



City of Helsinki



THE BALTIC SEA
CHALLENGE

citywater



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Benefits of water protection –a range of concrete measures for local actors

PROGRAMME

Tuesday 21 January 9.30-12.30

City Hall, Pohjoisesplanadi 11-13, Helsinki

9:30-10:00 Coffee

OPENING SESSION: INTRODUCTION TO THE THEME

Empire Hall

*Clean waters are beneficial for cities and citizens in facilitating business, tourism and recreational opportunities, as well as generally in increasing well-being. At the same time cities have a high impact on local waters since most emissions are of local origin. However, when determining the profitability of water protection measures, the costs are commonly compared only to potential cost-savings, underestimating non-monetary benefits e.g. competitiveness and well-being. Yet, such benefits may be turned into monetary terms by relating them to people's willingness to pay for a better water quality, thus giving added support to decision-making. Here, the **Cities Forum** present and provide practical examples of the feasibility and monetary benefits for local actors regarding water protection measures in ports, waste water treatment plants, storm water management and food.*

Chair Ms. Päivi Kippo-Edlund, Director of Environmental Protection, City of Helsinki

10:00-10:10

Opening words

Mr. Jussi Pajunen, Mayor of Helsinki

10:10-10:20

Facing the problem: What kind of measures can cities do?

Mr. Pekka Kansanen, Director General, City of Helsinki Environment Centre

10:20-10:40

Putting a monetary value on healthy waters – a cost-benefit perspective

Mr. Kari Hyytiäinen, Professor in the Economics of Baltic Sea Protection, University of Helsinki



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PARALLEL SESSIONS: SHOWCASING WATER PROTECTION

COSTS AND BENEFITS OF MEASURES – STORM WATERS, WASTE WATER RECEPTION IN PORTS, FOOD AND WASTE WATER TREATMENT

10:40-11:25 Seminar Room

STORM WATERS

Threat or possibility – where to find investment money?

Cities are characterized by extensive areas covered by hard, impervious surfaces, such as asphalt and buildings. Due to this, much less water may be absorbed by soils and vegetation and results in problems related to flooding and overloading in urban areas as well as in waste water treatment plants. Furthermore, the problem is diversified by the contamination of storm waters with pollutants and by climate change in general. The traditional management of storm waters consists of conveyance of water away from urban environments or leading it in to the sewage system. However, the current focus in storm water management is on natural solutions, such as storing and retaining storm water as well as removing gross pollutants in e.g. bio-filters. A very important aspect of storm water handling is further to recognize its potential as a valuable resource and favoring management solutions which can increase human well-being and the recreational opportunities in cities. Which are the benefits, and how can these solutions bring added value and gain support in the decision-making process in cities?

Moderator Ms. Lotta Nummelin, CEO, The Baltic Sea Fund

The economic valuation of ecosystem services, case storm waters

Mr. Mika Rekola, University lecturer, University of Helsinki

Storm water management, ecosystem services and Green technology - the case of Malmö

Mr. Lari Pitkä-Kangas, Member of the Malmö City Council, City of Malmö

10:40-11:25 Empire Hall

WASTE WATER RECEPTION IN PORTS

Preparedness for the special area status of the Baltic Sea

At a distance of more than three nautical miles from nearest land, a ship is allowed to discharge comminuted and disinfected sewage to the sea, while other sewage may be released in to the sea at a distance of more than 12 nautical miles according to the current Annex IV of the MARPOL Convention. However, IMO has already approved new amendments to MARPOL Annex IV, which entered into force on 1 January 2013. These new amendments introduce the Baltic Sea as a special area and prohibit discharge of sewage into the sea from passenger and cruise ships. Untreated sewage should be delivered to a port reception facility, alternatively treated in an approved sewage treatment plant capable of reducing nutrients on board according to established concentration standards. However, the special area status will enter into effect only when the Baltic Sea countries, which have undertaken to improve the port sewage reception capacity, via HELCOM notify IMO that adequate port reception facilities for sewage are available. Where are we now in the Baltic Sea and are reception facility investments cost-effective and beneficial for ports?

Moderator Ms. Marjukka Porvari, Director, John Nurminen Foundation

Available port reception facilities and needs for improvement

Ms. Anita Mäkinen, Chief Adviser, Finnish Transport Safety Agency

How to economically introduce a no-special fee praxis

Mr. Kimmo Mäki, Managing Director, Port of Helsinki



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11:25-12:10 Seminar Room

FOOD

Eat vegetarian – save the Baltic Sea?

When talking about food, an every-day question is “what should I eat today?” In our corner of the world, we consider the healthiness and price of the food, as well as maybe the time and skill it takes to make the course when answering the question. However, many of our private and public realized food choices do not have a positive impact on our health, and many of the same choices impact the environment, and especially in a local context the Baltic Sea negatively. Since eutrophication intensity varies between different food stuff the loads of nutrients to the Baltic Sea may be significantly changed by choices of the food services related to differing city functions (schools, health care institutions etc). In terms of environmental and also socioeconomic impacts, choice of food raw material and their original source is important. For instance, for eutrophication impacts the scale is large; for one kilogram of potatoes, the nitrogen load is only one-hundredth compared to that of beef, which has the highest eutrophication intensity of all meat products. How much can a local actor reduce food related nutrient loads when at the same time keeping in mind the nutritional requirements, and what are the benefits for the actor?

Moderator Ms. Lotta Nummelin, CEO, The Baltic Sea Fund

FOODWEB – Baltic environment, food and health: from habits to awareness

Ms. Sirpa Kurppa, Professor, MTT Agrifood Research Finland

The role of municipalities - how to improve the public food courses?

Mr. Petteri Huuska, Environment planner, City of Helsinki Environment Centre

11:25-12:10 Empire Hall

WASTE WATER TREATMENT PLANTS

Clean tech – costs or savings?

Improving municipal waste water treatment is of major importance in reducing nutrient loads to the Baltic Sea. Especially chemical phosphorus removal at waste water treatment plants is a cheap and efficient method of first aid to protect the Baltic Sea. Many local actors have undertaken treatment efficiency measures, and thereby met the requirements of the EU Urban Waste Water Treatment Directive and recommendations by HELCOM. Yet, not all waste water treatment plants meet these standards. How can we get more concrete actions and what are the benefits of efficiency measures for the local actor?

Moderator Ms. Marjukka Porvari, Director, John Nurminen Foundation

How can municipal waste water treatment be improved in a cost-efficient way?

Ms. Saijariina Toivikko, Senior Adviser, Finnish Water Utilities Association (FIWA)

Successful solutions in waste water treatment in the Helsinki region

Mr. Tommi Fred, Head of Department, Helsinki Region Environmental Services Authority

CONCLUDING SESSION: CITIES THINK-THANK

Empire Hall

12:10-12.30

Concluding remarks from sessions and questions to the audience by the chair and moderators:

- **Trump cards of future cities: intelligent water management?**

12.30-14.00 Lunch at the City Hall