

## **EMAS Environmental statement 2014**

## **Introduction**

### **Environmental management system**

The EEA uses an environmental management system which was registered under the European *Eco Management and Audit Scheme* (EMAS) in 2005. The first EMAS Regulation encompassing public and private sectors was adopted in 2001 ((EC) No 761/2001). It has subsequently been updated with the revised Regulation ((EC) No 1221/2009), which entered into force on 11 January 2010.

The Agency publishes an annual environmental statement, which since 2009 has been incorporated into the Agency's Annual Report.

EMAS is part of the Agency's Quality Management System (QMS) and is linked to other management processes.

### **Environmental impacts of the Agency's activities**

The Agency's activities have both direct and indirect impacts on the environment. The Agency routinely monitors its use of electricity, energy for heating, water and paper, the generation of waste as well as the CO<sub>2</sub> emissions from business travel. The Agency regularly evaluates its activities in order to optimise and improve outputs while limiting the use of resources and minimising negative impacts on the environment.

### **Environmental management structure**

The Agency's environmental management system is an integral part of the organisation's management plan and is designed to make environmental responsibilities clear to employees. Staff members are encouraged to actively engage in projects that will lead to positive environmental impacts. New employees receive a 30 minute introduction to the environmental management system, and several complimentary activities exist to further inform staff about EMAS priorities.

The environmental management system is documented in a handbook on the Agency's Intranet, explaining who is responsible for doing what, when and how.

### **EMAS Communication activities**

The Agency recognises the important role communications has in sustainable environmental management. As a result, an active approach to communicating the EMAS objectives is included in the EEA's internal and external outreach activities.

The EEA's website has a section dedicated to promoting positive environmental practices to external audiences and organisations. This section includes information about the Agency's commitment to environmental management. Internally, the EEA produces periodic newsletters, organises events and manages a system to solicit and incorporate recommendations from staff for improvements. Through these internal activities, the Agency transmits information on its environmental performance and fosters engagement from staff members.

## EEA ENVIRONMENT POLICY

# EEA ENVIRONMENT POLICY



The European Environment Agency (EEA) is an agency of the European Union mandated to help achieve significant and measurable improvement in Europe's environment and to support sustainable development. In that role we recognise that we have a special responsibility to act as a role model when it comes to managing our own environmental performance.

Like all organisations we consume natural resources and pollute the environment through our daily operations. In order to minimise our environmental impacts and continually improve our performance, we have in place an environmental management system, which complies with the Eco-Management and Audit Scheme (EMAS).

Our vision is to be a climate friendly and resource efficient organisation and in that context we are committed to:

- continuously improving our energy and material efficiency
- maintaining staff's awareness and understanding of environmental issues at a high level and encouraging the sharing of ideas for environmental improvement
- making use of own experience and accumulated knowledge in managing environmental performance to influence and inspire sister organisations (other EU bodies and institutions)
- complying with all environmentally relevant legislation and regulations of our host country

This environment policy covers Agency's operations and staff, also when on missions and travelling to and from work. The policy applies also to all other persons working at the Agency's premises.

March 2014

Hans Bruyninckx  
Executive Director

## Environmental performance in 2014

### Raising environmental awareness

Information on the Agency's commitment to, and practice of, EMAS is part of the induction programme for all new employees. As part of regular biannual internal audits, members of staff are randomly interviewed about the aspects of their work that relate to EMAS.

The Agency also continues to assist other EU bodies in relation to raising awareness of their environmental impacts. The Greening Network, created by the EEA in 2006, fulfils this task and now consists of 16 member organisations, all of them EU agencies.

To encourage more sustainable consumption and resource efficiency by employees at home as well as in the workplace, a swap party was held in January 2014 where unwanted Christmas gift could be exchanged. The positive feedback from participants was noted. Another activity of awareness included the weekly video loop in the canteen to communicate EMAS targets for 2014 and selected green tips. In 2014 the EMAS section of the EEA's website received 3,964 views a 9% increase to the previous year (3,625 views in 2013), which documents the usefulness of the provided information for external audiences. Awareness-raising activities also included newsletters and notifications for internal use, website updates for external audiences, as well as introducing new staff to EMAS as part of the induction training. Finally, the presentation of EMAS 2013 results and 2014 targets, the so called EMAS refresher visit, was given to each programme separately.

