



EUROPEAN CENTRAL BANK

EUROSYSTEM

# 2011 update of the ECB's environmental statement



GREEN ECB



This environmental statement provides information to the public and other interested parties on the environmental performance and activities of the European Central Bank (ECB) in 2010-II. It can be found on the ECB's website (in the "Publications" section).

The ECB was validated under the EMAS<sup>1</sup> scheme for the first time in 2010. The present environmental statement is the first update of the environmental statement within the EMAS validation cycle. It is a follow-up to the consolidated environmental statement 2010 and is only complete in combination with this document. It contains updated data for 2010, which are compared to 2008 and 2009 data.

This updated environmental statement was drafted in accordance with EMAS III standards. In 2013 the ECB intends to publish a new consolidated environmental statement.

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Information about the ECB is available on the Internet. It can be accessed through the Europa server ([www.ecb.europa.eu](http://www.ecb.europa.eu)).

<sup>1</sup> The EU Eco-Management and Audit Scheme (established by Regulation (EC) No 1221/2009 of the European Parliament and of the Council).

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## 2 Foreword

The European Central Bank (ECB) adopted the Eco-Management and Audit Scheme (EMAS) in order to systematically pursue environmental sustainability. In 2007 the ECB decided to take action and established a green initiative. Since then the ECB has implemented quick-win measures and systematically identified areas for improvement. In 2009 a 22% reduction in total carbon emissions was achieved.

This is the second public environmental statement of the ECB. It has been prepared in accordance with EMAS requirements and aims at providing concise information regarding the ECB's environmental performance. It covers the reporting period from July 2010 to June 2011 and the environmental inventory data for 2010. Comparing the 2009 and 2010 data reveals a further 7.8% saving in total carbon emissions. Based on the progress made in 2010 the Executive Board of the ECB is convinced that it will achieve the challenging target it set itself for 2011 of a 15% reduction in total carbon emissions.

In 2011 the Executive Board included continuous improvement of the ECB's environmental performance in the environmental policy. As carbon emissions in our footprint mainly arise from the production of electricity, heating and cooling, the Executive Board approved an improvement of the technical infrastructure in its main premises, with a specific focus on energy efficiency and long-term savings. In addition, steps have also been taken to improve workplace conditions and fire protection standards. However, our main focus is now the development and further implementation of the New ECB Premises (NEP). This project is underway and will significantly shape the future of the organisation. In 2010 the ECB became a Partner in the GreenBuilding Programme (GBP) launched by the European Commission, which is aimed at improving energy efficiency and expanding the integration of renewable energies in non-residential buildings in Europe on a voluntary basis.



Vítor Constâncio

Vice-President of the European Central Bank

### 3 Environmental performance 2010

As part of the environmental management cycle, the ECB's environmental performance and environmental impacts are assessed annually and measures for improvement are developed and introduced.

The environmental management system (EMS) is assessed regularly through internal audits, thus ensuring a continuous improvement. Since last year, the ECB has not identified any new aspects of the organisation's activities that have significant direct or indirect environmental impacts. As a result, no modifications within the environmental legal framework were deemed necessary. In 2011, the ECB has carried out EMS reviews (internal environmental audits) and an EMS management review.

The environmental policy framework was extended with the ECB's commitment to continuously improve environmental performance as follows:

#### Environmental policy

- The ECB is committed to complying with applicable legal regulations relating to environmental aspects.
- The ECB is committed to continuously improving its environmental performance and to minimising its ecological footprint.
- In principle, CO<sub>2</sub> emissions caused by the ECB should be reduced, in particular by lowering consumption of energy and natural resources.
- To this end, internal ECB processes should be designed, wherever possible, to be cost efficient and environmentally friendly.
- Staff members are encouraged to actively contribute to achieving the objectives of this policy.

All relevant information is communicated to ECB staff, for example through the ECB green pages section on the intranet, as well as through articles in the staff magazine, and is made available to the public in the environmental statement.

#### Inventory and key figures

The ECB's ecological impact is ascertained and evaluated by means of an environmental inventory carried out on an annual basis. Data are collected on the premises' environmentally relevant input-output streams, namely energy, water, resource consumption and business travel on the input side and waste, waste water and carbon dioxide emissions on the output side. Since the ECB's premises are rented and fully operated by its landlords, the majority of inventory data, such as the data on energy and water consumption and waste production, are provided by them.

