

•AALBORG•AARHUS•BALTUSK•BERGEN•BÜTZOW•CESSHOICE•COPENHAGEN•ELBLAG•ELVAESPOO•FREDERICAGA•GÄVL•GDANSK•GDYNIA•GÖTEBORG•GREIFS•WALDGROND•HO•HAAPSALU•HELSINKI
•HORSENS•JEKABPILS•JELGAVA•JOHVI•JURMALA•KALININGRAD•KALMAR•KARLSKRONA•KARLSTAD•KAUNAS•KEILA•KEMIKIEL•KLAIPEDA•KØGE•KOLDING•KOSZALINKOTKA
•KRISTIANSTAD•KRONSTADT•KURESSAARE•KÄRDLA•LAHTI•LANDSKRONA•LEPAJA•LINKÖPING•LOMONOSOVA•LJULÈ•LÜBECK•LEBA•MAARDU•MALBORK•MALMÖ
•MARIEHAVN•MARJAMPOLÉ•MIEDZYDRÓJE•MIOLETA•NACKA•NARVA•NAESTVEDN•NORRKÖPING•NORRTÄLJEN•NYKÖPING•OSKARSHAVN•OXELÖSUND•PALANGA•PALDISKI•PANEVEZYS
•PÄRNÛ•PETERHOF•PORÛ•PRUSZCZ•GDANSK•HEDAREZEKNE•RIGAR•ROSTOCK•SESTRORETSK•SIAULIAI•SILKEBORG•SILLAMÄE•SOPOT•STOCKHOLM•STPETERSBURG•SUNDSVALL•SZCZECIN
•TALLINN•TAMPERE•TARTU•TONSBERG•TUKUMS•TURKU•UMIEÅ•VAASA•VILJANDI•VILNIUS•VISBY•VORDINBORG•VORU•VÄSTERVIK•VÄXJÖ•WISMAR•YSTAD•ÖREBRO

Baltic Cities

Environmental bulletin • No 2, 2003

- Turku welcomes UBC EnvCom and Agenda 21 - Editorial by Armas Lahoniitty
- Cesis wins the UBC Best Environmental Practise Award 2003

SUSTAINABLE CONSUMPTION AND PRODUCTION - special theme edition





EDITOR in Chief

Risto Veivo

Co-Editor & LAYOUT

Sari Bowie

Editorial ASSISTANCE

Sanna Erkkö

EDITORIAL BOARD

Guldbrand Skjönberg, Nacka

Ralf Giercke, Lübeck

Mikko Jokinen, Turku

Carl Nielsen, Aarhus

Zita Tverkute, Panevezys

Pawel Zaboklicki, Gdansk

*

PUBLISHER

Union of the Baltic Cities

Commission on Environment

Linnankatu 41

FIN-20100 Turku

FINLAND

www.ubc.net/commissions/environment.html

Tel: +358 2 262 3171

Fax: +358 2 253 8613

E-mail: sari.bowie@saunalahti.fi

ubcenv@netti.fi

ISSN 1455-0903

*

Cover Picture:

City of Cesis, Latvia

PRINTING HOUSE

Newprint Ltd., Finland

Printed on 100% recycled paper

Baltic Cities

Environmental Bulletin



Welcome to Open House UBC

In August this year, the City Board of Turku made an important decision for Baltic co-operation. We have offered to host the Environment and Agenda 21 Secretariat of the Union of the Baltic Cities for the next six years. By doing this, we want to contribute to the development of our Union as an organisation and actor.

The UBC General Conference in Klaipeda, 17-18 October 2003, will make at least two important decisions for the development of the Union. Firstly, the new UBC Strategy will be discussed and approved.

Secondly, the Agenda 21 Action Programme 2004-2009 – Roadmap for Sustainable Baltic Cities will be adopted. Sustainable development is one of the core objectives of the UBC Strategy and the "Roadmap" is strongly contributing to its implementation. It is an outstanding action programme with great potential.

One of the biggest strengths of this programme is that it integrates the activities of different UBC bodies for reaching the common strategic goals of the whole Union. It also declares the UBC an Open House for partners to walk in for joining and shaping our efforts together. Many new partners are already entering the house, and we are convinced that this approach is critical for bringing about a long-term change for sustainability. In applying it, we are implementing principles of good governance to our own work.

The programme is very well designed and several million euros of European and national funding have already been made available for its launch. The goals are firmly anchored to our strategy and the planned actions are very concrete and efficient. These are the kind of processes that the UBC needs to develop further in its overall work for the Baltic Cities.

The Environment and Agenda 21 Secretariat is to serve as the programme co-ordination agency. I hope that the input of my city - Turku - will be beneficial for the Union, its members and partners in their work for Sustainable Baltic Cities.

Turku, which celebrates its 775th anniversary in 2004, is proud to be associated with this work for the benefit of future generations.

Armas Lahoniitty
Mayor of Turku
Vice-President of UBC

C o n t e n t s

2 WELCOME TO OPEN HOUSE UBC

Editorial by
Mr Armas Lahoniitty

UBC ENVIRONMENT & AGENDA 21 ACTIVITIES

4 Roadmap for Sustainable Baltic Cities - the new UBC Agenda 21 Program

5 Ten devoted cities chosen to share good practices in TBestC project

6 Second Training session of EMAS Peer Review for Cities

The Baltic Urban University Forum kick-off

New Hansa for Sustainable Ports and Cities to be started

UBC Environmental Award 2003!



27 City of Cesis and Environmental Development Board win the UBC Environmental Award 2003

28 Aalborg and Harbour Fronts

Gdynia is an environmentally friendly city

Jurmala held an Environmentally friendly business fair

29 ECAT Kalingrad gives environmental education for businesses

Kaunas has a School - for Community project

Panevezys investigated their radon risk

30 Sopot measured oxygen balance in the city

Sopot's didactic path

Vilnius and 'Let's live in a clean and healthy city'

special theme
edition

SUSTAINABLE CONSUMPTION AND PRODUCTION

7 DEAR READER, Welcome to Sustainable consumption and production

8 Shaping the International Framework on SCP

9 New facts and figures on Eco-Procurement

10 MIPS - a new tool for promoting Eco-Efficiency and sustainability in Procurement

11 EcoProcura in Gothenburg

12 Triip is the first green print service in Tartu and in Estonia

13 Environmentally friendly business fair in Jurmala Tool for environmental attributes of IT products

14 Green philosophy the guiding star for Malmö-restaurant Organic food circle in Turku

15 Sustainable canteens in Kolding



More about the first green print service in Estonia on page 12.



More about the wind electricity in Kotka on page 20.

15 Essays on Future - a writing competition between twin cities

16 Communicating the benefits of Eco-Procurement in Vienna

Green Procurement in Rostock

17 Rostock's water - new way of public private partnership

18 Governance, Finance and Capacity - a review of waste management in accession countries

Waste management in Brussels

20 The biofuels are future tendency

European mobility week

21 Environmental demands on purchasing in Gothenburg

22 GreenZone is a unique environmental quarter in Umeå

23 Nature and environment reports in agricultural sector in Kolding

CITIES ENVIRONMENTAL ACTIVITIES

24 Eco-theatres in Gdynia

Environmental database for SMEs in Turku area

25 Towards a sustainable city - international workshop in Rostock

Palanga gets a Blue Flag

The first Baltic bat meeting is in Turku

26 Local Governments meet on action for sustainable development - ICLEI World Congress

Activities of Vilnius Healthy City Bureau

In memory of Anna Lindh

Back cover (inside):

Introducing the UBC Environment and Agenda 21 Secretariat

Back cover:

The UBC member cities

Roadmap for Sustainable Baltic Cities

- Six-year Agenda 21 Program for the UBC

By Risto Veivo

UBC Agenda 21 Action Program 2004-2009 aims at concrete action and implementation of sustainable development. The program, *the Roadmap for Sustainable Baltic Cities*, works on five themes and it declares the UBC an Open House for partnerships. It is a strategic program of the whole UBC.

Most of the people in the Baltic Sea Region live in cities and towns. The total urban population in our region is 50 million and the cities are a critical factor for sustainability. At the moment, the Baltic Sea Region and its cities are not sustainable. This means that there are numerous environmental, economic and social challenges that need to be tackled in order to enable a meaningful and healthy life for both current and future generations. Many of these challenges can best be addressed by the cities.

This state of affairs has been recognised by the Union of the Baltic Cities. During the coming years, the Union will contribute more than ever before to both current and future wellbeing of citizens in its member cities. The starting point for this work is quite good, as the development of the region is in many ways positive at the moment and almost all UBC member cities already have their own on-going local sustainable development programs. The UBC has also become the most important channel in supporting its members in their sustainable development activities (UBC Local Agenda 21 Survey 2001 by Åbo Akademi University and Wissenschaftszentrum Berlin für Sozialforschung). The great interest and commitment of member cities as well as the success of the UBC network and services create a very favourable starting point for the new program.

Program of the whole UBC

The interest and support of the member cities has also been the most important factor for the making of the program. It will be crucial for its implementation too. The UBC Agenda 21 Action Program is very firmly anchored in the new UBC Strategy. It is a strategic action program designed for the implementation of the UBC Strategy. Both the strategy and the

program will (most likely) be adopted at the VII UBC General Conference in Klaipėda 17-18 October 2003.

The implementation of the program will be a concerted effort of all UBC bodies, commissions and networks. The program themes address issues of several UBC commissions, and several commissions have also contributed to the preparation.

Why six-year program?

The new program has been designed for six years. There are two main reasons for this. The most important one is that as almost all UBC cities already have their own sustainable development programs,

the main emphasis now needs to be put on implementation of concrete sustainable development actions in the cities. It is the implementation where cities need most support now, and where the real sustainability impact remains to be reached. In parallel, further development of the local Agenda 21 programs of the cities will naturally also take place. The other reason behind the six-year term are the outcomes of the World Summit on Sustainable Development (Johannesburg 2002) and the Local Government Session held on the occasion of the Summit. They also emphasise concrete actions as the next step. The concept of Local Action 21 was endorsed by the Local Govern-

Roadmap for Sustainable Baltic Cities

- UBC Agenda 21 Action Program 2004-2009

Goal: Sustainable Development in Baltic Cities

Five thematic focus areas:

- 1. Good governance and sustainable urban management**
- 2. Sustainable use of energy and resources**
- 3. Good living environment and nature protection**
- 4. Sustainable economy and transport**
- 5. Social integration and health**

Activities: mobilising UBC network and services - building partnerships and synergy with other actors - implementing co-operation projects

Monitoring: three-year program cycles, three assessments using 23 thematic indicators

Actors: All UBC bodies, commissions and networks, and partner organisations and stakeholders

Budget: 8 - 10 Million euros in the whole program period

ment Session. It means accelerated implementation of Local Agenda 21 by putting emphasis on concrete actions.

Implementation of concrete sustainable development actions and reaching real sustainable development impacts "on the ground" takes more time than building of local sustainable development programs. Such actions and impacts are also best addressed by using a thematic approach.

Themes of the Roadmap

Sustainable development is a wide concept. In different organisations and activities it can be addressed from very many different relevant points of view. In cities the matter is not simple either, even if the urban context and the activities where cities have a role to play provide some basis for definitions. The UBC has defined five thematic focus areas for the new program. These five themes of our *Roadmap for Sustainable Baltic Cities* are:

1. Good governance and sustainable urban management
2. Sustainable use of energy and resources
3. Good living environment and nature protection
4. Sustainable economy and transport
5. Social integration and health.

All of these five themes are crucial for sustainable development in cities, and the cities also have power and means to address them. To work on each of these themes, the UBC will implement a number of projects and utilise its regular network activities such as exchange of good practices and policy liaison. Utilising our strong network, emphasis will also be put on innovative development of new services and activities. The largest "toolbox" to be applied will be the projects. They will mobilise the majority of member cities and several other partners, and will altogether cost approximately 8 Million euros.

The progress on the five themes will be monitored three times during the program period. Altogether 23 indicators have been defined to reflect the progress made under each task. First monitoring will be carried out in 2004, interim one in 2006-2007 and final one in 2009.

Open House

And how are we going to implement all the projects and the other activities, and make sure that best expertise is available and all stakeholders can participate? The new program takes a very strong commitment towards open governance. In practice this means, that we will welcome all partner organisations, other co-opera-

tion partners and stakeholders to shape the activities and implement the program together with us. The UBC and its member cities are not alone with their interest and need for sustainable development of Baltic Cities. Everybody with such interest, "a stake on the matter", must be welcomed to work together with us.

Many partner organisations have already commented positively on the draft program and it seems that the UBC will be in good company in implementing its own program. This is the best way to go forward.

More information:

Mr Risto Veivo
Head of Secretariat, UBC EnvCom
Tel: +358 2 262 3172
E-mail: risto.veivo@netti.fi

Big Interest resulted in ten devoted cities starting good practice transfer in the TBestC Project

By Anna Granberg

In the TBestC project, ten cities have been chosen to share good practices. The interest among member cities was great - the chosen ones are preparing for serious business now.

The selection of the cities was based on the applications that the city couples or groups sent in to the UBC EnvCom Secretariat. Since many of the cities were interested in the same practice they were admitted to co-operate in groups. Out of many interesting applications the follow-

ing ten cities were selected.

Cities of Riga and Sopot and ECAT-Kaliningrad will together study the Eco-lighthouse project in Kristiansand.

