



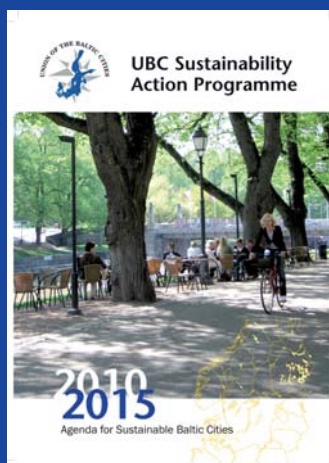
ENVIRONMENTAL

bulletin No 1, 2010



**IT IS ALL ABOUT
US ISN'T IT -
THE SUSTAINABLE
SOLUTIONS
FOR CITIES**

**UBC SUSTAINABILITY
ACTION PROGRAMME
2010-2015**



Welcome to the age of sustainable growth

The Baltic cities are changing with the world around them. Globalisation sets the scene for our cities with increased competition and global effects on local actions. Cities must cope with climate change, air pollution from increasing transportation, greater waste production and congested roads. New modes of production develop and people want a city suitable for working, housing and city life on the street or in the park.

A city's ability to adapt to these issues is crucial for its ability to cope in the global competition for inhabitants, investment and business. In that global competition sustainability has become a key factor. However, sustainable cities do not only cope with physical and technological challenges. They also provide inspiring, beautiful and vibrant urban environments that make cities attractive places to live and work in.



Karen Ellemann

Minister for the Environment and Minister
for Nordic Cooperation, Denmark

Some cities experience fast growth, while others stagnate or even decline. The central question is how to make a living now and in the future and what kind of growth we are willing and able to live with in the long run. Therefore we need to stimulate smart and sustainable growth. This notion has largely been accepted as the point of departure. The question is HOW we enter the age of sustainable growth. Urban planning and environmental technology are two of the means we are looking towards in order to save energy and preserve resources in Denmark. To enter the age of sustainable growth we must also embrace new ways of thinking. Cradle to cradle for products, buildings and cities is one way to do so. Smart planning is another. In Denmark I have just agreed with a number of local mayors on new principles of sustainable planning which means that new housing and workplaces should be placed in cities with good railway transportation. The effect: Less driving in cars. Less admission of carbon.

However, all these efforts can be worthless if we don't provide enough space in the city for human beings to have a good life. That means space enough to inhale clean air. Space enough to have a run in a nearby park. And space enough to find a place without disturbing noises from traffic, industrial buildings etc.

UBC member cities (as of April 2010)

Aalborg • Aarhus • Baltijsk • Bergen • Botkyrka • Cēsis • Chojnice • Copenhagen • Elblag • Elva • Espoo • Gargzdai • Guldborgsund • Gävle • Gdańsk • Gdynia • Greifswald • Haapsalu • Halmstad • Helsinki • Jēkabpils • Jelgava • Jõgeva • Jöhvi • Jurmala • Jyväskylä • Kaliningrad • Kalmar • Karlskrona • Karlstad • Kaunas • Keila • Kemi • Kiel • Klaipeda • Køge • Kolding • Koszalin • Kotka • Kristiansand • Kristianstad • Kronstadt • Kuressaare • Krynica Morska • Kärđla • Lahti • Liepaja • Linköping • Lomonosov • Luleå • Lübeck • Łeba • Maardu • Malbork • Malmö • Mariehamn • Marijampolė • Miedzyzdroje • Nacka • Narva • Næstved • Norrtälje • Oskarshamn • Paide • Palanga • Paldiski • Panevėžys • Pärnu • Peterhof • Pori • Porvoo • Pruszcz Gdanski • Reda • Rēzekne • Riga • Rostock • Robertsfors • Sestroretsk • Siauliai • Sillamäe • Słupsk • Sopot • St. Petersburg • Sundsvall • Szczecin • Söderhammar • Tallinn • Tampere • Tartu • Trelleborg • Tukums • Turku • Umeå • Ustka • Vaasa • Viljandi • Vilnius • Visby • Vordingborg • Võru • Västervik • Växjö • Wismar • Örebro • Östhammar



Photo: Panevezys

2 Welcome to the age of sustainable growth - Editorial by Karen Ellemann, Minister for Environment and Minister for Nordic Cooperation, Denmark

4 World of Solutions - Sustainable Solutions for us

6 Joint meeting of commissions of Energy, Environment and Transport in Gdynia

6 The best of the latest for municipalities - Solutions local, together - Conference

17 Sustainable solutions and attractivity through better management of urban-rural partnerships - **NEW BRIDGES**

EnvCom today



Nordic Conference on Sustainable Development in the Baltic Sea Region, 31 Jan - 2 Feb, Turku 2011

Q's corner

19 Sauli Rouhinen, Head Secretary of Finnish National Commission on Sustainable Development, Ministry of Environment, tells what meaning does the Solutions local, together - conference have for sustainable development.



Photo: Växjö/Climate Idols

7 Climate Idols in Växjö

8 In Kalmar Climate Pilots help families for greener lifestyle

9 Biogas buses will soon appear on streets of Tartu

10 Mobility management help for city administration in Hanseatic city of Rostock

11 New climate protection concept in Greifswald

11 Trelleborg turns algae into energy

12 Eco-supporters help in Helsinki

13 Environmental awareness grows in Karlstads where the city gives environmental education to staff

13 Climate fee compensation in Örebro

14 Wind power on low-energy building in Växjö

15 Kalundborg makes socially sustainable decisions about climate adaption

16 Cooperation on curbing HIV/AIDS epidemics resulted on practical tools for Russian cities - **We choose a life project**

16 SNOOP sniffs emissions of marine traffic

18 Castle Garden in Słupsk was awarded the best public space in Pomeranian Voivodeship 2009

18 Malmö showcasing urban solutions in Shanghai Expo 2010

19 Narrow gauge railway in Panevezys

Sustainable Solutions

22 PURE investments started in Riga

CHAMP enters the training stage

New ecological portal for citizens of St Petersburg

Sustainable urban mobility across Europe - ELTISplus

23 Back cover (inside): UBC Environment and Sustainable Development Secretariat

24 Back cover: Solutions local, together - Conference & Good Practice Database are full of solutions

Short News



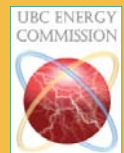
Illustration: Trelleborg

UBC Energy Commission

20-21 LED light will soon light the public places

Regional wastewater turns into energy resource in Turku

Rakvere active towards its Green Goals



Editorial information

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World of Solutions

- Sustainable Solutions for us

Text: **Stella Aaltonen** Photo: **city of Turku Photo Bank / Esko Keski-Oja**

What is a sustainable solution? Every one of us has an opinion of what is a solution from their perspectives. There is not just one clear answer on it. The issue becomes more complicated if we want to talk about sustainable solutions, as then we need to take into account also the different dimensions of sustainability of the solution. They have to take into account measures that are environmental, support wellbeing and are economically viable. Environmentally sustainable solutions are not necessarily really sustainable; the solutions need to advance also social equity and employment. Only when these three perspectives find a win-win situation can we talk about truly sustainable solutions.

Sustainable solutions turn out to be good in practice. They need to last and have a clear impact to the wanted direction that can be evidenced also on a long run, once the solutions have been used. Technical matters like public transport and waste water treatment are good high level questions. They are slowly moving to the right direction, but we have to raise social matters more in conversations.

Several people approach the issue from the perspective of next generations and say that we have to see the future and imagine what kind of opinion would the next generation have on our actions. Ideally this would mean that we would leave behind something better than we have ourselves received.

Individual solutions in your daily life

In the end it all comes to individuals in the local surroundings. Sustainable solutions are those that people like and enjoy. They want to commit into them for a longer time. If they do not want to commit or the commitment is occasional, the solutions can be claimed not to be sustainable.

The solutions will be sustainable when we can change our way of thinking. The world is changing and we have to use today's technology to win climate change challenges in order to get better future. Implementation of sustainable development needs to be carried out so that it is a natural part of life, without compulsory action because of threat scenarios. Threat scenarios are not a good way to get people to accept things.

In this Bulletin several articles describe well the efforts done in the cities in order to add the individual interest and commitment, so that the choices done today would make a huge impact on the sustainability of our planet. A good way to start the actions is to define well what sustainable solutions in your city are and who are the relevant stakeholders that could assist in finding the right solutions for your own cases.

Be tuned for solutions

UBC EnvCom has during the past years put efforts in passing on the existing solutions throughout our city network. The UBC Good Practice Database was launched a year ago. It has been well taken on by the cities around the Baltic Sea Region and outside. Currently we have over 430 cases available, and new cases are being published regularly and as the latest feature - different methods can now be found through the database.

