

## **EMAS** Environmental statement 2016

As verified on 30/3/2017 by Bureau Veritas as Verifier





## management

REG.NO. DK-000244

This environmental statement provides information to the general public and other interested parties on the environmental performance and activities of the European Environment Agency (EEA) in 2016. It can be found on the EEA website (see link). The EEA was first validated under the EMAS scheme in 2005<sup>1</sup>. This environmental statement is the sixth to be produced within the EMAS annual validation cycle. It contains updated data for 2016, which are compared with data from the previous four years.

BUREAU VERITAS
CERTIFICATION
25 AUG. 2017
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EMAS - MILLIOVERIFIKATOR
NR. DK-V6002

<sup>&</sup>lt;sup>1</sup> Bureau Veritas is the verifier of this statement, dated 30/3/2017 and registered under DANAK DK- 6002

## 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 traveiling to and from work. The policy applies also to all other persons working at the Agency's premises.

March 2017

Hans Bruyninckx Executive Director

**European Environment Agency** 



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## 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.

Since 2009, the EEA has published an annual environmental statement, which was incorporated into the EEA Annual Report. However, in 2016, the EEA Annual Report was merged into a Consolidated Annual Activity Report (CAAR), whereas the EMAS environmental statement will be published separately as a corporate document on the EEA's website. The 2017 environmental statement will follow the same format.

EMAS is part of the EEA's Quality Management System (QMS).

## **Environmental management structure**

The EEA's environmental management system is an integral part of its 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 complementary activities exist to further inform staff about EMAS priorities.

The environmental management system is documented in a handbook on the EEA intranet, which explains who is responsible for doing what, when and how.

## **Environmental impacts of EEA activities**

The EEA's activities have both direct and indirect impacts on the environment. The EEA routinely monitors its use of electricity, energy for heating, water, paper, its generation of waste its CO<sub>2</sub> emissions from business travel. It regularly evaluates its activities in order to optimise and improve outputs while limiting the use of resources and minimising negative impacts on the environment. This includes also our procurement process, where 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. It is standard EEA practice to include building environmental considerations into procurement.



## Environmental performance at the EEA in 2016

## Raising environmental awareness

The EEA recognises the important role communications has in sustainable environmental management. An active approach to communicating the EMAS objectives internally as well as externally is included in the EEA's outreach activities.

The EEA website has a section dedicated to EMAS. This section includes information about its commitment to environmental management as well as the annual environmental statement. In 2016, the EMAS section of the EEA website had 3 964 views, which continues to demonstrate the usefulness of the information provided for external audiences.

The EEA also continues to assist other EU bodies in raising awareness of their environmental impacts. The informal Inter-agency Greening Network, set up by the EEA in 2006, was formally recognised by the EU agencies' heads of administration in May 2016. With more than 25 members from EU agencies, the network addresses common environmental topics, with particular focus on implementation and registration under the EMAS Regulation. The Greening Network also is also represented in the informal Inter-institutional Group on Environmental Management (GIME) as part of EU environmental governance.

Internally, EMAS is part of the induction programme for all new employees who get to know the EMAS quality standard and how the EEA practices EMAS in its environmental management of the organisation. As part of regular biannual internal audits, members of staff are randomly interviewed about the aspects of their work that relate to EMAS.

Furthermore, the EEA organises events and manages a system to solicit and incorporate recommendations from staff for improvements. Through these internal activities, the EEA raises staff awareness for its environmental performance and fosters engagement from staff members.

Finally, to encourage more sustainable consumption and resource efficiency by employees at home as well as at the workplace, regular information is provided in the weekly video loop in the canteen, which includes green tips. In 2016, the EEA swap party was organised for the second time. The event encourages more sustainable consumption and resource efficiency by employees at home as well as in the workplace, by exchanging private items with colleagues. Those items that didn't find a new owner during the evening were donated to a Danish Charity. The event brought together about 20 colleagues and was supported by the Social Committee and was thus a win-win initiative from an environmental and social point of view.

## Running the EEA offices

The environmental impact of running the EEA offices is detailed below in several time series tables ranging from 2012 to 2016.

The tables cover electricity consumption, energy equivalent for district heating, water consumption, paper consumption and waste generation. The environmental performance in these areas is defined in relation to the number of people working at the EEA and the area of the office.