Cities of Jelgava and Cesis will get an opportunity to learn more about water management and bio-diversity of the City of Malmö.

City of Sillamäe will try to adopt the excellent environmental education scheme for businesses established by ECAT-Kaliningrad and

City of Liepaja will try to reach the EU requirements for air-quality through their co-operation with City of Turku.

The criteria for the evaluation stated that the practice should be feasible to transfer to another city and cohere with the new

cities' environmental plans and programs. The commitment of the cities both to take part in the project and to implement the practice was also evaluated.

At the first Workshop in Turku 9-11 October, the cities will start up their co-operation and plan for the up-coming study visit that is one of the core events in the project. The information collected during the study visit together with the analysis of the city's own situation will form basis for the feasibility analysis and report.

If you are interested in receiving information continuously from this project please don't hesitate to contact: Anna Granberg or Sanna Erkkö at UBC EnvCom.

More information:

Tel: +358 2 262 3169
E-mail: ubcenv@turku.fi

EMAS Peer Review Training in Barcelona

By Tea Nömmann

EMAS Peer Review for cities project is progressing well. All 16 cities are making progress on their Environmental management systems, and are now preparing for the second training session in Barcelona.

The training session will take place on 6-7 October in Barcelona. The focus is on "Peer Review" process and research on linkages between European Union 6th En-

vironmental Action Plan (6EAP) and Eco-Management and Auditing System (EMAS).

During the two days training, we aim at providing city participants the skills to undertake the peer review in a twin city. We also provide information and knowledge to enable the cities to reassess their own environmental management system. Peer review city pairs will be agreed during the training session.

The first results of the desk research on 6EAP and EMAS linkages will be presented to the cities. We aim at highlighting the obvious links between EMAS and the seven thematic strategies of 6EAP in an easy language. In-depth research will be carried out after the training in five pilot cities to identify and vision how does the

particular city see EMAS evolving to take account of the 6EAP over the next 10 years. The results will be integrated into peer reviews taking place in cities during the spring 2004.

Training session is a very good forum for city representatives to exchange their experiences and challenges they are facing while implementing EMAS. All cities are using draft project toolkit – a workbook to guide them through the EMAS process and their comments and suggestion are very valuable in further developing this toolkit.

More information on the EMAS project can be obtained at www.emascities.org.

New Hansa for Sustainable Ports and Cities

By Risto Veivo

There is a need and a wide interest to develop sustainable port policies in the Baltic Sea Region as well as on European level. Within the Union of the Baltic Cities, port cities and ports have been co-operating for several years in order to develop improved policy models. The newly approved Interreg III B project New Hansa of Sustainable Ports and Cities (2003-2005) results from this co-operation.

This UBC Agenda 21 project, lead by the City of Lübeck, is a genuine multi-stakeholder process of 15 ports and port cities, aiming at improved environmental policies and sustainable development at all ports of the Baltic Sea.

The problems addressed have economic, social and environmental aspects as well as considerable territorial impacts – and they call for integrated solutions. Specifically, the project concentrates on harmonising and strengthening the policies and practices to reduce air emissions, wastewater discharges and solid waste generation of vessels, and to improve reception practices of ship-generated wastes at ports.

On international level, the most important outcome of the project will be the joint policy document – the Baltic Memorandum of Understanding on Sustainable Ports (MoU). Wide support and commitment will be sought to the MoU in the Baltic Sea Region as well as in the European Commission. Links and dialogue are being established, and contributions and co-operation are strongly welcomed from all stakeholders.

More information:

Mr Risto Veivo, UBC EnvCom Secretariat
Mr Ralf Giercke and Jörg Straussler, Lübeck

The Baltic University Urban Forum Kick - off

By Anna Granberg

The three-day conference, 4-6 September, in Stockholm, gathered 20 cities to launch the BUUF project.

One of the main purposes of the seminar was to tie closer links between the participating cities and to start planning for the up-coming 20 Best Practice seminars that will be held in the project. During a three-year period, every participating city will arrange a seminar on one of the ten themes in the project.

The purpose of the BUUF project is to learn from each other's good practices and to monitor the proceedings through a set of indicators developed in the project. An advisory board consisting of 50 scholars will guide the whole process. The task of the board is also to produce 10 Best Practice reports presenting the good practices with in the themes. The BUUF project is carried out in co-operation between the lead partner Baltic University Programme, Royal Institute of Technology and UBC.

More information:

Ms Anna Granberg or Risto Veivo
Tel: +358 2 262 3169
E-mail: ubcenv@turku.fi

Dear Reader,

on the following pages you will find around 20 articles on sustainable consumption and production. First there are some general articles to introduce the political and theoretical context of the theme. These introductions are then followed by good practical examples of sustainable procurement in Baltic Cities and in other parts of Europe. Also company perspective, the production side, is presented.

Local authorities have a significant role to play in sustainable consumption and production. As they purchase, they can use their power to influence producers of goods and services. Sustainable procurement affects the environment in a positive way and there are also economic advantages to be gained. We hope that the encouraging examples of sustainable procurement may show the way to others. At least they show what is possible to achieve - and often even irrespective of the size of the city. One of the most important aims of the UBC network is to gather and disseminate such good practices.

We warmly thank all cities and other authors that contributed to this special theme edition of Baltic Cities Environmental Bulletin. This is a second theme edition in row – and since the interest has been great we will continue in the next Bulletin. The theme is open, so all suggestions are welcome.

Wishing you pleasant and informative moments with the theme edition,

Editorial Team

Shaping the International Framework on SCP

By Riina Loukola

The initiative to develop a programme on sustainable consumption and production (SCP) was taken up by Finland within EU during the World Summit on Sustainable Development (Johannesburg, 2002) preparations. With the EU taking an active role in the negotiations, the decision to develop the framework was made at the WSSD. It was one of the most prominent new initiatives made in the Summit.

The aim of the framework is to support regional and national initiatives to promote sustainable consumption and production. The main objective is to de-link economic growth and environmental degradation by improving the efficiency and sustainability of the use of natural resources. Achieving the goal of sustainable consumption and production requires action from all countries. However, the responsibility lies especially in the shoulders of developed countries.

Since Johannesburg, sustainable consumption and production has been high in the agenda of many international meetings. First steps were taken in the Governing Council of the United Nations Environment Programme (UNEP) in February 2003, where sustainable consumption and production was a subject of ministerial debate. UNEP decided to take an active role in the development of the framework of programmes. United Nations Commission on Sustainable Development (CSD) has decided on its future programme of work (May 2003).

Changing unsustainable consumption and production patterns was identified as one of the key cross-cutting issues to be discussed in every CSD implementation cycle. Specific discussions on the 10-year framework of programmes will be on the agenda for the 2010/2011 cycle. Also other international meetings, such as the Kiev Environment for Europe Conference (May 2003) and G8 meeting (June 2003) have discussed and decided on sustainable consumption and production.

Regional activities have also been numerous. UNEP has organized in cooperation with UN regional economic commissions regional meetings for Asia and the Pacific in Indonesia and for Latin America in Ar-

gentina. The activities will continue in the near future in another Latin American meeting in Nicaragua, African meeting in Egypt and in Korea for another Asian and Pacific meeting. There are also plans for a Baltic seminar, supported by Finland, and for a Pan-European conference.

Marrakech process

The first international expert meeting was organized in Marrakech, Morocco in June 2003 to provide expert inputs to the Commission on Sustainable Development (CSD) for consideration as a part of its future work on sustainable consumption and production. The meeting gathered 120 experts from 64 countries, as well as representatives from various international organisations, businesses and NGOs to discuss the elements, priorities and future organisation of the 10-year framework of programmes.

The work was carried out in four working groups that had detailed discussions on following major themes: (i) human settlements, (ii) general policy instruments and analytical tools, (iii) promoting sustainable consumption patterns and (iv) tools for changing production patterns.

The meeting identified a number of key priorities for the framework plan, including the development of policies that integrate the economic, environmental and social aspects of sustainable behavior. Strategies should include a mix of regulations, economic incentives and communication tools to change patterns of behavior, and involve partnerships between government agencies, international organizations, private enterprises, and public interest organizations. Sustainable procurement, for governments, businesses, and UN agencies themselves, as well as eco-labeling were

among the identified priorities.

The Marrakech meeting started a new "Marrakech Process", which will develop and implement the long-term plan to achieve sustainable consumption and production. It follows up on agreements reached at the Johannesburg Summit to accelerate the shift towards sustainable lifestyles that promote social and economic development for all.

The Marrakech Process will involve expert task forces and regional meetings on sustainable patterns of consumption and production. Next global expert meeting will be organized within two years.

The UN is to extend the survey on international and regional activities on sustainable consumption and production. The report of the global expert meeting and the regional meetings will be presented at the next session of the CSD.

These reports can be found from the internet; <http://www.uneptie.org/pc/sustain/events/events.htm>. UN will also prepare for the next CSD session a report on sustainable consumption and production in relation to the themes of the next CSD implementation cycle (water, sanitation, human settlements).

These first meetings have worked in a very constructive way. They have given a good starting point for shaping the 10 year framework programme which will gradually provide tools in encouraging sustainable consumption and production. Governments and local authorities will have a key role in the coming process, but private sector, NGOs and other stakeholders cooperation and coordination will be indispensable.

More information:

Ms Riina Loukola, Senior Adviser
Finnish Ministry of the Environment
E-mail: riina.loukola@ymparisto.fi

New Facts and Figures on Eco-Procurement

By Amalia Ochoa

European research project RELIEF showed that public procurement is a key contribute when reaching goals for greenhouse gas reduction of Kyoto Protocol.

Public Procurement can make a key contribution to achieving the European Union's greenhouse gas reduction targets adopted in the Kyoto Protocol. Just by switching to green electricity, EU public administrations can save greenhouse gas emissions amounting to 18% of the EU Kyoto obligations, providing the market responds to the increased demand for renewable electricity by increasing capacity. This is one of the results of the European research project RELIEF, co-ordinated by ICLEI's Sustainable Procurement team, and supported by the European Commission.

The project, which brings together seven research institutes and six local authorities from across Europe was started in 2001. It was designed to provide a scientific basis for the development of the concept of green purchasing.

Methods to calculate environmental benefits

One focus of the project was to develop methods to calculate the theoretically achievable environmental benefits of green purchasing among European public authorities – the relief potential. In order to make the figures meaningful, the impacts found were recalculated into so-called person equivalents, to allow easy comparison and an appreciation of the scale of impact.¹ The

findings prove that green purchasing is not just a symbolic activity, with marginal practical effects, but can have a significant impact on a range of areas. For example switching to organic food in public purchasing for canteens and catering would compensate the nutrification impact on European soils and waters of more than 2,2 Million inhabitants.

This first step of the calculation was based on the share represented by public sector purchasing in the product market, around 6% for most products covered by the research. However, another focus of the research was on the spill-over effects from public purchasing to the private sector and households. The increase in demand for green products would help to improve the competitiveness of suppliers on the private market, and the example set by public authorities can also assist in changing consumer behaviour. Here, the research found that for some products, the spill-over effect on the whole European market, substituting traditional products with green alternatives, could be as high as 100%.

One example of this comes from the field of IT equipment following the announcement by the US federal government in 1993 that only EnergyStar certified computers would be bought. Today, all computers sold around the world meet these requirements. According to the project's calculations this has already resulted in greenhouse gas reductions equivalent to around 1,000,000 inhabitants. If the next generation of energy-efficient computers were to be supported in a similar way, an-



Using EnergyStar certified computers has already resulted in greenhouse gas reductions equivalent to around 1,000,000 inhabitants.

other 982,000 person equivalents could be avoided, in Europe alone.

The implications of this research are clear. If green public purchasing was systematically implemented it would have a significant impact on a range of environmental problems. The challenge for public authorities is now to integrate the environment into their purchasing policies and use their purchasing power to encourage the development of more sustainable products and services. Green public purchasing has recently been in a debate within the European Union considering the European Directives on public purchasing are currently under revision. Furthermore, a recent ruling of the European Court of Justice has strengthened the opportunities for green purchasing by making clear that applying strong environmental standards is compatible with European purchasing law.

The scientific results of the RELIEF project are documented in the book "Buying into the Environment", which can be obtained from the Greenleaf Publishing website at: <http://www.greenleaf-publishing.com/catalogue/buying.htm>

More information:

Ms Amalia Ochoa
ICLEI
E-mail: amalia.ochoa@iclei-europe.org

¹ A "person equivalent" is calculated by dividing total emissions of a substance from a given geographic area, for example Europe, by that area's population. This gives the average "emission" per person, which can then be compared with the reductions generated by green purchasing.



Switching to organic food in public purchasing would compensate the nutrification impact on European soils and waters of more than 2,2 Million inhabitants. Photo: Sanna Erkko, Food at the Organic Circle.

MIPS – a New Tool for Promoting Eco-Efficiency and Sustainability in Procurement

By Michael Lettenmeier

The discussion on public procurement has, so far, mainly been based on the discussion about the environmental performance of single products. The concepts of eco-efficiency and MIPS could promote a broader viewpoint for developing public procurement into a more sustainable direction.

One of the biggest challenges towards sustainability is to change the production and consumption patterns of industrialised countries. One target for sustainable production and consumption has been the reduction of material flows in the industrialised countries by a factor of 10 up to the middle of this century. This would make possible a worldwide decrease of material flows by half while increasing worldwide prosperity twice, i.e. an increase in worldwide resource productivity by a factor of 4.

