

# EMAS - Newsletter

## The European Eco-Management and Audit Scheme

Improving your environmental  
and business performance

<http://www.europa.eu.int/comm/environment/emas>

### Editorial

#### The Small and Medium size Enterprises Issue

Small and Medium size Enterprises (SMEs) play a key role in Europe's economy. They employ over 53% of the workforce (around 80 million people) and generate over half Europe's total turnover.

In this issue of the Newsletter we focus on EMAS in the SME sector. This includes looking at the recycling strategies of two SMEs working in the mobile telephone sector assisting companies comply with the EU Waste Electric and Electronic Equipment Directive (WEEE) – RETRIVAL in Belgium and Corporate Mobile Recycling in the UK.

RETRIVAL implemented EMAS with the help of the Ecomapping® approach. We explain how this process created a model in Belgium for simplifying the process of EMAS implementation for SMEs. This includes minimising paperwork and joining with similar companies into 'clusters' to undertake some of the key activities required in the implementation process like training in environmental management issues for staff.

Additional help is at hand for SMEs: The new SME toolkit, especially designed for small companies wishing to pursue EMAS implementation, has been created. This tool is now available on a special icon of the EMAS website.

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

### Report

## EMAS for small SMEs: 10 people in 10 days on 10 pages

**Innovative EMAS approaches with visual based EMS systems and ultra light documentation systems have been certified in Belgium with two companies in December 2003. The methodology – based on proven concepts like Ecomapping® - now allows small SMEs to participate more cost effectively in EMAS by tackling some of the barriers which traditionally discouraged them from adopting EMAS.**

In a central Belgian government funded program, the social economy network "Resources" encouraged small SMEs in the recycling and waste management area to move towards EMAS certification in a cluster approach, enabling shared training, environmental review and documentation.

RETRIVAL scrl, a vocational integration company that has created 30 jobs since its creation, is based in Couillet near Charleroi in Southwest Belgium. The company operates on several industrial sites in the Wallonia region, in three sectors: waste management, enhancement and greening of sites and refurbishment of industrial sites. RETRIAL and CEDEVAR are members of a network of social economy undertakings, Ressources asbl, and is recognized by Recupel. This non-profit organisation coordinates the collection and the recycling of waste electrical and electronic equipment (WEEE).

Ecomapping® is an easy, creative process of scanning environmentally relevant processes and practice directly in the physical reality of the shop floor. Basically the light methodology requires only observation, communication, patience and very little documentation, starting from a map of the site. It helps in target setting and monitoring progress made in environmental performance as well as in the training and raising awareness of employees, managers and workers. An average of 1 day training per capita was necessary.

The specific requirements of EMAS have been made accessible in an easy understandable way requiring no EMS literacy, mainly through visuals for procedures required for save and environmentally friendly dismantling of hardware plastics, computer screen filling gases and printed circuit boards.

Describing the EMS procedures requires 10 pages, the EMAS environmental statement only two pages, while other companies in the waste recovery sector produce statements of up to 50 pages.

Conceived as "shareware" and a do-it-yourself-tool by Belgian Heinz Werner Engel, Ecomapping® is used in Europe and worldwide now by a variety of actors, such as: trade-unions for





Shared training: electronic waste recyclers  
RETRIVAL srl and CEDEVAR asbl in Wallonia  
scrap documentation and costs.

training of shop stewards, environmental consultants in supporting the implementation of EMAS and ISO 14001 in small companies, supply chain management and green productivity and in thousands of SMEs worldwide.

To learn more about the method of Ecomapping, contact Mr. Heinz-Werner Engel (HWE@mac.com) or visit [http://www.inem.org/new\\_toolkit/comm/environment/emas/toolkit/](http://www.inem.org/new_toolkit/comm/environment/emas/toolkit/)

## Best practice: Nuremberg City Theatres Twilight of the Gods in power save mode

**When English director Stephen Lawless ponders the grandiose effects in the planned staging of *Götterdämmerung* at the Nuremberg Theatre, Uwe Gedig knows he will face artistic resistance.**

"When the director tells us he needs exactly this kind of red, I need not start to explain he picked the most unfriendly tone, environmentally speaking, "the environmental manager at the second largest theatre in Bavaria tells us. "You have to accept some things to achieve others", is Gedig's credo.