### Comparison of environmental inventory data for 2008, 2009 and 2010

	2008	2009	2010	Change 2010/2009 (%)
<b>Energy</b>				
Total heating and cooling energy consumption (MWh)	20,087	22,815	24,147	+5.8
Total electrical energy consumption (MWh)	21,699	19,498	18,910	-3.0
of which, renewable electrical energy (MWh)	-	6,565	6,738	+2.6
Production of electrical energy (MWh)	3,707	5,333	4,591	-13.9
<b>Water<sup>2</sup></b>				
Fresh water consumption (m <sup>3</sup> )	38,413	44,956	43,016	-4.3
Waste water (m <sup>3</sup> )	38,413	44,956	43,016	-4.3
<b>Materials</b>				
Cleaning agents consumption (tonnes)	2.4	1.9	1.2	-34.6
<b>Paper</b>				
White paper (thousands of sheets of A4 equivalent)	44	4	0	-100
Mixed paper (50% recycled, 50% white) (thousands of sheets of A4 equivalent)	22,455	12,330	2,165	-82.4
Recycled paper (100% recycled) (thousands of sheets of A4 equivalent)	2,695	2,660	17,000	+539.1
ECB publications (white paper) (tonnes)	786.3	400.1	550.0	+37.5
<b>Waste</b>				
Paper and cardboard, recycled (tonnes)	188.3	149.1	160.1	+7.3
Confidential paper waste, recycled (tonnes)	94.8	92.4	101.4	+9.8
Residual waste, incinerated/combusted (tonnes)	200.8	225.0	227.2	+1.0
IT waste, recycled (tonnes) <sup>3</sup>	-	28.6	3.1	-89.2
<b>Business travel</b>				
Plane, train and car travel (tonnes of CO <sub>2</sub> )	1,714	1,623	1,515	-6.6
<b>Emissions</b>				
Carbon emissions (tonnes of CO <sub>2</sub> )	17,023	13,287	12,254	-7.8

2 Water consumption includes all non-technical water used in the ECB's premises that can be directly influenced by staff. Waste water is not measured, but is assumed to be equal to fresh water consumption. Waste water and grease from the ECB's canteen is included.

3 IT waste monitoring started in 2009.

### Comparison of environmental key figures for 2008, 2009 and 2010

	2008	2009	2010	Change 2010/2009 (%)
<b>Number of allocated workplaces<sup>4</sup></b>				
Due date: December of the respective year	2,140	2,140	2,250	+5.1
<b>Energy</b>				
Heating and cooling energy consumption per workplace (kWh per year)	9,386	10,661	10,732	+0.7
Electric energy consumption per workplace (kWh per year)	10,140	9,111	8,405	-7.8
Renewable electrical energy share (%)		33.7	35.6	+1.9 pp
<b>Water</b>				
Fresh water consumption per workplace (m <sup>3</sup> )	18.0	21.0	19.1	-9.0
<b>Paper<sup>5</sup></b>				
Office paper consumption per workplace (sheets of A4 equivalent)	11,772	7,006	8,518	+21.6
Recycled paper share (%)	10.7	17.7	88.7	+71.0 pp
<b>Waste</b>				
Paper and cardboard waste per workplace (kg)	88.0	69.7	71.1	+2.0
Confidential paper waste per workplace (kg)	44.3	43.2	45.1	+4.4
Residual waste per workplace (kg)	93.8	105.2	101.0	-4.0
<b>Emissions</b>				
CO <sub>2</sub> emissions per workplace (tonnes CO <sub>2</sub> )	7.9	6.2	5.4	-12.3

## Explanation of significant changes

### Energy

The harsh winter of 2009-10 led to an increase of 6% in the consumption of heating energy. However, the CO<sub>2</sub> emissions from heating energy decreased, because the primary energy factor of district heating and therefore the CO<sub>2</sub> emission factor of the district heating supplier improved significantly.