The reduction of material flows means that especially non-toxic mass flows such as erosion, fossil fuels, or renewable resources should be cut dramatically. This is a new aspect in the environmental discussion which traditionally had focussed on the reduction of the flow of toxic substances. The new paradigm of dematerialisation is thus drastically broadening the environmental discussion.

Material Input per Unit Service

MIPS (Material Input per Unit Service) is a tool for assessing and systematically reducing the resource consumption of products or activities. The basis of MIPS-figures are the *ecological rucksacks* accounted for different goods or commodities. The ecological rucksack means the amount of material moved away from its original place in the ecosphere during the whole life-cycle of a certain raw material, product or activity.

Resources are consumed for any activity, project, product, or trip a municipality is purchasing or undertaking. The amount of resources consumed can differ considerably between different solutions for the same

benefit. In order to make a large-scale resource conservation reality, material input data should be connected to the practices of economic and other planning and decision-making. Public procurement is quite relevant in terms of resource consumption, too.

Comparisons on hospital coats

According to calculations made by the Helsinki and Uusimaa Hospital Group, the production of a disposable sterile operation coat requires 2,6 kg of renewable and unrenovable resources. The production of a comparable washable and reusable operation coat requires 2,6 kg of resources, as well. Consequently, the ecological rucksacks of the coats are equal. But when comparing the MIPS of products, the ecological rucksack is compared also to the benefit provided. In the case of operation coats this benefit is the sterile protection provided during one operation. When the calculation includes also packaging, transport, and waste management of both coats and the washing of the reusable coat, the material input per one operation is 0,7 kg for the reusable coat and 4,4 kg for the disposable coat. Thus, the MIPS of the disposable coat is 6,3 times higher and the reusable coat 6,3 times more eco-efficient.

By using the MIPS-concept, the material flows behind activities, purchased products and services, or investments can be assessed in a holistic manner and compared to the related cash flows. This enables to reflect which activities and cost factors are especially relevant from the viewpoint of resource consumption and sustainability. Spending,

for instance, 5 Euros can mean quite different amounts of resource consumption for a Finnish municipality:

- 60 kWh of electricity – resource consumption ca. 25 kg
- 13 km of car-driving – resource consumption ca. 15 kg
- 0,5 kg copying paper – resource consumption ca. 7,5 kg
- a 20 km trip in an intercity train – resource consumption ca. 3 kg

The service-unit aspect of MIPS can promote the development of resource-saving alternatives by broadening the viewpoint from single products, investments, or services to the benefit achieved. This means that a municipality can save resources and money by, for instance, replacing products (e.g. computers) by services (e.g. it-solutions), replacing investments in buildings by space management, or by purchasing heat produced by local farmers instead of oil.

MIPS is widely used

In Europe, the MIPS-concept has been used besides for eco-efficiency considerations in hundreds of companies, also on the level of national economies and households. Developed in the early 90's by the German Wuppertal Institute, there has been an increasing interest in the MIPS-concept in Finland during the recent years. The Thule Institute of the University of Oulu has calculated the Total Material Requirement (TMR) of the Finnish economy. Currently, the institute is working on the material flows of more than hundred branches in a physical input-output-table as well as on the TMR of the Kymenlaakso region in south-eastern Finland. MIPS has also been applied in the development of products (e.g. furniture, packaging, electronics, textiles) and services (e.g. railway trips, real estate management, sport activities) of Finnish companies. The concepts of MIPS and the ecological rucksack have been used in information campaigns for households and schools carried out by waste management authorities and NGOs.

From a municipal viewpoint, there are several interesting MIPS-projects under way in Finland and elsewhere. The project "Promoting the eco-efficiency of a city – case Lahti" carried out by the Helsinki University of Technology is examining the water supply, energy supply, and procurement in the city of Lahti on the basis of the MIPS-concept. The Factor 10 Institute Austria is gathering together producers and potential consumers of low-MIPS-solutions in an eco-efficiency databank in order to promote a movement towards eco-efficiency on the procurement markets.

The Material-Euros -project of the city of Helsinki plans to clarify how material flow information can be integrated in the conventional accounting and management practices in a municipal organisation. The technical department of the University of Helsinki is studying the MIPS of the construction and maintenance of university buildings. The Finnish Association for Nature Conservation is starting a research project on the MIPS-figures of different transport modes in Finland.

More information:

Mr Michael Lettenmeier
Eco-efficiency Consultant
APILA network
Tel. +358 40 54 12 876
E-mail: m.l@iki.fi

More information can be found also at:

- <http://www.eco-efficient.net>
- <http://www.dipoli.hut.fi/factorx>
- <http://thule.oulu.fi/ecoeff>
- <http://www.ymparisto.fi/eng/orginfo/publica/electro/waste/advisory.htm>
- <http://www.hkkk.fi/organisaatiot/research/programs/dema/dema.htm>
- <http://www.vyh.fi/sve/inform/publikat/elekt/avfall/material.htm>
- <http://www.factor10-institute.org>
- <http://www.mips-online.info>

EcoProcura in Gothenburg

By Sanna Erkkö

The EcoProcura Conference, organised by ICLEI and the City of Gothenburg in 8-10 September 2003, focused on mainstreaming Eco-Procurement throughout Europe.

Ms. Cristina Marongiu, representing the European Commission, confirmed that the legal framework can no longer be claimed to be a hinder for green procurement. On the contrary, it has developed in favour of the environment at the European level. Ms. Marongiu called on public authorities to implement green procurement at a broad scale. She told that DG Environment is currently collecting a database of green products to assist purchasers, and the database will soon be available at the Internet.

A recent study, RELIEF, has concluded that there is a huge potential for environmental benefits. For instance, Margit Vestbjerg, Vice-Mayor of Kolding, stated: "I am very impressed by the fact that public authorities switching to green electricity alone account for 18 % of EU Kyoto commitments on greenhouse gas reduction." Lacking political will and complexity of implementation for smaller authorities are made responsible for this gap between potential and reality. In the conference, ICLEI also launched a campaign Procura+ to promote sustainable procurement at the local authorities. "More sustainability for the same money – this is the motto which should convince more and more politicians of the concept", said Christoph Erdmenger, ICLEI Director of Sustainable Procurement.

Also representatives from industry underlined the potential influence of public procurement. Unfortunately, only a few pioneers are demanding environmental criteria in procurement, although industry would need more pressure from public procurement to increase the share of



"green" products in their portfolio. By a way of example, Silvio Weeren, Programme Manager at IBM, stated: "Public authorities should focus on very few criteria only, but make sure that all the authorities are asking the same. This would give IT industry a sufficient incentive." A possible example is energy efficiency of computers and displays.

To summarise, there are good examples, such as the City of Gothenburg, who can encourage other local authorities to a more sustainable purchasing. The legal framework is no longer a hinder, but the lack of political commitment, in turn, is an obstacle. If local authorities would by green, it would both impose a huge demand on companies and had a remarkable positive impact on environment.

More information:

www.ecoprocura.nu

Ms Margit Vestbjerg, Vice-Mayor of Kolding, Denmark was impressed by the fact that public authorities switching to green



electricity alone account for 18 % of EU Kyoto commitments on greenhouse gas reduction.

Triip is the First Green Print Service in Tartu and in Estonia

By Siim Läänelaid

The first Green Print service in Estonia is developed in close co-operation between Tartu printing company Triip and the Estonian Fund for Nature (ELF). Green print service is based on vegetable-based printing inks and recycled or FSC certified paper.

The environmental impact of the Triip was estimated by Estonian Fund for Nature using the ecological footprint method. This method allows an organisation to assess the impact of its actions on the environment through consumption of resources such as water, electricity, heating, waste and transportation. In 2002, the ecological footprint of Triip amounts to 76 hectares, making up to 3,6 ha per employee.

Is that number big or small? The comparative analysis of the ecological footprints of different countries published in 1997 indicates the maximum footprint allowance for human consumption 1.7 global hectares per capita, which is the average of current ecological reality. At the same time, the 2000 annual report of the World Wide Fund for Nature announces the maximum



Triip is using vegetable-based printing inks.

level of sustainability to be 2.2 ha per capita. It is quite clear that we need to reduce our resource consumption and environmental impact. One of the possible remedies is definitely the Green Print product as well as establishment of explicit goals of sustainability in the company's environmental policy.

To implement environmentally friendly models of business, the Estonian Fund for Nature has co-operated with several Estonian enterprises. Triip is one of companies that have seriously dedicated to finding and implementing environmentally sustainable solutions in its field. In 2001, the Triip began separate collection of waste paper and cardboard. During the same year, the office and print shop moved into a building that has been reconstructed with ecological building materials. In December 2002, Triip received the Green Energy certificate for purchasing more than 6,000 kWh renewable energy a year, and began measuring its annual resource consumption in absolute units (kg, kWh, m³, etc.). Early in the year 2003, the company's environmental policy was adopted and ecological strategy developed. According to the company's environmental report 2002, energy consumption and waste production are the two most influential aspects of their environmental impact.

In the 2003 contest for the most environmentally friendly business enterprise conducted by the City Government of Tartu and the Environmental Department of Tartu County, Triip Ltd. was recognised for establishing an environmentally sustainable manufacturing process.

Why do we need green print

One of the major ecological problems is excessive and illegal logging. Ecological management of forests is largely in the hands of private forest owners. A private forest owner who respects the balance of nature can apply for the Forest Stewardship Council certificate. The Forest Stewardship Council (FSC) distributes the certificate in strict concordance with criteria for each country. FSC is the only international certificate

acknowledged by giant environmental organisations such as Greenpeace and the World Wide Fund for Nature (WWF).



If a paper manufacturer processes paper from FSC certified timber, it can apply for the certificate for its paper. In order to ensure that, the paper manufacturer must create a system which excludes the mixing of the FSC timber with timber of unknown origin. The FSC certificate therefore guarantees that the timber used for manufacturing the paper is not acquired illegally or by unbalancing the ecosystem of the forest.

Using recycled paper can also save forests as it decreases the need to produce cellulose from wood. Cellulose factories consume large amounts of energy and produce water and air polluting waste. Recycled paper may contain up to 100% of waste paper.

Printing ink consists of a variety of chemical compounds, several of which are petroleum-based. Petroleum is a non-renewable natural resource producing chemical compounds that do not decompose and whose combustion generates environmentally hazardous substances. Today, oils and resins of natural origin are used to substitute petrochemicals. Present-day natural oils produced mainly on the basis of rape and soybean are gaining popularity all over the world. The Green Print product offered by Triip is printed in Lotus ECO Plus ink based on 100 per cent vegetable-based oils with pine resin acting as a binder.

The pigments of Lotus ECO Plus ink used by Triip have been certified non-toxic according to European Legislation Directive 94/62EC. Lotus ECO Plus inks have also been certified the environmentally friendly label Green Swan in the Nordic countries.

More information:

AS Triip – www.triip.ee

E-mail: triip@triip.ee

Estonian Fund for Nature

E-mail: urmo@elfond.ee

Environmentally Friendly Business Fair in Jurmala

By Vita Brakovska



The Jurmala City Council in association with the Business Consultative Board of local entrepreneurs organized a business fair called “Jurmala City offers” in May 9-10, 2003. It was the first business fair in the history of the City of Jurmala.

The event was unique as it implemented city's principle and philosophy of being environmentally friendly. All the exposition stands and other practical furniture were made from folded cardboard. This environmental raw material can be utilized once again for similar or other purposes.

The goal of the event was to inform local inhabitants and city guests about businesses in Jurmala in an innovative way in order to attract more attention to activities and achievements realized by the municipality and its entrepreneurs. The result of the business fair shows, that it is possible to organize similar kind of events also in future. In addition, this gives an example of environmentally friendly practice for other cities in implementing similar events.

The development strategy of the City of Jurmala supports development of innovations and products of high added value as well as strengthening institutional capacity, skills and knowledge. Jurmala is a choice of location for international companies including joint ventures of Latvia and USA, Spain, Belgium, Germany etc. Established Business Consultative council provides closer co-operation between the municipality and local entrepreneurs.

Environmentally friendly stands

The idea about environmentally friendly exposition stands and furniture came from the previous co-operation between the municipality and local company *Vejiem lidzi Ltd. (Gone with the winds Ltd.)*. Its main business activities are consulting and producing environmentally friendly furniture. The folded cardboard small picnic bench “Picnic Fun” was one of the most practical innovative products for marketing purposes, which was used by the municipality in 2002.

32 companies participated in the fair representing various business fields from IT & Electronics and food production to retail sales and tourism and entertainment. The business fair gave a general overview about Jurmala as a business venue and reached the main goal set by the organizer, The Department of Economics and Development which was to inform and educate local inhabitants and business representatives about business activities and investment environment in Jurmala City.

Environmental impact and fulfilment of goals

Sustainable development is one of the basic principles implemented by the municipality of Jurmala City: protection of the coastal zone of the Baltic Sea, waste management and sorting the garbage are only some of the activities done by the municipality and non-governmental organizations.

The environmentally friendly business fair gave an additional contribution into the general philosophy of the city development. Also some of the stands were already used for organizing for some other exposition “Birds in Jurmala” which took place in hotel “Liesma” in May, 2003.

The local authority and its partners are ready to continue this new practice and share an existing experience with other cities.

More information:

Ms Vita Brakovska
Chief Specialist of Investment projects
E-mail: vita@jpd.gov.lv

Mr Maris Belte
Director of “Vejiem Lidzi”
E-mail: vlmaris@gandrs.lv

Environmental Attributes of IT Products

By Hans Wendschlag

Swedish IT industry association establishing an environmental self-declaration system for IT products.

