



SUOMEN ITÄMERI-INSTITUUTTI  
THE BALTIC INSTITUTE OF FINLAND

## BSR InnoShip

Baltic Sea cooperation for reducing ship and port emissions  
through knowledge and innovation-based competitiveness



EUSBSR report meeting for Priority Area 4

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## BSR InnoShip in brief

- The BSR InnoShip project will address the joint challenge of the Baltic Sea countries and the key marine stakeholders to cooperate in minimizing ship-based air pollution, while aiming at optimizing competitiveness of the marine industry
- The project will promote new and innovative transnational approach to mitigate the different needs and interests of the maritime sector and to ensure basis for more sustainable and economically viable management of the Baltic Sea resources





## Policy framework

- EU Strategy for the Baltic Sea Region, Priority Area 4 (clean shipping)
  - a part of the flagship project *“Promote measures to reduce emissions from ships and enhance the development”*
- HELCOM Baltic Sea Action Plan
  - Support from HELCOM Maritime group (November 2009)
  - Included in HELCOM Baltic Sea Action Plan: Maritime activities segment (M-40: Estimate the contribution of NO<sub>x</sub> emissions from shipping to eutrophication), 2010 HELCOM Ministerial Declaration (Moscow, May 2010)





## Problem to be addressed

- Baltic shipping is constantly growing and some of the busiest shipping routes in the world go through the Baltic Sea
- Consequently, ship exhaust emissions are increasing and affecting large geographical areas due to atmospheric transport of the pollutants
- IMO has designated the Baltic Sea as a Sulphur Emission Control Area (SECA) requiring a progressive reduction in sulphur oxide (SO<sub>x</sub>) emissions from ships by 2015
- Due to more stringent international requirements, shipping industry in the Baltic Sea will be faced in the next five years with substantially increased fuel expenses, logistics costs and needs for large investments into low-emission technology and infrastructure
- Through international agreements of IMO, EU Marine Strategy Framework Directive, HELCOM BSAP and EUSBSR, the BSR countries are obliged to take actions to reduce harmful atmospheric emissions and strengthen joint coordinated efforts to make the Baltic Sea a model area for clean shipping





## Objectives

### *Overall objective:*

- The project aims at enhancing integrated environmental and economic management of the Baltic Sea by supporting key maritime actors to minimize adverse effects of pollution from maritime traffic and optimize the competitiveness of the Baltic shipping by deploying sustainable, cost-effective, jointly coordinated national and transnational policies, strategies and concrete measures

### *Sub-objectives:*

- promote transnational coordinated efforts to make the Baltic Sea a model region for clean shipping in atmospheric emissions, in line with the international and national regulations,
- strengthen the capacities of authorities and decision-makers through the sharing and adoption of the good practices and up-to-date knowledge in development and joint coordination of innovative approach to boost sustainable and economically viable Baltic shipping,





## Objectives

- improve knowledge, skills and capacities of ports, cities and shipping companies in development and adoption of innovative low-emission technical solutions, and related economic planning through collaboration, joint piloting and transfer of concrete solutions
- raising public awareness and political commitment to reduce negative ship exhaust emission effects, mitigate related economic implications and promote solutions available in the Baltic Sea region and Europe wide





## Main outputs

- Manual of Best Practice on Clean Air Shipping and Port Operations in BSR
- Recommendations for making Baltic Sea model area for clean and economically viable shipping through joint transnational and national efforts
  - Including specific recommendations focusing on strengthening transnational integrated management of the Baltic Sea environment in the framework of the IMO regulations, EU marine Strategy Framework Directive and HELCOM Baltic Sea Action Plan on emission reductions of the Baltic shipping
- Economic analysis of the consequences of the air emissions reductions for the maritime transport in the Baltic Sea region and to the related transport logistics chain as a whole





## Main outputs

- Economic analysis of the implications of the air emission reduction measures required by the IMO regulations and EU marine Strategy Framework Directive to the shipping industry in the Baltic Sea region
- Emission concentration maps to be provided as an Internet-based service
- Baltic Sea wide Clean Baltic Shipping and Sustainable Port Operations Award will be developed based on the German environmental friendly shipping award *Blue Angel*