### Running the EEA offices

The environmental impact of running EEA offices is detailed below in several tables in time series segmentation from 2005 to 2014.

The tables cover electricity consumption, energy equivalent for district heating, water consumption, paper consumption and waste generation.

The environmental performance in these areas is set in relation to the number of persons working at the EEA and the office area.

The number of persons working at the EEA is expressed as Full Time Equivalent (FTEs) and is derived from the time recording system that both staff and in-house consultants and other short-term assistants use.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
FTE	136	155	172	173	175	198	219	235	226	211

The calculation of performance in terms of impacts per square-meter is complicated by the fact that EEA has since 2005 had some staff working in other buildings than the main building at Kongens Nytorv 6 (KN6). Since 2010, the EEA has been renting an adjacent building (KN8) - initially two floors and from 2011 three floors. KN6 and KN8 have a maximum of 175 and 55 office spaces respectively, and the size is approximately 10 000 m<sup>2</sup> in total (7 200 m<sup>2</sup> in KN6 and 2 800 m<sup>2</sup> in KN8).

## Electricity

### Consumption of electricity 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Total KWh</b>	715 320	796 858	768 424	724 110	735 669	683 004	735 148	779 851	762 206	779 251
<b>KWh /FTE</b>	5271	5138	4478	4188	4199	3451	3365	3321	3374	3693
<b>KWh /m<sup>2</sup></b>	99	111	107	101	102	95	102	78	76	78

The figures from 2005 to 2011 cover only KN6 (7200m<sup>2</sup>) and the 2012-2014 figures cover both buildings (10.000 m<sup>2</sup>).

Consumption of electricity can broadly be divided into two approximately equal parts: 1) electricity needed for central computing (servers) and data storage (including cooling the server room), and 2) staff-related use of electricity in offices and meeting rooms. The main server room is located in KN6.

As gathering, managing and disseminating environmental data is one of the main objectives of the Agency, reduction of the overall electricity use is not a goal *per se*. The increase in electricity consumption between 2011 and 2013 can, for example, be attributed to the enlargement of the server-park and addition of 168 terabytes of disk space; both needed to meet the objectives of the work programme.

Despite increased central computing and data storage, the overall electricity use per FTE shows a clear trend downwards over the ten years. There is certainly a multitude of reasons for this, for example more energy efficient computing, higher environmental awareness among staff, the installation of light sensors in corridors and changing the lighting to energy efficient LED lights.

Also in 2014 the Agency bought electricity from renewable sources (wind energy) through the renewable energy certificate system (RECS) for the agreed quantity of 768MWh in form of a RECS certificate.

## Heating

### Consumption of heating energy 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>m<sup>3</sup></b>	826	876	907	944	902	1 092	969	943	937	845
<b>KWh<sup>1</sup></b>	578 200	613 000	634 900	661 000	631 591	764 400	678 300	660 100	655 900	591 500
<b>KWh /FTE</b>	4261	3952	3700	3823	3605	3863	3104	2811	2903	2803
<b>KWh /m<sup>2</sup></b>	80	85	88	92	88	106	94	92	91	82

The figures for all years cover only KN6 (7200m<sup>2</sup>). The FTE includes all staff, but an increasing number of staff since 2010 is in KN8. Hence the downward trend 2010-2014 is mainly an artefact.

<sup>1</sup> To evaporate one m<sup>3</sup> of water it takes about 700 KWh of energy, according to HOFOR<sup>†</sup> (<http://www.hofor.dk/fjernvarme/>), heating supplier for the EEA.

