

EMAS website

<http://ec.europa.eu/environment/emas>

EMAS in figures

In March 2008, EMAS has collected the highest number of registered organisations in its history, even higher than in December of 2001, when EMAS II showed its first results on the register. A total of 5957 sites and 3967 organizations are in the EMAS register as of March 14th.

Registered organisations and sites

Austria	252	492
Belgium	42	336
Bulgaria	0	0
Cyprus	0	0
Czech Republic	28	30
Denmark	93	229
Estonia	2	2
Finland	41	48
France	13	13
Germany	1,453	1,918
Greece	56	59
Hungary	14	17
Ireland	6	6
Italy	779	1,106
Latvia	8	13
Lithuania	0	0
Malta	0	0
Luxembourg	1	1
Netherlands	11	15
Norway	27	27
Poland	10	10
Portugal	60	65
Romania	1	1
Slovak Republic	5	5
Slovenia	1	1
Spain	924	1,122
Sweden	71	72
United Kingdom	69	369
TOTAL	3,967	5,957

Leading industrial sectors:

Sectors	Organisations
• Sewage and refuse disposal	272
• Chemicals	262
• Food and beverages	264
• Fabricated metal products, except machinery and equipment	248
• Electricity, gas, steam and hot water supply	208

Leading service sectors:

Sectors	Organisations
• Hotels and restaurants	236
• Public authorities	268
• Other business activities	191
• Education	156

Best practice

Hotel Victoria is best environmental hotel in the world

This 4-Star hotel, a member of the Best Western group, has successfully operated the European Eco-management and Audit Scheme (EMAS) since 2006.

Rising energy prices, competition in the market, intensified legal compliance and tighter financial controls are many reasons for Astrid und Bertram Späth putting the resource management of their hotel under the magnifying glass and initiating steps for energy saving, complemented by efficient environmental protection measures.

The hotel lowered costs by 6,4 % of its total sales by employing a variety of energy-saving measures:

- Water heating is supplemented by the hotel's solar panel array, which has a collection area of 30 m². On sunny days, this satisfies the entire requirement for hot water for showers and washing.
- The solar power array, installed on the hotel roof, has a capacity of 7 600 watts and generates approximately 7 000 kilowatt-hours of solar power per year. This is enough to supply a quarter of the hotel's rooms.
- Energy-saving lamps and economic, low-flow showerheads were installed in the whole house. The investment per room was approximately € 800. However, this investment was amortized after scarcely one year, with the savings in water usage and energy of at least of 35 %.
- The oil central heating system was replaced in spring 2002 by a modern, 300 kW unit burning wood pellets. Some 100 tonnes of wood per year will cover the central heating and the balance of the hot water requirements of the hotel's guests. By choosing pellets as fuel, the hotel saves 50 000 litres of heating oil per annum.

With its ambition to be a 'zero-emission' hotel, the Hotel Victoria in Freiburg has already won numerous awards for its environmental excellence, the latest of which was the German Solar Prize, presented in Freiburg on October 6th 2007. The owners of the hotel, Astrid and Bertram Späth, were very proud of this prize rewarding them as «owners of facilities which run with renewable energies». Their involvement towards the environment is exemplary and they hope to scatter the seeds among their colleagues.



Read the environmental statement on the hotel website : <http://www.hotel-victoria.de>

The EMAS newsletter is published by the EMAS Helpdesk on behalf of the European Commission. An electronic copy is available on the Internet at http://ec.europa.eu/environment/emas/index_en.htm or by subscribing to the mailing list.

For a free subscription, comments or further information send an email to the EMAS Helpdesk at: emas@ec.europa.eu or write to the following address:

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Upcoming events

11-13 June 2008

Valencia, Spain

ECOFIRA

EMAS fair; Programme:

http://ec.europa.eu/environment/emas/pdf/news/events/jomada_emas.pdf

3-4 June 2008

St. Pölten, Austria

Austrian EMAS Conference

<http://www.emas.gv.at/article/articleview/63998/1/16773>

3-6 June 2008

Brussels, Belgium

Green Week

Draft Programme:

http://ec.europa.eu/environment/greenweek/pdf/draft_programme.pdf

28 May 2008

Maria Enzersdorf, Austria

EcoEfficiency Workshop at B.Braun

Annual workshop for EMAS registered organisations.