## Partners

- 19 partner organizations from nine Baltic Sea region countries representing universities and research institutes, maritime business development agencies and associations, Pan-Baltic organizations and cities and ports
  - Russia is represented in the project by the City of St. Petersburg as an actively engaged associated partner
- The partnership design reflects state-of-the-art expertise, best practices and experiences on emission effects and risks and economic implications of their reduction in BSR
- The partnership is built on the basis of long-term cooperation between the key project partners, open call and proposals and support from HELCOM Maritime Group, HELCOM Secretariat and the EU BSR Strategy Priority Area 4





## Partners

- The Baltic Institute of Finland as the Lead Partner
- Leading meteorological and maritime research institutes and universities in BSR and Europe are involved in measurements and monitoring activities of atmospheric emissions from the Baltic shipping and the related health risk assessment and environmental impact analysis
- The partners include also organizations providing expertise in assessment of related economic implications and cost-efficiency estimations in development of innovative technological low-emission solutions
- Under the UBC Commission on Environment coordination, ensuring the transnational involvement of BSR cities, ports and other key stakeholders, partners and associated partners share their experiences on low-emission solutions, measures and policies





## Associated organizations

- 24 associated partner organizations, which represent leading public and private maritime stakeholders from seven BSR countries, as well as Pan-Baltic organizations
- Associated organizations are represented in the project High Level Advisory Group (HLAG)
- City of St. Petersburg together with the Federal official body "Administration of Seaport the Big Port St. Petersburg" representing six main ports of St. Petersburg region (St. Petersburg, Kronshtadt, Lomonosov, Primorsk, Ust-Luga and Viborg) will represent Russia in the project
- The Russian involvement is crucial to promote integrated approach and measures to ensure the Baltic Sea region to become a model region for clean shipping





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## Work packages

WP 1: Project management (The Baltic Institute of Finland)

WP 2: Communication (The Baltic Institute of Finland)

WP 3: Knowledge and capacity building for reducing air emissions from the Baltic shipping

- WP 3 activities will focus on
  - ship and port emission inventories for the Baltic Sea together with the involved partners
  - estimating atmospheric transport of pollutants from shipping both on the Baltic Sea level and also on the city scale
  - identifying most vulnerable areas of high risk and
  - estimating emission effects to environment and human health
- Lead by Finnish Meteorological Institute





## Work packages

### WP 4: Enhancing and piloting transferable innovative cost-effective low-emission solutions for Baltic shipping

- WP4 activities aim at enhancing knowledge, skills and capacities of ports, cities and shipping companies to develop and utilize innovative cost-effective low-emission technical solutions as well as to
- ensure models and tools for policy-makers and key maritime stakeholders to support economic growth and competitiveness of Baltic shipping
- lead by Maritime University of Szczecin and University of Turku, Center of Maritime Studies





## Work packages

### WP 5: Strengthening joint transnational efforts to establish the Baltic Sea as a low-emission area with competitive marine industry

- WP 5 activities will aim at facilitating and promoting awareness raising and exchange of experiences of the accumulated experiences, knowledge and lessons learnt in WP3 and WP4 in the Baltic Sea region and Europe targeted at key maritime stakeholders and
- enhance commitment of policy- and decision-makers to jointly develop measures to make the Baltic Sea a model area for sustainable, economically viable clean shipping.
- Lead by UBC Commission on Environment





## Financing

- BSR InnoShip was prepared for applying funding in the EU Baltic Sea Region Programme 2007-2013 third call by 22 March 2010
  - under the BSR Programme priority 3, Baltic Sea as a common resource
- The total project budget estimated is 3.621.447,61 EUR
  - The ERDF co-financing applied is 2.559.643,11 EUR, the ERDF partners own contribution is 697.804,50 EUR, and the Norwegian budget equals to 364.000,00 EUR
- Financing decision expected on 11 June 2010
- The project duration is 42 months
  - i.e. in case the project starts in summer 2010, it will be finalised by the end of 2013.





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## The Baltic Institute of Finland

- a independent non-profit foundation
- promotes cooperation between parties operating in the Baltic Sea Region and Europe wide
- **Diligent Diplomat** – ensures brainstorming and managing international projects with confidentiality, transparency and strong expert competence





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## The Baltic Institute of Finland

- Brings together interested parties to initiate and design cooperation projects
- Ensures efficient management of the entire project life cycle from planning to funding application, managing, communication and final reporting
- Provides strong experience of the key EU funding programmes in the BSR as well as diverse contact network





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