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The number of people working at the EEA is expressed as full time equivalents (FTEMAS is MILLOVERIFIKATOR) the time recording system that both staff and in-house consultants use. It is based on a 40 hour working week. The change of working hours from 37.5 to 40 hours took place in 2014.<sup>2</sup>

	2012	2013	2014	2015	2016
FTE	235	226	211	193	196

## **Electricity**

## Consumption of electricity 2012-2016

	2012	2013	2014	2015	2016	Change 2012/2016 (%)
Total kWh	779 851	762 206	779 251	768 361	757 839	-2.82
kWh/FTE	3321	3374	3693	3981	3867	16.43
kWh/m²	78	76	78	77	76	-2,84

Notes: 2012-2016 figures cover both buildings in Kongens Nytorv 6 and 8 (10 000  $m^2$ ), kWh = kilowatt hours

The consumption of electricity can be broadly divided into two approximately equal parts: (1) the electricity needed for central computing (i.e. servers) and data storage (including the electricity used to cool the server room); and (2) the 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 EEA, the reduction of the overall use of electricity is not a goal per se. This has led to an increase in overall electricity use and use per FTE. However, the installation of more energy efficient computing, new light sensors in corridors and a switch to energy efficient LED lights, as well as higher environmental awareness among staff, have kept the results within range.

A specific improvement was achieved by replacing the server cooling system in July 2015 (third floor, KN6). This new system uses the outside temperature to regulate the cooling system, resulting in a reduction in energy consumption of almost 20 000 kWh since July 2015.

Furthermore, in 2015, the EEA bought electricity from renewable sources (wind energy) through the renewable energy certificate system (RECS). The agreed quantity of 768 MWh, which corresponds to the EEA's expected annual electricity consumption, was purchased in the form of a RECS certificate.

<sup>&</sup>lt;sup>2</sup> The calculation of performance in terms of impacts per square metre is complicated by the fact that since 2005 some EEA staff members have been working in buildings other than the main building at KN6. Since 2010, the EEA has been renting an adjacent building (KN8). Initially two floors were rented, but since 2011, three floors have been rented. The size of the two buildings is approximately 10 000 m<sup>2</sup> in total (7 200 m<sup>2</sup> in KN6 and 2 800 m in KN8).

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## Heating

Consumption of heating energy 2012-2016

	2012	2013	2014	2015	2016	Change 2012/2016 (%)
m <sup>3</sup>	943	937	845	989	1035	10
KWh[1]	660 100	655 900	591 500	692 300	724 500	10
KWh/FTE	2811	2903	2803	3587	3696	31
KWh/m²	92	91	82	96	101	9

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The steam used by the EEA for heating its premises is provided by the grid of the local district heating provider, HOFOR<sup>3</sup>. HOFOR working on switching the 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 to inner Copenhagen.

## Water

Consumption of water 2012-2016

	2012	2013	2014	2015	2016	Change 2012/2016 (%)
ın³	1827	2326	1787	1609	1423	-22,11
m³/FTE	8	10	8,5	8	7,3	-9,25
1/m²	254	323	248	223	198	-22,19

Note: For all years, the figures cover only KN6 (7 200 m<sup>2</sup>). The FTE includes all staff, but since 2010 an increasing number of staff have been located in KN8. Currently 53 people in Kongens Nytory 8 (March, 2017).

The EEA's consumption of water has decreased significantly over recent years and, in 2016, a further 10 % decrease in water consumption was recorded.

<sup>&</sup>lt;sup>3</sup> According to HOFOR, the heating supplier for the EEA, it takes about 700 kWh of energy to evaporate 1 m<sup>3</sup> of water (http://www.hofor.dk/fjernvarme/).

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## **Paper**

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## Consumption of paper 2012-2016

	2012 <sup>(b)</sup>	2013	2014	2015	2016	Change in % 2013/2016
No of sheets printed in- house	1 366 570	1 327 381	1 188 345	1 163 454	1 205 155	-9.21
In-house sheets per FTE	5 820	5 876	5 632	6028	6149	4,64
No of pages in published reports (a)	10 228 150	12 651 000	4 901 400	15 493 000 (°)	5 632 464	-44,93

## Notes:

- (a) Sum of pages per report print run.
- (b) Since 2012, the calculation method for in-house printing has been based on counters on printers. Data before 2012 are not deemed reliable or comparable.
- (c) The SOER alone is responsible for more than 11 000 000 printed pages

The new method of monitoring in-house printing, introduced in 2012, gives rather accurate and comparable figures. Because of the nature of the EEA's operations, one of which is dissemination of information in the form of written reports, the 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). Since 2014, the EEA has attempted to increase its dissemination of outputs electronically to further reduce paper consumption, but the printed publication of SOER 2015 led to a significant increase in paper consumption.

## Waste

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## Generation of waste (in kg) 2012-2016

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	2012	2013	2014	2015	2016	Change 2012/2016 (%)
Household	21 095	25 910	23 995	18 050	17 865	-15
Cardboard	2 210	2 055	2 400	2 215	3 620	64
Paper	5 410	3 405	10 865	5 583	6 390	18
Electronic	1 237	1 306	2 046	1 290	1 273	-3
Glass	No data <sup>(a)</sup>	600	200	600	400	-33
Total	29 573	33 276	39 506	27 738	29 548	0
Total/FTE	126	147	187	144	153	21

## Notes:

(a) The weighing of glass was suspended in 2012 because of collector-related logistics.