Programme and contact details:

http://ec.europa.eu/environment/emas/pdf/events/2008_02_05_einladung_okeffizienz_erfa_2008.pdf

26 - 29 May 2008

Offenbach, Germany

Environmental Auditing Course

Training for EMAS Auditors

http://www.umweltinstitut.de/programme/fortbildungskonzept_auditor.pdf

20 May 2008

Brussels, Belgium

2nd EMAS Verifier Day

Organised by Verein für Nachhaltiges Umweltmanagement

(VNU). <http://www.vnu-ev.de>

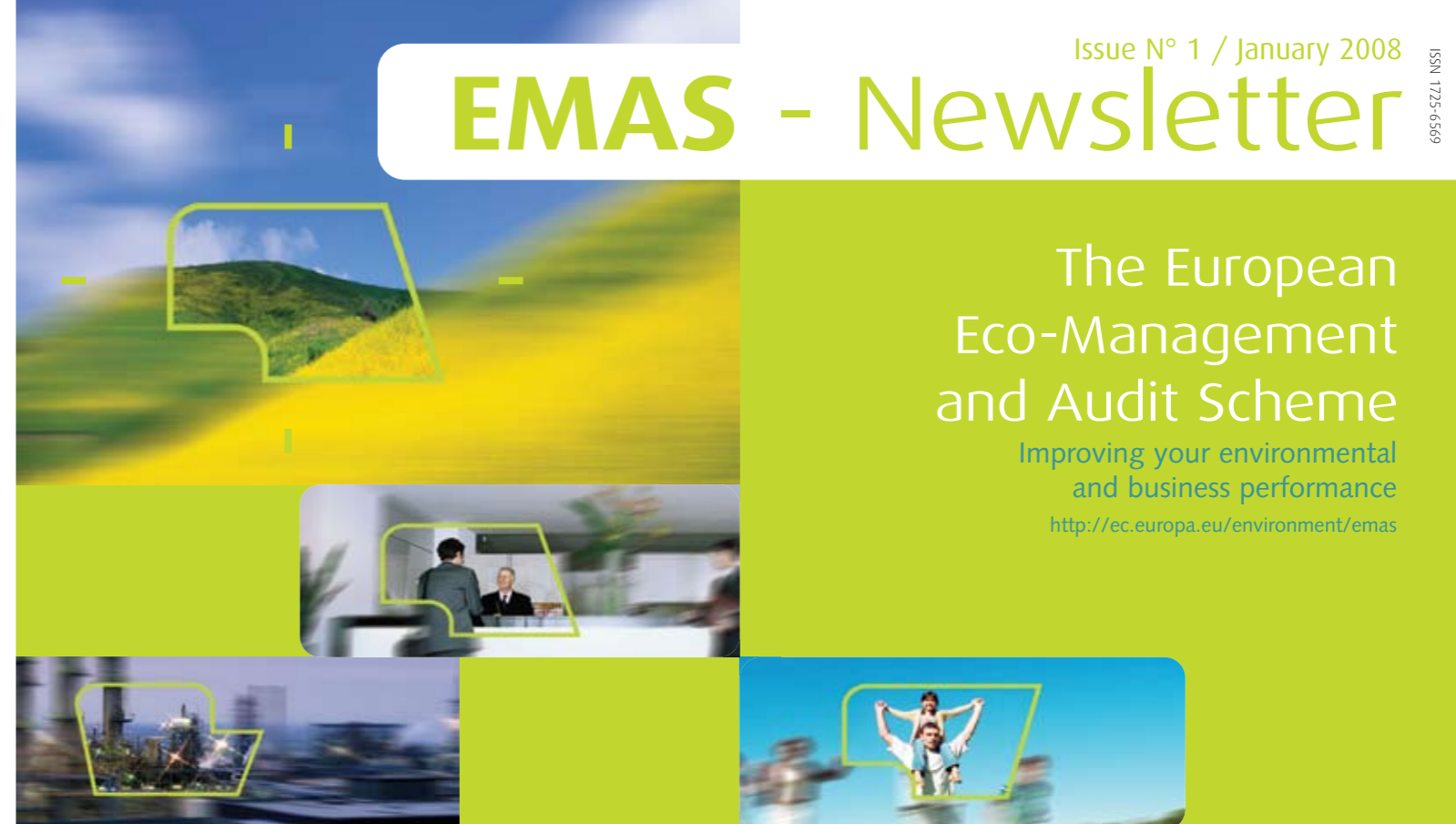
14 May 2008

Vienna, Austria

With EMAS: Ecologically Active Municipalities, Associations and Public Facilities – Concluding Event

http://www.oewav.at/upload/medialibrary/Folder_EMAS_WS_Abschlussveranstaltung_aktuell.pdf