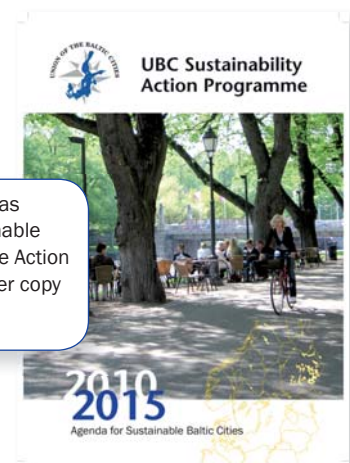
UBC EnvCom exists also in Facebook. This feature is being currently developed and we hope that you will spread the word around and become our friend. This way we can also start to have discussions and more exchange of information through Facebook.

If you would like to follow us even faster – join our Tweet. Through Twitter we can reach you faster and get the latest news spread around. So let's tweet!



The article has been inspired by the participants of the Solutions local, together – Conference preparation workshop in January 2010. More about solutions from www.solutions2011.fi and www.ubcwheel.eu.

The UBC Sustainability Action Programme 2010-2015 has been published. It clearly focuses on passing on sustainable solutions in the Baltic Sea Region. You can download the Action Programme at: www.ubc-environment.net or obtain paper copy at: environment@ubc.net.



It is all about us isn't it -
the sustainable solutions
for cities.



Uniting Resources for Combating Common Challenges

Text: **Lauri Hooli**

Finding sustainable solutions for combating climate change in the Baltic Sea Region, discussing how to implement the UBC Sustainability Action Programme 2010–2015 and the EU Strategy for the BSR were the main themes, when the UBC Commission on Energy, Environment and Transportation had their joint meeting in Gdynia in March 2010 with around 60 participants.

The meeting was historical since previously all commissions have kept their meetings separately. Now these three commissions decided to pour their knowhow to the common pool for reaching more comprehensive approaches to their shared issues.

Generally all sides were happy to have such a joint meeting. There was a common spirit to further develop these multi-commission events and enhance co-operation between commissions at all levels. The reinforced cross-sectoral co-operation is especially relevant for municipalities, whom it provides a great opportunity to strengthen the co-operation level between different departments and increase their internal communication with these external events.

Gdynias meeting was also the premier of UBC Sustainability Action Programme 2010–2015 (SAP) (www.ubc-environment.net) which was approved in UBC General Conference in September 2009 in Kristiansand, Norway. The new Action Programme stresses the multistakeholder involvement in the different processes towards sustainability. SAP is a strategic paper which considers crosscutting issues such as awareness & commitment, management & leadership, management of resources and quality of life. Now launched SAP follows the successful work of the UBC Agenda 21 Action Programme 2004–2009. Now the next challenge is a successful dissemination of the programme around the region and operatively implement its ambitious goals.

Altogether, the participants expressed satisfaction to the meeting, its organisation and the hospitality of Gdynia's local organising committee. Especially delighting was to see so many new faces taking part of this meeting and above all the local commitment, when most of the newcomers were from Gdynia and neighbouring areas.

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The best of the latest for municipalities

Solutions local, together - Nordic Conference on Sustainable Development in the Baltic Sea Region introduces sustainable practical solutions and inspires participants to use local solutions together with other stakeholders. Follow the development through the website and BLOG.

The parallel sessions of the Conference are:

EARTH - URBAN PLANNING FOR CITIZENS AND NATURE

- Sustainable transport systems
- Creative urban planning
- Diversity of nature

WATER - WATER FOR LIFE

- Water and recreation
- State of the Baltic Sea
- Water and climate change

AIR - CLIMATE AND ENERGY

- Processes to tackle climate change
- Eco- and energy-efficient technologies
- Renewable energy

FIRE - INNER INSPIRATION – KNOWLEDGE, NEW SKILLS AND PARTNERSHIPS

- Education and learning for sustainable development
- Rethinking workings methods
- Local partnerships for increasing the quality of life

www.solutions2011.fi





The Climate Idols of Växjö

Text: **Emilia Nordgren** Photo: **Mats Samuelsson**

The selected celebrities will get five challenges during the spring 2010 covering transport, energy, food and consumption and will be coached by experts and provided with climate smart products and services by local businesses. With the project Växjö municipality wants to show the green habits of the future through the Climate Idols' challenges. If they succeed to reach the goal of each challenge, they will receive a "Green Card" from the mayor.

Reducing electric energy use and ecodriving

The first challenge was to reduce the electric energy use at home with at least 15 %. The result was an average change by 33 %! Some of the Climate Idols reduced their electric energy use by more than 60 % compared to the same period last year. To coach and help the Climate Idols to achieve their goals the ANSWER project provided them with watt meters from the city library and offered a visit from an energy expert who helped them to find energy waste. Local businesses showed climate smart products such as LED bulbs, solar cell chargers and solar cell torches and lamps. Växjö Energy presented their online tool "The Energy Check" where customers are able to see their energy consumption on a daily bases.

The second challenge was presented at a car company who got the opportunity to show their greencars and present their future investment in a biogas station. The challenge is to reduce the fuel consumption by at least 12 %. A local driving school participated and talked about eco driving – which all climate idols will learn during the next couple of months. Växjö Energy owns an electric car which they lend out to the climate idols during the second challenge period; everyone gets to try it for two days each. Local media such as newspapers, TV news, radio news and online papers have reported on the Climate Idols and their challenges.

The Climate Idol project is a way to inspire inhabitants in Växjö by creating good examples. As a part of reducing carbon emissions in the geographical area of Växjö, a group of local celebrities from the local newspapers, music and theatre, restaurants and organizations has been chosen to attract attention and reach out to several target groups.

More to come

The future challenges will be for March: climate smart consumption, for April: finding alternatives to car-driving and finally for May: to buy and cook climate smart food. As extensions of the Climate Idol project different competitions and challenges between organisations, co-workers of the idols and inhabitants will take place during the Spring. Växjö's sister city Duluth will also start their own Climate Idol project with coaching from Sweden.

The Climate Idols are part of an international project called ANSWER, which is part of the work of Växjö municipality with *The Greenest city in Europe*.

The Climate Idols are:

- Kristina Alsér - County governor
- Ulf Ekeröth - Owner of a live music business
- Maria Wranå - Opera-singer and actress
- Miguel Perez - Pistol shooter
- Mathias Gaunitz - Owner of coffee shop, "Gusto"
- Hanna Höckert - Football trainer
- Peter Hogla - Director of organization for regional development

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Small changes help families jumpstart greener lifestyle

Text: **Tove Lund** Photos: **Tove Lund & Bo Lindholm**

The Climate Pilots project started in the City of Kalmar in Sweden in 2007. During a year, 12 families were given advice, help and a range of challenges to change their lifestyle in order to become more environmentally friendly and ultimately reduce their ecological footprint. The Climate Pilot program identifies some main areas where the households can start reducing their carbon footprint: food, energy use, consumption, leisure time and transportation. Involving citizens in sustainable solutions, such as in the Climate Pilots, is part of reaching the overall objective set by Kalmar County - to be a fossil fuel free region by 2030.

By making changes to their lifestyle, the Climate Pilots in Kalmar reduced their emissions by 32 per cent in one year, which corresponds to 53 tons of greenhouse gases a year, or a car journey ten times around the earth. In fact, the Climate Pilots have discovered that not only were they able to significantly reduce their carbon footprint without any major changes in their lifestyle, they were also able to save a lot of money in the process.

A few years ago some residents of the Swedish city of Kalmar on the Baltic Sea made a pledge to address the negative impact that their daily life-style was having on the global environment. Within a year, the 12 participating families had reduced their climate-changing carbon emissions by one-third.

Concept to Washington

Coping with climate change is a priority for Sweden, so to highlight both the issue and the program's success, Kalmar was invited by the Embassy of Sweden in Washington DC in 2009 to re-create it in the US on a smaller scale.

- It's one thing to talk about international negotiations and climate change, and another thing to bring it down to earth and have families involved and see if it's possible. The Climate Pilots project resonates very well with the message from the Swedish government that economic growth and the reduction of greenhouse gases can be achieved at the same time, says **Lars Roth** at the Embassy of Sweden in Washington DC.

Since the project ended in Washington DC at the end of February, the Climate Pilots all agree that they'll keep up their sustainable lifestyles. The program, they say, gave them something lasting – an awareness that living green doesn't have to be a monumental task.

- We see now that you don't have to change your whole lifestyle, says **Isaiah Akin**, one of the Climate Pilots.

