



Interreg



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South Baltic

PortSHAZ

Enhanced Eco-Efficient Cargo Operations

Protecting the Baltic Sea - Strengthening Ports - Scaling Innovation

EUSBSR PA Ship Operational Group Meeting, 07.04.2026

Background and context

Over 45 million tonnes

of dry bulk are handled annually by Baltic Sea ports

That is 1.875 million fully loaded trucks. Parked bumper-to-bumper, they would form a continuous line of nearly 31,000 kilometers—enough to wrap around almost 80% of the Earth.



Background and context

22,500 tonnes of fertiliser 2,250 tonnes of phosphorus
leaks into the sea each year, which is about 0.05% of cargo

That is the equivalent of dumping 9 Olympic-sized swimming pools filled with solid chemicals directly into the Baltic Sea.



Background and context



Up to 15,000 tonnes

are lost annually in the Port of Gdańsk

That equals 250 fully loaded freight train wagons. Imagine 5 massive freight trains derailed and emptying their entire cargo into the port every single year.

Background and context



€5–11 milion

is lost in product value every year

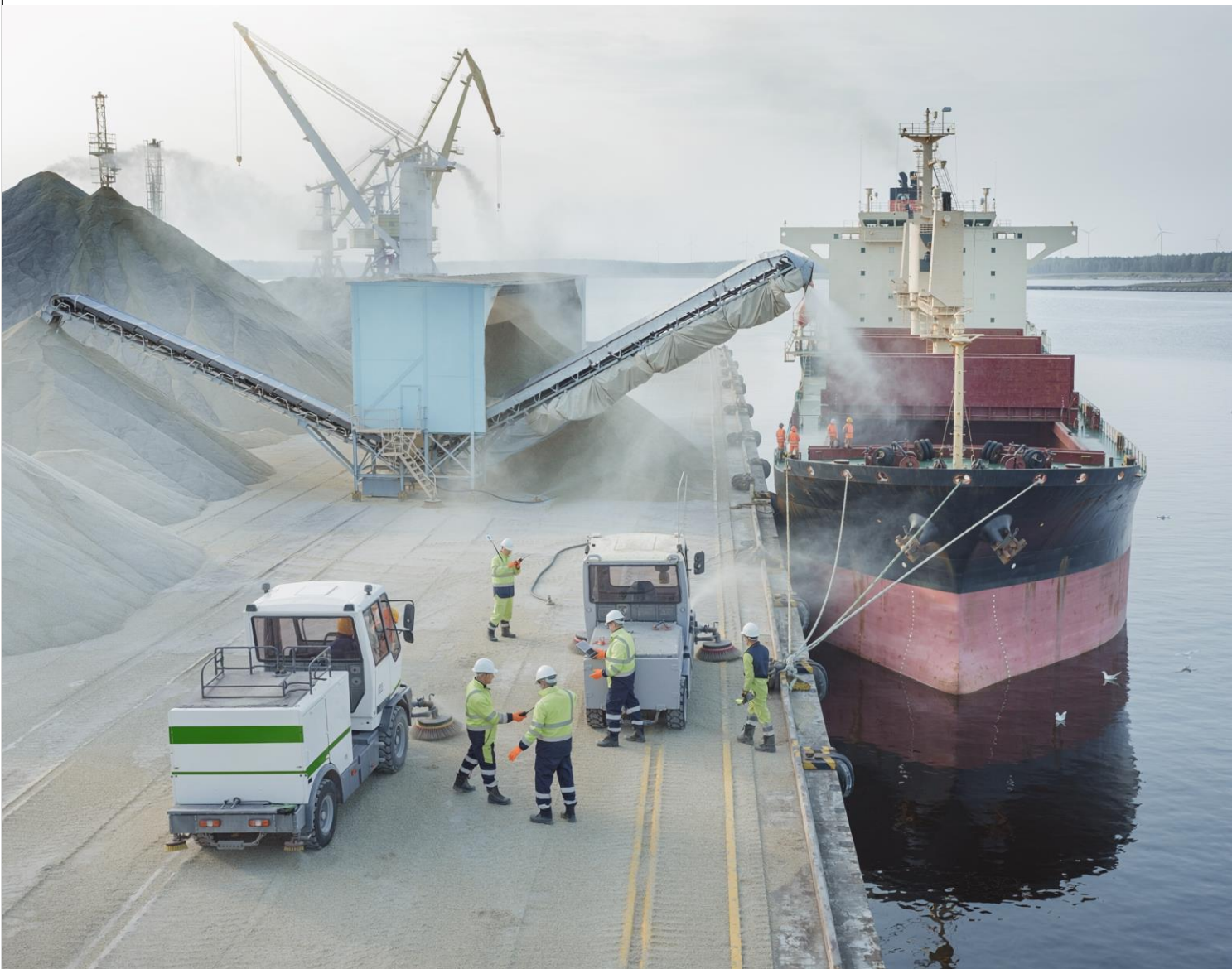
Enough to purchase 1 to 2 brand-new Mobile Harbor Cranes every single year. Instead of investing in terminal infrastructure, this capital simply sinks to the bottom of the sea.

