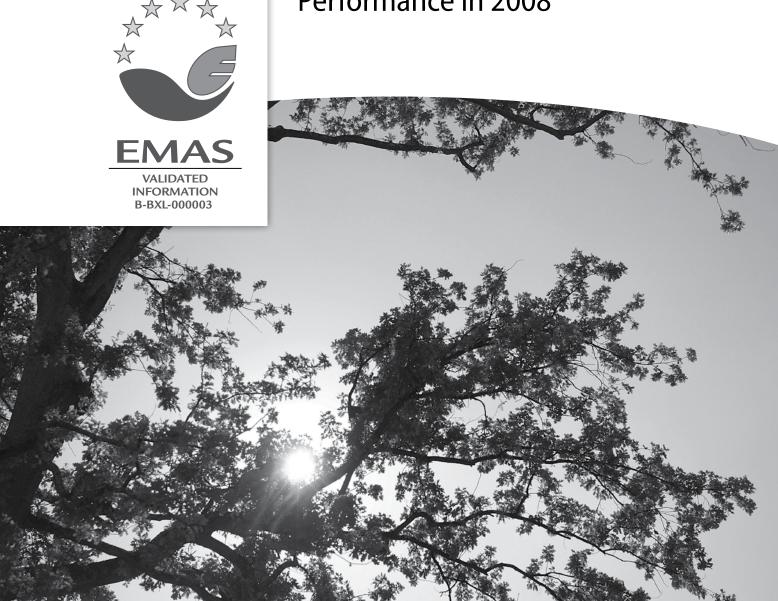


# 2009 EMAS Environmental Statement







Irène Souka
Director-General
Chair of the EMAS
Steering Committee

### **Foreword**

This is the European Commission's fourth EMAS environmental statement. This update contains information on environmental policy and the performance of five Commission pilot services in 2008. It concludes the management cycle which, in a departure from the norm, covered four years (2005-2008).

In the course of that year the pilot services have continued their efforts to achieve further improvements by building on the environmental gains recorded in the previous statements.

Thus, consumption per  $m^2$  of electricity, gas (or heating oil) and water in the office buildings concerned by the EMAS system was down by 5 %, 25 % and 7 % respectively on 2007. This corresponds to a 10 % reduction in  $CO_2$  emissions per  $m^2$ . For the Commission as a whole in Brussels, the number of sheets of office paper used per employee has fallen by almost 12 %. In the field of sustainable transport, the Commission's ongoing work to promote the use of bicycles by its staff – in particular by increasing the number of service bikes and dedicated parking places and the installation of showers and changing rooms for cyclists – was recognised with the award of the 2008 "prix du Parking d'Or".

An important feature of this update is the expansion of the EMAS system to eight new buildings, bringing the EMAS coverage up to almost half of the total area occupied by the Commission's departments in Brussels (23 buildings out of a total of 64).

Finally, in October 2008 the members of the EMAS Steering Committee considered that the EMAS pilot stage at the Commission had been a success and decided to recommend extending the system to all the Commission's activities in Brussels and Luxembourg. Such an extension, on which a decision is expected in 2009, is a clear demonstration of the Commission's commitment to a continuing improvement in its environmental performance. It also aims to serve as an example for other organisations by demonstrating the benefits of environmental impact management, particularly by means of the EMAS system.

Brussels, 19 June 2009

#### Irène Souka

Director-General Chair of the EMAS Steering Committee

### **EMAS** validation

This environmental statement update shows the environmental aspects and related impacts of five European Commission services (Secretariat-General, Environment Directorate-General, Personnel and Administration Directorate-General, Informatics Directorate-General and the Office for Infrastructure and Logistics in Brussels) for 2008 in the following buildings: Berlaymont, 2 Rue Breydel, 1 Avenue Beaulieu, 5 Avenue Beaulieu, 9 Avenue Beaulieu, 10 Rue Guimard, 23 Houtweg, 34 Rue Montoyer, 11 Rue de la Science, 75 Boulevard Clovis, 16 Rue Wilson, 86 Rue de la Loi, 28 Rue Belliard, 54 Rue Joseph II, 1-3 Avenue de Bourget, 45 Avenue d'Auderghem, 4 Rue Breydel, 21 Rue du Champ de Mars, 24 Rue Demot, 27 Rue Joseph II, 30 Rue Joseph II, 79 Rue Joseph II and 41 Rue de la Loi.

On the basis of an audit of the organisation, staff interviews, and the examination of documents, data and information, AIB-VINÇOTTE International, in its capacity as environmental verifier accredited by BELAC under No BE-V-0016, concluded that:

- the environmental management system, the environmental audit procedure and the 2009 environmental statement (2008 performance) meet the requirements of Regulation (EC) No 761/2001 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS);
- the data and information in this environmental statement are reliable and cover effectively all environmental issues of significance to this organisation.

Done at Brussels, 22 June 2009

(Signature)

Paul OLIVIER,

Chair of the Certification Committee AIB-VINÇOTTE International

Deadline for the next public statement: the next statement, concerning the 2009 reporting period, will be submitted to the Brussels-Capital region's competent body by the end of June 2010 in the context of the new three-year cycle (2009-2010).

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### 1. Introduction

#### 1.1. European Commission

The European Commission (EC) is the executive arm of the European Union. Alongside the European Parliament and the Council of the European Union, it is one of the three main institutions governing the Union. Since the latest enlargement on 1 January 2007, the Commission's activities have been steered by 27 Commissioners, who are assisted by some 35 000 civil servants and other staff working in 41 directorates-general and services all over the world. Each Commissioner takes responsibility for a particular area of policy and heads one or more services known as "directorates-general".

The Commission's primary role is to propose and enact legislation, and to act as "guardian of the treaties", which involves responsibility for initiating infringement proceedings at the European Court of Justice against Member States and others whom it considers to be in breach of the EU treaties and other Community law. The Commission also negotiates international agreements on behalf of the EU in close cooperation with the Council of the European Union.

The Commission's headquarters are in Brussels (Belgium), but it also has offices in Luxembourg, Ispra and Grange, to name but a few, agencies in a number of Member States, representations in all EU countries and delegations in many capital cities all over the world.

# 1.2. Environmental management at the Commission

The Commission first introduced a Green Housekeeping Programme in 1997.

In March 2001 the European Parliament and the Council of the European Union adopted Regulation (EC) No 761/2001, which extends the Community eco-management and audit scheme (EMAS) to public authorities.

Consequently, in September 2001 the Commission decided to apply this system to the activities and buildings of a number of its departments. To meet the requirements of this Regulation, the Commission is committed to making continual improvements to its environmental performance.

An initial EMAS registration was obtained in 2005 for the activities of four Commission departments covering eight sites, based on the environmental statement for 2002-2004. Following the 2007 statement (¹) (covering the 2005 and 2006 reporting periods), the IBGE (²) extended the Commission's EMAS registration to a fifth service and to five new sites on 17 January 2008. Finally, on the basis of the 2008 statement, two new sites were registered on 8 September of that year.

At the present time, the environmental management system (EMS) is being applied by five of the Commission's 41 departments: the Secretariat-General (SG), the Environment Directorate-General (DG ENV), the Personnel and Administration Directorate-General (DG ADMIN), the Informatics Directorate-General (DG DIGIT) and the Office for Infrastructure and Logistics in Brussels (OIB). The EMS is coordinated by DG ADMIN in liaison with correspondents in each department.

The EMAS Steering Committee (3) adopts environmental objectives, in line with the Commission's environment policy, and an overall action plan. The individual departments may then, if they consider it necessary, adopt a specific EMAS action plan to implement these objectives (see Annexes 5 and 6).

#### 1.3. Our environmental policy

The Commission recognises that it has a special duty, as initiator of European legislation, to pursue sustainable development objectives and to improve the global environment, particularly in Europe.

It believes its policy proposals and legislative initiatives are playing a decisive role in improving the quality of the European environment and raising all European citizens' awareness of environmental issues. It has developed tools for assessing the environmental impact and effectiveness of its actions.

However, like any organisation, the Commission, through its day-to-day activities, consumes natural resources and pollutes the environment. It is firmly committed to reducing its adverse impact to a minimum and to the continual improvement of its environmental performance.

<sup>(1)</sup> http://ec.europa.eu/environment/emas/es\_library/index\_en.htm.

<sup>(2)</sup> Bruxelles Environnement - Institut bruxellois pour la Gestion de l'Environnement.

<sup>(?)</sup> The EMAS Steering Committee comprises the directors-general/heads of department of the EMAS services and is chaired by the Director-General of DG ADMIN.

Early in 2008 a new version of the EMAS environmental policy (see Annex 1) was adopted that consolidates this policy for all the services concerned by EMAS.

# 1.4. Environmental impact of the Commission's activities

The Commission has identified the following aspects of its activities as having a significant environmental impact:

Forton on the l	F
Environmental aspect	Environmental impact
European Union policies	The Commission believes its policy proposals and legislative initiatives are playing a decisive role in protecting the European and global environment.
Buildings	The occupation of office space entails the consumption of energy and natural resources and generates waste. Air pollution generated by heating and electricity production is particularly significant. Some installations also emit gases that destroy the ozone layer.
Procurement of goods and services	Every product and service purchased on the market entails the consumption of energy and natural resources and the generation of waste and pollution during its lifecycle. We can influence this impact through our public procurement procedures.
Transport	Official cars, journeys to and from work and missions are a major source of consumption of energy and natural resources and of air pollution. They warrant particular attention in order to reduce their impact.
Legal compliance	Buildings, installations and working procedures must comply with European and Belgian law. Such compliance demands ongoing monitoring.