Waste generated by EEA activities is sorted into the following categories: glass, electronic, organic, paper, cardboard and household. Compared with 2011 data, a significant reduction in household waste was achieved in 2016. The archive was cleared in Q3 resulting in additional paper waste. Cardboard is the only category that did not decline in 2016, mainly because of the daily delivery of groceries to the canteen.

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## Carbon dioxide emissions related to travelling

## CO<sub>2</sub> emissions (in tonnes) 2012-2016

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	2012	2013	2014	2015	2016	Change in % 2014/2016	2016 Offset charge (EUR)
CO <sub>2</sub> emissions related to staff missions	259	287	238 <sup>(b)</sup>	430	378	( <b>3</b> 7).	5 722
CO <sub>2</sub> emissions for meeting participants	375	330	247 <sup>(b)</sup>	552	560	:#8	8 484
Total	634	617	922 (ª) (485)	982	954	3,47	14 206

## Notes:

- (a) The large increase in  $CO_2$  emissions between 2014 and 2015 is due to a change in the calculation method to one based on the radiative forcing index. This method uses a multiplier of 1.9, which accounts for other greenhouse gases, such as nitrogen oxides ( $NO_x$ ) and water vapour, and is added to the emissions factor to take into account the effects of greenhouse gas emissions at high altitude caused by aviation. The EEA chose to begin applying this index in 2014.
- (b) These figures are without the radiative forcing index (RFI).

Emissions related to staff travel activities have been reported since 2006. During this year, a carbon offsetting scheme was introduced and the EEA became well known for limiting the carbon footprint of its business travel. The carbon offsetting scheme is managed by the EEA's travel agent Business Travel Specialist, and the offsets are used to support Gold Standard energy efficiency projects in Africa<sup>4</sup>. Every quarter, diplomas are issued to confirm the offsetting of CO<sub>2</sub>. The total km travelled for missions and meetings in 2016 is 4 910 521 km, which is 5% less than in 2015.

<sup>4</sup> http://www.co2balance.com

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# Environmental targets for 2016 with performance indicators

				2 5 AUG. 2017	
Environmental issue	Source of impact	Action plan	Performance indicator	EMAS - MILJØVERIFIKATOR Performance inR0tK-v6002 in %	ATOR in %
	<ol> <li>Central computing and data storage by servers</li> </ol>	Introducing more energy efficient servers and related technology.	Zero growth for 2016-2018 (based on the average for 2011-2013).	2011-13: 254 904 kWh 2016: <b>271 749 kWh</b>	+ 7
1. Electricity consumption	2. Cooling in server room	Ensuring optimal temperature at all times.	Zero growth for 2016–2018 (based on the average for 2011-2013)  NB: 2016 figure is based on an estimated calculation with 2014 data, assuming same staff related consumption on 3 <sup>rd</sup> floor for 2016.	<b>2011-13: 91 232 kWh</b> 2015: 83 679 kWh 2016: 59 479 kWh	-53
	3. 'Staff-related' use of electricity in offices and meeting rooms (personal computers, printers, copy machines, faxes, lights, etc.)	Increasing awareness among staff about this aspect.	Zero growth for 2016-2018 (based on the average for 2011-2013) per FTE.	2011-13: 414 613 kWh 2016: <b>486 090 kWh</b> 2011-2013: 2025 kWh/FTE 2016: <b>2 519 kWh/FTE</b>	+ 17.24
	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 2016: 1 205 155 (A4) 2016: <b>6244 (A4)/FTE</b>	-9.21
2. Paper consumption	5. Printing publications at external printers	Reducing the number of paper publications through more targeted dissemination and electronic publishing.	Zero growth for 2016-2018 (base year 2013).	2013: 12 651 000 (A4) 2016: 5 632 464 (A4) (-55%)	-55.48
3. Sustainable resource use	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'	