In the early 1990s, customers mainly from the Swedish public sector began to request information about environmental properties of IT products they purchased. As these questions quickly increased, the Swedish IT industry association decided to meet the demand by establishing an environmental self-declaration system for IT products.

As Eco labels like EU Flower, Nordic Swan and German Blue Angel failed to harmonise and establish mutual recognition agreements, the field was open for the IT industry to take the lead. The system was established in Sweden in 1996 and expanded to Denmark and Norway in 1998. Finland will join in 2003. Any other European country is also welcome, should customer demand increase.

The declaration contains most criteria of Eco-labels like the Blue Angel. The 2003 version includes most criteria from the EU Flower for personal computers. The reason behind is the EU DG Environment communication that recommends member states to include EU Flower criteria in their call for tenders under EU Public Procurement Directive. The declaration addresses several issues like environmental management and reporting and product attributes like upgradability and energy consumption.

Majority of IT companies participate. Some 45 companies have signed a contract to use the system. This represent more than 80% of the market share per product category. Some 2500 IT Eco Declarations have been issued since the system was launched.

More information about the system, see www.itecodeclaration.org

More information:

hans_wendschlag@hp.com
Tel: +46 733 482072
www.hp.se/environment

Green Philosophy the Guiding Star for Malmö-Restaurant

By Anna Granberg

To choose between a non-environmental labelled product and an eco-labelled one is slowly becoming a every-day dilemma in the whole Baltic Sea Region. But to enjoy a pleasant evening out on a restaurant with your green consciousness untouched is not that common.

Björn Stenbeck has made his dream come true at the Salt & Brygga restaurant in the Western Harbour in Malmö, Sweden. According to Björn, it is not just as simple as serving organically grown potatoes to guests. For him it means a total concept. The sustainable thought is the guiding star for everything in his restaurant, from the eco-labelled dishing powder and the ecological grown cotton



In Salt & Brygga, at the Western Harbour of Malmö, commitment to environmentally friendly thinking is thorough from food to staff.

towels in the toilets to the composting of all the organic waste and energy-saving measures. The philosophy of Björn includes also a human and health angle. One of the aims at the restaurant is to create as good as possible working environment for the staff. For example, the plates are lighter than average to prevent occupational injuries.

Many have the belief that organic food is the same as green lentils and vegetable mash. These impressions will be put off at the first visit at Salt & Brygga. The menu is multiculturally inspired but with roots in the soil of the region of Scania. A typical lunch at Salt & Brygga could be a meat casserole with thyme marinated yellow beet roots or a vegetarian alternative, mushroom

and potato cake with root vegetable-ratatouille. And if it is a Sunday lunch a bottle of organically grown red wine or a glass of organic beer could be enjoyed with the meal. And to top up your impression the non-smoking servants will serve your meal in a totally non-smoking environment. So when ever in Malmö don't miss to pop by at Salt & Brygga.

More information:
www.saltobrygga.se

Organic Food Circle

By Sanna Erkkö

In the City of Turku, citizens have established special food purchasing groups, Organic Circles, in order to purchase organically grown food directly from farmers.

Currently, there are several Organic Circles active in the city. The largest one is active at the campus of the University of Turku. The aim of the University Circle is to bring closer students and employees of the University with the farmers of the Turku region. Organically grown products are often very expensive in the shops because of the smaller quantities. When students buy directly from the farmer no extra costs occur as the Circle operates on voluntary and non-profit basis.

All 170 members can make their order once a month in the Circle's homepage between Monday and Thursday. The goods are delivered following week on Wednesday. There is a lot of work on delivery days such as receiving the food, setting up the distribution event, and then sorting out the food according to the orders in 'ready-to-pick-up' parcels. Normally, 70-100 persons order food, so the piles of potatoes, flours, onions and cheeses easily fill up one large room.

Besides that this is a cheaper alternative for the purchasers of organically grown food, it is also an important market channel for the farmers. For instance, the University Circle is the second largest customer for some local farmers. The farmers have also been satisfied with the Circle(s) as customers. They know that there is a demand for their products, and they can also transport larger quantities to one single place. Purchasers, on the other hand, know from where the food they eat originates, they pay less than in the shops for it and they can support local farming.

Sustainable Canteens in Kolding

By Amalia Ochoa

The experiences of the Municipality of Kolding in Denmark on promoting a responsible public consumption demonstrate that a large part of potential environmental benefits that can be achieved, are related to employees exerting conscious environmental behaviour at all levels of the organisation.

The municipality of Kolding had two different framework contracts for food products, one for organic and one for conventional products. Unfortunately, the supplier of organic products went bankrupt, and the supplier of conventional products is only able to supply a limited amount of organic food products, primarily milk products. Furthermore, one of the Municipality's Agenda 21 aims is that environmentally conscious kitchen operations should be implemented, and a lack of organic food supplies was therefore a concern.

A regional project, which included both private and public canteens, was initiated proving very beneficial in fulfilling this gap. Ten kitchens in the Municipality of Kolding joined the project, whereby culinary and environmental experts made a joint effort to create canteens where healthy food with a minimum of environmental impacts was produced. The purchasing behaviour and cooking habits of those involved in the project were examined and mapped in order to identify opportunities for economic savings. The savings were then used to increase the amount of organic food products used in the canteen, creating a cost neutral solution. A second round of mapping was performed a few months later which revealed that two thirds of the participating canteens were successful in reaching the goal of 20% of purchases being organic (the highest being 62% in one canteen).

The successful outcome of the project can be attributable to the organisation of the project, whereby the people who had a thorough knowledge of the market for organic food products assisted canteen staff to find possible suppliers and make the necessary contracts. Food recipes, where part of the meat was replaced with vegetables, result-

ing in further financial savings were also used. The project team was also able to help with technical solutions that could reduce the use of water and energy. The future goal is to find ongoing funding for the persons involved in the project. There is no doubt that the canteen staff currently involved, in general, are very motivated in driving the success of this initiative, however, experience shows that new staff should also be supported in order to maintain the same levels of motivation.

More information:

Ms Amalia Ochoa
ICLEI
E-mail: amalia.ochoa@iclei-europe.org

Essays on Future

By Anna Antson

Sustainable consumption and production was one of the themes of an essay competition aimed at youngsters in Jõhvi, Estonia and its twin cities.

Problem of ecology and recycling is worldwide and the current situation worries equally both grown-ups and youngsters. That is



Students from Germany, Estonia, Denmark and Netherland visited also the Aalborg Youth Centre.

why students of two secondary schools of Estonian municipality Jõhvi participated in an international essay competition organized by its' twin town Norderstedt, Germany, in spring 2003. The aim of the competition was to get more intensive and wider contacts between the youngsters of the twin towns Zwijndrecht, Netherlands, Norderstaet, Germany, and Jõhvi and Kohtla-Järve, Estonia. The participants were between 15-16 years old.

The knowledge about Agenda 21 differs very much among youngsters of different countries, thus the proposal to organise this competition. Topics covered "Agenda 21" by the topic "My world today – my world 30 years later", rubbish recycling to the TV influence on young peoples' mind, sustainable consumption and over-population.

The essays were very different. However, something united them all. It was the anxiety about what would happen to Earth, how the humans' careless attitude to the environment will influence their lives and whether any changes are possible.

Of course these topics are very broad and need further investigation and elaboration. However, the students' worry about the future of the Earth and care of the environment gives hope.

The writers were rewarded by a trip to Aalborg in Denmark, organized by the local government of Norderstedt. During the trip, the students visited Aalborg youth center and got acquainted with the ecological projects worked out by local students. The students met also a representative of the technical department who told about their plans of renovation of the town and improving the situation with old factories and lots of wastes.

This trip was useful as well as interesting. Moreover, it was to make students think and give motivation for further projects and actions.

More information:

Ms Anna Antson
Jõhvi Russian Gymnasium
Tel: +372 33 52052
E-mail: annely.reimaa@johvilv.ee

Communicating the Benefits of Eco-Procurement in Vienna

By Eva Persy

In Vienna, Austria, eco-procurement officially started in 1999 as one of the emphasis of the Climate Protection Program (KLIP). The Vienna City Council adopted KLIP in November 1999.

Since then, the already existing and future activities to buy green have been combined under the project 'ÖkoKauf Wien'. Experts from relevant departments as well as environmental experts from outside administration, ca. 200 people, are brought together in 18 working groups to develop ecological criteria specific to products or product groups. These groups include electrical appliances, light bulbs, paper, cleaning and disinfection materials as well as products and services for building construction and public works, technical services and interior decoration. Further examples of the project's activities include an initiative for more organic food in hospitals, kindergardens, schools, and residential homes for the elderly, as well as the purchase of low-emission vehicles for the city of Vienna's vehicle fleet.

Three consultative committees, including public relations, provide adequate framework conditions for the individual working groups and their specific work.

So far 'ÖkoKauf's Public Relations Consultative Committee' has been successful in "marketing" eco-procurement. Some of the activities are listed below to show the benefits of buying green.

General measures, which are not aimed at a certain target group:

1) Creation and use of own Ökokauf-corporate design including a logo, colours, etc..

2) Production of posters, folders, brochures and videos.

3) Creation of: www.ekokauf.wien.at

Specific measures are aimed at certain target groups

Regarding the target group "officers" they include the production of information material to give support in applying the eco-criteria.

One example regarding the production of "hands-on" material for officers is a sample collection of ecological printing paper. This collection contains available ecological printing papers thus enabling the officers to examine paper quality, thickness, colour, etc. The collection has been prepared in close co-operation with the Secondary Technical and Vocation School for Arts and Crafts and Austrian paper retailers. Following the great success of the first edition it was decided to reissue this collection in accordance with EU standards. The completed collection shall not be reserved to the city administration alone but shall be made available to all interested parties.

More information:

Vienna Ombuds-Office for Environmental Protection

E-mail: pea@wua.magwien.gv.at

www.wien.gv.at/wua



Green Procurement in Rostock

By Dagmar Koziolk

Hanseatic City of Rostock is implementing green procurement in their administration.

In order to get EMAS certified, the Environmental Department had to check the consumption of energy and water and the use of environmentally friendly office materials. That's why there is a huge number of activities to implement green procurement for the whole administration of the city.

Since 1998, the ecofriendliness of materials has been assessed regularly. Measures to encourage use of environmentally sustainable products have been taken. One of the most important ones was the introduction of a catalogue of articles. It consists of a list of usual office products which are categorized as environmentally friendly, standard, or environmentally harmful. Colored marks such as green for environmentally friendly and red for non-environmental one, make it easy for city officers to work with this catalogue. It is characterized by easy rules and instructions, direct availability via the administration's intranet and, soon, provided with an automatic ordering and evaluation system delivering also regular reports on the status of environmental procurement. Also, employees are regularly informed in the staff journal on recent legal developments and new ecological products.

A crucial basis for implementing green purchasing is the co-operation between officers responsible for procurement, the Environmental Department and the Agenda 21 Office. Important impulses come from the procurement network BIG-Net, and from ICLEI projects, for example RELIEF.

More information:

Dr. Dagmar Koziolk

Environmental Department

Tel: +49-381-381 7336

E-mail: dagmar.koziolk@rostock.de

Rostock's Water – Breaking New Ground

By Karin Wohlgemuth

When Rostock city council and the district mayor decided to conclude a concession agreement with Eurawasser GmbH in 1992 it caused a stir throughout Germany. How have things worked out, ten years later? Mr Reinhard Lübker, managing director of Warnow-Wasser- und Abwasserverband (WWAV), and Mr Pierre Bütz and Dieter Degener, managing directors of Eurawasser GmbH Rostock (EWR) kindly agreed to be interviewed.

Mr Lübker, you are the managing director of WWAV and familiar with Rostock's water resources management. Why have you given away water supply and sewage disposal, which are both core responsibilities of local government?

- We had realized that meeting the new environmental norms would mean around 450 million investment, and that we would have trouble meeting the deadlines. So, we put the tasks of water supply and sewage disposal out to tender and looked for a private-sector partner. We chose Eurawasser because its model offered us the greatest influence. You see, we haven't given anything away.

Mr Degener, you started developing the Rostock Model in 1991, and have been running it for 10 years. How are the responsibilities shared between WWAV and EWR?

- In Rostock we have a concession model with a couple of special features. WWAV has control of the statutes, powers of instruction and supervision, the right to obtain information, and a say if substantial changes are made to the company structure of EWR. Eurawasser ensures that top quality drinking water is supplied as quickly as possible and that the statutory requirements for sewage disposal are met. Eurawasser finances all the necessary investment and improvement measures at its own risk, even though the prices and charges are set in advance. All plant and installations, including newly built facilities, remain or become property of WWAV, and WWAV has a say in awarding contracts for building and modernization work.

Are the local authorities and the citizens in the Rostock region pleased with the services provided by EWR, Mr Lübker?

- In terms of drinking water supply and sewage disposal, the quality of life has improved greatly. This is most noticeable in the quality of drinking water. Since the expansion of Rostock waterworks was completed in 1995, the citizens have finally been getting tap water that is good to drink.

The biggest investments were made in the sewage sector, because that's where there was most catching up to do. Rostock's central sewage plant was a purely mechanical system until then. In 1994/95 we turned it into one of the most up-to-date in Europe. Every year the modern central sewage plant takes about 900 tonnes of nitrogen and 200 tonnes of phosphorus out of the sewage, thus, reducing the nutrients in the Baltic Sea.