KH-AL-08-001-EN-C



The European Eco-Management and Audit Scheme

Improving your environmental and business performance

<http://ec.europa.eu/environment/emas>

EMAS and Climate Change issues

Status report

EMAS and the use of renewable energy sources to lower CO₂ emissions

The largest companies, particularly those subject to the more rigorous environmental legislation, have been the most immediately involved in reducing CO₂ emissions. Carbon trading is virtually compulsory for these, but many smaller companies are becoming involved in sector schemes, such as the UK's Climate Change Levy Agreement, to support more energy efficient and competitive industry. Access to renewable energy is improving and organisations seek increasingly to win community approval for their 'greenness'.

Organisations using EMAS must report on their energy performance as part of their environmental performance statement. The EMAS Regulation (EC No 761/2001) identifies



energy consumption as a direct environmental aspect and encourages companies to note the significance of energy inputs.

Activities for particular attention include further reductions in road vehicle engine emissions and additional 'green' taxes on fuels, improved legislation to support the development of more energy-efficient buildings – there is growing encouragement

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Editorial

Climate change and the impact on it of energy generation and consumption is a topic that should, by now, have found its way onto the agendas of most businesses of any significance.

The latest European objectives for climate and energy, apart from continuing to support the EU emissions trading scheme (EU ETS), are beginning to promote carbon capture and storage. In its proposal Brussels, 23.1.2008 COM (2008) 18 final, the Commission proposes a directive which will amend a series of other directives and a regulation to support this. The Commission intends to increase the use of renewable energy sources from the existing 8.5 % to 20 % by 2020, as well as increased awareness for energy efficiency and CO₂ reduction.

The EMAS Team, Environment Directorate General, Unit G2, European Commission.





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for estate-based initiatives on new developments such as mini-combined heat and power units, wind turbines and photovoltaic arrays. Measures to support passive cooling and solar gain are also encouraged. Industry is also being asked to become increasingly aware of the need for heat recovery and more effective use of insula-

tion in the storage and transportation of chilled and frozen goods.

This edition of the EMAS newsletter identifies the extent to which industry, local authorities and the education sector have embraced the issue and are reducing their emissions.

Case study

School EMAS programme brings energy savings and renewable energy

Apart from providing a tool for industry in communicating environmental information to stakeholders, EMAS has also been a good method of introducing environmental issues to young people. This is nowhere more true in the City of Leicester in the UK where, under the 'umbrella' of the local government authority's EMAS registration, and with support from the charitable environmental trust, Groundwork, more than sixty primary schools in the city's administrative area are now active in managing their school's impacts. Energy consumption, and the reduction of their carbon footprint, was identified as a key concern for the pupils and, supported by poster campaigns and awareness-raising presentations in school assemblies, pupils are now carefully closing down computers when

not in use, minimising their use of lights and closing doors behind them!

Tailoring their programme to complement the UK Government's Sustainable Schools initiative, Groundwork helped with the initial awareness-raising and, using intelligent metering now assist the schools in reporting performance and provide energy audits. This accurate metering enables energy usage to be measured with considerable accuracy and automated reading devices with the potential to interface to web-based data transfer and interrogation technology.

Not content with these steps, 25 schools have installed renewable energy options - wind turbines or photovoltaics. To achieve this, they

have managed their fund-raising events to buy the technology and also involving themselves in the bureaucratic process of applying for planning permission from their local government authority. Charlotte Lewis, the Groundwork Partner Manager for the local authority initiative said "The EMAS-based project on energy efficiency has proved a superb learning tool for the children, who have adopted good practice and are monitoring their work on a regular basis."



Wind turbine installed at Eyres Monsell Primary School, Leicester.