#### 1.5. What's new?

In October 2008 the EMAS Steering Committee concluded the pilot stage of the EMAS project at the Commission. From the Commission's positive environmental performance in the period 2002-2007, the Committee concluded that this pilot stage had been a success. The Committee accordingly suggested extending the EMS to all the Commission's activities and buildings in Brussels and Luxembourg. The Commission will decide in the course of 2009 whether or not to proceed with such an extension.

Pending this decision, eight additional sites (¹) have been added to the scope of EMAS at the Commission for the 2009 annual checks, bringing the number of buildings to 23 out of a total of 64 buildings occupied in Brussels, or almost half (46 %) of the total surface area occupied by the Commission.

<sup>(&#</sup>x27;) BREY (currently under compliance process), B-232, CDMA, DM-24, J-27, J-30, J-79, L-41.

## 2. European Union policies

The Commission mainstreams environmental issues into the drafting and revision of all EU policies. It provides financial support for environmental projects via the LIFE programme.

#### 2.1. Impact assessment system

The European Council meetings in Göteborg and Laeken, held in June and December 2001 respectively, introduced the political question of assessing the economic, social and environmental impact of policy proposals.

As part of the Better Regulation programme and the European Union's sustainable development strategy, the Commission has undertaken a number of measures to improve the legislative process. One of these measures is impact assessment, for which a new methodology (1) was introduced in 2002.

The Commission's **impact assessment system** is aimed at ensuring that its services draw up initiatives based on conclusive data by means of an integrated and balanced assessment of the problems to be resolved and the various courses of action possible. The economic, social and environmental impact of any new policy initiative is subjected to an integrated assessment, in consultation with outside stakeholders and in coordination with all the Commission services concerned.

On 14 November 2006 President Barroso set up an impact assessment board to provide quality support and independent scrutiny of impact assessments drawn up by Commission services, including the way in which these assessments follow the structure and approach of the internal guidelines.

In 2008 the board analysed **135 projects.** In January 2009 the Commission updated its internal guidelines for impact assessment.

All information on procedures and impact assessments carried out are published on the Europa website (2).

#### 2.2. EU environment policy

Every year the European Commission adopts a communication to the Council and the European Parliament on the review of the European Environment Policy (3).

The Commission's Environment Directorate-General (DG ENV) is responsible for the implementation of the EU's environment policies. This Directorate-General's main task is to protect, preserve and improve the environment for present and future generations, and to promote sustainable development.

DG ENV's specific achievements are set out in the annual activity report (4). In 2008 there were 17 external consultations in the area of environmental policy (5). In accordance with the specific provisions applicable to each initiative, DG ENV carries out regular evaluations of the instruments in force (6).

For developments in 2009 readers are invited to consult DG ENV's annual management plan on the Europa website (7).

#### 2.3. LIFE+ programme

Since 2007, LIFE+ has been the only financial instrument providing funding for the implementation of the EU's environment policy, focusing on the objectives of the 6th Environmental Action Programme (2002-2012).

The total budget planned is  $\leq$  2 143 million divided between three components:

LIFE+ Nature and Biodiversity (8)

LIFE+ Environmental Policy & Governance (9)

LIFE+ Information and Communication (10).

According to the evaluation of the projects arising from the 2007 call for proposals, carried out in 2008, 143 LIFE+ projects received €186 million in co-financing.

These projects break down into the three LIFE+ themes as follows:

LIFE+ theme	No. of projects	EUR million
Nature & Biodiversity	58	94
Environmental Policy &	74	84
Governance		
Information & Communication	11	8

The second LIFE+ call for proposals was launched in July 2008. The projects received are in the process of being evaluated and those approved will be announced in July 2009.

<sup>(1)</sup> Commission Communication COM/2002/276 of 5 June 2002.

<sup>(</sup>²) http://ec.europa.eu/governance/impact/index\_en.htm

<sup>(3)</sup> http://ec.europa.eu/environment/policyreview.htm

<sup>(4)</sup> http://ec.europa.eu/atwork governance /synthesis/aar/

<sup>(5)</sup> http://ec.europa.eu/environment/consultations\_en.htm

 $<sup>\ \ (^{6})\</sup> http://ec.europa.eu/dgs/environment/evaluation.htm$ 

<sup>(7)</sup> http://ec.europa.eu/dgs/environment/pdf/management\_plan\_2009.pdf (8) http://ec.europa.eu/environment/life/funding/lifeplus/components/component\_nat.htm

 $<sup>\</sup>label{thm:component} \begin{tabular}{ll} (\%) & thm://ec.europa.eu/environment/life/funding/lifeplus/components/component_env.htm \end{tabular}$ 

<sup>(10)</sup> http://ec.europa.eu/environment/life/funding/lifeplus/components/component\_info.htm

### 3. Administrative activities

As explained earlier, only five of the 41 Commission services in Brussels have introduced a formal environmental management system. However, the impact of some of their actions on the overall environmental footprint of the Commission is particularly relevant.

For example, two of the pilot services, DG DIGIT and the OIB, are the main managers of the Commission's physical working environment. The goods and services they manage range from buildings to office supplies to transport, IT and telecommunications.

It is worth mentioning that in 2008 the Commission carried out a study of its carbon footprint which enabled it to conduct an overall assessment of all its greenhouse gas emissions in Brussels and in Luxembourg. This study, the results of which are currently being assessed, will give a clearer picture of future priorities for action.

This chapter describes the measures taken in 2008 and assesses environmental performance in day-to-day administrative activities. For each of the key aspects below, it is specified whether it applies to the entire institution in Brussels or to a limited number of buildings and/or services.

#### 3.1. Buildings

**Scope:** Data relating to the 15 Commission buildings registered for EMAS and the eight new registrations (see 1.5).

Objective: To minimise the environmental impact of the Commission's buildings, especially the worst performers.

#### 3.1.1. Energy and water

**Scope:** To ensure the comparability of results, the energy and water data are set out for the Commission's office buildings. These represent 19 (¹) out of the 23 buildings considered within the scope of the management system. However, all possible steps are taken to restrict consumption in the other four buildings as well (nurseries and workshops).

Consumption per  $m^2$  of energy (electricity + gas + heating oil) was down by 15 % and by 27 % per person compared with 2007. This is largely due to a sizeable reduction in gas consumption in BERL, and to the inclusion in the EMAS

(1)	MO34, SC11, GUIM, BRE2, BU5, BU9, BERL, BU1, B-28, J-54, L-86, BREY,
	R-232 CDMA DM-24 I-27 I-30 I-70 I-41

	2002	2003	2004	2005	2006	2007	2008	2008 vs 2007
Total surface area in m <sup>2</sup>	75 857	75 857	75 857	206 166	253 525	268 292	421 965	+57 %
Total energy (elec+gas+ heating oil) (MWh/year)	20 835	20 730	20 083	76 856	87 169	82 220	109 920	+34 %
kWh/m <sup>2</sup>	275	273	265	373	344	306	260	-15 %
kWh/person	11 118	11 062	10 717	19 057	16 642	14 420	10 576	-27 %
Electricity (MWh/year)	12 656	12 276	11 923	40 749	39 909	40 427	60 445	+50 %
kWh/m <sup>2</sup>	167	162	157	198	157	151	143	-5 %
kWh/person	6 753	6 551	6 362	10 104	7 619	7 090	5 816	-18 %
Gas + Heating oil (MWh/year)	8 179	8 454	8 160	36 107	47 260	41 793	49 475	+18 %
kWh/m <sup>2</sup>	108	111	108	175	186	156	117	-25 %
kWh/person	4 364	4 511	4 354	8 953	9 023	7 330	4 760	-35 %
Water (m³/year)	45 310	48 106	52 186	114 702	140 616	133 791	195 664	+46 %
litres/m <sup>2</sup>	597	634	688	556	555	499	464	-7 %
L/person	24 178	25 670	27 847	28 441	26 845	22 493	18 827	-16 %
CO <sub>2</sub> emissions (tonnes/year)	5 390	5 407	5 241	19 238	20 478	19 510	27 762	+42 %
kg/m²	71	71	69	93	81	73	66	-10 %
kg/person	2 876	2 885	2 797	4 770	3 910	3 422	2 671	-22 %

Figure 2 – Consumption of energy and water in office buildings registered or yet to be registered for EMAS

management system of the eight new buildings, which are more energy-efficient per m<sup>2</sup> and more efficient in terms of occupation (fewer m<sup>2</sup> per person).

- (1) Electricity consumption per m<sup>2</sup> fell by 5 % in 2008. This trend is almost universal across all the buildings considered.
- (2) Most of the buildings in question used more gas and heating oil in 2008 as a result of the harsher winter than in 2007. Even so, total consumption per m<sup>2</sup> fell by almost 25 % in 2008. This is accounted for by the excellent performance of BERL, where a 19 % reduction per kWh/m<sup>2</sup> was recorded over 2007.
- (3) Water consumption per m<sup>2</sup> fell by over 7 %. This reduction could have been even larger without the water leaks in BRE2 (+84 %) and J-54 (+42 %).

It should be noted that the 2008 target of a 3 % saving per m² for energy and water in the worst performing buildings (¹) (total building stock of the Commission in Brussels) has been met as regards energy. Indeed, energy consumption for these buildings in 2008 was 5.5 % down on 2007. As regards water, however, the reduction for this type of building was only 1.7 % per m², which is nevertheless a step in the right direction towards a sustained improvement.

