

INFORMATION PACKAGE FROM MEETING IN HELSINKI 2022 SALTIC SK

The Baltic Sea City Accelerator Club

The municipalities with their local knowledge and mandate, combined with their access to financing are vital in solving the challenges of the Baltic Sea. The Baltic Sea City Accelerator Club is a unique international network focused on eutrophication, where the municipalities get access to leading research and solutions, hands-on assistance on their challenges, knowledge exchange with other municipalities and guidance on financing opportunities.

In 2021 we officially started our club, in collaboration with the Baltic Sea Challenge. This club is a continuation of the Baltic Sea City Accelerator, and a way for the municipalities previously involved in the City Accelerator programmes, to sharpen their work on eutrophication by a deepened cooperation, expanded knowledge exchange and improved funding opportunities.

2021 March - Kick-off (Digital)

The kick-off of the club took place in March 2021, with twelve participating municipalities, from four countries. The event included presentations from some of the leading solution providers and researchers as well as hands-on group work. The topics were selected based on feed-back from the municipalities and specific knowledge of Race For The Baltic and the Baltic Sea Challenge.

2021 October - Second meeting (Digital)

In October the second club event was conducted together with fifteen participating municipalities from four countries. Focus was on funding opportunities and how eutrophication can be linked to the Sustainable Development Goals (SDG).

2022 April – Third meeting (Helsinki)

The club's latest event in Helsinki, was the first in-person club event since the pandemic. The event gathered ten participating municipalities from three countries. However due to covid restrictions and the war in Ukraine, some municipalities were prevented from participating. Topics in focus were nutrient calculations and recycling, indicators for SDG 14 and treatments for agricultural runoff: gypsum, structural liming, biocoal, carbon sinks, and wetlands.













A network of municipalities dedicated to improving the Baltic Sea

We are always open for new and relevant club members. Is your municipality interested in becoming part of this network?

Read more about Baltic Sea City Accelerator Club on Race For The Baltic's website:

https://www.raceforthebaltic.com/baltic-sea-city-accelerator-project

The club is a continued collaboration between Race For The Baltic and The Baltic Sea Challenge of the Cities Helsinki and Turku.









Club meeting programme 26-28 of April in Helsinki

Keynote speaker

Anni Sinnemäki, the Deputy Mayor for Urban Environment City of Helsiniki

Presentations

- Introduction to the Baltic Sea Panel, Kari Petri Hyytiäinen, Professor, University of Helsinki
- Understand challenges & opportunities when choosing, planning and executing measures regarding eutrophication, Kati Berninger, Tyrsky Consulting
- Removing and recycling nutrients from the sea cormorants are helping us in doing that, Mikko Jokinen, Innoeco Consulting
- Establishing indicators to measure success toward the UN Sustainable
 Development Goal for "Life under water", Vivi Fleming, Head of Unit, SYKE
- Gypsym an effective water protection measure for agriculture, Anna Saarentaus, John Nurminen Foundation
- Sustainable biogas, Henri Nikkonen, John Nurminen Foundation
- Treatments in agriculture the arable lands, application of structural lime, gypsum, and wood fiber for reduction of nutrient load, Jaana Uusi-Kämppä, Senior Scientist Natural Resources Institute Finland

Workshops

Day 1: Mapping the gap – nutrient calculations and recycling

Day 2: SDGs in eutrophication projects

Field Trips

Day 2: Haltiala farm
Day 3: Urban wetland

The meeting consisted of:

3 days

10 municipalities

7 presentations

2 workshops

2 field trips



Participants

Helsinki

Anna Halonen, Project Specialist Katariina Serenius, Unit Manager, Environmental Monitoring and Supervision Mari Joensuu, Environmental Planner

Turku

Tove Holm, coordinator for the Baltic Sea Challenge at the City of Turku

Klaipėda

Rasa Grubliauskyte, Klaipeda district municipality administration Kristina Lūžaitė, Department of agriculture and environment Chief specialist

Panevėžys

Asta Puodziuniene, Panevezys City Municipality Strategical Planning Chief Expert Rūta Taučikienė, Panevezys City Municipality Chief Expert

Katrineholm

Jenny Herbertsson, Environmental strategist/water coordinator Linda Aldebert, Environmental strategist