Before 1993 sewer coverage in the rural areas was only 28%. We have now reached 80% and about 400 km have been added to the sewer network.

The concession agreement runs until 2018. Do you think this long duration could become a straitjacket for the local authorities?

- You have to agree to make an agreement. We drew it up together with the City of Rostock and the Rostock district water and sewage association, which later became WWAV. The concession agreement is no straitjacket. When we found that the conditions we were operating in had changed, we adapted the agreement to the new economic framework with the first supplementary agreement in 1995. Eurawasser's remit was expanded, for example to cover storm water. Four years later we again looked for solutions in cooperation with WWAV, this time to keep price increases to a minimum. The third supplementary agreement will apply until the end of 2006. You see, the contract is not a dogma.

Note for readers

This interview was kindly provided for the Baltic Cities Environmental Bulletin by the UBC Office Rostock.

Ms Karin Wohlgemuth from UBC Office Rostock interviewed Mr Reinhard Lübker, managing director of Warnow-Wasser- und Abwasserverband (WWAV) and Mr Pierre Bütz and Mr Dieter Degener, managing directors of Eurawasser GmbH Rostock (EWR).

Mr Bütz, what is the importance of EWR for the parent company Suez, in Paris?

- Suez has been in the private-sector water business for more than 120 years, worldwide. Rostock was our first step into the German water market, and as the European Union expands Rostock grows in importance as a reference project. In 2002, EWR signed a co-operation agreement to assist in building a new sewage treatment plant for the town of Maribor in Slovenia. Our sewage experts have been providing technical services there since 2002, and the staff who will run the new plant have been trained in Rostock.

Mr Degener, how has the Rostock Model worked out? Are you and your colleagues in Paris satisfied?

- In Rostock we can look back on ten successful years. Rostock is and remains our flagship, but now there are also Eurawasser firms in Goslar, Leuna, Güstrow-Bützow-Sternberg and Saale-Unstrut.

In Schwerin we have founded a water supply and sewage disposal company, Wasserversorgungs- und Abwasserentsorgungsgesellschaft (WAG), together with the public utilities, and in Mecklenburg-Western Pomerania we supply a quarter of the population.

More information:

Ms Regina Stolle
EURAWASSER Nord GmbH
Tel: +49-381-8072 160
E-mail: r.stolle@eurawasser.de

Governance, Finance and Capacity

By Edward Cameron

Governance, Finance and Capacity in a review of waste management practices in the 12 EU Accession Candidates.

This recently produced report concentrates on two major challenges facing municipalities in the CEEC, namely how to meet the strict requirements of EU Accession, and how to deal with the rising waste burden.

Significant progress has been made in the field of waste management during the past 20 years in the existing 15 Member States that comprise the European Union. Today, policy innovations, coupled with new and improved technologies provide a better spread of options to decision makers. Networks of best practice and organisations with mandates to build capacity at the local level support the development of integrated waste management strategies throughout the EU. Unfortunately many of these advances have not yet taken root in the 12 EU Accession Candidate Countries (CEECs).

The information presented in this report provides a mixed view of waste management in the EU Accession candidates. There are great differences between and often even within candidate countries. Having said that there are some recurring deficiencies that are unfortunately common to all 12 countries to one extent or another.

GOVERNANCE problems – The most striking problem is the failure to communicate. Local authorities rarely communicate with each other, have poor internal co-ordination between municipal departments, and have insufficient systems of consultation with local stakeholder groups. These problems, if left unchecked, will seriously undermine the efforts to implement and enforce environmental legislation.

FINANCIAL problems – Efficient waste management comes at a cost and this cost is presently too large for most municipalities in the CEEC. The provisions contained within waste legislation (especially those



relating to taxes and charges) do not adequately cover the cost of providing quality waste management. Moreover, despite the influx of foreign aid and investment, most notably from the European Union, the bulk of this money remains tied up at the central level. The result is that too little money filters down to the local level where it is needed most.

CAPACITY problems – There is a significant lack of resources at both the central and the local levels. This translates into a lack of people to ensure compliance and enforcement, a lack of expertise, and most crucially a lack of good practice exchange. Greater efforts need to be made to build capacity by strengthening networks of support throughout the CEEC.

This report represents a small contribution to addressing some of these issues. The report also serves as:

- A guide to policies, laws, and initiatives in the file of waste management throughout the European Union Accession Candidate Countries (CEEC).
- A resource of information, contacts, and support for practitioners and local officials.
- A presentation of the challenges and opportunities for improving waste management in the CEEC.
- A review of the progress made in the CEEC in meeting the requirements of the European Union's *acquis communautaire* with regard to waste management.
- An overview of some of the key problems facing local / regional government in the waste field.
- A series of policy recommendations aimed at the European institutions and designed to improve the quality and focus of their support to local actors in the Accession candidates.

The report was prepared by CameronSDS on behalf of the Austrian Association of Cities within the framework of the EU Commission LOGON II project. It can be downloaded from www.cameronsds.com

Waste Management in Brussels

By Barbara Dewulf

Waste is generated at the local level but results from our current lifestyles and consumption patterns. This means that tackling the waste problem must not be restricted to the end-of-pipe solutions, it must also encompass strategies to tackle production and consumption.

Local and Regional Authorities (LRAs) have major incentives to act resolutely in these fields. After all, they are the final recipients of our waste, and it is in their interest to tackle the waste growth.

Waste policy is guided by a waste management hierarchy, which prioritises waste prevention at source before recycling and other forms of recovery, and the disposal of waste in an ecologically responsible manner, for example in a landfill. Waste prevention is thus top priority. But what exactly does this involve? Prevention is not only a matter of reducing the weight of waste. It is also about buying behaviour, rational consumption, production methods and lifestyles.

The combination of waste prevention at source, measures relating to production, consumption and rational use, and closed-loop resource management can be gathered under the heading of a 'dematerialisation' policy. Dematerialisation seeks to achieve the same level of economic development or consumer well-being with the consumption of fewer material and energy resources.

The 3rd Waste Prevention and Management Plan for the Brussels Region

The draft of Brussels Region's Third Waste Plan emphasises the promotion of more sustainable consumption, starting from the concept of "dematerialisation". In this context, the Plan singles out households and offices as targets for its actions.

Planet to live in or throw away

The Brussels Institute for Management of the Environment (IBGE) organised a double exhibition, called "Planet to live in or throw away", which focuses on the supermarket trolley, the symbol of our consumption patterns. The objective was to raise everyone's awareness of the consequences of our lifestyles on the production of waste and on the use of natural resources.

The first part of the exhibition, "The Earth, a user's guide", presents the global challenge. It was created by the Association of Cities and Regions for Recycling (ACRR) with the support of the European Commission. It attempts to highlight the problem of the hidden flow of waste and explains the concept of ecological footprint.

The other part dwells more on our supermarket shelves. "At the useless and wastefulness department", the shopping trolley fills up. Products on display may prove thought-provoking and can suggest alternatives that would be both greener and cheaper.

The aim of the Brussels Research Institute for Sustainable Consumption is to collect objective information on responsible consumption. This information, based on in-depth research and product analysis such as composition and weight of content and packaging as well as price, consists *inter alia* in holding certain brand names up as examples. This is also practical as it meets a genuine demand of the population. A consumer, who is better informed, is more aware and is so liable to change his/her behaviour.

Between 1999 and 2002, the following subjects were studied: logos, washing powders, cosmetics, batteries and chargers, all-purpose cleaners, pesticides, snacks, light bulbs, toilet cleaning products, wipes, gadgets, and over-packaging. Thanks to this research, it was possible for example, in the field of

washing powders, to reward certain brands with "environmental gold, silver and bronze medals".

For offices, the Third Waste Plan proposes actions aimed at introducing environmental criteria in public procurement and in offices and rationalising the use of the new technologies. The latter category of actions has been introduced in the Waste Plan because the introduction of new technologies at large scale such as Internet and e-mail, has raised the quantity of paper waste tremendously, mainly because they were introduced without any support regarding the rational use of paper.



Pilot projects

In 2002, IBGE launched pilot projects in public and private enterprises to assess the potential of paper and energy savings allowed by the proper use of new ICT. Ten pilot entities have been selected and three potential scenarios for improvement identified. These scenarios included the awareness raising and education of employees, the introduction of new ICT tools and the reflection on the structural organisation of the company. The pilot projects have shown a potential reduction of paper consumption between 10% to 30% per office only by making the most of existing tools. The personnel often have a poor knowledge of potential and available functions. Indirectly, the reduced consumption of cartridges and toners and the reduced use of energy have also been calculated.

Producers responsibility

The second main pillar of the Third Waste Plan in its objective to promote sustaina-

ble production, is the further development and reinforcement of producer's responsibility principle. This principle obliges the producer of a product to take it back once it becomes waste. This 'take back' is combined with an obligation to handle the waste appropriately, by respecting reuse and valorisation objectives for each type of waste.

Producers responsibility has an indirect waste prevention effect. To achieve the valorisation objectives imposed, the producer will try to facilitate the dismantling of the products and the valorisation at the waste stage. Therefore, he will change the concept of the product ("eco-design").

Three Belgian regions have chosen to adopt, ahead on the European agenda, legislation concerning producers' responsibility for several waste streams. As a consequence, a take back obligation exists for packaging waste, for waste from paper or cardboard products, for end-of-life vehicles, for used tyres, for Waste from Electrical and Electronic Equipment, for batteries, for used medicines, for used oil, for fats and oils and for photography products.

The system being rather new, it has been focusing mainly on the organisation of the taking back of the waste streams concerned, but more emphasis will be given in future on the main objective of this tool; to achieve more sustainable production.

More information:

Mrs Barbara Dewulf/ IBGE-BIM
Tel.: +32 (0)2 7757785
E-mail: bde@ibgebim.be
www.ibgebim.be

The Brussels Region is an active member of the Association of Cities and Regions for Recycling (ACRR), an international association with pedagogic and scientific aim. With more than 70 member Local and Regional Authorities in Europe, ACRR promotes the exchange of information and experiences on the sustainable management of municipal waste, notably through prevention at source, reuse and recycling.

Contact ACRR: +32.2.775.77.01
E-mail: acrr@acrr.org
www.acrr.org

The Biofuels are Future Tendency

By Annemari Aboste

Kotka Energy Ltd. concentrates on renewable energy production and heat production

The City of Kotka has done remarkable investment on a well fare of the town's population by rearranging its energy business activities. Last spring, Kotka sold the electricity sales- and network activities to Kymenlaakson Sähkö Ltd, which is a strong regional energy company of Southeast Finland. The city increased its share of ownership and is today the biggest shareholder (27%) in that company. The arrangement does not influence on contracts with customers in any way. Despite of the pressure for increasing the electricity prices in Nordic electricity markets, the town population is guaranteed reasonable electricity price in the future, too.

The Kotka Energy Ltd. continues to develop its business activities with 40 professionals. The intention is to concentrate on district heat activities and on renewable energy production both in Finland and in Lithuania. UAB Suomijos Energija in Lithuania is 60% owned by the City of Kotka. Other shareholders are NEFCO (30%) and Fortum Power and Heat Oy (10%). By the end of October, new biofuel company UAB Ekosiluma will be established. It will be owned by Suomijos Energija, Fortum and NEFCO.

The wind mills and Nature-Ilona electricity

'Nature-Ilona electricity' is produced by two windmills by the Kotka Energy Ltd. Kymenlaakson Sähkö Ltd. sells it then to its customers. Nature-Ilona is a trademark for selling electricity. Only the amount which is produced is sold under the trademark, so the customers can be sure that the electricity they buy is really produced natural way. Based on good experiences on the windmills, two new mills are planned to be build nearby the existing ones at Mussalo Port area by 2005.



The biofuel boiler plant of Hovinsaari

The Kotka Energy Ltd. is building a Bio Power Plant of 65 MW in Hovinsaari, in Kotka. On completion of the Bio Power Plant, the production will be 56 MW district heat and 17 MW electricity. This way the total production of Hovinsaari Power Plant, including the existing gas fired CHP, is 110 MW of district heat and 47 MW of electricity. This covers 80% of the total need of district heat in Kotka area. The electricity production covers about 25% of the total need in Kotka network area.

The Bio Power Plant will use wood fuels such as bark, wood chips and wood residues. In addition to these, also peat will be burned. The investment was made for the modern and efficient flue gas scrubber.

A company called Enprima Ltd is responsible for planning and projecting of the Bio Power Plant. It also delivers the steam boiler. BMH Wood Tehnology Oy delivers the bio fuel handling system. Ion Blast Oy is responsible for delivering the electric filter and Kvaerner Pulping Oy is responsible for delivering the flue gas scrubber.

Waste energy plant

The Kotka Energy Ltd. plans to construct a power plant which uses assorted waste as a fuel in factory grounds of a company called Ahlstrom Cores Ltd. The company manufactures of core board.

Kotka Energy Ltd has done two separate studies about utilisation of assorted waste as a fuel. In preliminary project plan it was decided to choose grate technology taking into consideration environmental aspects, technique and economy. Currently, an estimate survey of environmental impact about the project is in progress.

More information:

Mr Kalle Patomeri, Project Manager
Tel. +358 44 7099 521

European Mobility Week

From 16 to 22 September cities and towns in more than 20 European countries organised the second edition of the European Mobility Week (EMW).