- You can do small things, bit by bit.

- The Climate Pilots have shown that citizens can play a key role in addressing climate change and the concept of coaching citizens towards a more sustainable life-style seem to work outside the Swedish context as well, says **Tove Lund**, Project Manager in the City of Kalmar.

- We now hope that we can continue spreading the concept of Climate Pilots around the Baltic Sea Region as a model for working towards sustainable cities.

More information:
www.climatepilots.com



Left: Climate coaches Patrik Helin, Rolf Möller and Project Manager Tove Lund.

Below: Climate Pilots Mya and Isaiah Akin.





Opening meeting of the Baltic Biogas Bus project in December 2009, in Tartu.

Biogas Buses will soon appear on the streets of Tartu

Being a university city, Tartu is very open to innovative ideas. Last year Tartu joined the Baltic Biogas Bus project and has now started, together with the other twelve partner cities in the Baltic Sea region, to promote and develop the introduction of using biogas fuel in public transport.

- One of the most positive sides of participating in this project is having partners who have started operating biogas buses years ago and are operating lots of similar buses today. The experience and know-how that they have shared with us already and are going to share in the future will definitely help us to develop this field, says **Margus Hanson**, Deputy Mayor of Tartu.

Experiences from Sweden

Mr Hanson has been to Stockholm and Uppsala in Sweden to see how biogas is used as a fuel in public transport. The project team members also participated in the recent conference Nordic Biogas 2010 in Oslo. The conference focussed on the use of biogas as vehicle fuel and there were several presentations on contemporary technological solutions for the processing and use of biogas.

- What we heard and saw at this conference will definitely help us to develop environmentally friendly public transport, concludes Mr. Hanson.

- Since our only means of public transport are buses- and not environmentally friendlier vehicles such as trams or trolley-buses- it is extremely important that we contribute to the use of nature-friendly fuels in the buses. A wider use of biogas is definitely one way of reducing our ecological footprint.

Heading for biogas production

First studies have been already completed in the Baltic Biogas Bus – project. These analysed the formation of landfill gases in a recently closed landfill near Tartu, possibilities of their use and the most convenient locations for biogas filling stations in Tartu.

- One study aimed at estimation of the amount of landfill gases to be formed in the years 2010-2050 and finding different uses

for the predicted amount of methane, said Project Manager **Jaanus Tamm**. The study revealed that the landfill produces methane suitable for car fuel in the amount that would suffice for fifteen public transport buses in a year. However, since the cleaning of landfill gases is rather expensive, the price of the fuel would be really high.

- The analysis showed that it is not profitable to clean landfill gases in order to get vehicle fuel, but they can be used for provision of heat or generating power, added Mr. Tamm.

Another study will be carried out soon in connection with the raw materials used for biogas production, in order to find out which raw materials and in what quantities can be supplied in the Tartu region.

Within the framework of this project and by relying on the experience of its partners, Tartu is able to carry out all the preparatory work until the actual investment in the biogas production, the creation of biogas filling facilities and the introduction of biogas as bus fuel. These activities will hopefully be supported by the EU as well as by the local private sector.

In 2012, there might be about ten biogas buses driving on the streets of Tartu, which would be one fifth of the total number of buses on all the lines.

- Since Tartu is the only city in Estonia to participate in this project, and it is the first project of this kind in the Baltic States, we have a lot to accomplish, to share our experience with the neighbouring countries. This is how Tartu can use its knowledge and experience to support those who are interested in the environmentally sustainable way of living, said Deputy Mayor Margus Hanson. Through the project Tartu can participate in relevant legislative drafting in Estonia.

The total budget for the Baltic Biogas Bus project, funded by the Baltic Sea Region Programme, is 4.2 million Euros, Tartu's participation being 0.54 million Euros.

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Tartu City Government

It has always been a top priority for the city of Tartu in Estonia to maintain and develop a clean and citizen-friendly living environment. Protection and expansion of green areas, construction of bicycle lanes and introduction of nature-friendly public transport are just a few examples of the activities included in the city development plan.

Common car pool, job tickets and increased usage of bicycles

Text: **Steffen Nozon** Photo: **Hanseatic city of Rostock**

As many other cities in Europe the Hanseatic City of Rostock has started to implement its climate protection program and is looking for good examples also in the city administration. Better mobility can contribute considerably to reducing of CO₂ emission. In the past, there were some good activities, however, these approaches were often not systematical.

The Hanseatic city of Rostock took part in a mobility management project funded by the federal government of Germany. With the help of an external adviser the city administration checked the car and cycle park and worked out an action plan for more green mobility. The project was carried out from September 2009 to February 2010. It aimed to reduce CO₂ emissions through changeover to a new mobility behavior of the employees.

On a basis of a complex analysis several measures were developed and discussed in a working group. Promising effects were especially seen in optimizing of the carpool management in connection with car sharing, offering a job ticket for employees and promoting the use of cycles for business trips.

The key point is to make the employees aware that a change in their behavior can benefit their health, expenditures and leisure time. Through the survey this awareness was ensured. Over 40 % of the questionnaires were filled in – that shows a great

interest in the mobility questions. The results revealed that nearly 30 % would favor a job ticket. An increasing number of employees prefer cycling or walking to their working places.

To initiate further pilot projects an action plan has been worked out:

1. A car pool will be installed for a more effective utilization of business cars
2. The city administration buys more environmental friendly cars using natural gas as fuel
3. The employees take part in cycling campaigns and competitions, like "cycle to work"
4. Improvements of the parking places for bicycles
5. Checking the precondition for the negotiation on a job ticket for employees

By these measures up to 12 % of the carbon dioxide emissions produced by the city administration can be reduced. This short project was a great success, because for the first time stakeholders from different offices developed together an action plan for mobility management in the Rostock municipality. In March 2010, the City Council decided to create a position for a mobility coordinator. Also in March, the city administration submits an application for a national competition on *Innovative ideas for mobility management* with a concept for an internet based mobility platform as a modern mean of civic participation.

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New climate protection concept

Text: **Steffi Deickert, Michael Haufe and Justus Lodemann**
Photo: **Greifswald**

During three extended weekends, 22 citizens of Greifswald, Germany took part in the first “citizens’ forum for local policy on energy and climate”. The randomly selected people aged from 29 to 71 years intensively worked on the topic of climate protection. Experts informed about local circumstances and options of the action. Lively discussions within the group and with the experts contributed to the formulation of a citizens’ report with far-reaching action demands concerning climate protection in Greifswald. This report was handed over on the 14th of March 2010 to the mayor of Greifswald, Dr. **König**.

Vision of a green town

Within the citizens’ report the participants developed a “vision of a green town” – a town which uses renewable energy sources in its municipal utility, provides roofs with solar panels or greening, where passive houses are built – a city in which climate protection is an integral part of everyday life. Among other issues it is needed to cover the portion of electricity, which is not generated by the municipal utility, completely with green power until 2020. The participants also endorsed a statute concerning district heating – under the condition that implementation and pricing are made transparent. Furthermore, climate protection and environmental concerns should be included in every urban planning process.

To reach as many inhabitants of Greifswald as possible, a central, independent and permanent information centre for climate and environmental protection is needed. The environmental and climate-relevant information should be available in an understandable way to everyone. Professional public relations and environmental education can contribute to the awareness raising and thereby may change the behavior of consumers.

The only hope and wish is that these important ideas are taken up and implemented. Many forum’ participants want to commit themselves further to climate protection in Greifswald and want to present their ideas. The citizens’ willingness to observe own



New climate protection concept developed through participation of committed citizens in Greifswald.

habits and to change them is high. Consequently, they expect that the local authorities of Greifswald will create suitable conditions and act as role models.

Integration of inhabitants is needed

The university and Hanseatic town Greifswald is a founder member in the “Covenant of Mayors” and has dedicated itself to reduce CO₂-emissions from 2005 to 2020 by 14% within the scope of a local climate alliance. The development of a climate protection concept is promoted by the Federal Environmental Ministry. Currently 5.1 t CO₂ are emitted annually per capita in Greifswald (federal average: 9.7 t CO₂). The relatively low output is reached by a high portion of district heating-supplied households and by combined heat and power generation (CHP).

The consumption of power of private households has risen during the last years and it causes big strains to considerably reduce the CO₂-emissions. Because 1/3 of the energy in Greifswald is consumed by the private households, the integration of the inhabitants in the process of formulating and later implementing the climate protection concept is a precondition for its success. The civil participation is guaranteed by the realization of public citizens’ assemblies and the formulation of the above mentioned citizens’ report.

