Discussion Panel on OPS Success Cases and Projects

Bogdan Ołdakowski, Secretary General, Baltic Ports Organization

29th November 2023

BPO – who we are?

BPO – Baltic Ports Organization
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established
October 10, 1991
Copenhagen

nearly 50 members
major ports in the 9 countries

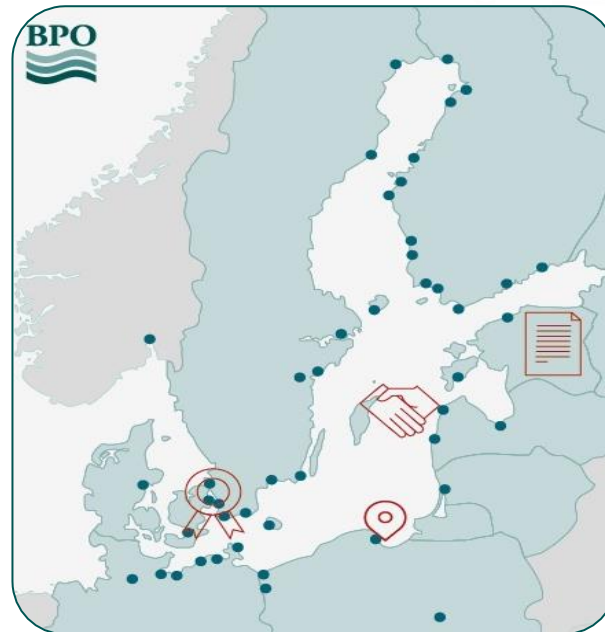**registered in Estonia**
Port of Tallinn headquarter

office in Gdynia
Poland

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BPO – who we are?

BPO's mission

—

The BPO's mission is to **contribute to sustainable development** of maritime transport and the port industry in the Baltic Sea Region, thereby **strengthening its global competitiveness**.

Kimmo Naski, Chairman of the Baltic Ports Organization (BPO)

The Baltic Sea as a model region for green ports and maritime transport

The Baltic Sea as a model region for green ports and maritime transport

WE ARE PAVING THE WAY

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BPO Ystad Climate Declaration signed at the BPC 2023 !

BPO Ystad Climate Declaration signed at the Baltic Ports Conference 2023

The Baltic Ports Organization (BPO) Ystad Climate Declaration has been signed today by the Members of the Organization, gathered for the General Assembly during the second day of the Baltic Ports Conference 2023 (BPC) in Ystad, Sweden.

With the European Green Deal, and the adoption of various associated initiatives, such as the Fit for 55 package, the European Commission (EC) set the course towards a climate neutral European Union. The push towards the greening of maritime transport, both in Europe and on a global scale, further underscored by the recent approval of IMO's GHG Strategy, is one of the defining factors shaping the future of the maritime transport sector.

Recognizing the essential part ports need to play in order to achieve the climate goals placed before the maritime community, Members of the BPO declared their readiness to put forth the best effort to reduce greenhouse gas (GHG) emissions from port activities, inspire environmental consciousness and cooperate with business partners and a wide range of stakeholders in order to protect our climate.

The BPO Ystad Climate Declaration supports the plan formulated by the EC. At the same time the signees would like to emphasize the need for a practical and rational approach, combined with transparent dialogue between the maritime industry and the policymakers as key for making a carbon neutral Europe a reality. The goals must be achievable, with clearly outlined targets and the required financial and legislative support must be provided.
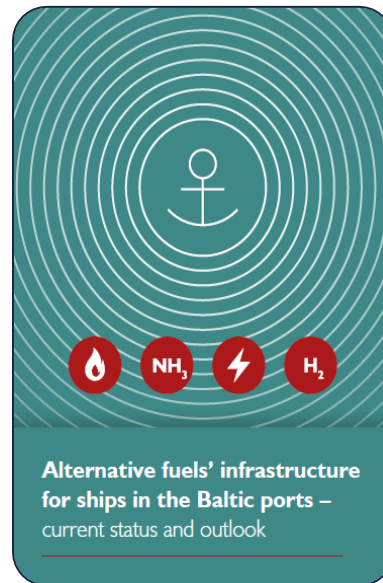
You can access the full document under this link: http://www.bcoports.com/BPC/BPO_Ystad_Climate_Declaration_main_300%5b56930%5d.pdf

Next edition of the Baltic Ports Conference will take us to Klaipeda, where we will meet in September 2024.

OnShore Power Supply in Baltic Sea Region

Source: BPO Report (updated on 2021)

OnShore Power Supply in Baltic Sea Region

❖ **List of OPS in BSR, updated on 2021!**

Country	Port	Types of vessel	Connecting points	Voltage (kV)	Frequency	Max Power (MW)	Year
DENMARK	Helsingor	Ferry	1	11		4,5	2018
	Kaldunborg			0,4		0,065	
	Rønne	Ferry		0,4			
FINLANDIA	Kemi	RoPax	1	6,6	50		2006
FINLANDIA	Kotka	RoPax	1	6,6	50		2006
	Oulu	RoPax	1	6,6	50		2008
	Helsinki	Ferry	1	6,6 / 11	50/60	4	2012
	Turku	Bulk		0,4			
ESTONIA	Tallinn (Old City Harbour)	RoPax	5	11		14	2020
GERMANY	Hamburg	Cruise ship Container ships (2020)	1	11		9,8	2016
	Kiel	Ferry, Cruise ship	1	10		4,5	2019
	Lubeck	Cruise ship, RoPax, RoRo	2	6,6; 11	50	0,5; 2; 3,5; 9,8	2010