For a whole week, over 88 million European citizens were able to take part in a wide range of activities dedicated to the promotion of sustainable mobility and transport modes. Central theme for this year was ACCESSIBILITY, chosen to support the European Year of People with Disabilities. The European Mobility Week led up to the "In town without my car!" day (Car Free Day) on 22 September.

Organised for the first time in September 2002, the European Mobility Week is a major initiative built on the Car Free Day and supported by the European Commission (DG Environment), with the aim to promote sustainable urban mobility and raise public awareness on the negative impact of current urban mobility on our environment and quality of life. More particularly, the European Mobility Week is an opportunity to encourage citizens to change their travel behaviour and shift to more sustainable modes of transport.

The number of cities organising the event in 2003 has increased to more than 600, compared to 431 in 2002. For example, this year, the Car Free Day was celebrated in more than 1100 European cities and towns, with 909 participating and 217 supporting cities.

Local authorities participating in the European Mobility Week 2003, are encouraged to apply for the European Mobility Week Award 2004, rewarding the cities with the most comprehensive and innovative Mobility Week. Deadline for submitting applications is 31 December 2003.

Source: www.mobilityweek-europe.org

More information:

www.mobilityweek-europe.org

Environmental Demands on Purchasing in the City of Gothenburg

By Lars Parkbring

In Sweden, the sum spent on procurement within public sector amounts to 400 billion kronas a year. In the Nordic countries, a great deal of the procurement is handled by the local authorities, who are in an excellent position to influence suppliers to offer more environmentally compatible goods and services.

The City of Göteborg is one of the most industrialised regions in Sweden with about 450 000 citizens and 750 000 in the Gothenburg region. The city organisation consists of about 80 administrative units and municipal companies with more than 45 000 employees. The city concludes agreements for some seven billion kronas every year. The City of Gothenburg Procurement Company concludes central agreements for some two billion kronas in turn.

The Procurement Company is a wholly owned municipal enterprise, which was founded in 1994. The main task of the company is to co-ordinate the procurement of goods and services that are used by several municipal departments and companies.

In Gothenburg, local politicians saw centrally controlled procurement, which took environmental protection into account, as a way of limiting the use of products that were environmentally hazardous and waste of resources. Also, the costs could be reduced by means of favourable contract terms with the suppliers. The developing procedures for purchasing, including environmental criteria began in 1989 with a thorough survey covering legislation and regulations relevant for public procurement. The result was that, in 1990, the City Council made a unanimous decision to oblige the City Committees, Boards and companies to include an environmental assessment every time a decision to purchase was made.

The former Procurement Authority was assigned to develop a model for environmentally aware purchasing together with the Environmental Protection Office. This model, based on political decisions, established working methods and information strategy, has been put into practice.

The Gothenburg model

The Gothenburg model for undertaking

environmental assessments in procurement consists of several elements. It takes into account the current law and regulations, for example the Law on Public Procurement. The model follows decisions of the Council, for example in a form of the Environmental Policy of the City of Gothenburg. All suppliers who submit tender to the City of Gothenburg must provide an environmental declaration and each procurement is subject to an environmental assessment. Special project teams consisting of purchasers, users, suppliers, etc., develop environmentally optimised well functioning products and services. National Guidelines for sustainable procurement are also set up.

Awareness and understanding of environmental work requires that the staff is informed and committed. That means that information about the Council's decisions and the results of the project teams are given regularly. Information about the environmental improvements of each purchasing is given to concerned departments after each procurement has been undertaken. To improve environmental skills, training is incorporated in the continuous staff development and training programme. That means that general courses on environmental questions and special courses on environmental-conscious purchasing are organised.

To summarise, the benefits for the environment mean benefits for the administration. Co-ordination of transports reduced the number of deliveries and so lowered prices. Environmentally friendly limited assortment caused limited stock in trade, which also lowered the prices. Number of suppliers was reduced, so the order processing became more effective. This meant that the number of invoices was reduced causing less administration work and so lower prices.

The business and local authority activities

differ widely from each other covering everything from waste management and energy production to a child and health care. Most of the organisations need to make purchases, which fall within a framework of the general agreements. Others handle most of their purchases themselves. Depending on the line of business and what is needed, different ways to use the model have been chosen. The various experiences then spread to other administrative units and companies via collaboration between the local authority organisations.

The information is disseminated both via joint committees and networks. In some cases, the City Council has also made a decision that criteria produced in individual companies or joint projects are to apply generally to all purchasing by the local authority.

The model also includes collaboration with suppliers during contract period. Joint committees set up projects together with suppliers to develop their products or find solutions that open up new routes to a healthier environment. The projects are often incorporated in the agreements and have included the reuse of packaging and products, and organising transports of different product groups from different suppliers to be delivered in the same consignment. In this way we also give small and medium-sized companies a chance to be a supplier to the City of Gothenburg.

Co-ordinated purchasing and the environmental demands that are imposed on suppliers have helped Gothenburg get more for our money, while progressively reducing the burden on the environment at the same time.

More information:

Mr Lars Parkbring, City of Gothenburg
Tel: +46-31 613702
lars.parkbring@upphandlingsab.goteborg.se

GreenZone - a Unique Environmental Quarter in Umeå

By Stina Fahlgren

In Umeå, a unique environmental motorquarter was established in 2000. The quarter is unique because of its adaptation to the recycling principal. It offers services both for cars and drivers with its complete car-facility, “an energy station” with a grocery store and a fast food restaurant. The project is named GreenZone. In this article the project is viewed from an urban planning point of view.

The area is situated in the northern outskirts of Umeå, Sweden, and it is a facility centre for motorists. It consists of a Ford motor facility, an energy station Statoil, and Macdonald's. The wooden building with its' natural colouring and sedum-covered roof easily rises attention. There is a pond and the area is surrounded by a stream for the local rain water management. The driving lanes are covered with grass-armed tiles, gravel or concrete tiles to facilitate permeation of the surface.

Alternative placement

In the spring 1997, the Umeå Agenda 21 group aimed to start an ecological pilot project. At that time, an environmentally interested car salesman Per Carstedt appeared at the office and asked if he could locate his new building, later called GreenZone, in Umeå. His partner was Mr Anders Nyquist, an architect competent in ecological and healthy building principles. The Agenda 21 group was delighted about this proposal, but the road to implementation was not so easy.

According to the Umeå spatial plan there was no suitable place for this kind of establishment. Eventually, a good site was found, but there were already houses there. Finally, the problem was solved as one of the houses was moved and the other demolished and recycled.

Planning work

Aim of the objectives for the planning process was to take environmental solutions in the buildings and recycling into



View of the GreenZone from the road.

account as far and as well, as possible. All buildings within the site should fulfil strict environmental requirements. The companies interested in starting up a business in the area had to fulfil these environmental requirements. An environmental programme, containing exploitation agreements between the city and the companies, was set up. The programme covered both the construction and the maintenance stage of the buildings. It also stated that the staff in the businesses should be educated in environmental issues and that all businesses should have an environmental management system.

All the building material should be healthy and contain no hazardous substances. Selection of plants is important for the recycling of water within the area as well as the pond, use of solar energy and reuse of heat energy was also looked upon as important.

The company Ecosystem in Scandinavia Ltd. will take part in the follow-up and evaluation of the project together with the municipality and the University of Umeå. The site was ready in summer 2000.

Money

Is it economically feasible to build something like GreenZone? The project was, of course, more expensive than a conventional one because on the development work that had to be carried out before construction work. If municipalities in the Baltic Sea Region would like to facilitate this kind of projects, Mr Per Carstedt gives them the advise to look over their taxation systems and the fees to create a good incentive for companies that want to invest in environmentally friendly techniques.

More information:
www.greenzone.nu

Nature and Environment Reports in Agricultural Sector of Kolding

By Ib Clausen and Michael Damm

The agricultural sector includes over 60% of Denmark's open countryside and is therefore an important factor in the work towards sustainable development. As part of the Agenda 21 work, Kolding Municipality has therefore initiated development of a concept for continuing nature and environment improvement by the agricultural sector together with sector representatives and the local agricultural organisation.

The improvements are meant to become an integral part of production development on the farms. The purpose is to develop a "nature and environment inspection report" for each farm. The objective is to increase nature areas and decrease environmental impact and to provide an overview of opportunities for expansion of, and changes to, the production at the farm in question. In addition, the work aims at facilitating the adaptation of the agricultural sector into European agricultural policy.

Mutually binding co-operation

The nature and environment inspection report is based on the agricultural report of Green Networks¹ and will therefore contain objectives and action plans for environment and nature initiatives of an individual farm. The farmers undertake to meet objectives and carry out actions recommended in the report and to update the objectives and action plan every second year. In addition, the farmer is offered free labour from a municipality's department of manpower to carry out one or more of the nature-improving initiatives identified in the nature and environment inspection report. As co-operation is voluntary, both the ob-

jectives and the action plan will be prepared in close dialogue with the individual farmer.

Long-term project objectives

Long-term project objectives are to examine the need for more knowledge of the environmental impact and nature potential of an individual farm. It also creates new network of co-operation between environmental authorities and agricultural organisations with a focus on sector's impact on nature and environment, increased efficiency of farming operations and facilitation on the sale of an individual farm. In addition, the objectives of Kolding Municipality's agenda 21 to create more natural areas and to reduce the environmental load on an ongoing basis are considered.

To summarise, the purpose of the work is within the framework of network co-operation, to develop and implement an extended service to the agricultural sector that caters for the need to promote a sustainable development within the sector.

Project background

The project will not only benefit nature and environment, but also improves the farmer's competitive strength in a market that is increasingly characterised by multinational food manufacturing companies, reduced EU subsidies, increased competition from the new EU member countries as well as the global market. The following factors have been taken into account:

Agenda 2000 in the European Union

The overall plan for agricultural development in the EU, Agenda 2000, stipulates a minimum environment and nature standard as a condition for entitlement to EU subsidy.

Sale of agricultural property

As a result of current environmental and planning legislation, there is a need for buyers of agricultural property to know the limitations and expansion possibilities that exist on the individual property.

Environmental legislation

Increased environmental control of the agricultural sector means that demands to an individual farmer, as far as the management of environment and nature standards are concerned, will continue to increase.

Goal of the Municipality's Agenda 21

Work towards the Municipality's Agenda 21 goal of increasing nature areas and the amount of ecological land in the landscape.

Food industry

The increased focus on healthy food, food ethics and transparency in the production means that a farmer must be able to not only manage his operations in a manner that is environmentally correct and with animal welfare in mind but that he must also be able to document it.

More information:

Mr Ib Clausen
Environmental Department
E-mail: ibcl@kolding.dk

¹ Green Network has existed since 1994. It is a voluntary private/public network in the region involving mutually binding co-operation about environmental issues of importance to trade and industry.



Eco-Theatres in Gdynia

By Adam Kaldunski

The first municipal review of small drama performances dedicated to ecology, natural environment and its protection is one of the projects launched within "Gdynia-an environmentally friendly city" programme, which has been defined in the *Strategic Plan for Gdynia*.

The event was organised by the Eco-Development Division of Gdynia City Hall. The solemn final with the presentation of theatrical performances took place on the Gdynia Municipal Theatre. It added splendour to the celebrations of International Environmental Protection Day.

The objective was to improve ecological sensitivity of children through combination of art and environmental protection and environmental creation. 28 theatre groups, 600 actors representing 24 kindergartens and schools from Gdynia, performed within the three-day review.

The jury, presided by Mrs Beata Buczek-Zarnecka, an actress from Gdynia Municipal Theatre, assessed not only the artistic character of performances but also their significance with the ecological subject matter of the review. "The Good Little Ghosts" from Kindergarten no. 22 won the first prize in their own category. The play was called "Let's save nature" and it was done in a colourful, fresh and artistic way. A musical entitled "Begin with yourself" performed by TAO team from Primary School no. 17 won the category of primary schools. It was awarded for perfect combination of music and performance and, most of all, for the original idea as well as artistic and ecological value of the play.

Second prizes went to "Ladybirds" team from Kindergarten no. 31 and a play "Excursion to the forest" and to the "Oak-people" team from Kindergarten no. 50 and for the play "Rubbish-boy and Rubbishella". In both cases, the prize was awarded for a showy combination of music, dance, costumes and decorations as well as for a comprehensible but at the same time humorous text.

Moreover, three young actors were awarded individual prizes for having stage personality. A couple of teams were also distinguished for choreography, music, screenplay and costumes. The results of the competition can be found on http://www.gdynia.pl/?co=srodowisko/konkurs_teatr.

As the performances aroused great interest among both pupils and teachers, it is already certain that the second edition of Eco-theatres review will take place next year.

More information:
Mr Adam Kaldunski
Tel. +48 58 661 71 75
E-mail: a.kaldunski@gdynia.pl

Environmental Database for SMEs in Turku Area

By Kristina Karppi

In the spring 2003, Agenda 21 for Southwest Finland published a website on environmental information relevant to small and medium-sized enterprises in the Turku area.

The objective is both to serve the enterprises in their environmental management as an easy and fast source of information as well as to promote better cooperation between the enterprises and the environmental officials.

Environmental officials had been thinking ways for good and effective co-operation with private enterprises in the area. The relationship has traditionally been a little tense between the parties, as in many

places. As a form of a new, more communicative culture in the administration it was aimed at a more open 'pre-contacts' with the enterprises as opposed to the old 'post-contacts' when the first contact was done after an environmental accident or injury of the legislation had happened. A website with easily accessible environmental information was thought of as one good mean of serving the clients in advance.