**After three years, Nurnberg City Theatres are still the first and only theatre in Europe registered under EMAS.**

"Even the boards, which are trodden on, have to be produced from wood", artistic director Wolf Konold writes in the environmental statement. This entails costs and environmental impacts. In 1999 the costs related to the environment added up to 350,000 Euro; this equals 7% of the material costs in the theatre. "For production, rigging and maintenance the theatre has 10 different crafts and a massive administration. Apart from joiners, electrical equipment unit, costume design, props unit and locksmithery there is a painter hall, rooms for the sculptor, upholsterer, mask designer and even an armourer. Artistic impression dominates all other aspects. "If an artist wants to perform, he simply disregards all the other aspects, even his body – if e.g. paints are poisonous." In the painters hall many different paints, diluters and sensitive cleaning agents are stored. "Information that one paint which produced the shiniest reflections in previous sets is even the most poisonous for actors and stage designers helped raising awareness", Mr. Gedig recalls. "Today we have reduced the number of hazardous substances to 34. From occupational safety we moved to environmental awareness."

### Arts first, then the environment

City theatres are one of the most prominent producers of waste in Nuremberg, adding 200 tons. In 1997 a yard for potential recyclables was commissioned for better and safer storage. Recycling 70 tons of waste paper and 20 tons of wood from stage construction saves several thousands of Euros annually.

Energy costs from electricity consumptions amounted to 150,000 Euro annually. To avoid costly peak demand, which occurred prior to evening performances, a cunning management of peak demand was implemented: "We simply turn off air-conditioning for some minutes while people come into the theatre – no-one notices and the peak is gone." For a different peak at 11 a.m. the fan in the joiners' room is turned off.

These seem small changes, which nevertheless amount to several thousand Euros. Motion detectors ensure lights are on only when people are inside a room: between 1998 and 2001 electricity consumption was cut by 5%, costs even by 10%. Uwe Gedig can easily imagine why authorities picked the theatre as a beacon to implement EMAS first in Nuremberg: They are in the limelight much more than other administration units.



To learn more contact:  
Uwe Gedig Richard-Wagner-Platz 2-10, 90317 Nuremberg,  
Germany or visit <http://www.staatstheater-nuernberg.de>



"The mobile phone to recycling", this poster teaches small children. As users become younger, recyclers shall do so, too.

## Service Sector Vodafone - mobile communication and responsibility for waste electronic equipment

**Environmental performance is big business for Vodafone in Greece, the second mobile communication provider worldwide to receive EMAS certification:** Due to the weather conditions and Greek topography, energy efficiency is handled in a different way: Remote cell extenders have been equipped with photovoltaic systems, while energy for cooling base stations is recovered, hereby saving 60% of the energy.

In the beginning there was the need for cooling the base stations, radio transmitters and receivers used for transmitting and receiving calls to or from mobile telephones. As these devices perform best under a consistent temperature, air conditioning is necessary. Due to the high amount of sunny days, their remote sites and the development of solar powered base stations, Vodafone decided to install photovoltaic systems to 18% of its cell extenders. More over, waste heat is recovered from the air conditioning. The ever worrying issue of electro-magnetic field harming human health was dealt with in a transparent way. The "Hermes" program for systematic measurement and communication of fields displays field strength parameters optically under [www.hermes.ntua.gr](http://www.hermes.ntua.gr). Its pilot operation in three municipalities is monitored on-line on an aggregated 24-hour basis by the Technical University of Athens.

Starting on the 5<sup>th</sup> of June 2003, the Global Environmental Day, Vodafone gives the Greek mobile user the possibility to take action for the protection of the environment. The customers – of any operator – can bring any mobile phone or accessory that is of no use to the Vodafone Shops Chain, avoiding thus to throw it away. 14,000 items have been recycled by the new EMAS front-runner Vodafone during the first four months of the program.

The basic environmental protection results from 2003 are summarised under:  
<http://www.vodafone.gr/live1/page.jsp?pid=0106040300&vars=0000000000>

## Service Sector Corporate Mobile Recycling – collect, repair, reuse

**Recently EMAS registered London based recycler Corporate Mobile Recycling** shows how mobile recycling works: To prevent a share of UK's 25 Million mobile phones to be crushed in a landfill and leak cadmium to the soil, the recently registered company offers a free of charge collection from anywhere in the UK – and even world wide. Safe arrangements for collection and a full audit trail intend to attract consumers to hand in waste devices.