Environmental issue	Source of impact	Action plan	Performance indicator	Performance in 2016	Change in %
4. Waste production	7. Elimination of unnecessary waste, such as the use of plastic bags in office bins	Devise a suitable campaign and identify actions to reduce waste.	Reporting on the results (Base year 2011).	2011: 26069kg 2011: 165 per FTE 2016: 29 548 kg total waste 2016: 153 kg per FTE	-23% - 15%
5. Greenhouse gas emissions	8. Staff going on missions	Using videoconferencing and Skype conferencing if possible, including for meetings with ETCs, except for one meeting annually.	tCO <sub>2</sub> e: 3 % reduction (base year 2014) Radiative forcing index (RFI) included since 2014.	2014: 922 tCO <sub>2</sub> e 2014: 4t/FTE 2016: <b>954 tCO<sub>2</sub>e</b> 2016: <b>5 t/FTE</b>	+ 1,7%
	9. External participants coming to EEA-organised meetings by plane	Using videoconferencing and Skype conferencing if applicable.	$tCO_2$ e zero growth (base year $2014$ ).	2014: 247 tCO <sub>2</sub> e 2016: <b>560 tCO<sub>2</sub>e</b>	
6. Various negative environmental impacts of the EEA	10. All procurement	Calls for tender have to have an environmental criteria specification according to the type of goods purchased. All purchases are carried out against best-available environmental criteria.	New EU directives requiring new certifications are taken into account.	Fully implemented	
7. Various positive environmental impacts of the EEA — awareness raising	11. Green communication/awareness-raising activities BUREAU VERITAS CERTIFICATION 2 5 AII6, 2017	Continue developing and implementing an integrated approach to awareness raising.	Communication plan progress report.	Internal communication activities carried out 1) SMT EMAS management review carried out in September 2016 2) A second EEA swap party was successfully organised with	

colleagues in  November  3) Announcements regarding EMAS included posters for a call for new environmental auditors in September, a video loop in the canteen and the regular introduction of EMAS to new staff to new staff External relations include membership of the Greening Network of EU Agencies (formalised under the Heads of Agencies Network) and the informal inter-institutional Group on Environmental Management (GIME) in Brussels.	In 01/2016 the Executive Director merged the function of EMAS coordinator with a new staff well-being coordinator under Administrative services	No real progress as this would require a replacement of the windows
	Reporting on the results.	Communication of the results of the projects.
	Integration of EMAS and health and safety issues (reference EU standards, OHSAS 18001 standard) into a Total Quality and Environmental Management System (TQMS).	Improving insulation of window frames and doors.
BUREAU VERITAS CERTIFICATION 2 5 AUG. 2017 EMAS - MILJØVERIFIKATOR NR. DK-V6002	12. All EEA activities	13. Environment in buildings
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Note:  $tCO_2e = tonnes of CO_2 equivalent$ 

# Annex A: Environmental Management Programme 2017

Environmental issue	Source of impact	Action plan	Performance indicator
1. Electricity consumption	Central computing and data storage by servers	Introducing more energy efficient technology.	Zero growth for 2016-2018 (based on the average for 2011-2013)
	2. Cooling in server room	Installing a separate meter to monitor consumption (no meter since July 2015).	Zero growth for 2016-2018 (based on the average for 2011-2013)
	3. 'Staff-related' use of electricity in offices and meeting rooms (PCs, printers, copy machines, faxes, lights etc.)	Increasing awareness among staff about these aspects. Bending the trend of staff related electricity consumption.	Zero growth for 2016-2018 (based on the average for 2011-2013) per FTE
2. Paper consumption	4. Printing documents and emails	Introduction of 'follow-me' printing to reduce paper consumption. (Ongoing project)	3 % reduction (base year 2013) in absolute and per FTE figures
	5. Printing publications at external printers	Reducing the number of paper publications through more print on demand and web publishing as well as targeted dissemination and electronic publishing	Zero growth for 2016-2018 (base year 2013)
		Note: report production, including a streamlined workflow, was included in the management plan system. The workflow foresees SMT approval if a report is printed or published electronically.	
3. Sustainable resource use	6. Electricity, paper, heat and water consumption	Devise suitable campaigns throughout the year aimed at achieving measurable reductions.	Reporting on the results
4. Waste production	7. Elimination of unnecessary waste such as the use of plastic bags in office bins	Introduce waste separation bins on corridors or kitchens of each floor of KN7 and KN8 for plastic, organic and paper.	Reporting on the results  BUREAU VERITAS
5. Greenhouse gas emissions	8. Staff going on missions	Register number of videoconferences and Skype conferences; where possible replace missions	tCO <sub>2</sub> e: 3 % reduction (BBS BT (CAP DO 13)) 2 5 AUG. 2017
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		including meetings with ETCs, except for one meeting per year.	
	9. External participants coming to EEA-organised meetings by plane	Using videoconferencing/Skype conferencing when applicable.	tCO <sub>2</sub> e zero growth (base year 2014)
6. Various negative environmental impacts of the	11. All procurement	Calls for tender have to have an environmental criteria specification according to the type of goods purchased. All purchases are carried out against best available environmental criteria.	All procurement aligned to EU directives.
EEA			
7. Various positive environmental impacts of the EEA awareness raising	12. Green communication/awareness-raising activities	Continue developing and implementing an integrated approach to awareness-raising.	Communication plan progress report.
8. Environmental economic and social impacts	13. All EEA activities	Using synergies between EMAS and staff health and well-being aspects (e.g. reduce meat consumption, exercise)	Reporting on the results.
9. Internal environment	14. Environment in buildings	Complete the installation of LED lightning on the remaining floors.	Reporting on the results.