This first civil forum in Mecklenburg-Vorpommern concerning climate protection was carried out in cooperation with the University of Greifswald - the exclusive professorship for environmental ethics in Germany.

More information: ott@uni-greifswald.de

Energetic Algae

By implementing previously unutilized resources Trelleborg Municipality can create sustainable solutions that benefit the land & marine environment, produces biogas and reduce eutrophication.

The Trelleborg area consists of 82% intensively farmed agricultural land. As a result of the extensive drainage work, which has historically taken place in order to generate additional cultivable land, many original small wetlands and damp areas of the landscape have largely disappeared in recent centuries. By restoring a more natural river structure, it uses its natural ability to reduce water flow, capture nutrients and increase biodiversity. These actions can also help Sweden achieve its commitments to reduce outputs of Phosphorous and Nitrogen made as part of the Baltic Sea Action plan.

The WAB project (Wetlands, Algae, Biogas, a South Baltic Sea Eutrophication Counteract Project) will collect coastal algae, that is produced as a result of nutrient leakage, as well as vegetation from constructed wetlands and use it for biogas production.

Text: **Patrick Finnis**

WAB is a project that can deliver economically as well as environmentally. For example, the produced biogas would reduce dependency on other energy sources therefore reducing costs to the municipality and directly benefiting the environment. In the longer term, the produced biogas will also generate income for the municipality and as a result be able to pay back some of the initial investment.

If its principles were to be implemented among other UBC member cities, the WAB project has the ability to remove nutrients from the highly eutrophied Baltic Sea in an economically efficient and holistic process that could result in a required reversal of nutrient flows.

WAB is a project of the South Baltic Interreg Programme made up of 11 cooperating partners in Sweden and Poland. The core areas of testing and implementation are Trelleborg (Sweden) and Sopot (Poland).

More information:
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Eco-supporters bring everyday eco-actions to workplaces

Text: Silja Sarkkinen Photo: City of Helsinki Picture Bank / Matti Tirri

A network of nearly 700 eco-supporters consisting of staff of the city of Helsinki have learned environmental ideas and skills to adapt in their working units. Improved environmental awareness and responsibility are leading to new everyday practices, which save money and natural resources. Every choice and action counts!

The purpose of the Eco-support Activity is to improve environmental management and eco-efficiency and to promote environmental awareness on municipality administration. The development of the model started in 2006, and it is based on tasks and objectives formulated in the sustainability action plan of the City of Helsinki.

The target for Helsinki is to train altogether about one thousand eco-supporters – at least one for every workplace or unit. Until now more than 600 eco-supporters have been trained. They work in various offices, schools, youth centres, libraries, hospitals, health and social centres, construction and building maintenance units, energy and water supply units etc. Each eco-supporter is given a two-day basic training course and supporting manuals and guidelines. Eco-supporters share ideas and experiences through their co-operation network, which gives further guidance and follow-up training.

Tangible results

Eco-support activities focus on the grass-root level of municipal workplaces and are easily linked to existing environmental management systems. Environmental awareness increases and the environmental impacts of work are reduced when employees realize that they can make a difference. New practices and tangible, everyday choices result e.g. in waste reduction and more efficient recycling and energy saving.

The effects of the eco-supporters' activities are monitored and studied regularly in order to further develop the activity model. Today the Eco-support Activity model is adopted by five other municipalities of the greater Helsinki region as well as the cities of Hämeenlinna and Kotka in Finland, and in Tallinn, Tartu and Rakvere in Estonia. The co-ordinators of the co-operating municipalities arrange follow-up meetings and seminars to share and compare their experiences and identify possible setbacks and bottlenecks.

[More information:](http://www.eco-support.net)
www.eco-support.net (to be opened soon)

Eco-support Activity model

The Eco-support Activity model is becoming increasingly popular and therefore it was necessary to define criteria for the activity. These are our steps towards environmental responsibility:

- Our organisation is committed to promoting environmental responsibility.
- We appoint and train eco-supporters in our work community.
- We give support to eco-supporters and their work.
- We find out about the state of the environment and identify our own opportunities to influence it.
- We save energy and water.
- We prevent waste production, we recycle and we sort.
- We pay attention to environmental aspects when purchasing.
- We promote sustainable transportation.
- We take eco-support activity into account in our planning, operations and evaluations.
- We ensure the continuity of eco-support activity.



4730 working days for the environment



KARLSTADS KOMMUN

Text: **Petter Falk**

As political initiative, all employees and elected officials of Karlstad municipality will receive a basic education on environmental and climate issues. The education is mandatory and takes place during ordinary office hours.

- The aim of the education is to get a basic knowledge in understanding environment problems, but also to increase the awareness of how the everyday work of each unit of the municipality affects the environment. In the long run, our hopes and ambitions is to further develop the everyday environmental work within the organisation, but also inspire employees to carry on the knowledge through out the community, explains the environmental coordinator **Per-Olof Haster**.

The initiative requires a massive organisation. Advisory Centre owned by the Karlstad municipality provides special trainings to almost 250 instructors, who then will carry out the basic environmental training through out the organisation. The instructors are mostly people working with management, human relations or environment within the organizations. The course consists of five themes; climate changes, environmental consequences for Karlstad, energy, transport, and finally food and consumption. Each class lasts about one hour and contains a multimedia presentation, followed by a series of interactive exercises and a discussion workshop.

Expenses into a context

The Karlstad municipality, along with the companies within the municipalities corporate group, has 7300 employees and 300

The demand for awareness regarding environmental issues is at all times high in Sweden. Never before has the general public showed such an interest in learning about the climate change, sustainable consumption, energy etc. And in Karlstads, a response to this growing demand has just kicked off.

elected officials, the total sum of time adds up to 4730 working days! But Haster doesn't see it as such a high price to pay:

- Of course it's pricy, but I think you need to bring it all into the context. Karlstad municipality as an organisation and an employer has been working with different environmental policies for over ten years. The initiative with the environmental training can be seen both as a way to revitalize our own environmental work, and a way to further implement our existing policies. But it shall also be seen as a first step with our new climate strategy that will be launched next year. And of course, when talking about bringing things into the context, environmental awareness is not only a matter for Karlstad, it's a global issue.

So far almost 100 instructors have received their training and many of the municipality units have finished the first of the five classes. For every single class, there is additional literature to help the students along the way. Haster continues:

- This first basic education is mandatory for all personnel, but in the future we will provide optional specialized training. And so far the response and feedback from the participants is over all positive. So we have great expectations for the future, both for this education programme and for Karlstads environmental work.

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Climate fee compensation in Örebro

Text: **Tomas Bergkvist**



ÖREBRO

Since it is uncertain whether or not a municipality has the right to buy emission allowances, the Municipality of Örebro has introduced an internal "trading system" relating to the emissions of carbon dioxide from fossil fuels. Climate fees are levied on carbon emissions from travelling and transportation carried out by municipal departments. The fees are levied on air travel and the purchase of fossil fuels, among other things, as well as on business trips undertaken in privately-owned cars. In total, it is expected that these fees will total over one million Swedish kronor during 2010.

The climate fees will be credited to a special climate account, common to the entire municipality. If departments would like to develop their operations or change something meaning a reduction in the emissions of carbon dioxide or other greenhouse gases, they can then apply for money from this common climate account. The applications received so far show that

there are many good ideas which can also be developed further. All departments are hereby supported in their own efforts involving the climate, so all departments must now question their travelling and transportation more. The better the departments conform to the travel guidelines imposed upon them, the less travel costs and the greater health benefits there will be.

The system for imposing climate fees has been made as simple as possible, in order to avoid a lot of time-consuming manual work. Computer systems handle the actual fees. The model that has been adopted now will be evaluated after a period of one year. A few other municipalities have introduced similar systems.

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Wind power on a new low-energy building in Växjö

Text: **Carina Herbertsson** Photos: **Växjöhem**

Växjöhem is taking part in an EU initiative – SESAC-CONCERTO – under the 6th framework programme of the European Commission, where the goal is to construct more energy-efficient buildings than the applicable norms dictate in respective participating countries and to produce energy from renewable sources. The municipality of Växjö is an overall coordinator of the project which also includes Grenoble, in France and Delft, in Holland.

Measuring electricity consumption and water savings issues are high on the agenda of Växjö Municipality. The Växjö municipality owned property company, Växjöhem AB, puts a great deal of effort into its energy profile. It owns some 6,700 rented apartments and approximately 50,000 m² of other premises.