The contents were created by a working group of environmental and economic officials. Structure was divided between thematic and more managerial-legislative topics. The first one offers information on how to handle, for instance waste or energy issues. The second one includes information on how to proceed in developing environmental management system. Also legislative duties are presented. All sections also include links to more specific information and contact information.

The website was first tested by several enterprises. The feedback was very positive. The content as well as the form i.e. the web-editorial solution were conceived as clear and functional. Data reports on the usage show a high interest, most popular pages being the ones informing on legislation, environmental management and waste issues. There is also a permanent feedback formula for the users' comments.

Currently, a new section is being built. It will include municipally specific environmental information for SME's such as local environmental and waste orders and central contact information.

More information:
Ms Kristina Karppi
Agenda 21 for Southwest Finland
E-mail: kristina.karppi@turku.fi
www.turku.fi/ytietopankki

Towards a Sustainable City

By Gisela Jacobs

In the International Workshop on Local and Regional Development held in August 2003 during the *Hanse SAIL 2003* in Rostock, Germany, several projects and actions were presented.

The Hanse SAIL in Rostock included an international workshop on sustainable town development under a topic "On the way towards a Sustainable City". Participants from partner and twin cities received information about development activities in Rostock and in the surrounding region. They were also able to present their own experiences from their respective towns.

During the workshop, Mr Johann-Georg Jaeger, member of the Rostock Agenda 21 Council, recalled the history of Agenda 21 and emphasised the important role of the Ecumenical Assembly for Peace, Justice and Safekeeping of Creation for the implementation of the decisions made by the Rio Conference in 1992 on development strategies. In East Germany just after the political changes in 1989-90, the so-called 'Round Tables' accelerated the Agenda process distinctively - also in Rostock.

Ms Gisela Jacobs, Head of the Office for Sustainable Town Development in Rostock, portrayed then a picture of the various efforts to improve the quality of life in Rostock, where economical development and creation of jobs are priority.

From the City of Leipzig, Mr Holger Tschense, Mayor and Head of Department of Environment, Internal order and Sport, presented a series of activities done in Leipzig. The city is going to grant price reductions for public facilities, like transportation systems, as a bonus to people who work over four hours a week without financial compensation. In 'Colourful Gardens' project, refugees and foreigners work together with local residents. The project costs are covered by selling the garden-grown products.

City of Leipzig wishes to host the Olympic Games in 2012. The local Agenda Office is co-operating closely with the newly established Olympic Bureau to ensure that the concept of sustainability is fully adhered to. As both Leipzig and Rostock are co-applicants for the Olympic Games, the Agenda 21 Council and Office of Rostock are following a similar pattern.

More information:

Ms Gisela Jacobs
Office for Sustainable Town Development/Agenda 21
Tel: +49-381-381 1150
Email: agenda21@rostock.de

The Blue Flag for Palanga

By Irena Satkauskienė

Palanga Town Municipality in Lithuania received the 'Blue Flag' on their beach in the beginning 2003. Palanga is also the first municipality in Lithuania to receive the Blue Flag.

Last year, Palanga Town Municipality signed an agreement with Mr Rimantas Braziulis, the chairman of the Lithuanian Green Movement, regarding the implementation of the Blue Flag Program in the beach covering 500 m belonging to the territory of Palanga Botany Park. International Blue Flag Supervisory Board measured the efforts and work done during the implementation.

The Blue flag is given for one season only. The authorised persons of Lithuanian Green Movement as well as inspectors of Environmental Protection Education Fund will check that the beach meets all the requirements during the high season. Therefore Palanga Town Municipality will be obligated constantly to keep the requirements which are set up by the Blue Flag Organization.

More information:

Ms Irena Satkauskienė
Chief Specialist
Tel: +370 460 48125
E-mail: Turizmas@palanga.lt

Baltic Bat Meeting is Held in Turku

By Petteri Vihervaara

Scientists, conservationists, environmental protection authorities and amateurs will meet in Turku 24 - 25 October with the aim to strengthen bat conservation and research in Baltic Sea Region.

Bats are poorly known and rather strictly conserved animals in environmental legislation. The worry of declining bat populations has aroused people to see the importance and need of more studies and research of them. Reasons for declining populations are plenty, e.g., habitat fragmentation and accumulation of insect pesticides. Even that many bat species are endangered, there are few species which have not only been affected negatively by humans.

EUROBATS agreement was signed in 1991, and for its implementation the monitoring and conservation of bats should be enhanced both in the member countries and in the range states. Currently, 34 species of bats have been observed in Europe.

Enhancing and strengthening the cooperation with Baltic bat workers is the main goal of the meeting. Through cooperation and an effective network the conservation and research of the bats could be developed more effectively and also latest research news would be easily distributed. Lack of standardized survey methods makes it hard to compare population estimations of different species, which could be one of the theme discussions. All participants will also present the state of bat research in their home country.

This pilot meeting is supported by the Finnish Ministry of the Environment, UBC Commission on Environment, WWF Finland and the Archipelago Research Institute of the University of Turku.

More information:

Mr Petteri Vihervaara
Tel: +358 400 472 045
E-mail: petteri.vihervaara@utu.fi

Local Governments Meet to Take Action Towards Sustainable Development

Local governments from around the world will gather in Athens, Greece from 3-7 November for the 2003 ICLEI World Congress, Local Action 21: Local Governments Implementing Sustainable Development.

Over 500 representatives from local governments, international agencies, national governments, and donors will exchange ideas and identify opportunities to strengthen and advance the achievements of local governments of sustainable development.

As the first major meeting of local government leaders on sustainable development since the 2002 World Summit on Sustainable Development in Johannesburg, ICLEI's 2003 World Congress will serve as a catalyst for local government leaders to move from undertaking Local Agenda 21 planning processes to taking action to implement their plans for sustainable community development as part of the recently-launched Local Action 21 strategy.

The five-day event will include site visits to local sustainability projects in Athens Prefecture including a solar village, the 2004 Olympic Athletes' Village, and a waste management facility. Presentations by ICLEI members on their best practices and experiences in various fields such

as climate protection and water management, interactive small-group discussions, regional meetings, roundtables, and a Marketplace showcasing ICLEI members' sustainable development achievements are also on. Invited speakers include representatives from UN agencies and international organizations.

With a focus on concrete action and measurable results, the Congress will provide participants with the tools, mechanisms, and practical support necessary to overcome barriers to sustainability and implement Local Action 21 strategies to create sustainable communities and cities while protecting global common goods. New and expanded campaign and programme activities will be initiated at the Congress on priority issues such as Responsible Purchasing; Sustainability Management; Resilient Communities and Cities; and Just, Peaceful and Secure Communities.

The 2003 World Congress is hosted by the Coalition of 21 Municipalities, a coalition of twenty-one local authorities (representing more than one million inhabitants) in the northern and eastern section of Athens Prefecture that promotes the principles and the objectives of sustainable development.

Additional information on the World Congress is available at: www.iclei.org/worldcongress or by emailing world.congress@iclei.org

More information:

Karen Alebon
Acting Director, Information Services
ICLEI
Tel: +1-416/392-1182
Email: kalebon@iclei.org

In Memory of Anna Lindh

The UBC Commission on Environment would like to express our great sorrow for the violent death of Mrs. Anna Lindh, the Swedish Foreign minister. Anna Lindh was appointed Minister of Environment in 1994 and became Foreign minister in 1998.

As an Environmental Minister Anna Lindh always impressed for being well informed and very competent. She was both a good listener

and had the outstanding ability to inspire and make an impression at the audience. She meant a great deal in the initial phase of the successful work with Agenda 21 in Sweden, many municipalities were inspired by her person. Her input was also very important for the advancement of Agenda 21 work on Baltic Sea regional level. Even when she is gone, her work will continue to inspire Baltic Cities.

Activities of Vilnius Healthy City Bureau

By Danguole Vaitkiene-Vlasova

Since it was founded in 1997, the Vilnius Healthy City Bureau has aimed to promote an idea of a healthy city.

This goal is achieved by encouraging society to concentrate public efforts to improve health, and by giving education on healthier habits. Also others experience, and co-operating with like-minded organisations, help in fulfilling this goal. Citizens are encouraged to take part in various actions, programmes, projects, and seminars. Bureau's partners varies from public organisations to national defence volunteer forces and businessmen. The main activities include education on environment protection, promoting healthy lifestyles and encouraging social integration.

Promotion of engine free transport, which can also be called light traffic, has been one of the key concerns this year as transport flows, followed by air pollution, increase. It is estimated, that vehicle exhaust gasses and soot constitute the largest part of city pollution. Thus, promotions of light traffic and development of bicycle tracks, are becoming more and more important.

A programme for light traffic development is prepared for 2002-2012. The aim is to connect all bicycle tracks into one net, which enable cyclist bike safely. They also provide information on bicycle tracks, and generally encourage people to use bicycles instead of cars. A special geo-information database, which will provide citizens with necessary information about the tracks and their condition, is under plan.

Social integration is also important. As part of that, The Bureau and the Ministry of Defence organised a summer camp in 2003 where some 600 children were given education on developing healthy life style habits.

In addition to national work, the Vilnius Healthy City Bureau co-operates also with foreign organizations.

More information:

Ms Danguole Vaitkiene-Vlasova
E-mail: danguolev@post.omnitel.net

The City of Cesis Wins The Best Environmental Practise in Baltic Cities Award 2003



By Anna Gramberg

The UBC and the Award Evaluation Committee had the honour to declare the City of Cesis and the Environmental Development Board as the winner of the UBC Best Environmental Practice in Baltic Cities Award 2003.

The motivation states that the City of Cesis has in an innovative way involved citizens and other stakeholders in the planning process and practical work for improving the bio-diversity and the green areas in the city. In this way City of Cesis has formed the basis for a long term participatory process with the Environmental Development Board (EDB) taking part not only in the greenery area but also influencing in policy areas like territorial planning.

Cesis was awarded a grant of 5000 Euro, which was kindly donated by the Danish company Per Aarsleff A/S, to be used for

a study visit, and a diploma from the President of the UBC Per Bodker Andersen during festive Award ceremony in 17 October at the 7th General Conference in Klaipeda. During the General Conference, all good practices were presented in an exhibition and all participants had an opportunity to get good input and new ideas to implement in their own city.

Altogether ten practises applied for the Award. Here they are briefly introduced in an alphabetical order.

Environmental Development Board is a tool for the well-balanced environment in Cesis

Establishing an Environmental Development Board (EDB) by the Council in Cesis, Latvia, in 2002, is an excellent example of voluntary work that has led to establishment of a tool that is recognised not only locally but also nationally. The work prior the establishment was proposed and implemented through a "bottom up" method, and initiated by the activities of local community. The involvement of municipal authorities and local politicians has been of utmost importance.

Initiative of a group of activists

Back in 1999, a group of enthusiasts got together and decided to investigate and undertake remedial work of the Winter Valley, which is one of the key landscape elements of Cesis. As a result, they made several improvements there. For a start, the overgrown plantation was cut out and different kinds of waste were cleared away. The valuable landscape was demonstrated to local community so well that entrepreneurs, public institutions, housekeepers and other groups have all participated in the cleaning actions and simultaneously improved their knowledge on the Valley from biological and esthetical point of view. In addition, walking and



biking trails were built for all to use. The idea of establishing a Environmental Development Board grew out of these voluntary activities.

EDB aims also in the future to develop plans for green territories in the city, promote sustainable land use, identify threats to biodiversity and development plans, and educate and involve local community in biodiversity and landscape protection. At present the EDB provides guidance to the infrastructure projects and participates in the development and spatial planning of the city. This years activities include renovation of another valuable territory and public hearing of the reconstruction project of thermal power station which assembled a lot of interested people.

The Board consists of officers of the administration of the Cesis City Council, representatives of NGOs and entrepreneurs together with representatives of the public administration. The participation of the work of EDB is voluntary.

More information:
Ms Inta Adamsone,
Environmental Officer, Development Planning Department
E-mail: inta.adamsone@dome.cesis.lv

New Use for the Harbour Fronts in Aalborg

In the City of Aalborg, Denmark, the old industrially developed harbour fronts have gradually been regenerated into contemporary urban districts with multifunctional activities. The overall goal of the work, which started in the early 1990s, has been to strengthen and to develop Aalborg's identity as a city by the water. In some areas the regeneration is almost total, but some of the historic traces have been preserved as they give identity to the area and provide inspiration also for future planning.

A key element has been that the new structures respect the existing surroundings and that there is a high quality in construction and materials. The goal has been to highlight the characteristic elements of the landscape. Relevant interest groups have been involved in the work as soon as the planning process has began. Sustainable town development, be it environmental, economic or social, has been the basis for all the planning. Dialogue between all the interest groups and also involving the citizens have been very im-

portant. Today, the harbour fronts consist of mixture of housing and offices, and some of the council's administration.

The work has also had an environmental benefits. The using of old compared to developing totally new, is one. Building densely in the inner city instead of the outskirts has also reduced the total traffic. Increased regeneration strengthens the infrastructure of public transportation and encourages cycling and walking. Polluted sites have been cleaned up or otherwise secured for posterity. The change of identity from Industrial City to cultural - and science-based city is progressing well and the improvement of the city quality and visual environment is constantly in progress.