Incoming apparatus are checked for possible repair, batteries handed to an authorized recycler, and those devices ready for re-use are sold in less developed countries. Dismantled parts are re-used after testing or shredded and sold to the industry. Mobiles contain large amounts of gold, platinum, copper and nickel.

For more information visit: [www.cmrecycling.co.uk](http://www.cmrecycling.co.uk)

## More than 80 environmental measures identified at the European Commission

The pilot project for the **implementation of EMAS in the four Commission services** (Secretariat-General, Committee of the Regions, DG Environment and DG Administration) is making good progress. The environmental review has been finalised and the main environmental impacts identified. Nine main areas will be addressed in a bid to lift pressure on natural resources, with some of the most important actions tackling building management and maintenance, waste management and mobility, as well as environmental policy and funding.

- There is a need for remedial action to abate unnecessary energy consumption in the Commission's buildings, which accounts for over 80% of its contribution to CO2 emissions. The occupation of 63 buildings in Brussels generates nearly 50,000 tonnes of greenhouse gases per year.
- A third of the buildings had above-average water consumption, adding up some 410,000 m<sup>3</sup>.
- Office paper alone amounted to nearly 2 million tonnes!
- As regards mobility, the Commission has already deployed an array of actions in order to clamp down on the number of daily "loner" car commuters. In addition, following Belgian law Commission's services are currently designing a comprehensive mobility plan to be in place by the end of this year.
- Action will be taken to green Commission's purchasing in areas such as buildings maintenance services, social infrastructure (e.g. catering, laundry services), its vehicle fleet and IT and communications equipment.
- Finally, it is worth noting that several measures will be set up to monitor and let external stakeholders know about the benefits provided by environmental legislation and funding.

All the above actions, as well as much more, will be communicated to the personnel, as it is with them where the power of EMAS lies. Last but not least, getting the senior management to endorse the environmental policy and the associated action programme will fuel improvements in the Commission's environmental impacts for the next year.



## EMAS in figures

The statistics are now collected for both registered organisations and registered sites. The number of sites (3,872) of April 1<sup>st</sup> is close to the all time high of 3,912 organisations showing that the number of employees working in EMAS work surroundings is stable at around 900,000.

### Registered organisations and sites

|                 |              |              |
|-----------------|--------------|--------------|
| Austria         | 260          | 342          |
| Belgium         | 26           | 74           |
| Denmark         | 120          | 246          |
| Finland         | 39           | 47           |
| France          | 23           | 23           |
| Germany         | 1,739        | 2,110        |
| Greece          | 10           | 10           |
| Ireland         | 7            | 7            |
| Italy           | 186          | 236          |
| Malta           | 1            | 1            |
| Luxembourg      | 1            | 1            |
| Netherlands     | 29           | 33           |
| Norway          | 42           | 42           |
| Portugal        | 13           | 16           |
| Spain           | 368          | 491          |
| Slovak Republic | 1            | 1            |
| Sweden          | 116          | 116          |
| United Kingdom  | 76           | 76           |
| <b>TOTAL</b>    | <b>3,055</b> | <b>3,872</b> |

### Leading industrial sectors:

| Sectors   | Registrations |
|---|---------------|
| • Chemicals   | 276           |
| • Food and beverages  | 247           |
| • Fabricated metal products, except machinery and equipment | 228           |
| • Sewage and refuse disposal                                | 206           |
| • Machinery and equipment                                   | 160           |

### Leading service sectors:

| Sectors                                   | Registrations |
|---|---------------|
| • Hotels and restaurants                  | 173           |
| • Public authorities                      | 121           |
| • Transport                               | 103           |
| • Health and social work                  | 89            |
| • Wholesale Trade (except motor vehicles) | 59            |

In May the EMAS Helpdesk researched the top 100 stock market registered companies. This revealed that 28 out of 100 companies ranked by turnover in 2003 have EMAS in at least one site. All the top 6 companies have chosen EMAS as their environmental management system. Other top brand names in this list are ENEL, ABB, Lufthansa, Aventis, MAN, Roche, Novartis, Nestlé, to name just a few.