#### We have:

- (1) made progress on improving lighting in trafficked areas (corridors, staircases, car parks, etc.);
- (2) made progress towards a more efficient use of heating, ventilation and air conditioning outside office hours;
- (3) eliminated hot water from toilet facilities wherever possible;
- (4) improved the energy efficiency of vending machines.

#### We will:

- (1) keep up the good work and reduce energy and water consumption by 3 % in the worst-performing buildings;
- (2) apply, for the purposes of the PUL project (2), an evaluation methodology based on a building's entire lifecycle cost. This cost will include construction costs, operating costs (technical maintenance, energy consumption, upkeep, etc.) and the costs of subsequent renovation/demolition;
- (') As regards energy: BERL, BREY, BU (esp.), CCAB, L-86, MO34, SDME / as regards water: BERL, BREY, BU (esp.), L-86, MO51, SC29, SDME.
  (') The Projet Urbain Loi (PUL) is a project for the redevelopment of the European Quarter in close partnership between the Brussels-Capital Region, the Commission and the City of Brussels.

- (3) limit the operation of technical installations in buildings outside normal working hours;
- (4) continue to improve the efficiency of lighting systems as far as possible;
- (5) opt for energy-saving installations when replacing cooling systems;
- (6) introduce a system for more regular monitoring of our energy and water consumption to improve our understanding and responsiveness with regard to the energy performance of our buildings;
- (7) prepare eight new buildings for registration for EMAS in 2010.

#### 3.1.2. Ozone-depleting gases

Cooling installations in some buildings and refrigeration equipment in the social infrastructures (restaurants, self-services and cafeterias) contain refrigerants (such as HCFCs) known to deplete the ozone layer.

Scope: this action concerns all Commission buildings in Brussels.

Year	2005	2006	2007	2008
Total load (kg)	16 807	16 222	17 156	17 109
Total losses (kg)	1 130	1 135	762	696
Including losses of R22 (kg)	965	974	741	543

Figure 3 – Losses of refrigerant gas from all buildings in Brussels

#### We have:

(1) updated the inventory of equipment containing R22 in welfare facilities with a view to replacing them gradually by 2012, well before the time limit of 2015 laid down in Regulation (EC) No 2037/2000 of 29 June 2000.

#### We will:

(1) gradually replace (or convert) buildings' cooling systems to eradicate R22 by 2012. One installation out of a total of 40 will be affected in 2009.

Year	2005	2006	2007	2008	2009	2012
Number of systems still to be replaced at the end of the year	211	133	79	40	39	0
Losses of gas (R22) in kg	16.8	32.9	15.8	6.7		

Figure 4 – Phasing-out of equipment containing HCFCs in welfare facilities

#### 3.1.3. Legal compliance

**We have** taken appropriate steps as regards compliance with legislation and the updating of environmental permits for the eight (¹) new buildings that are to be registered for EMAS.

**We will** ensure full compliance with the new Community Directive on the energy performance of buildings (Directive 2002/91/EC) once it has been transposed into local law by the Brussels-Capital Region.

#### 3.2. Waste

**Scope:** This aspect concerns all the general waste produced on a daily basis at all Commission buildings in Brussels. As in 2007, it includes specific waste related to the maintenance of technical installations and equipment in buildings and toxic products used in offset printing.

Objective: to maximise recycling and re-use of waste and to prevent waste generation where possible.

#### 3.2.1. General waste

The volume of waste generated per person/year increased from 284 kg in 2007 to 294 kg in 2008. This represents a 3 % increase, whereas our objective for 2008 was a 2 % reduction.

#### Total waste (kg) per person

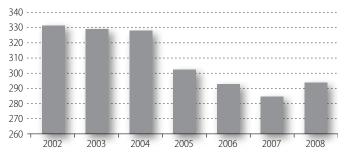


Figure 5 – Trend in total waste per person in all Commission buildings

These 10 kg of extra waste per person are made up for the most part of non-separated general waste. In our view, some of this waste could be sorted; measures to make Commission staff and cleaning staff more aware of this aspect will be stepped up.

The new contract for the collection of waste allows more sophisticated monitoring of the quantities involved and the way in which the waste is handled:

(¹) CDMA, L-41, BREY, J-27, J-30, J-79, B232, DM24.

- a) 24 % of non-separated waste is recycled into renewable energy
- b) over 90 % of paper/cardboard waste (the yellow bins) is recycled
- c) 95 % of food packaging (blue bins) is recycled
- e) 100 % of food waste is composted
- f) 98 % of glass (green bins) is recycled

#### We have:

(1) improved the waste collection system by continuing to install blue bins (for the collection of plastic bottles, aluminium cans, tins and tetrapaks) in cafeterias and on every floor (906 bins in 2008 compared with 877 in 2007) in Commission buildings and by increasing the number of glass collection points. The ultimate goal is to have a blue bin on every floor of every building.

#### We will:

- (1) reduce the total volume of waste generated by 2 % in 2009;
- (2) complete the installation of blue bins on every floor and green bins in every Commission building;
- (3) stop using polystyrene beakers in Commission cafeterias altogether by the end of 2009;
- (4) heighten the awareness of waste prevention, separation and recycling on the part of staff and cleaning staff.

#### 3.2.2. Obsolete equipment

**We have** continued to use the contract with the non-profit organisation OXFAM-Solidarité for the collection, reuse and environmentally friendly recycling of all obsolete furniture and IT equipment.

Under this contract, the EC applies a policy of writing off IT equipment and office furniture when it reaches the end of its economical life but can still be re-used, rather than waiting until it is only fit to be thrown away.

Note in this respect that an environmental action can lead to a social one: OXFAM-Solidarité re-uses or resells a proportion of this equipment (between 16 % and 75 % of IT equipment depending on the year) in order to fund its welfare activities. The remainder is transferred to the appropriate branch of Recupel, the non-profit organisation responsible for recycling electrical and electronic waste in Belgium. This fulfils our commitment to have waste either recycled or dismantled in accordance with the environmental rules in force.

Since 2006 the annual rate of re-use of IT equipment has stabilised at a level which on average is higher than the target of 60 %; thus in 2008 92 % of PCs and 72 % of monitors were reused. This is explained by an improvement in the situation in general as regards recycled goods. However, the marked downward trend in new prices has reduced the comparative advantage of second-hand IT goods. For example, the financial and technical efficiency of new printers means that the reutilisation rate for printers is low (36 % in 2008). There is no indication that this trend will be reversed in the near future

Obsolete ICT items in %	2002	2003	2004	2005	2006	2007	2008
Total number of items	n.d.	13 948	10 130	6 960	18 273	10 090	11 175
Second-hand use	73 %	69 %	16 %	44 %	72 %	66 %	75 %
Recycled or dismantled	27 %	31 %	74 %	56 %	28 %	34 %	25 %

Figure 7 - Re-use of obsolete ICT equipment by OXFAM-Solidarité

**We will** continue using Oxfam-Solidarité to recycle and reuse obsolete equipment for the duration of the contract with a view to achieving a stable annual rate of re-use of at least 60 %.

#### 3.3. Paper and printing

**Scope:** This aspect applies across the whole Commission in Brussels.

Paper consumption is monitored in three different areas of activity:

- a) office paper used in printers, photocopiers, etc.,
- b) offset paper used by the central print shop, and
- c) official publications printed by the Publications Office.

Objectives: to reduce the consumption of natural resources and generation of waste by promoting rational paper consumption.

#### 3.3.1. Office paper

The total amount of office paper used in the Commission has continued to fall (from 1 681 tonnes in 2007 to 1 557 tonnes in 2008, or -7.4 %). This represents a fall in the average number of sheets per person and per working day of almost 12 % (from 59 in 2007 to 52 in 2008), more than the target of a 2 % reduction set for 2008.

#### **Number of sheets**

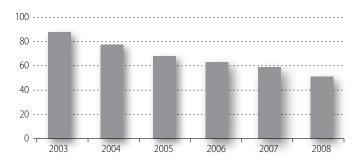
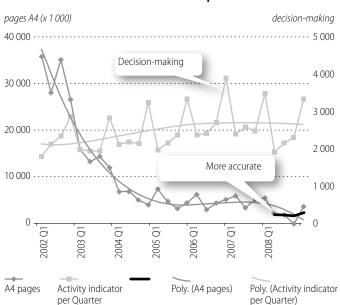


Figure 8 - Number of sheets per person per working day for the whole Commission

#### We have:

- (1) begun, in DG DIGIT, the phasing-out of individual printers in favour of network printers and multifunctional devices. The ratio of individual printers to shared printers in DG DIGIT fell from 0.74 in October 2007 to 0.71 on 31 December 2008.
- (2) approved the Commission-wide printing strategy at the end of 2008; Implementation of the strategy is scheduled to begin in 2009 and is expected to lead, among other things, to a reduction in the average number of pages printed by users in the Commission as a whole;
- (3) launched the new "e-Greffe" application, designed to computerise the submission to the Commission's Registry of all instruments that are the subject of a Commission procedure. In particular, this has led to greater precision in following up the Commission's decision-making activity on the one hand (see figure 9), and to a 21 % reduction in the amount of printing done by the printshops and on Registry printers on the other.