Background and context

The result: eutrophication, dead zones, and ecosystem damage



Project objectives



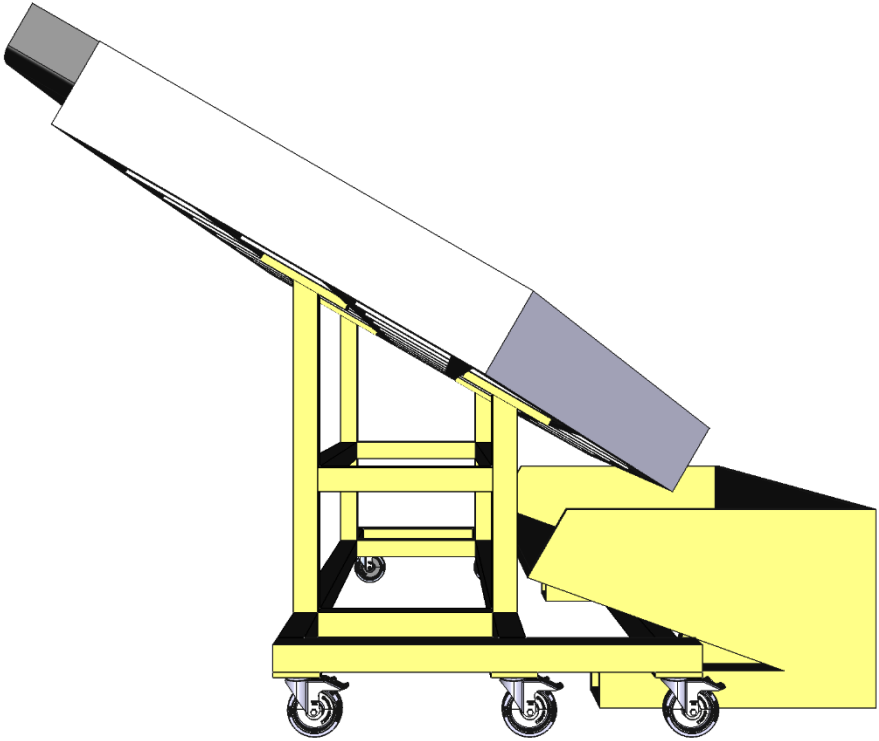
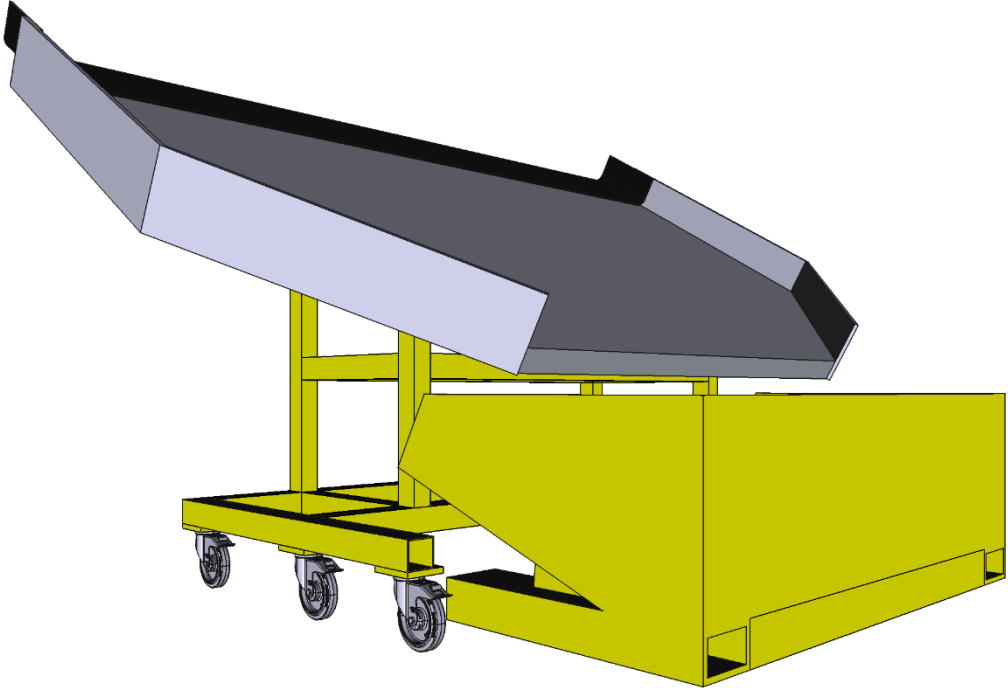
- **Create simple guidelines** and hands-on tips that make it easier for ports to work in a more environmentally friendly way.
- Find and use **practical technical solutions** that help small and medium ports stop dry bulk cargo from leaking into the water. Focus on eco-efficient routines that can be added to daily work.
- **Improve water quality** by tackling the everyday causes of cargo loss. By making small changes in how we handle cargo, we can reduce pollution in the sea.

