

Water in the Baltic Sea Region: A sea of challenges and business opportunities

A possible outline for joint action¹

Water is one of the 21st century's greatest challenges. However, water also represents huge business opportunities. Especially in the Baltic Sea Region we have a strong basis for exploring these opportunities. This discussion paper suggests how the Baltic Sea Region can become a beacon in this area through development of a comprehensive regional water cluster.

International challenges and opportunities in the water sector

In 2010, the global water market amounted to approx. 360 billion €. Several countries in the Baltic Sea Region have a long tradition of solving complex water supply and environmental problems in close cooperation between government, utilities and industry. The global water market represents a strong export potential. This international opportunity must be seized.

Water is, however, also a scarce and vulnerable resource. Since 1970, the amount of water available pr. capita has fallen by 40% reflecting the global demographic development. Today, more than 1.2 billion people lack access to clean water and soon 1.8 billion people will experience outright water scarcity. Water shortage is a challenge to both developed and developing countries. Climate change and increased urbanization in many parts of the world will change and worsen problems related to shortage of water resources.

It is mainly agriculture, irrigation and energy production that place greater demands on water resources in most countries. The amount of water used for irrigation is increasing and represents in many countries well over half of the available water resources. In some countries, water for energy production, including cooling of water, is of greatest importance. Other urgent problems to address relate to pollution of water and its sources.

Due to climate change, the cost of handling problems related to raising sea levels, heavy rain falls, floods etc. will increase dramatically. From 2007, prices for water and drainage increased 10 to 13 % on average and nothing seems to stop this trend. Industry, e.g. Carlsberg Breweries, expects the price of water to increase 300% on average in the future. Carlsberg has initiated numerous activities to determine and reduce water consumption.

Both industry and agriculture will need to explore avenues to reduce the additional costs of increased water prices. Fortunately, the developments in water technologies and management are also developing rapidly, and companies, utilities and public authorities have much better opportunities to recycle water and optimize the total use of water in production. Also in the field of waste water, new technologies are emerging.

¹ This paper is developed by Baltic Development Forum in cooperation with Petter Møller, AP Consult

The Baltic Sea Region - a first mover?

The Baltic Sea countries are world leaders in clean and green tech. Also there is a long and strong tradition of efficient water management. This region represents competences and cooperation experiences that give capacity to develop innovative solutions addressing the global water problems.

A new green growth initiative could evolve into a new cluster on water as the long term objective. The Baltic Sea region could become a testing and demonstration area, giving further global opportunities through new innovative products and water solutions. BDF offers to coordinate the first steps in this direction.

New water footprint Standard

The International Standardisation Organisation, ISO, is currently developing a new standard for estimating water footprint: ISO 14046 Water Footprint Requirements and Guidelines. At the moment the standard is being drafted and has to go through formal procedures before ready for adoption by the participating countries. A definitive version of the standard is expected to be available in 2011/2012. The present working drafts can, however, be used as a basis for reporting, since substantial changes are not expected. Initial work has been supported by the private sector including Coca-Cola and Unilever.

The main elements in the ISO standard are based on a 'lifecycle' perspective. It distinguishes between types of water and 'elementary flow' (surface brackish water, groundwater, fossil water, etc.). It reflects potential environmental impacts related to water use. Furthermore, it reflects changes in water use and water quality. Companies can unambiguously demonstrate the types of water they use and present the effect on the environment. The water footprint standard also illustrates the size of the potential impacts associated to water use. A 'water footprint' can be stated positively as well as negatively.

Companies and public authorities in the Baltic Sea Region have a chance to become first movers, if the water footprint is promoted and introduced in a coordinated manner. The introduction of water footprint should go hand-in-hand with increased efforts to address the pollution of the Baltic Sea, one of the most polluted seas in the world on certain dimensions. Solving the problems of the Baltic Sea could be a way of demonstrating how the region is able to address problems related to water, waste water and water management in general, through displaying the use of intelligent water technologies.

The main water stakeholders in the Baltic Sea Region

The Baltic Sea Region has many stakeholders in the water sector. They can all contribute and they all need to be taken into consideration when exploiting the opportunities of the water sector and introducing the water footprint.

- **HELCOM**

The Helsinki Commission, or HELCOM, works to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation between Denmark, Estonia, the European Community, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.

HELCOM Baltic Sea Action Plan is an ambitious programme to restore the good ecological status of the Baltic marine environment by 2021 - a decisive stepping stone for wider and more efficient actions to combat the continuing deterioration of the marine environment resulting from human activity.

By adopting a new environmental strategy, HELCOM will continue its long record of respected leadership in Marine Environmental Protection, incorporating the latest scientific knowledge and innovative management approaches into strategic policy implementation, stimulating closer, goal-oriented multilateral co-operation around Baltic Sea. If implemented, the action plan will lead to profound, innovative changes in the ways we manage the Baltic Sea environment. HELCOM has, however, no financial instruments or implementing authority vis-à-vis the member states.

- EU

During Swedish Presidency in 2009, the EU Strategy for the Baltic Sea Region (EUSBSR) and its Action Plan was endorsed by the European Council. EUSBSR aims at assisting implementation of the HELCOM plan. It includes a wide range of policy fields and action areas. It provides consistency in the EU support programme for the Baltic Sea Region.

Furthermore, the European Commission has established the Integrated Maritime Policy that includes Maritime Spatial Planning of European marine waters. On the regional level, HELCOM and VASAB2 have established a Joint Working Group to further improve the long-term sustainable management and planning for the whole Baltic Sea.

The adoption of EUSBSR means that EU is putting extra focus on the Baltic Sea and ways to reduce pollution of the sea. More generally, attention is also on maritime policies and sustainable use of water resources. More projects funding that will help address different aspects of the pollution can be expected in the years to come. Additional funds will also have to be made available.