#### Distribution of documents to other European Institutions



The above graph shows the relationship between:

- the traditional indicator of Commission "decision-making activity" which was amended by the introduction of the e-Greffe application from 30 April 2008. The new, more accurate activity indicator (in red on the graph) has been established subsequently; and
- paper consumption for the final versions of documents sent to the other European-Institutions. This figure has been falling significantly, especially over the period 2002-2004, and despite the impact of enlargement, thanks to the increased use of electronic transmission ("Greffe 2000") and, for the remaining paper documents, generalised recto/verso printing.

In 2007 consumption fell to a level that could only be reduced further if all interinstitutional exchanges of documents were conducted electronically.

#### We will:

Continue to work to reduce the consumption of office paper (2 % per person) by a variety of measures, including:

- (1) raising awareness of printing and electronic working methods,
- (2) speeding up the phasing-out of individual printers in favour of network printers and multifunctional devices. In particular, DG DIGIT, DG ADMIN and DG ENV have set themselves the target of improving their ratio of individual printers to shared printers from 1.04 (December 2008) to 0.60 by the end of 2009.
- (3) selecting a tool for counting the number of pages printed and copied on each printer. This will allow the various Commission departments to manage the consumption of paper by the printers and photocopiers they use. This tool will be chosen by the end of 2009.
- (4) using e-Greffe.

#### 3.3.2. Offset paper

The consumption by weight of offset paper increased by over 29 % in 2008 (to 366 tonnes, up from 283 tonnes in 2007).

This sharp increase was mainly due to:

- (1) the use of paper sent to us by the Publications Office (100 tonnes) which was of a heavier weight and a larger format (= waste of paper when cut) than the paper normally used,
- (2) an increase in the number of requests for colour printing, which requires a heavier grade of paper,

(3) an increase in printing activities in the course of the year as a result of taking on a large number of printing tasks which had been out-sourced in 2006 and 2007.

#### Consumption of offset paper

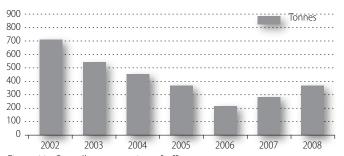


Figure 11 - Overall consumption of offset paper

#### We have:

- (1) through close cooperation with the Registry, exceeded our objective of reducing the printing of COM and SEC final documents by 25 000 copies (roughly 10 % of total printing), with a reduction of 70 000 copies in 2008,
- (2) reduced consumption of chemicals for printing, in particular by reducing the alcohol content of fountain solutions from 10 % to 5 %,
- (3) increased the proportion of environmentally friendly paper used to 100 % by 2008.

#### We will:

- (1) continue to raise awareness in the departments responsible of the quantities printed,
- (2) continue to use environmentally friendly paper,
- (3) reduce the amount of alcohol in fountain solutions to an absolute minimum.

#### 3.3.3. Publications printed by the OPOCE

**Scope:** This concerns the whole of the Ordinary Publications programme (POP) of the Secretariat-General printed by the Publications Office, excluding special publications.

The weight of POP publications increased by 4 % in 2008, preventing us from achieving the overall target set (maintaining the same total weight of POP publications as in 2007); this was due to an increase in the total number of pages printed.

#### Weight of publications

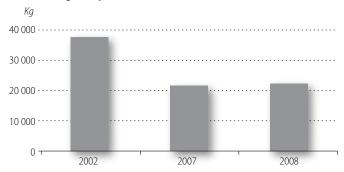


Figure 12 – Weight of publications printed by OPOCE

At the beginning of 2009 the Commission reorganised part of the Secretariat General, transferring activities relating to general publications to the Directorate General for Communication.

#### 3.4. Transport and mobility

**Scope:** This topic concerns the whole of the Commission in Brussels.

It involves three areas in particular:

- (1) work-related travel,
- (2) staff commuting daily to and from work,
- (3) the Commission's car fleet.

# Objective: To reduce travel-related CO<sub>2</sub> emissions to a minimum

#### 3.4.1. Work-related travel

#### We have:

- (1) continued our efforts to reduce work-related travel by the use of videoconferencing. The pilot project to deploy personal video-conferencing systems for management staff in DG DIGIT has thus continued, achieving an equipment rate of 64 %, which is more than the target of 50 %;
- (2) continued efforts to promote the use of service bicycles; increase in the number of bicycles available (from 176 in 2007 to 230 in 2008) and in the rate of use (used almost 26 000 times, representing an increase of more than 12 % over 2007);
- (3) encouraged the use of public transport, notably by distributing 49 000 free tickets for the Brussels public transport network for work-related travel between Commission buildings or to Zaventem airport (16 % increase over 2007).

#### We will:

- (1) continue our efforts to reduce work-related travel,
  - continue measuring the use of all the videoconferencing equipment available at the Commission to monitor trends in video-conferencing more closely and optimise use of the facilities available,

 analyse in greater detail the number and type of journeys undertaken in connection with work and identify any room for improvement.

#### 3.4.2. Travel between home and work

In July 2008 a survey was launched throughout the Commission in Brussels on the various forms of transport used by staff for their journeys between home and work. This survey confirmed the progressive positive impact of the measures taken by the Commission to increase the use of sustainable forms of transport.

The main trends are as follows (period 1998-2008):

- private car use has fallen from 50 % to 29 %,
- the use of public transport has risen from 32 % to 50 %,
- walking and cycling have increased from 17 % to 18 %,
- car-sharing has remained marginal at 1 %.

Almost a third of users stated that the facilities provided had changed their habits.

#### We have:

- (1) continued to encourage the use of bicycles, particularly by organising nine training sessions on city cycling ("À vélo dans le trafic urbain") to make cyclists more safety-conscious. It is worth mentioning that the Commission's ongoing work to promote the use of bicycles by its staff was rewarded with the 2008 "prix du Parking d'Or", presented by the "Pro-Vélo" association and the city of Brussels.
- (2) continued to provide alternatives to the daily commute by continuing the implementation of flexible working hours (17 000 people worked flexitime compared with 15 000 in 2007) and teleworking (almost 1000 people opted for this system in 2008; decisions on new types of teleworking arrangements are expected to be taken in the course of 2009),
- (3) continued to encourage the use of public transport, in particular by requesting funding in the 2010 budget to cover 50 % of the cost of public transport season tickets for Commission staff.

#### We will:

- (1) continue to allow flexitime and teleworking and evaluate their impact on staff's mobility;
- (2) adopt a new Mobility Plan for the period 2010-2012, laying down objectives for the use of public transport by the staff for their journeys between home and work.

#### 3.4.3. The Commission's car fleet

The average  $\rm CO_2$  emissions of the Commission's car fleet fell by more than 12 %, from 241g/km in 2007 to 210 g/km in 2008 (¹).

 $<sup>(\</sup>mbox{{\sc i}})$  Actual consumption of the vehicles multiplied by the emission coefficient of the fuel.

#### We have:

- (1) continued implementing a greener purchasing policy for the Commission car fleet, replacing 21 old cars powered by high-capacity petrol engines with new models with lower-capacity diesel engines and particulate filters,
- (2) given all Commission drivers training in "eco-driving",
- (3) introduced a calculation system based on the vehicles' actual emissions rather than on theoretical emissions (as indicated on the certificates of conformity).

#### We will:

- (1) continue systematically replacing vehicles in the Commission's car fleet that have reached the end of their economic life-cycle with more environmentally friendly models (lower engine capacity, hybrid technology, bio-fuels, etc.).
- (2) continue organising "eco-driving" courses for drivers of the Commission's car fleet.

#### 3.5. Green public procurement (GPP)

**Scope:** This aspect concerns the five pilot services but can have an impact across the whole Commission, e.g. for horizontal equipment or service contracts.

Objective: Require goods and services acquired from suppliers outside the Commission to meet environmental criteria.

Since the introduction of EMAS a growing number of contracts include environmental specifications.

#### 3.5.1. Contracts relating to infrastructure

#### We have:

(1) continued systematically introducing environmental criteria into OIB invitations to tender. GPP was included in eight of the 25 contracts worth more than € 60 000 signed in 2008 (32 % of contracts compared with 23 % in 2007). These contracts were for services with a potentially significant impact on the environment, including cleaning (offices and windows), and waste collection and treatment.

#### We will:

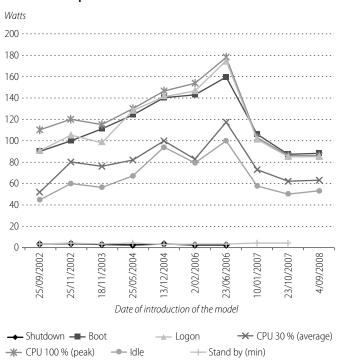
- (1) include environmental criteria in at least 40 % of the contracts worth more than € 60 000 for which OIB is responsible,
- (2) include the requirement that at least 50 % of electricity be green by 2009 and 100 % by 2012 (call for tender published in 2009).

#### 3.5.2. IT equipment

#### We have:

- (1) continued to include environmental criteria in the technical evaluation of all invitations to tender for the purchase of IT hardware and introduced such criteria into the financial evaluation. Wherever relevant, the financial evaluation includes the cost of the energy consumed by the equipment during its regulatory useful life;
- (2) the invitation to tender for office PCs launched in 2007 stressed the importance attached by the Commission to environmental criteria. By including power consumption (see figure 13) in the financial evaluation, it suggested to tenderers the need to strike an acceptable balance between the hardware's consumption and its purchase price. This approach continued in 2008 during the performance stage of the framework contract resulting from the call for tenders, since the purchase price of the new model has fallen considerably while the energy performance has remained the same;
- (3) organised information and awareness-raising for IT service providers on the environmental aspects of contracts signed with DG DIGIT.