The steam used by the EEA for heating its premises is provided by the grid of the local district heating provider HOFOR, who is undergoing a reorganisation of its district heating grid from steam to hot water by 2021. This modification to the existing system will provide energy and environmental benefits not only to the EEA but the inner city of Copenhagen

## Water

### Consumption of water 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
m <sup>3</sup>	1 456	1 581	1 545	1 564	1 854	2 636	2 381	1 827	2 326	1 787
m <sup>3</sup> / FTE	11	10	9	9	11	13	11	8	10	8,5
l/m <sup>2</sup>	202	220	215	217	258	366	331	254	323	248

The figures for all years cover only KN6 (7200m<sup>2</sup>). The FTE includes all staff, but an increasing number of staff since 2010 is in KN8.

The EEA's consumption of water was high in 2013, as it was in 2010 and 2011. This increase can be attributed to regularly watering several large plants in the courtyard (as well as on the façade of the building in 2010). The courtyard plants were removed at the end of 2013. The consumption of water in 2014 is now on a more acceptable level.

We will continue to monitor the amounts consumed regularly and take steps to encourage less water consumption by staff members and the canteen.

## Paper

### Consumption of paper 2006-2014

	2006	2007	2008	2009	2010	2011	2012**	2013	2014
No. of sheets printed in-house	1 534 265	725 500	1 583 000	549 000	906 500	134 500	1 366 570	1 327 381	1 188 345
In-house sheets per FTE	9892	4228	9156	3134	4581	616	5820	5876	5632
Number of pages in published reports*	9 944 120	14 047 732	6 651 600	6 309 400	9 844 500	10 674 600	10 228 150	12 651 000	4 901 400

**Note:** \* Sum of pages per report x print run.

\*\* Since 2012 the calculation method for in house printing is based on counters on printers. Data before 2012 are not deemed reliable or comparable.

Due to the nature of the Agency's operations, one of which is dissemination of information in the form of written reports, the Agency's high consumption of paper per FTE is noteworthy. The use of paper can fluctuate, depending on the type and number of reports published in-house (EEA technical reports are

printed on-demand in-house, while reports in the series “EEA reports” and some other publications are printed externally). In 2014, the Agency increased its dissemination of outputs electronically to further reduce paper consumption.

The new method that was introduced in 2012 to monitor in-house printing gives rather accurate and comparable figures. The number of pages printed in-house was further reduced by 10.5 % from 2013 to 2014.

## Waste

### Generation of waste 2006-2014 (kg)

	2006	2007	2008	2009	2010*	2011	2012	2013	2014
<b>Household</b>	19 870	26 570	25 090	28 500	25 730	23 735	21 095	25 910	23 995
<b>Cardboard</b>	8 540	5 185	6 765	13 790	4 100	2 510	2 210	2 055	2 400
<b>Paper</b>					6 430	6 400	5 410	3405	10 865
<b>Organic</b>	3 000	2 400	1 930	3 300	2 850	1 050**	No data***	No data****	No data****
<b>Electronic</b>	1 900	1 170	2 150	1 570	2 492	1 904	1 237	1306	2 046
<b>Glass</b>	690	335	150	320	510	470	No data***	600	200
<b>Total</b>	34 000	35 660	36 085	47 480	42 112	36 069	29 573	33 276	39 506
<b>Total/FTE</b>	219	207	286	271	213	165	126	147	187

**Note:**

\* 2010 was the first year where cardboard waste was separated from paper.

\*\* Data series covers January to March 2011 only.

\*\*\*Weighing of organic and glass was suspended due to the collectors' logistics.

\*\*\*\*Weighing of organic remained suspended due to the collectors' logistics.

Waste generated by EEA activities is sorted into the following categories: glass, electronic, organic, paper, cardboard and household. Compared to 2013 data, less household and glass waste was recorded in 2014 when again more cardboard, paper and electronic waste was generated mainly due to a "spring cleaning" campaign and disposal –and replacement- of written-off IT equipment. To be noted is that purchase of new IT equipment results to an increased amount of cardboard waste, due to the packaging material.

It is not possible to provide data on organic waste due to technical limitations in the current waste collection process. The lorry collecting the organic waste has no built- in scale and thus is unable to provide figures.