| Rang | Organisation      | Country | Sector     | EMAS organisations | Turnover in Mio. Euro | Employees |
|------|-------------------|---------|------------|--------------------|-----------------------|-----------|
| 1    | Royal Dutch/Shell | NL, GB  | Energy     | 5                  | 189,754               | 111,000   |
| 2    | BP                | GB      | Energy     | 18                 | 189,003               | 9,817     |
| 3    | DaimlerChrysler   | D       | Automotive | 13                 | 149,583               | 370,677   |
| 4    | Total             | F       | Energy     | 3                  | 102,540               | 121,469   |
| 5    | VW                | D       | Auto       | 14                 | 86,948                | 324,000   |
| 6    | Siemens           | D       | Technology | 13                 | 84,016                | 445,100   |

## News

### Toolkit for implementation in SMEs released on the website

The update of the ever successful SME toolkit has been finally completed and is ready for testing by the public via the EMAS website. First published in 2000, the web based manual for the implementation of EMAS in SMEs has been downloaded some 20,000 times and used in companies all around the world, which is shown by the address of the download.

The 2004 update shows how to set up a management system in a do-it-yourself approach for EMAS verification. The 11 sections cover the cycle of plan - do - check - act and serve both the readers for general first information and for detailed action on a company level. A large section is dedicated to funding and sources for information, and the toolkit manages to cover the new Member States as well.

The International Network of Environmental Management (INEM) welcomes comments to [phundley@inem.org](mailto:phundley@inem.org).

### Reference to EMAS registration of suppliers suggested by UK printing companies

UK printing companies Xerox and ReDesign have explored ways of communicating the fact that paper suppliers for printed matter have registered their management system under EMAS. It has been suggested that the inner cover shall state: "Printed on paper, manufactured by (NAME OF THE COMPANY) which is an organisation registered under the EU Eco-Management and Audit Scheme". The logo will include the registration number of the manufacturer.

### The new corporate design has been released by the Commission

After four years, the old EMAS designs have been updated. As a consequence graphics and fonts have been brightened up for the needs and demands of a corporate design. Starting with this Newsletter, all the EMAS documents shall use the design elements representing the EMAS key values: Performance, credibility and transparency represented by the pictures on environment, the service and the industry sectors. Fresh colours like apple green and ultramarine blue have been picked to promote recognition. Gradually the new design will also be applied to the website and other documents.

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://europa.eu.int/comm/environment/emas> or by subscribing to the mailing list.

For a free subscription, comments or further information send an email to the EMAS Helpdesk at: [emas@cec.eu.int](mailto:emas@cec.eu.int) or write to the following address:

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Tel: + 32 2 282 84 49

## Upcoming events

June 1<sup>st</sup> > 4<sup>th</sup>, 2004

**Brussels, BEL**

**EU Green Week**

For more information visit:

[http://europa.eu.int/comm/environment/greenweek/index\\_en.htm](http://europa.eu.int/comm/environment/greenweek/index_en.htm)

Or contact: [greenweek@iceo.be](mailto:greenweek@iceo.be)

June 9<sup>th</sup> > 11<sup>th</sup>, 2004

**Aalborg, DAN**

**Fourth European Conference on Sustainable Cities and Towns**

For more info view:

[www.aalborgplus10.dk](http://www.aalborgplus10.dk)

June 22<sup>nd</sup> > 23<sup>rd</sup>, 2004

**Malta, MAL**

**Workshop EMAS for Local Authorities**

Contact Mr. Claudio Boffa at Malta Standards Authorities for more information:

[Claudio.boffa@msa.org.mt](mailto:Claudio.boffa@msa.org.mt)

June 28<sup>th</sup> > 29<sup>th</sup>, 2004

**Nottingham, GBR**

**Corporate Social Responsibility and Environmental Management Conference**

For further information contact Elaine White: [elaine@erpenv.demon.co.uk](mailto:elaine@erpenv.demon.co.uk)

June 30<sup>th</sup>, 2004

**Klagenfurt, AUT**

**Exchange of information between the regulators and the verifier**

For more information contact Ms Verena Zolles: [zolles@OEWA.VA.AT](mailto:zolles@OEWA.VA.AT)

September 20<sup>th</sup>, 2004

**Langenberg, Saxony, GER**

**EMAS in Agriculture**