#### **Power consumption**



*Figure 13* - Power consumption of different PC types introduced since 2002

#### We will:

 continue to provide information and training on how to take account of environmental aspects and criteria for staff, especially from DG DIGIT and OIB, involved in drawing up calls for tenders for the supply of equipment and services,

- (2) continue to systematically include environmental criteria in IT hardware procurement; begin to include environmental criteria in contracts for IT services where relevant.
- (3) select a tool for collecting data on energy consumption and designed to save energy. A tool of this kind will be chosen by the end of 2009 and a pilot project conducted in 2010 in which the tool will be installed on each individual PC in DG DIGIT. All the other Commission departments can then be offered installation of the tool.

#### 3.5.3. Office supplies

There are 680 different articles in the supplies catalogue, 131 or approximately 20 % of which are environmentally friendly (either recycled, recyclable or sustainable). They include stationery, low-energy light bulbs, rechargeable batteries and "green" cleaning products. Non-sustainable items are regularly replaced by more environmentally-friendly ones. A tree icon makes it easy for staff to identify such items in the catalogue.

#### We have:

- (1) achieved our objective by increasing the percentage of environmentally friendly office supplies to nearly 20 % of the total catalogue (compared with 16 % in 2007),
- (2) reduced consumption of toner cartridges for printers and copiers by approximately 9 % over 2007. Recyclable cartridges make up 42 % of all cartridges used, compared with 36 % in 2007.

#### **Toner cartridges**

Total number

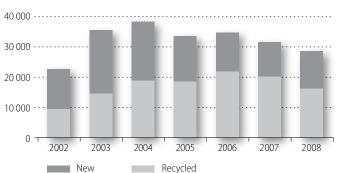


Figure 14 – Total consumption of toner cartridges (printers and copiers)

#### We will:

- (1) continue replacing items in the office supplies catalogue with new, more environmentally friendly articles. We are planning to increase the number of environmentally friendly items to 140 in 2009.
- (2) continue to monitor the use of toner cartridges in the light of the technologies available by promoting the

- purchase of recycled cartridges and by including this environmental factor in invitations to tender for printer/copiers,
- (3) introduce ecological procurement training, in particular for staff responsible for orders and purchasing within each department.

# 3.6. Environmental health risk prevention and management

**Scope:** This aspect applies across the Commission in Brussels and relates to the employer's responsibilities in the matter of protecting employees in the workplace.

Objective: To ensure the quality of the working environment and the responsible use of chemicals.

The department responsible for health and safety at work carries out regular inspections and checks into questions affecting the safety, health and welfare of workers in all the buildings occupied by the European Commission in Brussels. These inspections are followed up by reports, which are subsequently sent to the technical services responsible if necessary.

#### Report on building inspections

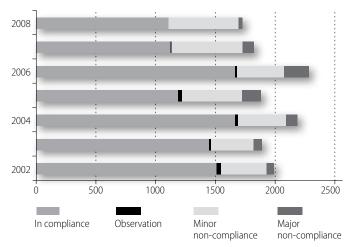


Figure 15 – Nombre de rapports et proportion des observations relevées

The number of reports containing comments on non-compliance has remained stable (36 % in 2008 against 38 % in 2007). The percentage of major non-compliance has been falling steadily since 2006 (9 % in 2006, 5 % in 2007 and 2 % in 2008).

#### We have:

(1) stepped up checks on possible environmental issues by increasing the number and level of detail of the environmental headings to be used for future inspections and checks.

#### We will:

(1) improve training and the information provided to outside service providers regarding health and safety at work and environmental issues in particular.

#### 3.7. Communication

#### 3.7.1. External communication

**Scope:** This concerns the whole of the Commission.

Objective: to communicate and interact in a transparent manner with parties outside the Commission regarding the Commission's environmental performance.

#### We have:

- (1) presented the main results of the EMAS pilot stage to the general public during the "open day" at the Commission in May 2008,
- (2) issued a press release on the Commission's mobility and sustainable transport policy to mark "Mobility Week" (September 2008),
- (3) issued a press release and a memo on the successful audit of EMAS and the results obtained during the five-year pilot stage at the Commission (November 2008),
- (4) received the "Prix du parking d'Or" for 2008 (we had been awarded it once before in 2001), which each year rewards the employer in the Brussels region which has done the most to encourage the use of bicycles by its employees. The prize is awarded by the Brussels cycling associations and the City of Brussels,
- (5) created an external communication register to ensure that requests for information from outside the Commission are followed up (25 requests in 2008, one not answered).

# 3.7.2. Internal communication, training and awareness-raising

**Scope:** This concerns (1) staff and contractors of the five services registered for EMAS and (2) all Commission staff in Brussels.

Objective: to ensure that all staff understand the way the EMS works and to encourage their active participation.

#### We have:

- (1) continued EMAS awareness-raising in the induction courses for all staff in Brussels as well as for trainees (2500 and 1200 participants respectively), and organised presentations of the system for a number of departments which do not yet apply the EMAS system,
- (2) organised several training courses on the EMAS Regulation for the team in charge of implementing EMAS
   (8 participants) and for staff of the five pilot departments (over 300 participants),
- (3) **promoted sustainable transport** through awareness-raising events, such as free breakfasts for employees who cycle to work (10 events) and guided bicycle tours of Brussels (5 events),
- (4) promoted the **optimum use of natural resources** by recommending that staff switch off office lights if they are going to be out of their office for any length of time and by informing staff of the environmental aspects of using IT equipment,
- (5) provided information on the importance of sorting waste, using the construction of Christmas trees from plastic bottles; we also organised a training course for staff responsible for handling hazardous substances and waste (total of 20 participants),
- (6) created an **internal communication register** to ensure that requests from staff for information are followed up (81 requests in 2008, nine awaiting a reply).

More generally, the operation of EMAS and the involvement of the staff have been publicised in more than 25 articles in the course of 2008 (in "Commission en Direct" (the in-house magazine), the Commission's intranet site, or specialist newsletters such as "Concrete" – published by OIB - or "Management Matters", a publication for Commission managers).

#### We will:

- continue awareness-raising and training activities, particularly in connection with the extension of EMAS to the Commission as a whole (e.g. training for all new EMAS correspondents in the DGs concerned, or development of an online training module to reach a large number of staff),
- (2) update the EMAS website to offer simple tips that staff can put into practice in their daily tasks (action carried over from 2008),
- (3) develop training on green public procurement for the staff involved (action carried over from 2008).

### 4. Conclusions

In 2008 environmental management was consolidated by stepping up the integration of EMAS actions into the day-to-day working of the five pilot services. The Commission's environmental objectives are now fixed over the next three years, providing the departments with more visibility for the development of their EMAS action plans. The system as a whole is planned and followed up by management via the regular EMAS Steering Committee meetings; the operational aspects of the system will be monitored by means of the monthly meetings of EMAS officers.

From 2009 the management system will be further improved by more appropriate timing: all the action plans will be developed and validated in November of each year, in time to be included in the Commission's overall annual management cycle (programming, evaluation and reporting).

The decision by the EMAS Steering Committee to close the pilot stage and suggest the extension of this system to the entire Commission in Brussels and Luxembourg reflects the benefits of this management system for the Commission in particular and for organisations in general. On the one hand, the system helps to reduce the organisation's ecological footprint and the associated energy costs. On the other, it reinforces the synergies between the various departments involved, motivates the staff in support of common objectives, and improves the organisation's image, in particular through greater transparency.

## Annex 1 • EMAS Environmental policy



#### **EUROPEAN COMMISSION**

Environmental Management System



#### EMAS Environmental Policy

In 1997, the European Commission started a process of green housekeeping activities and subsequently in 2001, decided to put in place (in five pilot services) an environmental management system as laid down in Regulation (EC) 761/2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

The purpose of registering Commission services is two-fold: (i) it is consistent with the environmental principles set out in the Treaty establishing the European Community and (ii) the Commission should lead by example with regard to the Member Sates.

In making this commitment, the European Commission recognises the positive contribution it can make to sustainable development, as a long-term goal, through its policy and legislative processes as well as in its day-to-day operations and decisions.

Concretely, the Commission engages to minimise the environmental impact of its everyday work and continuously improve its environmental performance by:

- (1) Taking measures to prevent pollution and to achieve more efficient use of natural resources (mainly energy, water and paper);
- Taking measures to reduce overall CO<sub>2</sub> emissions (mainly from buildings and transport);
- (3) Encouraging waste prevention, maximising waste recycling and reusing and optimising waste disposal;
- Integrating environmental criteria into public procurement procedures and into the rules regarding the organisation of events;
- (5) Complying with relevant environmental legislation and regulations;
- (6) Stimulating the sustainable behaviour of all staff and subcontractors through training, information and awareness-raising actions;

and in relation to the Commission's core business by:

(7) Systematically assessing the potential economic, social and environmental impacts of major new policy and legislative initiatives and promoting the systematic integration of environmental objectives into Community policies;

- (8) Ensuring the effectiveness of environmental legislation and funding in creating environmental benefits;
- (9) Promoting transparent communication and dialogue with all interested parties, both internally and externally.