## CO<sub>2</sub> emissions related to traveling

### CO<sub>2</sub> emissions 2006-2014 (tonnes)

	2006	2007	2008	2009	2010	2011	2012	2013	2014
CO <sub>2</sub> emissions for staff missions					308	351	259	287	238
CO <sub>2</sub> emissions for meeting participants					227	301	375	330	247
<b>Total</b>	673	447	526	600	535	652	634	617	(922)* 485

Emissions related to staff travel activities have been reported since 2006. During this year, a carbon offsetting scheme was introduced and the Agency became well known for limiting the carbon footprint of its business travel. The carbon offsetting scheme is managed by the EEA's travel agent Seneca, and the offsets are used to support Gold Standard energy efficiency projects in Africa.<sup>2</sup>

Evaluating the last two years shows that the distance travelled via air has gone down, from 5.6 million km to 4.8 million km as well as the carbon footprint.

\*The high increase of tonnes of CO<sub>2</sub> emissions is due to the change of calculation method based on the Radiative Force Index (RFI). This multiplier of 1.9, which also includes other greenhouse gases such as NO<sub>x</sub> and water vapour, is added to the emissions factor to take into account the effects of emitting greenhouse gas emissions at high altitude by aviation. The EEA has chosen to apply this index as of 2014.

## Procurement

Building environmental considerations into procurement is a standard practice at the EEA. Our green procurement cycle includes an 'environmental impact statement' in the initial proposal for procurement, as well as specific, robust environmental criteria and 'environmental considerations' in the tender specifications.

<sup>2</sup> <http://www.co2balance.com/project-portfolio/project/great-accra-improved-cook-stoves-microscale-gs/>

## Environmental targets 2014 with performance indicators

Environmental issue	Source of impact	Action plan	Performance indicator	Performance in 2014
<b>1. Electricity consumption</b>	1. Central computing and data storage by servers	Introducing more energy efficient servers and related technology.	0-growth in 2012-2014 (base year 2011)	2011: 239 622 KWh 2014: 276 216 KWh
	2. Cooling in server room	Ensuring optimal temperature at all times.	0-growth in 2012-2014 (base year 2011)	2011: 87 228 KWh 2014: 105 179 KWh
	3. 'Staff-related' use of electricity in offices and meeting rooms (PCs, printers, copy machines, faxes, lights etc.)	Increasing awareness among staff about this aspect.	3% reduction in 2012-2014 (base year 2011)  Absolute and per FTE figures	2011: 413 339 KWh 2011: 1 887 KWh/FTE 2014: 397 856 KWh 2014: 1 886 KWh/FTE
<b>2. Paper consumption</b>	4. Printing documents and emails	Raising awareness about printing habits.	3% reduction (base year 2013) in absolute and per FTE figures.	2013: 1 327 381 (A4) 2013: 5 876 (A4)/FTE 2014: 1 188 345 (A4) 2014: 5 632 (A4)/FTE
	5. Printing publications at external printers	Reducing the number of paper publications through more targeted dissemination and electronic publishing.	0-growth (base year 2013)	2013: 12 651 000 (A4) 2014: 4 901 400 (A4)
<b>3. Sustainable resource use</b>	6. Electricity, paper, heat and water consumption	Devise suitable campaigns throughout the year aimed at achieving measurable reductions.	Reporting on the results	See 'Raising environmental awareness'
<b>4. Waste production</b>	7. Elimination of unnecessary waste such as the use of plastic bags in office bins	Devise a suitable campaign and identify actions to reduce it.	Reporting on the results	No progress