Solar panels

Within the framework of this project Växjöhem has prepared 88 apartments, a nursery school, and a solar panel installation at one of the city's senior schools. Being a property company in the Greenest City in Europe, Växjöhem strives to participate, develop and use technology so that innovations relating to energy generated from renewable sources can continue moving forward. If nobody dares to try, then it is difficult to reduce prices and achieve more efficient solutions.

The results of the solar panel installation have been rather successful. Despite the fact that Växjö lies in the area with amongst the lowest number of annual hours of the sun in the whole Sweden, the installation, of 69 kW, has produced approximately 59,000 kWh per year. The installation is also used as a teaching aid for the pupils of the school.

Windpower on the roof

Within the framework of the EU initiative, the company has begun the construction of an apartment building with 46 apartments. The building is what we call a "low-energy" building with estimated energy consumption of more than 40 % below the current applicable norms in Sweden. The building has a conventional heating system combined with a ventilation system with a very high degree of recycling.

The thoughts relating to renewable sources of energy and Positive energy buildings mean that the company continues looking at what it can, as a property owner, do to participate in developments. Just before the summer of 2009 Växjöhem was in contact

with a company that presented small-scale wind generators and Växjöhem was eager to use this technology.

Växjöhem is aware that there have been quite a few problems with previous projects for wind power generation for domestic buildings in Sweden, but nevertheless it wishes to participate in finding a sustainable solution.

New technology

Wind power technology is something completely new for the company, so it has entailed many hours of study to become familiar with the technology, particularly relating to framework noise and vibrations. In October requests were prepared and sent out for tenders with proposals for different types of generators. The wind generator that was evaluated as the most suitable, rotates vertically unlike previous wind generators used for domestic buildings in Sweden. The generator will produce some



20,000 kWh per year, that is estimated consumption of electricity for the building's common functions (lift, lighting of common parts, etc.). The wind generator will be supplied by the Modern Energi company and is expected to be installed on the building during the autumn of 2010.

The wind generator, just like the solar panel installation, will be able to be used as a teaching aid at the adjacent senior school. In mathematics, for different calculations, in scientific subjects relating to renewable sources of energy and in English, when we have many English speaking field trips where there is an interest in what the students actually learn in these trips.

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Making socially sustainable decisions about climate adaptation

Text: **Hannibal Rasmussen, Søren Gram and Bjørn Bedsted** Photo: **Jørgen Madsen**

In Kalundborg Municipality, they want to move the discussion about climate adaptation into the public debate and onto the political agenda. The Danish Board of Technology (DBT) is co-operating closely with Kalundborg Municipality to draft an adaptation strategy for areas prone to future floods and increased precipitation. Together we have designed a participatory process. Stakeholders (land and home owners, farmers, nature conservationists etc.) have been presented to different scenarios showing different ways of handling climate change on a scenario workshop at the end of 2009. The output was different visions of how to deal with climate change in the area.

The visions spanned from turning existing farmland and built on areas into wetlands to the establishment of large dikes in order to protect those same areas. The economic, social and environmental consequences of the various visions proposed are now further examined. The results will form the basis for a citizen summit about climate adaptation in Kalundborg Municipality at the beginning of 2011. Five hundred citizens will be invited to discuss and vote on alternative adaptation measures, thus providing important input to the decision-makers about the design of their climate adaptation strategy.

This participatory process has been developed within the BaltCICA project under the EU Baltic Sea Region Programme 2007 – 2013. As a BaltCICA partner, DBT is part of the process of testing and implementing new participatory decision procedures throughout the Baltic Sea Region.

Involvement of stakeholders and citizens in the decision-making process has the advantage of using local knowledge actively, thus improving the quality of decisions made. Furthermore, by giving those affected by decisions made an opportunity to influence those same decisions, their readiness to accept decisions made are increased. Thus participation, if properly designed and genuinely applied, leads to more socially sustainable decisions.

There is a growing awareness in the planning departments of Danish municipalities that climate change will have a significant impact on specific areas, thereby jeopardising the current land use in local communities. What is often lacking is an awareness of the essential political nature of dealing with adaptation measures. Treating the complex problems of climate adaptation as a mere technical issue fails to take into account alternative, and possibly more sustainable solutions and long-term strategies.

Renovating the sewage system in a seaside summer cottage area increases the inclination to protect that area from future flooding and thus technical decisions become political. When public authorities invest in infrastructure in a specific area it raises the expectations of the local inhabitants, hence making it even more difficult to differ from a strategy of protecting the current use of that area. Maybe it would be more desirable in the long run to simply phase out the seaside summer cottages and allow nature to take its course, rather than keep trying to protect it from the rising sea.

The purpose of The Danish Board of Technology (DBT) is to disseminate knowledge about technology, its possibilities and its effects on people, on society and on the environment as well as to promote the ongoing discussion about technology, to evaluate technology and to advise the Danish Parliament and other governmental bodies in matters pertaining to technology. DBT is internationally renowned for its' development and use of participatory methods. DBT has been addressing climate change in several projects and is hosting a national conference about climate adaptation on the 11th of October 2010 in Copenhagen.

For further information: www.tekno.dk

More information: www.baltcica.org



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Local stakeholders working on new visions of climate adaptation during a scenario workshop.

Cooperation on curbing HIV/AIDS epidemics resulted in practical tools for Russian cities

Text: **Karolina Mackiewicz**

Baltic Region Healthy Cities Association, in cooperation with Russian National Healthy Cities Network hosted the Final Conference of the project “We Choose a Life – Youth against HIV/AIDS” in Moscow, Russian Federation, on 2-4 February 2010. Final gathering of project partners from Russian cities created a platform for discussions on effective tools and solutions to address HIV/AIDS epidemic among young people and synergies among national, regional and local policies in the field of health promotion. Representatives from partner cities, trainers and experts admitted that two-year project provided cities with concrete and sustainable tools for effective work on curbing the rapidly growing HIV/AIDS epidemic among youth.

Following three solutions are recommended for other cities to use:

- **Integrated and more systematic approach**

Integrated and more systematic approach is essential when effective reduction of HIV/AIDS infection among young people is wanted. Development of healthy lifestyles with focus on sexual health, stakeholder involvement with focus on youth, political commitment and development of positive relations with media are prerequisites for efficient response to HIV/AIDS epidemic.

- **Improvement by strengthening cross-sectoral cooperation**

Effective response to HIV/AIDS epidemic among young people requires coordinated cooperation across several sectors and should not be limited to the local level. Cross-sectoral approach creates a mechanism for better information sharing and coordination, supporting the inclusion of all major stakeholders in society. Health of citizens is promoted most effectively when many sectors work together and learn from each other.

Representatives from partner cities, trainers and experts admitted that *We Choose a Life project* provided cities with concrete and sustainable tools for effective work on curbing the rapidly growing HIV/AIDS epidemic among youth.

Since a successful multi-sectoral approach must be relevant to a particular situation, each city which participated in “We Choose a Life” published Local Strategic Action Plan on tackling the HIV/AIDS epidemics and Youth Health Profile. Local Strategic Action Plans were approved by the local authorities and will be implemented during next years.

- **Engage your target group**

Local decision-makers and local leaders must pay attention to engaging target groups and promote cross-sectoral approach. The youth cannot be neglected. That makes the actions effective. Being involved gives young people the feeling of ownership and encourage them to continue the work in the field. That makes the actions sustainable.

In the project, the Youth monitoring tool was used to collect the feedback on youth health and risk behaviours and to determine risk groups for interventions. Moreover, a group of 60 volunteers in each of the project city was trained as media advocates working with young people on HIV/AIDS issues

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SNOOP sniffs emissions of marine traffic

- Impacts of shipping-induced air emissions in focus

Text: **Anu Keltaniemi**

Air quality in coastal cities and harbour areas is becoming an important regulative issue. The Shipping-induced NOx and SOx emissions – OPerational monitoring network (SNOOP) project will monitor shipping patterns and emissions arising from marine traffic in the Baltic Sea area with a special focus on the Northern Baltic Sea and the Gulf of Finland.

SNOOP focuses on the shipping-induced NOx, SOx, PM, CO and CO2 emissions. The project pursues to establish a long-term follow-up network on ship exhaust emissions, which makes it possible to observe development of ship exhaust emissions in the Central Baltic area. The project aims also to tie the information from the network to an effect estimation framework for HELCOM and port cities participating in the project.

In the project measured data on air concentrations will be collected, as well as deposition of nitrogen and PM compounds near harbours and the coastal sites. Possible impacts of exhaust emissions to human health will be also analysed. The project yields

experimental knowledge on solubility of the sea water, about the usability for marine biota and estimates ship exhaust emissions' impact on the marine environment. Measurements are implemented in the cities and port areas of Helsinki, Turku and Tallinn and onboard ships.