The total electrical energy consumption decreased slightly by 3%. Taking into account the increase in the number of workplaces, the electrical energy consumption per workplace decreased by 7.8%. Due to a overhauling of the combined heat and power plants, the production of electrical energy decreased by 13.9%.

### Paper and paper waste

In order to achieve the target set for 2011 to increase the share of recycled paper to over 50% and in the context of sustainable procurement, the ECB switched to 100% recycled paper bearing the "Blue Angel" label for internal printing and copying. As a result, in 2010 the proportion of recycled paper increased to 71% of total paper consumption. Regrettably there was an increase in paper

4 The number of "allocated workplaces" is used in many of the calculations (e.g. for the core indicators). It represents the concept of "number of employees" (including non-ECB staff) used in EMAS.

5 Measurement of annual consumption based on annual invoices.

consumption in 2010 of 27.8% compared with 2009. This is partly linked to the fact that consumption is calculated on the basis of annual invoices and the purchase in 2009 was rather low.

Other explanations for the increased use of paper (as well as for the increase in confidential paper waste) are the tasks and reporting related to the financial crisis, the documentation requirements in procurement processes, which are rather paper heavy, and the implementation of the New ECB Premises project.

An increase in the number of ECB publications of about 90 tonnes can be attributed to the joint ECB/Eesti Pank "Euro Information Campaign" carried out in Estonia in 2010 in connection with the country's adoption of the euro. This circumstance, combined with a new series of training materials targeted at cash handlers in the euro area, accounted for over 3 million printed matters.

### IT waste

In 2009 extensive IT restructuring measures were implemented, such as the virtualisation of some tasks and the concomitant decommissioning of old servers and other IT equipment. This led to the large quantity of IT waste recorded. In addition, used IT equipment is returned to the contractor for reuse, recycling and disposal. Therefore, it is not recorded in the environmental inventory.

### Materials

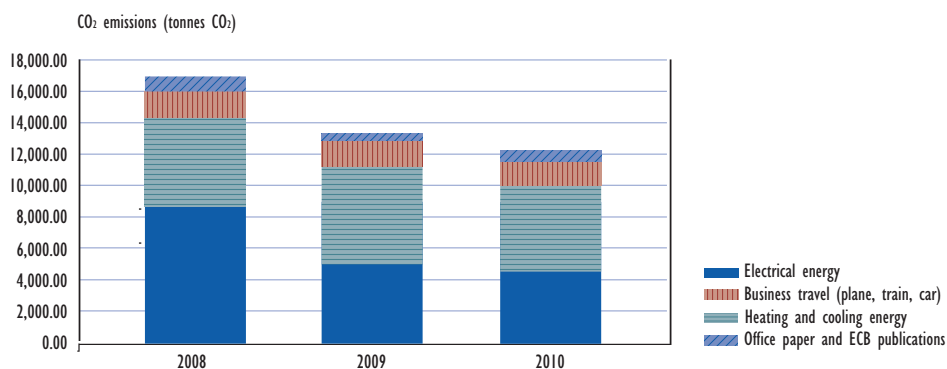
A large decrease (34.6%) was recorded in the use of cleaning agents in 2010. From July 2010 the external cleaning service provider shifted to biodegradable cleaning agents that are EU Ecolabel certified. All staff members of the service provider were trained in the use and, in particular, the dosage of the cleaning agents.

### Business travel

The CO<sub>2</sub> emissions from business travel (plane, train and car) decreased by 6.6%. This was maybe owing to an increased use of teleconferencing tools.

### CO<sub>2</sub> footprint 2010

The carbon footprint is ascertained on the basis of the environmental inventory figures outlined above. The calculation includes direct CO<sub>2</sub> emissions, as well as indirect CO<sub>2</sub> emissions generated by activities in the supply chain and by business travel.<sup>6</sup>



<sup>6</sup> CO<sub>2</sub> equivalents were calculated using approved conversion factors obtained from the ECB's energy suppliers for heating, cooling and electric energy, the UK Government's Department for Environment, Food and Rural Affairs (DEFRA) and Deutsche Bahn conversion factors for travel and the conversion factor of the Institute for Energy and Environmental Research (IFEU Institute) for paper consumption.