Vaxholm

Emma Mattsson, Water- and ecologist strategist

Kalmar

Renate Foks, Project Manager

Västervik

Anders Fröberg, Water coordinator

Blekinge Arkipelag

Ylva Wallin, Intern

Värmdö

Jenni Brink Bylund, Water strategist Daniel Hedström, Environmental inspector

Day 1 **Presentations**

After introducing words from Race For The Baltic and the Baltic Sea Challenge, the Deputy Mayor of Urban Environment for the City of Helsinki Anni Sinnemäki welcomed us by telling us about Helsinki City's work for the environment and against eutrophication and opened the meeting.

Anni Sinnemäki, Deputy Mayor of Urban Environment, City of Helsinki

The Baltic Sea Panel

This inspiring start was followed by the first presentation held by Kari Petri Hyytiäinen, about the network The Baltic Sea Panel. Professor Hyytiäinen emphasized the importance of The Baltic Sea Panels objectives, to initiate public discussion, support research, take initiatives on the protection of coastal waters and the Baltic Sea and encourage other actors in the field. A greatly appreciated run down by the members of the club!

> Kari Petri Hyytiäinen, Professor, University of Helsinki

Removing and recycling nutrients from the sea - can cormorants help us in doing that?

Mr Jokinen, presented his work with cormorant colonies and the opportunities of recycling nutrients from the birds "guano" (manure).

"The fish they eat during breeding period in Finland, contains more than 40 tons of phosphorus. Part of that returns back to the sea, but main part remains in nesting colonies. There it can be collected and recycled as

nutrients." Mikko Jokinen, Innoeco Consulting





- Looks terrible? Unpleasant animals?
- Destroying beautiful nature? Eating all our fish from the sea?
- Or: Good example of ecological opportunism!

Workshop Mapping the gap

Objective of the workshop: To find out and understand the difficulties, challenges and opportunities when municipalities choose, plan and execute measures regarding eutrophication. The workshop was held by Kati Berninger, Tyrsky Consulting.

For the event's first workshop we started with Kati Berninger who presented possibilities in nutrient recycling and where nutrients leak the most. The club learned about different types of circulation possibilities within municipalities.

The workshop followed with discussions and knowledge exchange regarding local measures and how to calculate the reduction of nutrient emissions in projects.



The participants were divided into three groups, focusing on different types of measures;

- a) stormwater management & treatment,
- b) agricultural measures, wetlands & ditches,
- c) sewage & wastewater treatment









Identified challenges

- · lack of resources to execute calculations
- knowledge gap
- different areas may need different measures
- multiple land owners
- financial limitations
- old systems & technology
- communicating with politicians

Identified opportunities

- · circulate nutrients
- increase in biodiversity
- improved water auality
- reduced emissions
- collaborations & share best practices



Day 2 Presentations

Gypsum: an effective water protection measure for agriculture

Anna Saarentaus, John Nurminen Foundation, presented their project on how gypsum can be utilized to reduce erosion and leakage of nutrients from agricultural fields. Gypsum reduces eutrophication, improves water quality and the living conditions of aquatic species and does not affect

species and does not affect harvest levels.

"According to Finnish studies, gypsum decreases phosphorus loads by 50 %"

Anna Saarentaus, JNF

Sustainable biogas

Henri Nikkonen, John Nurminen Foundation, presented another of their project focusing on promoting the sustainability of biogas from the water protection point of view.

"Biogas is a climate-friendly energy form which also enables nutrient recycling. However, it can pose a risk of nutrient leaching to water bodies if the management of digestates & wastewater

Langi Nildon on

Henri Nikkonen, JNF

from biogas plants is not carefully planned."

The arable lands, application of structural lime, gypsum, and wood fiber for reduction of nutrient load

Jaana Uusi-Kämppä, Senior Scientist at the Natural Resources Institute Finland, presented her research on treatments in agriculture for water protection and the results of these different treatments around Finland.

In focus was soil amendment and what should be considered to be able to achieve the best results on a specific field.

 Gypsum and structure lime increase soils' electrical conductivity.