Practical guide

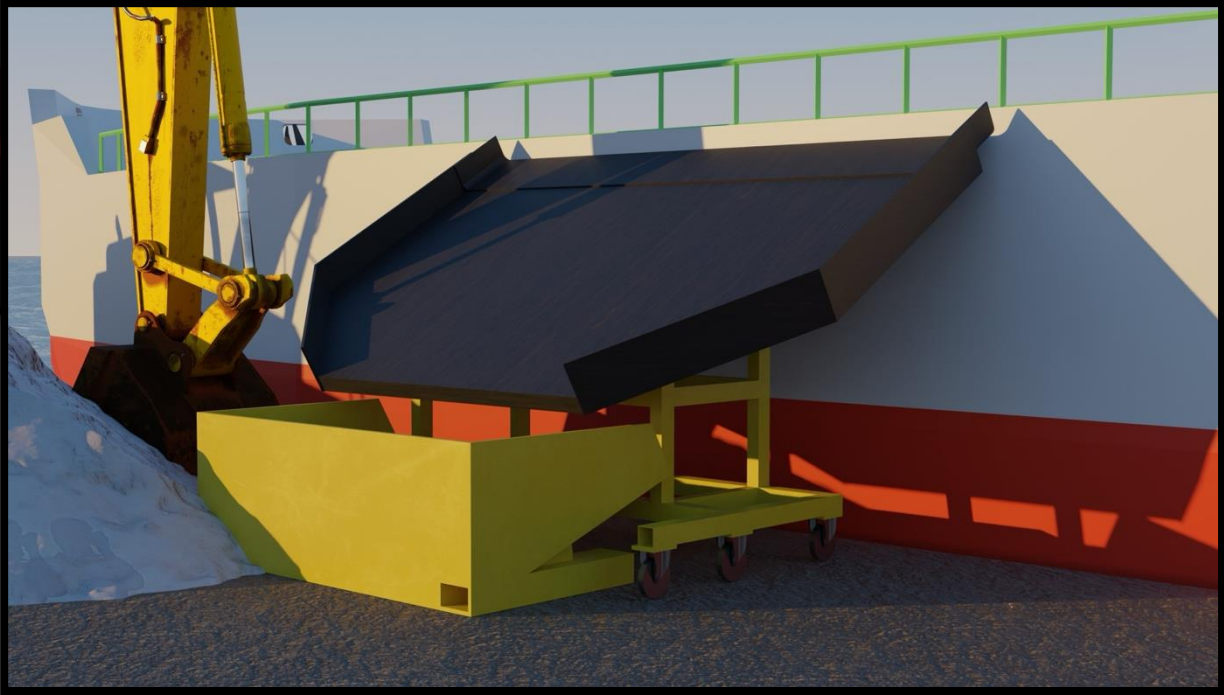


- Greening Baltic Sea ports through practical, science-based solutions
- Closing the “last metre gap” in dry bulk handling
- From problem awareness to daily operational change
- CargoShield – smart prevention cover for cleaner transfers
- Simple actions, big impact – tarps, training, teamwork
- Environmental care as operational excellence
- Compliance made easy – HELCOM, EU Directives, EcoPorts
- Actionable roadmap – inspect, contain, clean, educate, improve

Key result - prevention cover



Key results - prevention cover



Pilot activities

3rd pilot

Vordingborg

1H2027

2nd pilot

Rostock

2H 2026

1st pilot

Elbląg

1H 2026



Pilot objectives

- **Test prevention covers** during daily port operations to see how they work in practice.
- **Train port staff** to use and maintain the covers confidently and safely.
- **Monitor the reduction** in cargo leakage, the impact on operations, and the environmental results.
- **Collect environmental data** and ask operators for feedback on the process.
- **Check if the solution is cost-effective** and can be used in other ports as well.

Expected outcomes

Environmental:

- Less nutrient runoff is entering the Baltic Sea.
- Lower risk of algae blooms and other problems in the pilot port areas.
- There will be less cargo left on the quays and in the drains, making cleanup easier and reducing pollution.