- The Baltic Sea Action Group

In February 2010, all Heads of State and Government met in Helsinki. The Finnish President, Tarja Halonen and former Prime Minister Matti Vanhanen of Finland took the initiative to call for a Baltic Sea Action Summit together with Chairman of the Baltic Sea Action Group (BSAG), Ilkka Herlin. BSAG is devoted to rescuing the Baltic Sea with carefully chosen projects. The Summit demonstrated political consensus in the need to address the present pollution of the Baltic Sea. Huge political capital has been invested.

BSAG was responsible for organising the summit and collecting commitments from public-private partners and companies in a sustainable and environmentally friendly use of water. 171 commitments for concrete action were made. Prime Minister Putin has committed himself for hosting the next Baltic Sea Action Summit (the date is to be decided).

- Baltic Sea 2020

Baltic Sea 2020 is another key organisation contributing to turn around the negative environmental trend. Baltic Sea 2020 received BDFs Baltic Sea Award for the impressive private initiative which finances projects that can help the Baltic Sea recover.

- The World Wild Fund (WWF)

WWF is also very active and competent. It has taken a 'Baltic Consensus' initiative, designed to secure the input of key resource 'users' to influence and promote a more efficient, integrated planning and management of the Baltic Sea.

- Stockholm International Water Institute (SIWI)

SIWI is a policy institute whose internationally-oriented programmes and activities contribute to finding sustainable solutions to the world's escalating water crisis. SIWI serves as a platform for knowledge sharing and networking between scientific, business, policy and civil society communities. Established 1999, the Swedish Baltic Sea Water Award recognizes outstanding efforts to improve the marine environment in the Baltic Sea.

- Baltic Development Forum (BDF)

BDF's mission is "to create a prosperous Baltic Sea Region through regional integration, sustainable growth, innovation and competitiveness". Within this mission and with private business and industry as members and partners, it is natural that BDF also focuses on the Baltic Sea pollution. The issue has recurrently been a theme on most BDF Summits, and BDF's award has been granted to actors in the field.

BDF sees the Baltic Sea pollution as a huge problem but also as very good opportunity that should not be missed. The private sector needs to be invited as a partner to the political objectives for the Baltic Sea. As the list of actors indicates, there are many organisations with a purely environmental perspective. No one is reaching out to the private sector as BDF is. Therefore, BDF has a role to play as a platform forum that creates networking opportunities for businesses. BDF's platform can serve as matchmaking between partners that are developing concrete projects and looking for funding, including EU-funding, and financing from investment banks.

At the BDF Summit and the Annual Forum of the EUSBSR on 24-26 Oct 2011, BDF, the Commission and the Polish Presidency are organising a stakeholder meeting which will provide input to the review of the EUSBSR. It is expected that concrete proposals will transpire from the Summit/Annual Forum also within the priority area of clean water.

- Business/ Enterprises

It seems that the private sector's primary interest is to get access to networks that enable them to win concrete projects including gaining insight into projects in the pipeline. Companies can also brand themselves by making commitments to solving the environmental problems. A networking platform around the Baltic Sea could add value to their existing sales organizations. The private sector also has an interest in participating in demonstration projects with partners such as cities and regions.

Existing EU-projects and funding sources

The EUSBSR covers among other things knowledge, skills and projects in the areas of: *Sustainable agriculture, Structural development in agriculture, Agro tourism, Cleaner water environment, Climate change related to water, Cleantech.*

The EUSBSR Action Plan includes approximately 20 projects on water and water pollution, particularly within the HELCOM plan (reduction of hazardous substances) and screening of "municipal waste waters". Denmark is lead on one project in the field. At the top of the list Sweden, Germany and Finland have over 10 projects each in the priority areas.

The EU Structural Fund for transnational cooperation 2007-2013 (the Baltic Sea Region programme) is the main financial instrument. Among the key objectives are to make "the Baltic Sea an attractive place to invest, work and live". The structural funds have invested approximately 200 million € in projects. 34 million € remain in the program, of which 10 million € in priority 3 "Baltic Sea as a common resource". Projects requires at least three organizations from three different countries, and projects within water will typically fall within this priority. The priority focus on joint national solutions is reduction of pollution of the Baltic Sea and improving sustainable management of the sea as a common resource.

The Nordic and European Investment Banks

The two investment banks have both committed themselves to providing funds and services to the implementation of the EUSBSR. The banks have stated that the successful implementation of the HELCOM plan to restore the good ecological status of the Baltic marine environment by 2021 is vital to the success of the EU strategy, as the pollution of the Baltic Sea is only too visible for the people living around it. Heavy investments are needed to meet the HELCOM plan.

A water cluster in the Baltic Sea Region

Altogether, competent actors and accessible funding opportunities can be mobilized in a joint effort to turn the Baltic Sea Region into an international test and demonstration site for water solutions. These solutions can be used subsequently in the rest of the world. New and innovative system solutions in collaboration between industry and other stakeholders around the Baltic Sea could be used in pursuit of the global water market.

BDF offers to lead the first steps towards a new platform initiative aiming at a regional water cluster in the Baltic Sea Region. A regional water cluster organisation was one idea that received a lot of attention during a Green Growth conference organised by BDF in Riga during Spring 2011 together with the European Commission and Nordic Council of Ministers.

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With its huge regional experience in establishing networks between public and private sector, BDF is in a good position to gather public and especially private stakeholders who have something to offer in the water sector and in addressing the pollution problems of the Baltic Sea. BDF will come up with concrete suggestions for the next steps in a process towards addressing the water challenges of the Baltic Sea Region in partnership with the private sector.