By virtue of the powers conferred on the Appointing Authorities, the EMAS Steering Committee, composed of the Secretary General, the Directors General of the Environment, Personnel and Administration and Informatics Directorates-General and the Director of the Office for Infrastructure and Logistics in Brussels, hereby approves this Policy Statement and commits to allocate sufficient resources for the efficient management of the environmental management system.

This document shall take effect on the date of its signature.

Brussels, 3rd June 2008

Catherine DAY

Mogens Peter CARL

Secretariat-General Environment Directorate-General Claude CHENE

ersonnel and Administration Directorate-General

Francisco GARCIA MORÁN Informatics

Directorate-General

Gabor ZUPKO Office for Infrastructure and Logistics in Brussels

# Annex 2 • Organisation charts of the EMAS DGs

**SG:** http://ec.europa.eu/dgs/secretariat\_general/sg\_org\_chart\_en.pdf

**ADMIN:** http://ec.europa.eu/dgs/personnel\_administration/documents/chart\_en.pdf

**OIB:** http://ec.europa.eu/oib/doc/org-oib\_en.pdf

**ENV:** http://ec.europa.eu/dgs/environment/directory.htm

**DIGIT:** http://ec.europa.eu/dgs/informatics/about/whoswho/index\_en.htm

# Annexe 3 • Glossary of Terms

CO <sub>2</sub>	A colourless, odourless, incombustible gas, formed during respiration, combustion and organic decomposition and used in food refrigeration, carbonated beverages, inert atmospheres, fire extinguishers, and aerosols
DG	Directorate-General
DG ADMIN	Directorate-General for Personnel and Administration
DG AIDCO	Directorate-General EuropeAid
DG DIGIT	Informatics Directorate General
DG ENV	Environment Directorate-General
EC	European Commission
ECF	Elementary chlorine-free
EMAS	Eco-Management and Audit Scheme
EMS	Environmental management system
EU	European Union (27 Member States since 1 January 2007)
IBGE	Bruxelles Environnement - Institut bruxellois pour la Gestion de l'Environnement.
ICT	Information and communication technologies
ISO 14001	Internationally agreed standard for environmental management
OIB	Office for Infrastructure and Logistics in Brussels
OPOCE	Office for Official Publications of the European Communities
OXFAM	Development, relief and campaigning organisation that works to find solutions to poverty around the world
PC	Personal computer
POP	Ordinary Publications Programme, managed by the Secretariat-General
PUL	Projet Urbain Loi (Loi urban development project)
R22	Hydrochlorofluorocarbon (HCFC-22), a gas that depletes the ozone layer used as a refrigerant. It has a smaller ozone-depleting potential than CFC-12. It is a temporary replacement for CFC-12 and its use in the EU will be banned in 2015
SG	Secretariat-General
TCF	Totally chlorine-free

# Annex 4 • Breakdown of consumption by building

Buildings	Area (m²)	Occup. Pers. on 31/12/08	Address	Services accommodated
MO34	12 582	258	Rue Montoyer 34	ADMIN
SC11	9 185	192	Rue de la Science 11	ADMIN
GUIM	10 796	170	Rue Guimard 10	ADMIN, OIB, PMO
BRE2	18 748	535	Rue Breydel 2	ADMIN, BUDG
HTWG (1)(2)	4 032	Dépôt	Houtweg 23	OIB (Depot)
BU-5	11 540	304	Avenue Beaulieu 5-7	ENV
BU-9	13 006	415	Avenue Beaulieu 9-11	ENV, OIB (crèche)
BERL	130 309	2 159	Berlaymont	College, SG, COMM, SJ, ADMIN, OIB
BU-1	13 024	422	Avenue Beaulieu 1-3	ECFIN
B-28	14 767	464	Rue Belliard 28	DIGIT
CLOV (1)	5 571	Crèche	Boulevard Clovis 75	OIB (Crèche)
DAV1 (¹)	12 450	122	Avenue de Bourget 1-3	OIB (Printshop and central mail room)
J-54	20 693	476	Rue Joseph II 54	AIDCO, EMPL
L-86	13 642	307	Rue de la Loi 86	OIB, ADMIN
WILS (1)	2 544	Crèche	Rue Wilson 16	OIB (Childcare centre)
BREY (*)	30 905	941	Avenue d'Auderghem 45	BUDG, ENTR
B-232 (*)	11 709	439	Rue Breydel 4	SANCO
CDMA (*)	19 297	722	Rue du Champ de Mars 21	RTD
DM-24 (*)	15 094	484	Rue Demot 24	EPSO, TREN
J-27 (*)	12 413	426	Rue Joseph II 27	EMPL
J-30 (*)	18 538	477	Rue Joseph II 30	OLAF
J-79 (*)	16 540	170	Rue Joseph II 79	CDP-OSP, COMP, MARE, OIB, TAXUD
L-41 (*)	29 177	786	Rue de la Loi 41	AIDCO
Total	446 562	10 519		

<sup>(</sup>¹) non-office building (\*) new buildings added to the EMAS project

### Electricity consumption (kWh)

Building	2002	2003	2004	2005	2006	2007	2008
MO34	2 928 465	2 354 512	2 351 752	2 149 468	2 064 125	1 822 207	1 793 384
SC11	1 086 472	743 530	1 022 984	957 895	1 056 824	933 783	805 383
GUIM	1 267 289	1 404 288	1 358 017	1 376 555	1 316 689	1 170 787	1 169 914
BRE2	2 840 314	3 057 218	2 643 236	2 764 345	2 698 529	2 434 844	2 404 282
HTWG (1)	1 158 570	1 277 485	1 240 184	1 148 530	190 304	178 790	173 226
BU-5	2 572 563	2 668 105	2 640 168	2 438 794	2 366 739	2 170 778	2 090 437
BU-9	1 960 642	2 048 123	1 906 766	1 874 870	1 804 588	1 641 705	1 658 391
BERL (²)	-	-	-	29 186 865	21 556 877	21 259 527	21 604 935
BU-1 ( <sup>3</sup> )	-	-	-	2 251 969	2 106 987	1 937 026	1 952 121
B-28 (5)	1 663 172	1 741 088	1 675 207	1 295 404	-	2 624 484	2 524 926
CLOV (1) +WILS (1)	475 624	500 609	497 608	499 658	512 085	534 354	540 583
DAV1 (1) (6)	-	-	-	-	498 427	1 160 382	1 302 726
J-54	1 952 435	2 005 831	1 832 023	1 955 225	2 012 906	1 820 203	1 746 523
L-86	2 428 623	3 348 766	3 233 670	3 114 896	2 924 426	2 611 596	2 374 803
BREY (*)	6 911 552	6 788 493	6 608 848	5 074 184	4 894 793	4 230 299	4 035 158
B-232 (*)	1 520 733	2 289 848	2 261 290	1 522 750	1 268 533	1 253 675	1 290 404
CDMA (4) (*)	-	-	-	2 224 595	2 728 050	2 585 107	2 364 242
DM-24 (*)	2 161 832	2 120 596	1 956 189	2 048 714	2 116 650	1 850 873	1 795 438
J-27 (*)	2 050 348	2 008 741	1 921 849	1 994 175	2 774 405	3 117 104	1 815 996
J-30 (*)	2 648 750	2 854 000	2 721 175	2 959 879	3 165 638	3 422 399	3 597 620
J-79 (*)	2 341 022	2 809 473	2 678 109	2 613 753	2 265 151	2 004 714	1 914 835
L-41 (*)	4 822 782	5 131 632	4 607 471	4 605 713	4 204 940	3 749 536	3 506 074
Grand total	20 334 169	21 149 555	20 401 615	51 014 474	41 109 506	42 300 466	62 461 401

<sup>(\*)</sup> new buildings added to the EMAS project
(¹) non-office building
(²) under renovation until Nov 2004
(³) building outside EMAS project – data unavailable
(⁴) building occupied by the Commission from 2004
(²) building under renovation in 2006
(°) building occupied by the Commission from 2006

### Consumption of gas and heating oil (kWh)

Building	2002	2003	2004	2005	2006	2007	2008
MO34	1 907 323	1 961 982	1 786 043	1 176 829	1 021 799	1 044 768	1 331 549
SC11	967 171	998 121	898 550	876 470	1 052 980	732 251	670 484
GUIM	957 301	1 262 320	1 258 087	1 175 734	1 051 987	894 796	1 145 893
BRE2	1 216 754	1 239 069	1 291 797	1 176 278	1 058 562	860 053	1 083 776
HTWG (1)	1 018 547	1 117 441	1 165 865	1 037 317	211 707	284 511	301 877
BU-5	1 590 702	1 535 181	1 499 944	1 479 956	1 659 283	1 536 411	1 639 038
BU-9	1 539 613	1 457 248	1 425 643	1 904 157	1 977 984	1 679 727	1 979 760
BERL (²)	-	-	-	28 317 851	33 827 585	28 924 876	23 422 888
BU-1 ( <sup>3</sup> )	1 835 278	1 620 833	1 816 111	1 669 430	1 640 362	1 598 043	1 792 442
B-28 (5)	812 500	954 668	943 401	673 786	-	645 086	713 284
CLOV (1) +WILS (1)	688 056	816 111	708 023	656 921	698 244	643 134	626 934
DAV1 (1) (6)	-	-	-	-	-	750 664	1 024 132
J-54	1 375 278	1 626 455	1.328.244	1 758 972	1 463 521	1 529 110	1 485 985
L-86	1 945 626	1 845 070	1.295.696	2 167 595	2 505 804	2 348 236	2 165 638
BREY (*)	4 450 278	5 506 667	5 645 064	4 025 445	4 159 501	3 400 123	3 690 300
B-232 (*)	1 255 556	599 250	1 312 138	1 046 955	811 288	597 918	856 912
CDMA (4) (*)	-	-	-	2 865 618	2 385 463	1 898 938	1 917 385
DM-24 (*)	760 000	789 164	852 473	912 618	931 210	992 245	910 469
J-27 (*)	1 006 944	1 078 889	1 128 548	843 747	752 623	697 140	672 475
J-30 (*)	1 067 778	1 325 000	1 178 951	1 311 860	1 457 504	1 073 201	1 116 168
J-79 (*)	1 402 222	1 239 444	9 996 944	1 023 566	1 027 219	817 732	881 134
L-41 (*)	1 596 667	2 658 103	2 626 283	2 647 343	2 981 384	2 127 640	1 999 893
Grand total	15 854 149	16 434 499	15 417 404	44 071 296	48 169 818	43 471 666	51 428 416