Report

Global Cement Company targets CO₂ emissions

The extraction of aggregates and minerals generally is an emotive subject. When you are one of the world's leading suppliers of cement and related materials, winning 'your licence to operate' among your many stakeholders is important. Lafarge Cement has a number of its associates registered to the EMAS scheme and uses this and other management system processes to control a variety of environmental impacts of its operations. In regard to Climate Change, the Group makes headlines in its environmental report of the 45 million tonnes of CO₂ it emits, mainly from its cement operations. Between 1990 and 2000, emissions were reduced by 13 % per tonne of cement, corrected for acquisitions and disposals. In the current decade, it is

committed to further reductions such that, in 20 years, it has reduced its emissions per tonne of cement by 20 %.

The company uses three main methods of reducing emissions - energy efficiency, energy substitution, by using alternative fuels, and materials substitution - using industrial by-products as raw materials or as substitutes for clinker.

In its reports for EMAS purposes, Lafarge Cement UK, the only cement manufacture in the UK to have all its sites registered to EMAS, uses environmental performance indicators and these are clearly targeted at GHG reductions - here reduction in the use of limestone and increasing use of renewables has

proven beneficial - and global energy efficiency.

Contact: Dave Shenton, National Environment Manager at Lafarge Cement UK - email : david.shenton@lafargecement.co.uk

Lafarge's Westbury Plant in Wiltshire, UK



Interview

Volvo Europa Truck NV, first CO₂-free company in Belgium and the first CO₂-free automotive factory worldwide

Volvo Europa trucks' first EMAS registration occurred more than 10 years ago. It was one of Belgium's first registrations. In 2006, Volvo Europa Truck NV and Electrabel announced the development of the first CO₂-free operation in Belgium at their site at Oostakker, Belgium. More than two years later, the company is the first automotive factory produce without CO₂ emissions.

Each year the Swedish parent company imposes environmental targets for emissions and Volvo Europa Truck NV translated their target into zero CO₂ emissions by using different renewable energy sources.

Wind energy and hydropower

Around 50 % of the electricity is produced by three 2 MW wind turbines, located on the Volvo site. The windmills have a mast height of 100 m and a sail radius of 40 m. The other 50 % of the electricity is supplied by Electrabel, using AlpeEnergie, a certified hydraulic powered energy source from the Compagnie Nationale du Rhône, branch of Electrabel, between Lake Lemans and the Rhône estuary.

Heating with biomass

Until September 2007, Volvo Europa Truck NV used natural gas to heat its plants and offices and, in 2005, released 4020 tonnes of CO₂. With the new and modified systems, these emissions will be reduced to zero. Originally, the heating plant had three boilers fuelled with natural gas. One of these was due for renewal and has been replaced with a new installation of 5 MW capacity using wood pellets. Another boiler has been converted to a duo-heating system, with the possibility of using bio-fuel (wood pellets) and natural gas as fuel. Natural gas will only be used in emergency. The third boiler will be dismantled.

Solar energy

150 sun panels of 200 Wp each (maximum capacity) are mounted in series on the roof of

the new biomass heating plant. This gives a total installed peak capacity of 30 kW, and the electricity produced in this way can be used directly for starting the wood pellet boiler. A sun boiler system consists of a sun collector on the roof and a boiler tank somewhere inside the building and a trial is being carried out at the company to assess whether the hot water required for showers and washbasins can be produced by sun boilers. The test installation consists of 2 collectors with a total surface area of 5 m² and a 300 litre buffer tank placed so as to produce around 160 litres a day of sanitary hot water at 65° C.

Lower energy consumption

Between 2001 and 2006, assisted by Electrabel, Volvo reduced its energy consumption by 23 %, while production volumes increased by 33 %.

Collaboration with Electrabel

Volvo Europa Truck NV and Electrabel have entered into a long-term contract, with Electrabel granted building and planning rights to construct a wind turbine park and a new biomass heating system on the Volvo site.

Download the full report: "http://www.volvo.com/NR/rdonlyres/7871B851-F350-499A-A8B6-471C229662F7/0/CO2_free_gent_ENG.pdf"



Energy production is not one of our core activities," explains Marc Seghers, Infrastructure and Environment Manager and also project leader. "So we've contacted various producers. In the end our choice of partner was determined by Electrabel's years of experience and competence in the field of wind turbines and biomass projects."

"We hope this project will inspire other companies. The technology is there. It's a question of daring," says Patrick Collignon, general manager of Volvo Europa Truck.

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