Jaana Uusi-Kämppä, Scientist

- $\bullet\,$ Structure lime increases the pH level of soil.
- Soil improvement fibres boost microbial activity in soil.
- Soil improvement fibres except zero fibre contain nutrients and are suitable for organic farming.

Workshop SDGs & eutrophication





The workshop began with a presentation by Vivi Fleming, "Establishing indicators to measure success toward the UN Sustainable Development Goal for "Life under water"

The presentation was followed by questions and group discussions about how the municipalities work with the SDGs today and what they could do to improve working and reporting on them.

"Index of coastal
eutrophication potential (ICEP)
offers predictability of
potential coastal ecosystem
degradation from land-based
pollution."



Vivi Fleming, Head of Unit, SYKE

Take Home messages

- Choosing and developing new indicators requires thorough work – adapting existing ones to new areas might be easier
- Report once enjoy twice!
- Instructions for SDG indicators are still vague, even contradicting, clearly under development
- Make sure what you are using the indicators for, who has the responsibility and where will they be used

Field trip Haltiala Farm

The club visited Haltiala farm and met with farmer Aleksi Kankare who showed the group how they worked with soil improvements and different treatments they have used on their fields. The farm is surrounded by wide cultivated fields and the fields are sown with traditional crops.



Field trip Urban wetland

The club received a guided tour from the landscape architect behind the design of a urban wetland located in central Helsinki. Landscape architect Elisa Lähde presented to the group the challenges with constructing the wetland as well as the benefits it has had for the water quality and biodiversity. The excursion was appreciated by the participants and inspired to conduct similar projects in the municipalities.



Concluding remarks

During a concluding discussion and reflection session, the municipalities raised key takings from the meeting, as well as ideas for focus areas and topics for upcoming club meetings.

Key takings

- Valuable learnings by seeing measures against eutrophication in the field.
- Engaging to learn more about how to work with and incorporate the SDGs in water management projects.
- Gained new contacts and Identified opportunities for collaboration with cities and organisations.
- Inspirational presentations and conversations led to ideas for new projects.

Focus areas & topics

- Funding opportunities for measures, operation services and maintenance of measures.
- Solutions to capture nutrients in various activities and types of land use.
- Cost-benefit calculations cost per kg reduced phosphorus.
- Improve skills for project-pitches.
- Explore potential of collaborative projects within the club.
- Methods for restoration of sea bays.

Outcome from the event

A database with the members' measures and projects' against eutrophication will be produced to increase possibilities for collaboration and knowledge exchange within the club.



Race For The Baltic (RFTB) is a non-profit organization with a mission to ensure a healthy Baltic Sea. We focus on solution-oriented and cost-effective projects with measurable impact.

To achieve the greatest positive impact, RFTB's efforts are focused on solving the root problem of the Baltic Sea - Eutrophication. Of the various environmental pressures on the Baltic Sea, eutrophication has by far the largest environmental impact. Beyond dead sea bottoms, eutrophication also leads to algal blooms, fish mortality and poor water transparency.

RFTB is a business oriented non-profit organization, with vast experience from the private sector. The work is focused on solution-oriented and cost-effective projects with measurable impact.

The organization works in close collaboration with researchers, governmental institutions, non-profit organizations, entrepreneurs, and the private sector. RFTB is funded by a small group of philanthropists. The organization was founded, and continues to be supported, by Zennström Philanthropies.



The Baltic Sea Challenge (BSC) is a network initiative that invites organisations to commit in protecting the Baltic Sea and their local waters, to building their own Baltic Sea Action Plan and to implementing it. There are already 315 member organisations in the BSC Network from the countries around the Baltic Sea. Even though the initiative was started by the cities of Helsinki and Turku in Finland, it exists especially owing to and for its member organisations.

The preparation for the Baltic Sea Challenge started in 2006 by the initiative of the Mayors of Helsinki and Turku. They wanted their cities to commit to work for the Baltic Sea and to be pioneers in strategic water protection. The joint Baltic Sea Action Plan of the cities was published in 2007, and the Baltic Sea Challenge was initiated. In the first Action Plan there was almost 40 actions under nine themes.

The Action Plan and its implementation was peer reviewed in 2013 by the city of Tampere specialists, and a new Action Plan was prepared. The current action plan is for 2019-2023, with 117 actions under five aims.