During the three-year (2009–2012) project nine Finnish and Estonian SNOOP-partners work together to produce policy-relevant, scientifically based information on emissions from shipping and their effects. The project is financed by Central Baltic INTERREG IV A Programme 2007–2013 and Centre for Economic Development, Transport and the Environment (ELY) of Southwest Finland. The total budget of the project is approximately 1.3 MEUR.

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Sustainable solutions and attractiveness through better management of urban rural partnerships

Text: **Sakari Saarinen** Photo: **Lower Silesia**

Atractivity is a common interest of every municipality and region trying to allure (new) taxpayers, businesses and tourists. Improving attractivity requires cross-sectoral cooperation and participatory planning processes. Attractivity is closely linked to the multi-dimensional concept of quality of life. Ensuring high quality of life is a key element in the development of attractive city-regions in the Baltic Sea Region. This is an urgent quest for city-regions covering both urban and rural areas since the interactions of the two types of territorial qualities are becoming more and more complex. Quality of life is also an individual concept that different people determine in different ways, depending on their own preferences and decisions. Improving quality of life and thus increasing attractivity demands both an active involvement of the inhabitants and good governance of local and regional authorities.

Urban and rural equally towards integrated planning

The NEW BRIDGES project (2009-2011), led by UBC EnvCom aims at building new opportunities for sustainability, improving the quality of life and increasing the Baltic Sea regional attractivity through developing the management of urban rural interactions in seven partner city-regions across the BSR. The quality of life and attractivity are approached through three key elements - residential preferences, mobility & accessibility and provision of services. New partnerships and sustainable solutions are targeted by paying particular attention to the individual preferences of the people living and working in the city-regions. Inhabitants and local stakeholders - practitioners, representatives from interest groups and NGOs, scientists, decision-makers, and entrepreneurs & employees - have been involved in the project from the very beginning through surveys, interviews and Local Stakeholder Meetings.

The experiences from NEW BRIDGES partners first analyses show that the city-regions have difficulties in addressing the identified urban rural challenges in regional planning as cooperation and communication between the relevant stakeholders and an integrated planning approach is in many cases insufficient. Furthermore, urban and rural parts of the city-regions are not always treated equally in planning and policy-making.

The spatial planning and regional policies have to be able to respond to the changing societies and varying individual preferences. The planning and policies have to be adaptive, cross-sectoral and integrated to be able to come up with sustainable solutions. NEW BRIDGES partner city-regions will

The urban rural interaction where cities and their surrounding suburban and rural areas build new partnerships and form active city-regions can offer a good framework for local and regional authorities to work together across a large area. Well managed interaction allows city-regions to coordinate sustainable development, to create critical mass, to develop integrated transports and to attract new inhabitants and investments.



Strengthening of Quality of Life through Improved Management of Urban Rural Interaction

between summer 2010 and spring 2011 implement pilot actions to introduce new sustainable solutions to their regional planning policies and to build more new urban rural partnerships.

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Best public space in Pomeranian Voivodeship 2009

Text: **Katarzyna Guzewska** Photo: **Internet**

The Castle garden is a small park next to the Southern part of the medieval city walls, leading East towards the Castle of the Pomeranian Dukes. The garden is a part of the greenery joined with the so-called planty park in Słupsk. Princess Erdmuta created the garden around the castle at the beginning of the XVII century. The garden was not typical because not only plants but also herbs grew there. Unfortunately, the garden itself as well as the castle was later neglected and devastated by Prussian army during their stay in town in the XIX century. When Słupsk became a Polish town, the castle was renovated but the garden was turned into a minor square.

The Castle garden currently resembles the Renaissance type of a garden from the XVII century. It has walking paths, a sandstone stairway, stylish benches and over 1500 plants, including box, yew, rhododendron as well as herbs, like oregano, thyme, lavender and rosmarinus. While designing the garden, the following elements were taken into consideration: the castle's architecture, rebuilt outdoor stairway and medieval parts of city walls made of bricks and stones. Those elements form a closed space and particular scenery for greenery.

A new shape of the walking paths and 13 benches from sandstone, which are almost the same colour as the castle stairway, encourage citizens to stop and take a rest in this beautiful sur-



The Castle garden in the town of Słupsk, Poland, was awarded 'The best public space in Pomeranian Voivodeship 2009' for creating an interesting architectural composition which successfully matches historic environment as well as for a well-considered choice and high quality of applied solutions which refer to the gardening tradition of this place in a creative way.

rounding. New lamps that look like antique have been installed in the garden as well. Moreover, the wild bear sculpture on flat stones has been transferred there and it is a real attraction for visitors.

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Which city has 293 000 inhabitants, is placed in the south of Sweden, is in the forefront of environmental work and will be part of Shanghai Expo 2010?

Malmö goes East

Text: **Hanna Asp**

The answer is the city of Malmö. Let me give you an insight in the Expo 2010, the green work that has been conducted in Malmö and why the city has chosen to be present as a good example during the World Expo.

The Shanghai World Expo that is taking place from May is expected to be the biggest Expo so far with some 70-100 million visitors during the six month period. The theme of the Expo is "Better City, Better Life" with a focus on the fast urbanisation in relation to the fact that the amount of the world's population that lives in cities continues to increase. In the 1950s, 29 % of the world's population lived in the cities; in 2010 this has increased to roughly 55 %.

Malmö showcasing an urban solution

Within the framework of the theme, a specific part will be dedicated to the Urban Best Practice Area, UBPA. Expo 2010 has invited a selected number of cities from the whole world, cities that are considered to be in the forefront on sustainable city development. Here, good and exciting solutions for "future cities" will be presented. Malmö is part of these exclusive selected cities, together with cities like London, Paris and Barcelona.

- This is a fantastic opportunity for us to market the city of Malmö and to show what Swedish municipalities and Swedish companies can achieve with a strong political will to carry out environmentally sustainable solutions in the city. The city of Malmö's successful green work will be presented for millions of visitors and for media from the whole world, says the president of the city's executive board **Ilmar Reepalu**.

The city of Malmö have been invited to communicate on the subject "Urban sustainable development in a former industrial city", thus it's fast transformation from an industrial city to the present, knowledge and sustainable city. In the exposition at the Shanghai World Expo Malmö will focus on it's transformation of the Western Harbour into an entirely new district with room for 600 dwellings as well as offices, shops and other services. A key tool in the creation of the district has been a fundamental ecological approach to planning, building and construction; this area is supplied at 100 % by locally produced energy from renewable sources such as solar, wind and water energy and from the district's waste. Moreover, a number of biotopes have been created in order to maintain the biodiversity; an eco-friendly transport system is as well in place in the area.

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Baltic Sea Region as a forerunner in Sustainable Development

Text: Stella Aaltonen Photo: Pasi Leino



Answers provided by *Sauli Rouhinen*,
Head Secretary of Finnish National
Commission on Sustainable Development
Ministry of Environment.



Solutions local, together – Conference takes place in January 2011. What meaning does the conference have for the further progress of sustainable development?

We have in Finland tried to bring sustainable development into practice on both governmental and on the civil society already since the beginning of 90s. People keep asking what exactly does sustainable development mean. It is a long learning process and relearning process. Changing of habits is exactly the same; learning and relearning.

The technology develops and our consumption standards increase, these create new learning themes. Running of a home and changing of consumption habits and lifestyle won't happen if you don't get new instructions all the time. A practical solution is this kind of a joint think tank, during which exchange of experiences is very valuable.

How do you see the situation with the sustainable development in the Baltic Sea Region in comparison with the rest of Europe?

In some aspects we are forerunners. The Nordic countries have coped well in the international comparisons on sustainable development. Cooperation in the Baltic Sea Region has taken place for a long time both in the sphere of environment protection and sustainable development.

On the other hand, we have also huge challenges; the Baltic Sea is almost a closed sea with enormously intensive economical activities, that's why the load on the Baltic Sea is significant. Much can be achieved if there is a wish to do something together for the benefit of all. I feel optimistic but simultaneously feel that it is very challenging to promote sustainable development in the Baltic Sea Region."

In this Questions & Answers' Corner we bring interesting issues into discussion.

Narrow gauge railway as a sustainable solution societal problems in Panevezys

Text: **Zita Tverkute**

Narrow gauge railway contributes in solving the question of air pollution with carbon dioxide, mitigation and adaptation to the challenges, caused by climate warming. What is more, the narrow gauge railway substitutes hundreds or even thousands of cars, which would be used to reach leisure and educational events, recreational and cultural events, which are held outside the city. The narrow gauge railway encompasses all of this by using nature friendly passenger carriages, with seating capacity for 400 – 500 passengers. In the past, water and firewood were used as fuel. In the future, to avoid further air pollution by carbon dioxide, we expect to continue using these renewable and nature friendly energy sources.