<b>5. Greenhouse gas emissions</b>	8. Staff going on missions	Using videoconferencing and Skype conferencing when possible including meetings with ETCs, except for one meeting annually.	CO <sub>2</sub> tons, 3 % reduction (base year 2013) in absolute and per FTE figures	2013: 286.9 t 2013: 1,269 t/FTE 2014: 237.9 t 2014: 1.127 t/FTE
	9. External participants coming to EEA-organised meetings by plane	Using videoconferencing/Skype conferencing when applicable.	CO <sub>2</sub> tons, 0 growth (base year 2013)	2013: 330.4 t 2014: 247.4 t
<b>6. Various negative environmental impacts of EEA</b>	10. All procurement	Calls for tenders have to have an environmental criteria specification according to the type of good purchased. All purchases carried out against best available environmental criteria.	New EU directives requiring new certifications are taken into account	Fully implemented
<b>7. Various positive environmental impacts of EEA - Awareness raising</b>	11. Green communication / awareness-raising activities	Continue developing and implementing an integrated approach to awareness-raising.	Communication plan progress report	Internal communication activities carried out 1) SMT was informed about the EMAS communication activities 2) EMAS newsletter introduced (2) 3) Announcements regarding EMAS included: posters, video loop in canteen, refresher in programme meetings, introduction of

				EMAS to new staff
<b>8. Environmental economic and social impacts</b>	12. All EEA activities	Integration of EMAS and health and safety issues, (reference EU standards, OHSAS 18001 standard) into a Total Quality and Environmental Management System (TQMS)	Reporting on the results	Reorganisation 1 January 2015 brought the responsibility for EMAS and QMS together in the Executive Director's office.
<b>9. Internal environment</b>	13. Environment in buildings	Improving insulation of window frames and doors.	Communication of the results of the projects	The owner of the main building made a complete overhaul of all windows in the façade facing Kongens Nytorv.

## Annex A: Environmental Management Programme 2015

Environmental issue	Source of impact	Action plan	Performance indicator
<b>1. Electricity consumption</b>	1. Central computing and data storage by servers	Introducing more energy efficient servers and related technology.	0-growth in 2015-2017 (base year 2011)
	2. Cooling in server room	Ensuring optimal temperature at all times. New cooling system installed in April 2015.	50% reduction in 2015-2017 (base year 2011)
	3. 'Staff-related' use of electricity in offices and meeting rooms (PCs, printers, copy machines, faxes, lights etc.)	Increasing awareness among staff about this aspect.	6% reduction in 2015-2017 (base year 2011) Absolute and per FTE figures
<b>2. Paper consumption</b>	4. Printing documents and emails	Raising awareness about printing habits.	6 % reduction (base year 2013) in absolute and per FTE figures.
	5. Printing publications at external printers	Reducing the number of paper publications through more targeted dissemination and electronic publishing.	0-growth in 2015-2017 (base year 2013) (but with a peak in 2015 because of the five-yearly report published in all languages of the EEA member countries)
<b>3. Sustainable resource use</b>	6. Electricity, paper, heat and water consumption	Devise suitable campaigns throughout the year aimed at achieving measurable reductions.	Reporting on the results
<b>4. Waste production</b>	7. Elimination of unnecessary waste such as the use of plastic bags in office bins	Devise a suitable campaign and identify actions to reduce it.	Reporting on the results
<b>5. Greenhouse gas emissions</b>	8. Staff going on missions	Using videoconferencing and Skype conferencing when possible including meetings with ETCs, except for one meeting annually.	CO <sub>2</sub> tons: 6 % reduction (base year 2013) in absolute and per FTE figures
	9. External participants coming to EEA-organised meetings by plane	Using videoconferencing/Skype conferencing when applicable.	CO <sub>2</sub> tons, 0 growth (base year 2013)

<b>6. Various negative environmental impacts of EEA</b>	11. All procurement	Calls for tenders have to have an environmental criteria specification according to the type of good purchased. All purchases carried out against best available environmental criteria.	All procurement aligned to EU directives.
<b>7. Various positive environmental impacts of EEA - Awareness raising</b>	12. Green communication / awareness-raising activities	Continue developing and implementing an integrated approach to awareness-raising.	Communication plan progress report
<b>8. Environmental economic and social impacts</b>	13. All EEA activities	Integration of EMAS and health and safety issues, (reference EU standards, OHSAS 18001 standard) into a Total Quality and Environmental Management System (TQMS)	Reporting on the results
<b>9. Internal environment</b>	14. Environment in buildings	Support the 'new premises' evaluation project by comparing the potential benefits of the environment in the 'old' and 'new' building	Reporting on the results