Country	Port	Types of vessel	Connecting points	Voltage (kV)	Frequency	Max Power (MW)	Year
NORWAY	Oslo	Ferry	2	11	50	3,75; 4,5	2017
SWEDEN	Gothenburg	RoRo, RoPax	6	11; 6,6	50/60	1,25-2,5	2000
	Trelleborg	Ferry	6	10,5	50	3,6	2017
	Helsingborg	Ferry	1	11; 0,4		4,5	2018
	Ystad	RoPax	4	11	50/60	6,25-10 5	2013
	Visby	Ferry	4	11	50/60	5	2019
	Karlskrona	RoPax	1	11		2; 2,5	2011
	Port of Frihamnen (Stockholm)	RoPax	2	0,69	50	4 (2*2)	1990
SWEDEN[*]	Port of Stadsgården (Stockholm)	RoPax	2	0,69	50	4 (2*2)	1980
	Port of Värtahamnen (Stockholm)	RoPax	2	11	50	6 (2*3)	2019
	Port of Nynäshamn (Stockholm)	RoPax	1	6,6	60	1,8	2017
	Piteå	RoRo	2	6	50		
LATVIA	Riga			0,4		0,25	
LITHUANIA	Klaipeda	Oil, Product tankers, Barges,		0,4		0,015; 0,4	
POLAND	Port of Gdynia	Ferry		11	50/60	3,5	2021

Source: BPO Report

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EXISTING ONSHORE POWER SUPPLY (OPS) INSTALLATIONS

Below table presents some of the current OPS installations existing in Baltic and North Sea Region ports. In comparison to Nordregio's research from 2016, it is noticeable that the number of existing OPS in the ports within the Baltic Sea Region has increased more than twice since in 2016. Starting from 11 and gradually expanding to 27 OPS ready ports in 2022. Hence, **the total number of OPS ports in the Baltic Sea Region has tripled over the last few years.**

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Source: Motus Foundation / BPO

PLANNED ONSHORE POWER SUPPLY (OPS) INSTALLATIONS

Country	Port	Planned Investments
Poland	Port of Swinoujscie	Planned ferry terminal in the mid of 2023, the system will enable the power supply to ships at 5 ferry berths with a frequency of 50 Hz and 60 Hz with a rated power of up to 3 MW
	Port of Gdansk	Planned 40 kW, 0.4 V / 50 Hz OPS
Denmark	Port of Aarhus	Planned cruise OPS from spring 2023.
Finland	Port of Helsinki	Planned 2 connection points for ferries in west harbour
		Planned 3 cruise ship mobile connection points at Hernesaari, 11kV, 60Hz, 20MVA
		Planned 2 RoRo/RoPax connection in Vuosaari
		Planned Cruise ship connection in Katajanokka
	Port of Rauma	Planned five shore-side electricity connections points/power outlets for the vessels in 2022 for roro and storo traffic in four different quays. Currently there are no OPS available in the port.
Norway	Port of Oslo	Planned for cargo and container port,
		Plannned for containership (3 outlets) Total capacity of 1,6 MW
		Planned mobile unit, for vehicle carries 0.4/0.44/0.69kV, 50/60Hz 1000kVA

Source: Motus Foundation / BPO

OnShore Power Supply in the Baltic Sea - examples

OPS – Port of Trelleborg

OPS – Port of Ystad

OPS – Port of Värtahamnen

OnShore Power Supply in Baltic Sea Region: Funding Opportunities

There are several EU programs financing the construction of OPS, for example:

❖ **Connecting Europe Facility (CEF):** CEF supports projects that improve European transport, energy, and digital infrastructure. OPS for ports could fall under its scope for enhancing port infrastructure and reducing emissions.

❖ **Horizon Europe:** This is the EU's flagship research and innovation program. It funds projects focusing on various areas, including energy, where OPS initiatives might be eligible for support, especially in research and development aspects.

❖ **Innovation Fund:** This fund supports innovative low-carbon technologies and projects, and OPS could potentially qualify for funding here, especially if there are innovative approaches or new technologies involved.

❖ **European Regional Development Fund (ERDF):** ERDF supports regional development initiatives, including those focused on infrastructure improvements and sustainability. OPS projects in specific regions might find support here.

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BalticOPS (Baltic ports for climate)

The project idea is further development and construction of OPS in ports (ro-pax, passenger, cruise and container ships).

❑ **Project will be divided into modules:**

- **planning/study module** (all activities that must be plan first),

- **stakeholder platform module**

  - exchange of expertise, knowledge, views for better planning and successful implementation of the planned activities;
  - standardization and procedures;
  - will consists of ports, port operators, port users, shipping lines, bunkering companies, energy providers, administration, etc.,

- **project management & dissemination module** (project must be managed, organized, reported and promoted according to EU standards);

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CONCLUSION

- **Investing in OPS is a rather complex case**

- **Who will pay for this?**
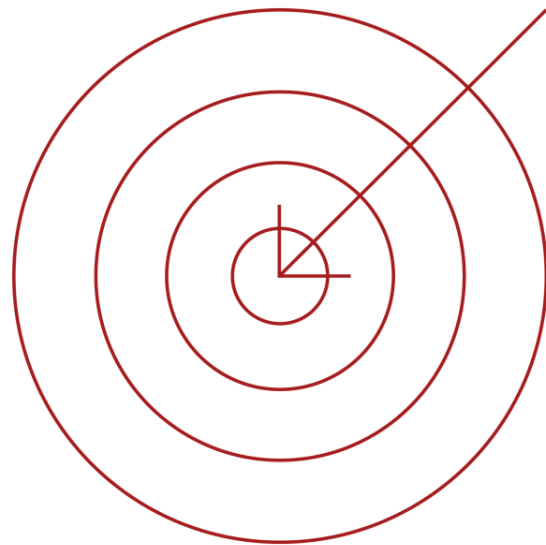
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