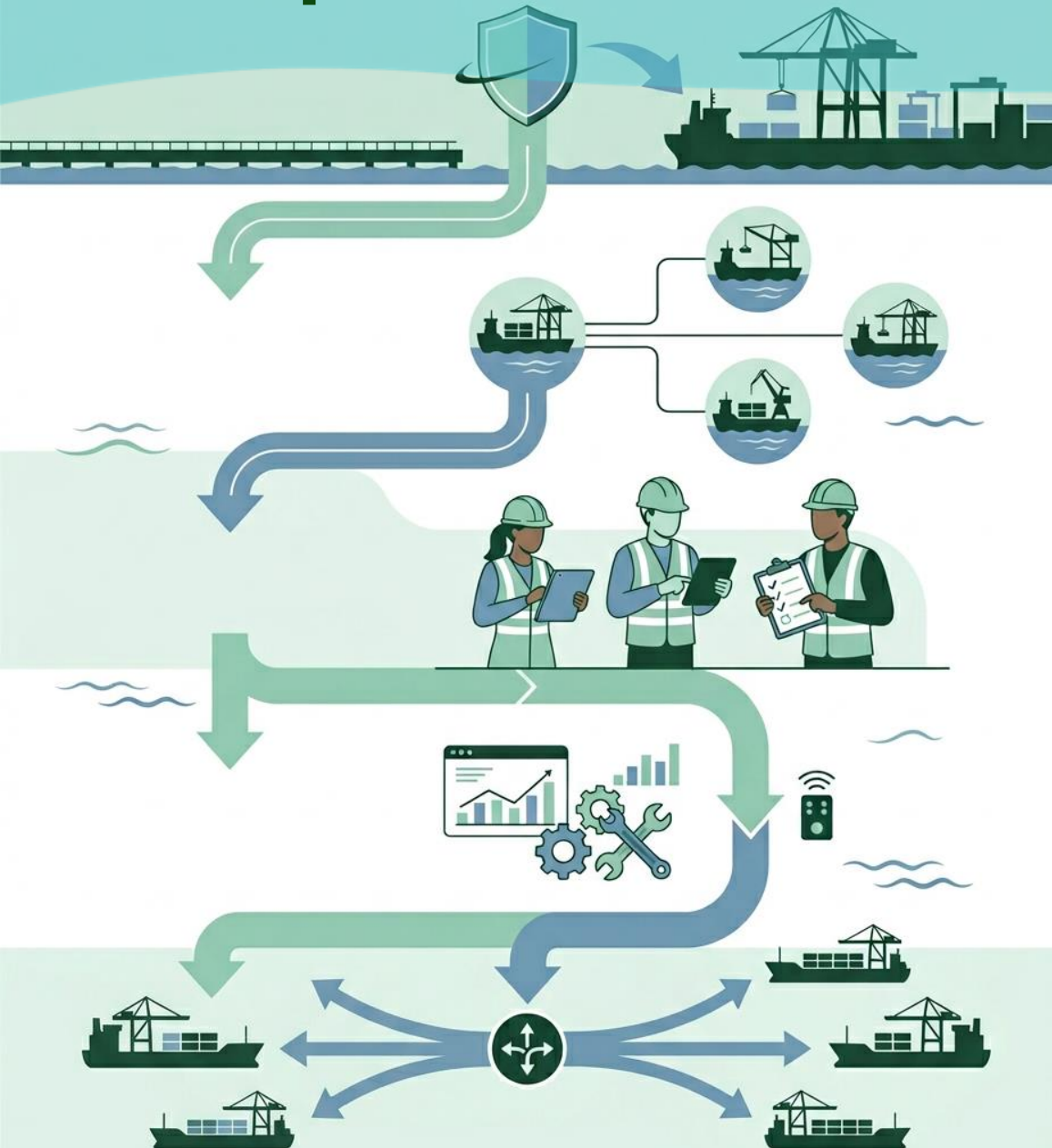
Operational:

- Ports will lose less cargo, which means direct savings and less waste.
- Workplaces will be safer, with less dust and cleaner surfaces for staff.
- Ports will find it easier to meet environmental rules and standards.

Systemic:

- We will set clear best practices that other ports in the region can follow.
- Environmental routines will become a regular part of port management systems.
- We will also provide policy recommendations that can be used by other ports and at the national level.

Next steps

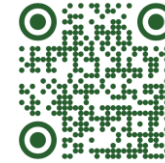


- Deliver prevention covers
- Conduct pilot testing in three ports
- Train staff on use and monitoring
- Evaluate pilot results and refine design (we are considering remotely controlled covers)
- Share recommendations for wider adoption

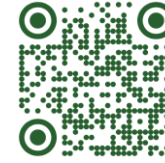
Partnership



Elbląg Seaport Authority



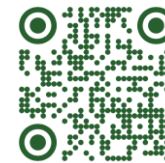
Race For The Baltic



Coastal Research and Planning Institute



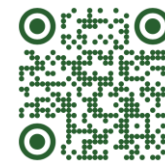
K2 Solutions



Institute for Sustainable Economy and Logistics



Port of Vordingborg



Thank you



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