Attractive routes of the narrow gauge railway could also solve social problems of the city. The narrow gauge railway can be used as a means of transport to get to exceptional places of historical, cultural and technical heritage, which otherwise would be unreachable for socially unable families. Thus, many members of the city community cannot take advantage of social integration to the activities dedicated to knowledge of biological diversity, issues of environment protection, recognition of region, city, historical and cultural heritage. It could also contribute to environment protection and reduction of the severe pollution by exhaust gas.

Activity of the narrow gauge railway, which is located in Panevėžys, Lithuania, and the inclusion of its perspectives to the cases of "good practice", is one of numerous activities of the project *Panevėžys – a sustainable city*, which, on its turn, fully meets the main criteria of sustainable development: sustained ecologic, economic and social development.

This means of transport is very attractive, nature friendly with lots of programmes, dedicated to the recognition of the technical heritage, biological diversity and the outskirts of the city. Consequently, the narrow gauge railway attracts huge numbers of Lithuanian as well as foreign tourists, who contribute largely to the economic development of the city.

More information:
www.siaurukas.eu - EN - TRIPS

LED light in public space

Text: **Stefan Windh** Photo: **Pixel Factory**

The cities and communities are huge spenders of electricity for different light applications in various public spaces. This cost money from tax payers that can find better use. LED light can save between 60-80 % of the electricity bill for public lighting. LED technology can minimize also maintenance costs since a LED lamp can function as long as 20 years without replacement or service.

There are a few things missing yet before the LED revolution is in full swing. Vital components for drivers and software for intelligent management of this new electronic device are still missing at large. LED is not a new kind of lamp; it is a solid state electronic device.

As LED technology is an interesting development, the UBC Commission on Energy is working with the project *LED light in public space*. The project aims to create a model for how to converse to LED technology in public lighting and thus reduce both CO2 emissions and municipal costs for street and park lighting. By doing this the project will also develop best practice examples for the rest of the EU and market the South Baltic Region as a pilot region in the LED area.

The project aims to reach the following results:

- Raised awareness of the advantages of LED technology
- Increased commitment to the implementation of LED in public lighting to save energy and costs

- A triple helix network for lobbying of LED technology
- Durable education effects
- Guide in lighting demands and inventory of status of technological development
- Developed standards for public lighting by LED
- Design manual for planners and manufacturers
- Pilot LED lighting installations and best practice models and applicable LED solutions for lighting in public space as convincing arguments for future investments into lighting infrastructure in cities and regions of south BSR and beyond.

The project is funded by the South Baltic programme with 2.5 million € and is composed of 12 different partners.

Many UBC cites take part and are in progress of testing LED lights in their own cities. Visit the www.ledlightproject.eu for further information and inspiration.

UBC Energy Commission at the Baltic Summit 2010

For the first time Lithuania and Vilnius will be hosting the Summit of the Baltic Development Forum which will take place on 1-2 June 2010. The annual Forum of decision-makers, business, academia and media from the Baltic Sea Region and beyond will be organized back-to-back with the Prime Ministers' Summit that will mark the end of the Lithuanian Presidency of Council of the Baltic Sea States. Beyond doubts, these two events will transform Vilnius, the European Capital of Culture'2009, into the "Baltic Sea Region Capital'2010". UBC Energy Commission will be present and host their own seminar focused on the importance of the municipal level in energy policy implementations.

Energy issues will be much in focus during the summit. The Baltic Development Forum's Report on energy efficiency in the Kaliningrad Region presents the analysis of different investment strategies by providing an economic evaluation of the plans for investments in technologies for energy efficiency and in new nuclear power plants in the Kaliningrad Region and neighbouring countries. An evaluation of the benefits and costs of new interconnectors in the region is needed in order to investigate the integration of the Kaliningrad region into the regional energy system.

More information:
<http://www.bdforum.org/>

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The UBC Energy Commission is part of the Union of Baltic Cities, for more information please visit www.ubc.net.

Regional wastewater turns into an energy resource

Text and photo: **Jarno Järveläinen**

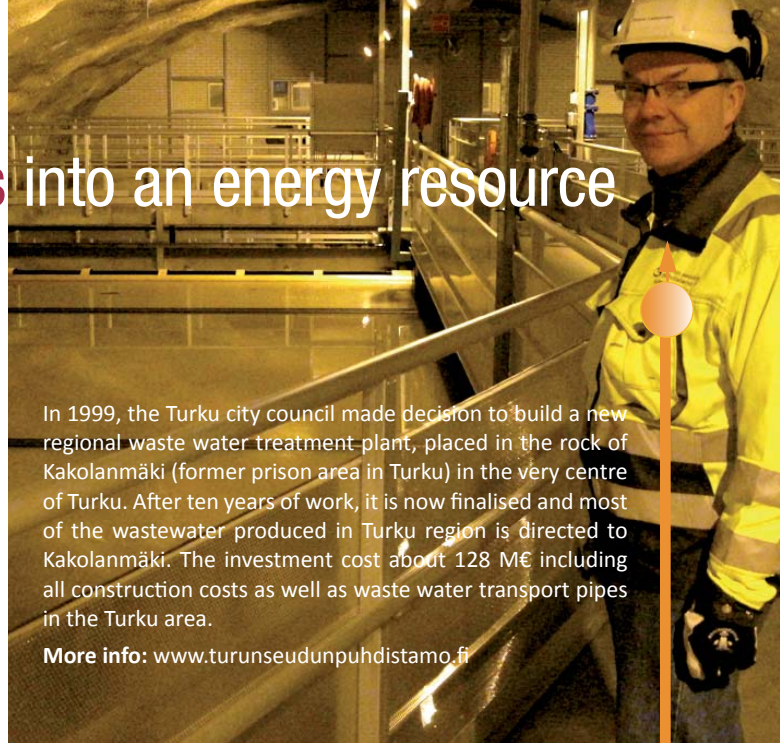
In January 2009, a new wastewater treatment plant in Kakolanmäki, in the city of Turku Finland, started operating. In addition to new technology and improved treatment quality, the new plant fills the needs of all environmental demands (HELCOM Recommendation 28E/5). The innovative aspect is in the concept with good collaboration between the waste water treatment plant, the heat recovery company Turku Energia Ltd. and a biogas producer Biovakka Ltd.

- The wastewater plant replaces five old plants. The total treatment capacity of the plant is for 300 000 people which means that the capacity also includes waste water treatment for several neighbouring municipalities, says **Timo Anttila**, Managing Director of Turun seudun puhdistamo Oy.

From problem to a resource

Treatment plant is built in the city centre of Turku, tens of meters under the rock. In the beginning of the process, the location of the wastewater treatment plant was criticised for being in the very centre of the city with possible smell or noise problems but these problems have not occurred and are not foreseen in the future either.

Treated water can now be released to the Baltic Sea without any harm to coastal waters. All the contaminants in waste water organic matter and pathogens are removed from the treatment process as sludge. Sludge is refined into biogas and the residue from that process is used as a fertilizer. Biogas is used for electricity and heat (see BC Environmental Bulletin 2/2009).



In 1999, the Turku city council made decision to build a new regional waste water treatment plant, placed in the rock of Kakolanmäki (former prison area in Turku) in the very centre of Turku. After ten years of work, it is now finalised and most of the wastewater produced in Turku region is directed to Kakolanmäki. The investment cost about 128 M€ including all construction costs as well as waste water transport pipes in the Turku area.

More info: www.turunseudunpuhdistamo.fi

Heat recovery system is also installed in the treatment plant and used in the district heating. Furthermore cold water is collected and used in the district cooling network in some hospital and office buildings. The former problems of sludge deposit are solved by combining problems to a resource.

- Resource gives the community a possibility to use less fossil fuels and offers a real solution for the management of the growing waste sludge problem. Refining waste water to energy and fertilizers gives additional jobs and income to the local area. There is less need for mining phosphate when sludge is used as fertilizer, says **Raimo Laaksonen**, Operations Manager of Turun seudun puhdistamo Oy.

Rakvere active in achieving its Green Goals

Text: **Anu Oja**

The municipality of Rakvere in Estonia was nominated *Sustainable Energy Communities* in the competition of Sustainable Energy Europe Awards 2010. Rakvere has already started to use Green Energy (energy from renewable sources) as far as municipal buildings and street lightening are concerned reducing its overall CO₂ emissions by 13 %.