<sup>(\*)</sup> new buildings added to the EMAS project
(¹) non-office building
(²) under renovation until Nov 2004
(³) building outside EMAS project – data unavailable
(¹) building occupied by the Commission from 2004
(²) building under renovation in 2006
(°) building occupied by the Commission from 2006

## Water Consumption (m<sup>3</sup>)

Building	2002	2003	2004	2005	2006	2007	2008
MO34	7 150	5 673	5 812	4 870	4 646	4 671	4 508
SC11	3 640	2 706	3 761	4 939	2 721	2 655	1 858
GUIM	4 370	3 402	4 083	3 777	3 879	3 483	4 005
BRE2	5 920	10 254	13 310	12 059	9 250	7 330	15 814
HTWG (1)	18 240	15 865	11 277	8 568	283	140	151
BU-5	11 910	12 423	10 424	10 874	9 227	6 912	5 031
BU-9	12 320	13 648	14 796	14 836	10 394	8 279	7 664
BERL (2)	-	-	-	63 347	75 921	71 942	76 541
BU-1 (3)	11 390	16 707	16 020	11 298	9.899	7 754	8 084
B-28 (5)	3 970	4 009	5 163	4 711	-	2 031	1 973
CLOV (1) +WILS (1)	5 230	6 5 1 6	5 248	5 336	5 374	4 867	6 100
DAV1 (1) (6)	-	-	-	-	408	935	846
J-54	9 690	10 998	12 879	7 738	7 407	7 266	10 465
L-86	12 200	16 023	17 766	15 418	7 272	10 441	7 373
BREY (*)	32 120	31 911	34 331	21 411	20 391	14 924	16 210
B-232 (*)	3 790	3 460	4 125	4 088	5 037	3 793	4 292
CDMA (4) (*)	-	-	-	4 985	4 481	4 469	4 3 1 3
DM-24 (*)	3 000	2 456	3 081	2 967	4 301	3 917	3 986
J-27 (*)	3 610	4 223	5 226	5 054	5 759	4 659	3 838
J-30 (*)	8 920	10 539	6 624	7 689	6 482	6 734	8 298
J-79 (*)	3 340	5 253	5 556	4 604	3 180	3 275	2 709
L-41 (*)	-	12 128	12 441	11 903	13 249	10 311	10 820
Grand total	106 030	118 224	120 539	167 771	146 681	139 733	204 879

<sup>(\*)</sup> new buildings added to the EMAS project
(¹) non-office building
(²) under renovation until Nov 2004
(³) building outside EMAS project – data unavailable
(⁴) building occupied by the Commission from 2004
(²) building under renovation in 2006
(°) building occupied by the Commission from 2006

### Total energy (electricity + gas + heating oil ) consumption (MWh)

Building	2002	2003	2004	2005	2006	2007	2008
MO34	4 836	4 316	4 138	3 326	3 086	2 867	3 125
SC11	2 054	1 742	1 922	1 834	2 110	1 666	1 476
GUIM	2 225	2 667	2 616	2 552	2 369	2 066	2 316
BRE2	4 057	4 296	3 935	3 941	3 757	3 295	3 488
HTWG (1)	2 177	2 395	2 406	2 186	402	463	475
BU-5	4 163	4 203	4 140	3 919	4 026	3 707	3 729
BU-9	3 500	3 505	3 332	3 779	3 783	3 321	3 638
BERL (²)	-	-	-	57 505	55 384	50 184	45 028
BU-1 ( <sup>3</sup> )	1 835	1 621	1 816	3 921	3 747	3 535	3 745
B-28 ( <sup>5</sup> )	2 476	2 696	2 619	1 969	-	3 270	3 238
CLOV (1) +WILS (1)	1 164	1 317	1 206	1 157	1 210	1 177	1 168
DAV1 (1) (6)	-	-	-	-	498	1.911	2 327
J-54	3 328	3 632	3 160	3 714	3 476	3 349	3 233
L-86	4 374	5 194	4 529	5 282	5 430	4 960	4 540
BREY (*)	11 362	12 295	12 254	9 100	9 054	7 630	7 725
B-232 (*)	2 776	2 889	3 573	2 570	2 080	1 852	2 147
CDMA (4) (*)	-	-	-	5 090	5 114	4 484	4 282
DM-24 (*)	2 922	2 910	2 809	2 961	3 048	2 843	2 706
J-27 (*)	3 057	3 088	3 050	2 838	3 527	3 814	2 488
J-30 (*)	3 717	4 179	3 900	4 272	4 623	4 496	4 714
J-79 (*)	3 743	4 049	12 675	3 637	3 292	2 822	2 796
L-41 (*)	6 419	7 790	7 234	7 253	7 186	5 877	5 506
Grand total	36 188	37 584	35 819	95 086	89 279	85 772	113 890

<sup>(\*)</sup> new buildings added to the EMAS project
(¹) non-office building
(²) under renovation until Nov 2004
(³) building outside EMAS project – data unavailable
(¹) building occupied by the Commission from 2004
(²) building under renovation in 2006
(°) building occupied by the Commission from 2006

## Aggregate CO<sub>2</sub> emissions (tonnes)

Building	2002	2003	2004	2005	2006	2007	2008
MO34	1 250	1 105	1 069	868	765	703,8	753,6
SC11	516	425	490	458	498	400	353
GUIM	568	678	663	641	568	497	547
BRE2	1 085	1 172	1 058	1 049	944	833	869
HTWG (1)	548	610	609	546	94	106	108
BU-5	1 081	1 114	1 099	1 014	975	897	896
BU-9	890	911	862	934	887	783	847
BERL (2)	-	-	-	14 273	12 641	11 575	10 563
BU-1 (3)	369	326	365	998	901	846	889
B-28 (5)	656	718	696	516	-	841	828
CLOV (1) +WILS (1)	279	315	293	279	279	274	273
DAV1 (1) (6)	-	-	-	-	135	465	559
J-54	854	933	820	928	840	801	772
L-86	1 237	1 503	1 322	1 493	1 460	1 333	1 220
BREY (*)	3 231	3 476	3 460	2 574	2 557	2 158	2 178
B-232 (*)	785	837	1 019	730	592	530	610
CDMA (4) (*)	-	-	-	1 422	1 443	1 271	1 211
DM-24 (*)	842	838	806	850	875	812	774
J-27 (*)	875	882	870	815	1 022	1 108	717
J-30 (*)	1 068	1 198	1 120	1 226	1 325	1 299	1 362
J-79 (*)	1 066	1 162	3 456	1 046	944	811	802
L-41 (*)	1 853	2 227	2 063	2 069	2 039	1 677	1 571
Grand total	9 333	9 811	9 345	23 998	20 987	20 355	28 702

<sup>(\*)</sup> new buildings added to the EMAS project
(!) non-office building
(?) under renovation until Nov 2004
(3) building outside EMAS project – data unavailable
(4) building occupied by the Commission from 2004
(5) building under renovation in 2006
(6) building occupied by the Commission from 2006

## Annex 5 • Summary of aims, targets and key measures for 2008

Objectives (policies)	Scope of the action	Indicator	2007 value	Objective 2008	Results 2008	Department responsible	Situation
Key measures		1014 ( 2		2008		responsible	
<ol> <li>Reduce the energy consumption of buildings</li> </ol>	Commission (1)	KWh/m² KWh/staff CO <sub>2</sub> emissions (Kg/m²) CO <sub>2</sub> emissions (Kg/staff)	307 14 420 73 3 422		260 10 576 66 2 671		
	Worst performing buildings (2)	KWh/m²	340	-3 %	-5.5 %	OIB, ALL	Done
Review lighting/ HVAC outside office hours		•				OIB, ADMIN	Done
• Stop providing hot water in sanitary facilities						OIB	Action ongoin
· Improve energy efficiency of vending machines						OIB	Done
<ul> <li>Install an energy-saving tool on computers</li> </ul>						DIGIT	Action ongoin
2. Rational use of water	Commission (1)	Litre /m²	499		464		
	Worst performing buildings (3)	Litre/m²	23 284 545	-3 %	-1.7 %	OIB, ALL	Not achieved
3. Rational use of IT equipment	Pilot services	Ratio individual/ shared printers	1.24 (4)		1.04(4)	ALL	Done
4. Reduce paper consumption	Commission	Office paper (sheets/ person/day)	59	-2 %	52	ALL	Done
		Offset paper (tonnes/year) Publications (POP) (Tonnes/year)	283 ( <sup>5</sup> ) 21		366		
Promote electronic working methods			-	-	-	ALL	Done
<ul> <li>encourage double-sided and 2 pages/ sheet printing (definition of a printing strategy for the Commission)</li> </ul>			-	-	-	ALL	Done
5. Reduce CO <sub>2</sub> emissions of business	Commission	CO <sub>2</sub> emissions (kg/pers)	0				
trips and commuting		% private car use by staff No. videoconferences/no. missions	40 %				
Implementation of plan for purchasing official cars		g CO <sub>2</sub> /km	241 g/km	-	210 g/km	OIB	Done
Evaluation of mobility plan						OIB, ADMIN	Done
Promoting car-sharing, public transport, service bicycles, etc.	Pilot services					OIB, ADMIN	Done
Increasing the use of videoconference facilities						PS (⁵)	Done (provision of facilities; promotional activities)