More information:

Ms Anne Juel Andersen
Architect, Technical Department
Tel: +45 993 12217
E-mail: aja-teknik@aalborg.dk

Gdynia – Environmentally Friendly City



The "Gdynia - an environmentally friendly city" programme for education and ecological information has several goals in the City of Gdynia, Poland. One is to change people's habits and to promote a more environmentally friendly lifestyle. It also tries to inspire citizens to act for the benefit of city's natural environment and simultaneously broaden their knowledge about it. In addition, it also supports the waste segregation system, which is being created in the city.

The program is a series of innovative parallel projects, which can be divided into three groups; competitions, informative activities and open-air educational projects. 'Ecology in our school', where pupils created a website and annually organised 'We invite birds to Gdynia', are some examples of the competitions.



Informative activities include constant cooperation with journalists. This has given a change to spread information also to wider public regularly. Also, introducing recycled paper in the Gdynia City Hall was a pioneering event also in on a national level.

In educational projects people have been able to see and experiment themselves the impacts on their behaviour to the environment. For example at the Earth Day picnics people could take part in activities like sorting different kind of waste in the right bins in a given time.

The programme has been conducted since 2000, involving thousands of people over the years. Many of the projects are serial projects, which have become a permanent part of ecological events calendar in the city. The program is a result of the Strategic Plan adopted in 1998, and is a good example of realisation of one of the four city development strategic goals. This programme also complies with the LA 21 Programme assumed by the Gdynia City Council in 1999.

More information:

Mr Adam Kaldunski
Senior Specialist
Tel/fax: +48 58 661 71 75
E-mail: a.kaldunski@gdynia.pl

Environmentally Friendly Business Fair in Jurmala

In the City of Jurmala, Latvia, the



Jurmala City Council together with the Business Consultative Board of local entrepreneurs wanted to bring environmentally friendly products and business world together by organizing a business fair "Jurmala City offers" in May, 2003. It was the first time in city's history to organise such a fair, and it was an opportunity to show that Jurmala is not only a place for entertainment and relaxation but also a place for starting and developing of business activities.

The event reached its' main goal of informing and educating citizens and business representatives about business activities and investment environment in the City of Jurmala.



Speciality of the Fair was that all exposition stands and practical furniture were made of folded cardboard. The idea came from a previous co-operation between the municipality and a local company *Vejiem lidzi Ltd.* whose business activities include making environmentally friendly furniture. The stands are light, and they are easy to make into new combinations. They can also be used again in later events organized by the city.

The Fair contributed to the general philosophy of the city development, where sustainable development is one of the basic principles. The local authority and its partners are ready to continue with this new practice and are interested in sharing the experience with other cities.

More information:

Ms Vita Brakovska
Chief Specialist of Investment Projects
Tel: +371 709 3849
E-mail: vita@jpd.gov.lv

Environmental education for businesses in the City of Kaliningrad

The ECAT Kaliningrad's adult education on environmental protection and waste management has been a highly needed service to local enterprises and their personnel responsible for environmental damage. The courses started in September 2002. The overall goal is declining of negative industrial impact on environment in Kaliningrad and Kaliningrad oblast, and increasing of the overall sustainability of the region. The structure of the courses corresponds to the interests of target groups, the engineers and managers of enterprises in the region. In spite of the relatively short time period, the results are impressive as about 200 people were educated during last year. The level of education is very high as the best specialists from local environmental authorities and environmental services give lectures to the students. Feedback from participants has been positive and inspiring.

The course in environmental protection and environmental safety was the first of its kind in Kaliningrad. During the two-week course, participants are introduced into basic environmental science, learn what are the main environmental problems of Kaliningrad and discuss ways of solving them, and learn about the environmental law of Kaliningrad oblast and Russia. One of the future goals of the activity is to introduce the system of environmental management at enterprises.

From the very beginning, ECAT's work at educational field was recognized and supported by the local authorities. Kaliningrad City Hall asked ECAT to develop a special course in environmental protection and safety for employees of local authorities. These courses emphasise especially the role of the municipality in solving environmental problems.

The courses are very important for environmental improvement in the region. First, the knowledge obtained during courses helps engineers and managers to fulfil the legal requirements. It is both environmentally and economically sustainable for industrial companies. Second, participants are informed about new achievements and technologies that can be suitable for their work. Furthermore, the courses offer a meeting place for environmentalists, engineers and local authorities. There is a constant exchange of ideas and thoughts. Although the education aims at increasing professional environmental knowledge the courses also try to raise personal environmental awareness.

More information:
Ms Yulia Vasileva, ECAT-Kaliningrad
Tel: +7 0112 275110
E-mail: ecatk@rol.ru

The School - for Community project in Kaunas

In Kaunas, Lithuania, 'The School – for Community' project has aimed at involving pupils into helping the community to solve environmental problems, and simultaneously learn to work and communicate independently. The idea is to stimulate pupils' interest to look at environment in the city, its problems, and analyse the possibilities that the pupils have in solving them. The project has been running since 1999.

Every winter, pupils prepare project proposals based on defined themes approved by the City Council. Then the municipality's environmental protection and education specialists and NGO's decide which projects are to be implemented. Specialists of Department of Environmental Protection consult children during the implementation stage. At the end of the school year, the results are presented in a

great event in the City Council Hall. All the elected projects are financed by the City's Environmental Protection Fund.

The project is part of the environmental education work of the Environmental Protection Department of Kaunas City Municipality. To implement the Kaunas Municipal Environmental Strategy is a long-term process and it is necessary to involve all citizens. The use of Community resources as a part of rising the environmental awareness has been highly supported by the Council. The next step to activate public will be a project for adults.

More information:
Ms Marija Stanikuniene
Head of Environmental Protection Division
Tel: +370 37 422467
E-mail: marijas@kaunas.sav.lt

Radon Risk in Panevezys

Radon isotope Rn-222 represents one of the most important sources of human exposure. Radon is an inert radioactive gaseous element formed by the decay of radium isotope Ra-226. The sources of radon are variable: soils, building materials, water and rocks. It tends to accumulate in closed spaces, and its activity in rooms sometimes becomes rather high.

Experimental measurements carried out in some spots of the City of Panevezys in Lithuania at the beginning of 2002, revealed that the activity of radon in the soil air was 50 kBq/m³, and that the soil itself was rather permeable for the air. Such areas were classified as highly radon risky where construction works must be accompanied with preventive measures. The results have helped the municipality to plan ahead ways of reducing chemical, physical and microbiological contamination. All this could also be taken into account when designing and building new housing and office buildings. After evaluation of the results, the inhabitants and community of City of Panevezys could be informed about the levels of contamination and of the preventive means.

The investigations improved collaboration between various governmental and municipal institutions. Also educational institutions were involved in the collaboration process as the measurements were performed together with student environmentalists of a local college. In future, help will be given for small and medium-sized enterprises to estimate radon risk in living and work places.



More information:
Ms Regina Abromaityte
Head of Panevezys Department Radiation Protection Centre
Tel./fax: +370 45 463677
E-mail: rscpanevezys@takas.lt

Ms Zita Tverkute
Head of Ecological Department
Tel. +370 45 501217/501315
E-mail: ekologija@panevezys.sav.lt

Oxygen Balance Measurements in Sopot

Children learned many new things about air quality in Sopot, Poland, during 1999-2001, when nearly 200 pupils from primary and secondary schools analysed deficiency of oxygen in the air in a programme called 'The Oxygen Balance of Sopot'.

The programme aimed at defining proportion of biologically active areas in the total city area. It also specified a degree of renewable air resources in the urban areas using research results later in the city's spatial planning. The programme gave environmental education to young people not just on the analysing but also on plants, trees and other fauna as they had to make an inventory of the green areas and species for oxygen production calculations.



Both of Sopot practises show an involvement of children and adults to be part of surrounding environment and the impact their actions have on it. This group is sitting by the didactic path.

The programme also actively introduced the new method used in the program to analyse air pollution. These calculations should be taken into account when planning the balanced development of the city.

The work started with an inventory of green areas, such as gardens and parks, and continued in the build-up areas. Calculations were based on oxygen consumption by humans, pets and cars. Also effects of heating up houses and warming up water were analysed. Results showed the importance of greenery, and necessary to attend to the present flora and plant trees wherever possible. This refers also to the Tri-City Landscape Park that supplements the city's oxygen deficit.

Heat production and households amount to as much as 68% of the total oxygen consumption, and combustion in car engines to 21%. This highlights the need for rapid introduction of other, also alternative, sources of heating to reduce the combustion levels.

A didactic path in Sopot

The project "On the Sopot stream walk" aims at establishing a tourist and nature path leading to a beautiful region of forests and streams in the City of Sopot, Poland. The area is very old, there is, for example, an old wooden-ground fortress dating back as far as the 8th - 9th century. Also, several old trees still grow there. The idea for the project came from pupils from local primary and secondary schools. The path will be first of its kind in Sopot, and it has two purposes. One is to educate both children and adults about the nature along it, and the second one is to attract tourists to this beautiful area.

The work started in November 2002 by dividing the path into short sections. Each section was then described by an independent school-team. At the end of the first stage, teachers with specialists veri-

fied the work. The results have now been introduced to the city gardener and specialists of the Department of Engineering and Environmental Protection. The teachers described the path and the length of it. They also proposed for the information tables to be placed along the path. At the moment, supplementary funds to make the tables are being searched for. A brochure of the path has been prepared and it will be further distributed to citizens and tourists.

More information on both Sopot practises:

Ms Magdalena Czczatka
Department of Engineering and Environmental Protection
Tel.: +48 (58) 52 13 792
E-mail: czczot2@wp.pl

'Let's Live in a Clean and Healthy City' in Vilnius

In the field of environmental education, one of the most popular actions in both Vilnius and in Lithuania is "Clean Up the World" campaign. In this campaign, volunteers work in their communities to carry out local clean up activities. They stimulate healthy environment at working places, clean streets, yards, staircases, parks, markets, roadsides and schools. The active participants include pupils and students, institution workers, businessmen, country defence volunteer forces and different public organisations. According to the organisers, the goal is to change not only the surroundings, but also the way of thinking as well as to develop responsibility of a society for a clean city.

The campaign "Clean Up the World" has taken place in Vilnius since 1995. The Board of Vilnius City approves the campaign annually. The key strategic objectives laid down in the programme are cleaning of city environment, encouraging citizens to participate on voluntary basis, promoting the respect of surroundings and the movement for healthy environment and healthy way of living in the city.

At the beginning of the campaign, the organisers faced passive attitude of the citizens. Nevertheless, as this campaign is becoming a tradition, each year an increasing number of people joins the volunteers who regularly participate in the action.



Firemen are doing their share by taking part in the campaign to make Vilnius a clean and healthy city to live in.

More information:

Mrs Danguole Vaitkiene-Vlasova
Director of Vilnius Healthy City Bureau
Tel. +370 5 2652098
E-mail: info@vsmb.lt
danguolev@post.omnitel.net



UBC Environment and Agenda 21 Secretariat

Network is a 'net' that 'works'. Partnerships are invaluable and best solutions can best be learnt from others. In the work of the UBC such practical co-operation has always been essential.

In the UBC, our Agenda 21 work is a joint initiative of 105 cities and other partners. The fora for joint work of these cities, their representatives and other partners, are the UBC Commission on Environment and the Agenda 21 Working Group. They are open to participation of all member cities, and also many partner organisations are regularly present at the meetings.

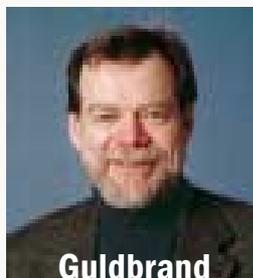
You are most welcome to join! Two meetings are organised every year. It is in these meetings that you are also most likely to find partners for your own initiatives, or use the opportunity to join projects in the pipeline!



Meetings in the seminar room are usually accompanied by on-site learning at excursions. Here are some of the EnvCom participants visiting the new open air museum just outside Kaunas, May 2003.



Mikko



Guldbrand

The EnvCom Co-chairs are currently Mr. Mikko Jokinen from Turku, Finland and Mr Guldbrand Skjönberg from Nacka, Sweden. In his every-day work, Mr. Jokinen is Environmental Director of City of Turku and Mr. Skjönberg is Manager to the Boards in the City of Nacka.



The secretariat staff currently consist of a team of five professionals working fulltime for the UBC. They are Head of Secretariat Mr. Risto Veivo (left), Publications Officer Mrs. Sari Bowie, Project Co-ordinator Ms. Anna Granberg (middle), Project Officer Mrs. Sanna Erko and Project Co-ordinator Mrs. Tea Nömmann (right).

In addition to the meetings, we organise several Environment and Agenda 21 workshops and seminars every year, as well as publish the Baltic Cities Environmental Bulletin and website. The bulletin offers you an excellent forum to publicise your activities and initiatives on environment and sustainable development. If you have an idea for a story, just contact us!

We are here for you. The UBC Environment and Agenda 21 Secretariat is the co-ordination and service unit for the environmental and Agenda 21 work of the UBC. It runs the services for the cities: organises meetings and policy work, prepares documents and publications, as well as initiates and runs projects.

The UBC EnvCom and Agenda 21 webpages are continuously updated. There you can find acute and general information on the activities. You can also check the Documents & Publications page for publications and reports in pdf-format. These include for example the Local Agenda 21 Good Practice Review for city leadership. If you have any questions, ideas or comments regarding our services, please, never hesitate to contact us!



www.ubc.net/commissions/environment.html