A comparison of the 2009 and 2010 data reveals a 7.8% reduction in total carbon emissions. The most significant reduction in CO<sub>2</sub> emissions (-13.0 %) was achieved through the decrease in the primary energy factor of district heating of the district heating supplier. Further reductions resulted from a decrease in the electrical energy consumption (-5.9 %), as well as from reduced business travel (-6.6 %). Due to the increased number of ECB publications, the paper-related CO<sub>2</sub> emissions increased by 34.6%. Taking into account the increased number of workplaces, the CO<sub>2</sub> emissions per workplace decreased by 12.3%.

### Environmental Management Programme 2010-11

The Environmental Management Programme was issued by the Management Committee for 2010-11. The column entitled "Status" shows the actual level of implementation of the measures.

Environmental Management Programme 2010-11	Year	Status
1. Assessment of costs and benefits of LED illumination at ECB workplaces	2011	Completed; assessment conducted and replacements implemented, where appropriate
2. Assessment of costs and benefits of carbon neutral business travel by train	2010	Completed; first assessment has taken place - as a result, decision postponed until 2012
3. Consideration of a "sustainable investment" pension investment choice for ECB staff	2011	Pending; launch planned for second half of 2011
4. Consideration of opportunities for reusing IT equipment, and/or local disassembly solutions	2011	In process
5. Establishment of "power-off policy" for non-IT equipment	2010	In process; establishment planned for 2011
6. Implementation of so-called "multi-functional devices" (MFDs)	2011	Completed; rollout of "Blue Angel" labelled MFDs (combined fax, scanner, printer, copy machine) launched
7. Increase of energy efficiency of equipment in computer rooms	2010-11	In process
8. Increase of energy efficiency of office IT equipment and adjustment of procurement guidelines accordingly	2010-11	In process
9. Implementation of remote IT power management system	2010	In process; re-launch required following reorganisation
10. Implementation of eco-rating system in stationery catalogue	2010	On hold; implementation shall be considered with the next system upgrade
11. Implementation of briefing on the environmental policy and the EMS in the newcomers' induction sessions	2010	In process; establishment planned for 2011
12. Implementation of specific green-procurement training for purchasers	2011	Pending; depends on establishment of sustainable procurement guide
13. Assessment of opportunities for stationery packing and logistics with low environmental impact	2010	Completed; grouping of orders and recycling of stationery packaging
14. Implementation of a map, containing EMS-related information on technical plants and equipment in the premises	2011	In process; first release implemented for the ECB premises
15. Increase of electronic and online publications	2011	Completed; E-PUB documents, etc. will be available mid-2011
16. Increase share of recycling paper use	2010	Completed; switch to 100% recycling paper for internal use in 2010
17. Increase the use of telephone conferencing and video conferencing	2011	In process; up to now, tripling of related requests
18. Performance of staff campaign on the EMS and general awareness on climate change	2010-11	Completed; regular staff awareness training implemented
19. Implementation of staff awareness campaigns and of subsequent Green Day at the ECB	2010-11	In process; Green Day planned for October 2011
20. Switch to "green" power (e.g. from water power) for all ECB premises	2011	Completed; green electricity purchased for all ECB premises from January 2011
21. Reduced greenhouse gas emissions from transportation of goods/mail	2010-11	Completed; frequency of transportation between the ECB premises reduced by 60%

## 4 Environmental verifier's declaration

Prof Dr.-Ing Jan Uwe Lieback, with the EMAS environmental verifier registration number DE-V-0026, accredited and licensed for scope 64.I and 84.I, declares to have verified the whole organisation of the European Central Bank (ECB), registration Number D-125-00045, at their site in 60311 Frankfurt am Main, Kaiserstraße 29, Germany (Eurotower), as indicated in this updated environmental statement 2011.

The European Central Bank meets all requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

By signing this declaration, we declare that:

- The verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009
- The outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment
- The data and information of the environmental statement of the ECB in Frankfurt am Main reflect a reliable, credible and correct image of the organisations activities, within the scope mentioned in the environmental statement

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

Done at Frankfurt am Main on 29th of June 2011



Prof. Dr.-Ing.  
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Verifier DE-V-0026

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