<sup>(</sup>¹) Office buildings within the scope of EMAS: MO34, SC11, GUIM, BRE2, BU5, BU9, BERL, BU1, B-28, J-54, L-86, BREY, B-232, CDMA, DM-24, J-27, J-30, J-79, L-41. (²) Worst performing buildings, energy: - BERL, BREY, BU (esp.), CCAB, L-86, MO34, SDME. (³) Worst performing buildings, water: BERL, BREY, BU (esp.), L-86, MO51, SC29, SDME. (\*) DG ADMIN, DG ENV, OIB, DIGIT.

<sup>(5)</sup> The figure in the 2007 Environmental Statement (252 tonnes) did not take account of stock variations or all delivery notes. It has accordingly been corrected to 283 tonnes.

6. Optimise waste management	Commission	Kg/staff % waste sorted % waste recycled	284 57 % 50 %	-2 %	294 54 % 47 %		Not achieved
Replace polystyrene cups in cafeterias					•	OIB, ALL	Action ongoing
Ensure chemicals are stored properly; replace certain chemicals with less environmentally-harmful substances						OIB, ALL	Done
Manage obsolete equipment (contract with OXFAM)						DIGIT, OIB	Fait
7. Include environmental criteria in Commission public procurement contracts	Commission					ALL	
Computer equipment		% hardware contracts with environmental criteria	100 %	100 %	100 %	DIGIT	Done
Green electricity		% green electricity	0 %	Launch of calls for tender	Call for tender launched	OIB	Done
Service contracts (with environmental criteria)		% signed with environmental criteria	23 %	30 %	32 %	OIB	Done
Offset paper		% env. friendly paper	-	-	100 %	OIB	Done
Office supplies		% green products	16 %	+2.5 %	20 %	OIB	Done
Implementation of the GPP communication		% of product groups included				ENV	Action ongoing
8. Ensure conformity with the law	Commission						
Legal monitoring     Monitoring of environmental permits	•	Updated legal monitoring register No. of buildings registered	8	+7	+7	ADMIN (DIGIT, OIB)	Done Done
Compliance with the Community     Directive on the energy performance of buildings	Commission Bxl	m <sup>2</sup> of buildings registered Number of buildings	210 000	+ 83 000	+83 000	OIB	Action postponed
Better prioritisation and monitoring with regard to health and safety procedures		% reports with non- compliance	38 %	Réduire # non- conformités	36 %	ADMIN, OIB	Done
Encourage sustainable behaviour by staff and contractors	Commission						
Communication and awareness-raising (energy, waste, hazardous products)	Pilot services	Number of actions	-	-	-	ADMIN	-
Training (e.g. new colleagues, drivers, green public procurement)	Pilot services	Number of actions	-	-	-		-
10. Dialogue with third parties	Pilot services	Number of actions	-	-	-	ADMIN (w/ COMM)	-

<sup>(</sup>¹) Office buildings within the scope of EMAS: MO34, SC11, GUIM, BRE2, BU5, BU9, BERL, BU1, B-28, J-54, L-86, BREY, B-232, CDMA, DM-24, J-27, J-30, J-79, L-41.
(²) Worst performing buildings, energy: - BERL, BREY, BU (esp.), CCAB, L-86, MO34, SDME.
(³) Worst performing buildings, water: BERL, BREY, BU (esp.), L-86, MO51, SC29, SDME.
(⁴) DG ADMIN, DG ENV, OIB, DIGIT.
(⁵) The figure in the 2007 Environmental Statement (252 tonnes) did not take account of stock variations or all delivery notes. It has accordingly been corrected to 283 tonnes.

## Annex 6 • Summary of aims, targets and key measures for 2009-2011

Objectives (policies) Key measures	Scope of the action	Indicator	2008 value	Objective 2009	Objective 2010	Objective 2011	Long-term	Department responsible
I. Efficient use of natural resource	S							
Reduce the energy consumption of buildings	Commission (1)	KWh/m² KWh/staff CO <sub>2</sub> emissions (Kg/m²) CO <sub>2</sub> emissions (Kg/staff)	260 10 576 66 2 671	-3 %	-3 %	-3 %		OIB, ALL
Implement measures in the following areas :								
• Lighting								OIB
• HVAC								OIB
Buildings management								OIB
Computer equipment								DIGIT
Inclusion of environmental criteria on entry into service or renovation of a building	Commission	No. of projects taking account of environmental criteria	100 % of projects	100 % of projects	100 % of projects	100 % of projects	100 % of projects	OIB
3. Rational use of water	Commission (1)	Litre/m² Litte/staff	464 18 827	-3 %	-3 %	-3 %		OIB, ALL
4. Rational use of IT equipment	Pilot services	Ratio indiv./shared printers	1,04 (²)	0,6 (3)				3 SERVICES (3)
5. Reduce paper consumption	Commission	Office paper (sheets/ person/day) Offset paper (tonnes/year) Publications (POP) (Tonnes/year)	52 366 22	-2 %	-2 %	-2 %		ALL
Implement Commission's printing strategy		No. of actions identified and implemented	-	-	100 %	-		DIGIT
Draw up an archiving strategy		% achievement	-	-		100 %		SG
II. Transport and mobility								
6. Reduce CO <sub>2</sub> emissions of business trips and commuting	Commission	CO <sub>2</sub> emissions (kg/pers)						
Reduce CO <sub>2</sub> emissions of official vehicles		g CO <sub>2</sub> /km	210 g/km	-	-	-	-26 % 196,5 gr (2012	OIB
• Draw up a new mobility plan		% achievement		100 %			vs2004)	OIB
Increase the use of videoconferencing		No.of videoconferences/ no. of missions						ALL
Make videoconference facilities available to staff		Number of videoconference rooms (4). No. of meetings in these rooms						DIGIT

<sup>(</sup>¹) Office buildings within the scope of EMAS: MO34, SC11, GUIM, BRE2, BU5, BU9, BERL, BU1, B-28, J-54, L-86, BREY, B-232, CDMA, DM-24, J-27, J-30, J-79, L-41.
(²) DG ADMIN, DG ENV, OIB, DIGIT.
(³) DG ADMIN, DG ENV, DIGIT.
(°) Managed by DIGIT
(°) For OIB only.

III. Waste management, sorting								
7. Optimise waste management	Commission	Kg/staff % waste sorted % waste recycled	294 54 % 47 %	-2 %				
Replace polystyrene cups in cafeterias		Polystyrene cups replaced		100 %	•	•		OIB
• Improve sorting of waste		% waste sorted	54 %	60 %				OIB, TOUS
IV. Green public procurement								
8. Include environmental criteria in Commission public procurement contracts (implement the Communication on GPP for the Member States)	Commission						100 % (2012)	TOUS
Computer equipment		% hardware contracts with environmental criteria	100 %	100 %	100 %	100 %		DIGIT
Green electricity		% green electricity	0 %	50 %	50 %	50 %	100 %	OIB
Service contracts		% signed with environmental criteria	32 % (5)	40 % (5)	50 % ( <sup>5</sup> )	60 % (5)		OIB
Office supplies		% green products	20 %	+2.5 %	+2.5 %	+2.5 %		OIB
V. Legal compliance								
8. Ensure conformity with the law	Commission							
EMAS registration of buildings		No. of buildings registered m <sup>2</sup> of buildings registered	15 292 000	+8 +154 000	+8 +88 500	+9 +75 000	All buildings in 2010	OIB
Compliance with the Community Directive on the energy performance of buildings	Commission Brussels	Number of buildings		On transposal into local law				OIB
Better prioritisation and monitoring with regard to health and safety procedures		% reports with non- compliance	36 %	reduce non- compliance numbers				ADMIN, OIB
VI. Sustainable behaviour of staff	and contractors	<b>i</b>						
9. Increase awareness and encourage sustainable behaviour	Commission							
Communication and awareness- raising (energy, waste, hazardous products)	Pilot services	Number of actions	-	25	25	25		ADMIN
Training (e.g. new colleagues, drivers, green public procurement)	Pilot services	Number of actions	-	7	6	6		ADMIN
10. Dialogue with third parties	Pilot services	Number of actions	-			-		ADMIN (COMM)

<sup>(</sup>¹) Office buildings within the scope of EMAS: MO34, SC11, GUIM, BRE2, BU5, BU9, BERL, BU1, B-28, J-54, L-86, BREY, B-232, CDMA, DM-24, J-27, J-30, J-79, L-41.
(²) DG ADMIN, DG ENV, DIGIT.
(²) DG ADMIN, DG ENV, DIGIT.
(\*) Managed by DIGIT
(\*) For OIB only.