A Sustainable Energy Action Plan has been compiled according to which ca 40 % of reduction can be achieved by the end of 2010 by taking different actions, among which the most effective one is the renovation of the district heating system that will start using renewable energies as fuel sources.

Rakvere faces the problem of dealing with a large stock of residential buildings built during the Soviet times. Due to previous low energy costs, the problems arising from the poor quality of the buildings, was not an issue. However, due to the increasing cost of energy nowadays as well as new directives set forth, new approaches and measures need to be applied.

Engaged in several projects

The city is one of the partners in the project *Energy Efficient and Integrated Urban Development Action* (Urb.Energy, financed by Baltic Sea Region Programme 2007-2013) that addresses first

and foremost the problem of energy efficient refurbishment of urban housestock. During the project Rakvere will design construction pilots for the old residential buildings. The housing associations managing the buildings will later be able to use those pilots when reconstructing the houses according to the recommendations set forth by the audit documents. Such construction pilots would not only consist of the façade renewal but also form the overall appearance of the city by assigning colour and appearance solutions for the apartment buildings.

Rakvere is also a partner in the cross-border energy awareness raising project *Encouraging simple energy efficient behavioural patterns at schools (Flick the Switch*, supported by the Intelligent Energy Europe Programme.) The aim is to get European students into the habit of switching off the lights and devices when they are not in use and this way to prevent the enormous waste in terms of unnecessary generation of millions of tonnes of CO₂ emissions in Europe that leads to harming of environment and acceleration of climate change.

Rakvere is also a partner in the project called *Eco-Support activities – working together towards a better environment* (page 12).

More information: www.rakvere.ee

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Short News

PURE investment started in Riga

During this spring concrete actions to reduce the eutrophication of the Baltic Sea have started in PURE –Project on Urban Reduction of Eutrophication. Recently project partner Riga Water has started realising new investments for enhanced phosphorous removal at their wastewater treatment plant. In May five other project partners will start cooperation with a consultant in order to review their current wastewater and sludge handling practices, and to prepare new investments that would further reduce the nutrient load entering the Baltic Sea.

In the coming months the PURE partners wish to start cooperation with UBC member cities; the plan is to collect current wastewater treatment practices and results from our member cities and to facilitate the information exchange between the cities on the issue. Next October, a workshop addressing the topics of wastewater treatment and sludge handling will take place in Riga for interested participants.

More information: www.purebalticsea.eu



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New ecological portal for citizens of St Petersburg has been launched

Text: **Anna Koreneva**

A new ecological website of the Committee of Environmental protection and ecological safety of the city of St Petersburg, www.infoeco.ru, was launched in December 2009. The site combines a wide range of tasks on promotion of ecological data and knowledge. These include both informative and consultative services – updated information on the state of the environment in St Petersburg and Leningrad oblast for citizens and required documents on ecological monitoring and expertise for enterprises to educational and entertaining – library on ecological methods, games and movies for children and teachers.

The portal has computer games *Secret of the otter Marusya* and *Missing Eco-knowledge*, ecological quiz on the Baltic Sea and ecotips for daily usage. These new elements have made the ecological portal in St Petersburg more attractive for citizens. The site is considered to be a practical and efficient way of encouraging sustainable way of living by means of Internet.

High expectations for future

The new ecological portal gathers the information under one point and therefore assists the citizens to find relevant information and motivation. It also coordinates the awareness actions carried out in the city. In a number of dissemination events for the local authorities, enterprises and the public in St Petersburg a lot of positive comments and responses have been received and high estimations of the new service have been given.

The portal was developed in a project *Awareness rising for citizens in St Petersburg through a new tool*, co-financed by the Finnish Ministry of Environment. The project was successfully finished in February 2010 exceeding not only project partner's plans, but also expectations of local authorities and citizens in St Petersburg who felt the need in a multifunctional service providing necessary ecological information.

CHAMP enters the training stage

The second year of the CHAMP project started with the first training sessions in Finland and Italy. Altogether the project has recruited already over 50 local authorities in Germany, Italy, Finland and Hungary, that will be trained in implementing the integrated management system during the next two years.

Over 30 experts from the 14 Finnish pilot cities and regions took part in the first Finnish CHAMP training in March in Vantaa. The training concentrated on the first two steps of Integrated Management System, baseline review and target setting.

The participating cities and regions– Espoo, Helsinki, Hämeenlinna, Joensuu, Kainuu region, Kotka, Lahti, Oulu, Porvoo, Riihimäki, Salo, Tampere, Turku and Vantaa – were in a major role giving insight to their local climate work.

In Italy, 15 cities and regions are taking part in the project and the first training gathered around 30 participants in the beginning of February in Milan. The focus here was solely on the baseline review and how it is conducted in respect to climate change work, including emission calculations. The participants from Italy are Ancona, Asti, Caltanissetta, Cesano Maderno, Firenze, La Spezia, Mantova, Desio/Meda, Padova, Pavia, Province of Bergamo, Province of Pistoia, Province of Perugia and the Province of Siena.

In both countries the participating cities are in different phases on their climate work, which poses a challenge but also gives great opportunities as the cities that are one step behind can learn from the experiences of the cities that are ahead.

More information: www.localmanagement.eu

A Managing Urban Europe Initiative



Sustainable urban mobility across Europe

UBC EnvCom is a partner in the new three-year *ELTISplus* project on promoting and enhancing sustainable urban mobility across Europe. The project objective is twofold: to maintain, improve and enhance the image, awareness, use and usefulness of ELTIS - the European Local Transport Information Service – portal (www.eltis.org); and to gain further awareness and acceptance of the concept Sustainable Urban Mobility Plans (SUMP) and to accelerate the development and uptake of SUMP by competent authorities across Europe.

The ELTISplus project partners will organize a series of workshops and other events on sustainable urban mobility plans in all the EU Member States. UBC EnvCom is responsible for the workshops in the Baltic Sea Region countries. The workshops are targeted to cities (e.g. politicians, decision-makers, authorities), researchers, consultants and other implementers such as urban and transport planners, and to energy, health and environmental actors. The first national events will take place in autumn 2010.

More information:

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The Committee of Environmental protection and ecological safety of the city of St Petersburg confirmed the new ecological portal to be highly utilized already during the first weeks after the launch of the website that proves its importance and practicality.

More information:

www.infoeco.ru
www.ubc-environment.net/index.php/main:awarenessstpetersburg

UBC Environment and Sustainable Development Secretariat

Union of the Baltic Cities (UBC) is a network of 106 cities from all ten Baltic Sea countries, with an overriding goal of contributing to the democratic, social, cultural and environmentally sustainable development in the Baltic Sea Region. UBC Commission on Environment (UBC EnvCom) is one of the 13 commissions of the UBC.

Practical work of the Commission is carried out by UBC Environment and Sustainable Development Secretariat. Its services for the cities include for example organising meetings and policy work, preparing documents and publications, initiating and running projects, and consulting and training. The Secretariat carries out Baltic Cities Sustainable Development Surveys biannually, publishes Baltic Cities Environmental bulletin, and offers Good Practice Database for local authorities at www.ubcwheel.eu.

The current staff of Environment and Sustainable Development Secretariat consists of 15 professionals working fulltime for the UBC.



EnvCom, Turku

Our aims

Baltic Sea



Projects



ELTISplus - PURE - CHAMP - NEW BRIDGES - MATRUSCHKA - SUSTAINMENT - BUSTRIP - Managing Urban Europe-25 - NewHansa ... just to mention a few.

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RATKAISUJA

lähellä, yhdessä

LÖSNINGAR

nära, tillsammans

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Conference on
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**31 Jan - 2 Feb 2011
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Solutions local, together introduces sustainable practical solutions and inspires participants to use local solutions together with other stakeholders.

**www.solutions2011.fi
solutions2011@turku.fi**

UBC Good Practice Database is full of good solutions

Since the launch of the UBC Good Practice Database in the Baltic Sea Region, March 2009, the database has raised in the number of cases. Currently the database includes well over 400 good practices from over hundred cities. This gives a very good impression of how active and engaged cities are in the Baltic Sea region!

The database was developed to answer to the need of local authorities to find practical examples complemented with suitable tools. The practices cover sustainable development in cities including all topics from transport to health and from social aspects to economic instruments, all dimensions of the Aalborg Commitments. For example, the database has at the moment 102 cases related to water. More are being inserted all the time and the visitors are ranking the cases as they use them.

The Database is an excellent way to market your good practices and also get inspiration and ideas for your own work. We warmly invite you to register and insert your own cases to the database at: www.ubcwheel.eu - LOGIN.