



LECTURER PREPARATION GUIDE

Future-Proofing South Baltic Marinas

A Strategic Benchmark of Challenges, Operational Realities & Solutions

About this guide

This document prepares you to deliver the 'Future-Proofing South Baltic Marinas' lecture with confidence. It provides the strategic context, slide-by-slide talking points, data commentary, facilitation tips, and discussion questions. The lecture is grounded in the D.2.1 ECOMARINAS Benchmarking Report — a survey of 62 stakeholders across Poland, Germany, Sweden, and Lithuania.

Format	Lecture with data-driven discussion	Duration	60–90 minutes
Audience	Baltic marina managers & administrators		

Document Overview

This guide is organised across ten sections:

- Section 1: Learning Objectives & Audience Profile
- Section 2: Lecture Structure & Timing Guide
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Section 1: Learning Objectives & Audience Profile

Learning Objectives

By the end of this lecture, participants will be able to:

- Describe the current state of environmental management in South Baltic marinas, based on real survey data
- Identify the six key pressures facing modern marina operations
- Explain the most common operational blind spots revealed by the benchmarking research
- Evaluate at least three proven solutions — nature-based, technological, and networked — applicable to their own context
- Develop an immediate action plan based on the benchmarking report findings
- Connect their marina's challenges to regional and global best practice

Audience Profile

What they bring to the room	What they need from this lecture
Real operational experience managing Baltic marinas	Data that validates — or challenges — their assumptions
Awareness of environmental pressures but limited benchmarking data	Evidence of what peer marinas are actually doing
Sustainability interest, often without owner buy-in	Practical, low-cost solutions they can present to decision-makers
Frustration with structural barriers (funding, regulation, staffing)	Honest acknowledgement of barriers alongside viable pathways
Interest in what works elsewhere (global models)	Concrete international examples with direct Baltic relevance

Lecturer Tip

This lecture is more data-driven than the regulatory lecture. Participants respond strongly to seeing real survey numbers — especially when the data validates frustrations they already feel. Frame each statistic as: 'You are not alone in facing this.'



Section 2: Lecture Structure & Timing Guide

Slide	Topic	Time	Activity
1	Introduction & title	3 min	<i>Welcome, framing</i>
2	Strategic context: Baltic ecosystem	6 min	<i>Data presentation</i>
3	Six pressures overview	5 min	<i>Signposting frame</i>
4	Benchmark: Who was surveyed	5 min	<i>Data slide walk-through</i>
5	Blackwater / pump-out data	8 min	<i>Country comparison</i>
6	Hazardous liquids blind spot	7 min	<i>Discussion question</i>
7	Water quality & invasive species	7 min	<i>Reflection moment</i>
8	Solid waste: gaps & successes	7 min	<i>Country comparison</i>
9	Barriers to action	6 min	<i>Group recognition activity</i>
10	Solution 1: Nature-based	5 min	<i>Case study</i>
11	Solution 2: Technology	6 min	<i>Case study</i>
12	Global models	5 min	<i>International examples</i>
13	Solution 3: Network power	4 min	<i>Forum invitation</i>
14	Manager's action plan	7 min	<i>Takeaway exercise</i>
15–16	Closing & ECOMARINAS next steps	4 min	<i>Call to action</i>

Section 3: Slide-by-Slide Speaker Notes

Slides 1–2: Introduction & Strategic Context

Core Message

The Baltic Sea is not just a backdrop for marina operations — it is the most ecologically stressed sea in Europe, and marinas sit at its most vulnerable interface.

Suggested opening:

"This lecture is built on real data from 62 marina stakeholders across four Baltic countries. The numbers may surprise you — in some cases they will confirm what you already suspected, and in others they will challenge assumptions. Either way, they give us something we have never had before: a benchmark of where the South Baltic marina sector actually stands today."

- Present the 97% eutrophication statistic as a frame: this is the ecosystem context within which every marina decision is made.
- Emphasise that marinas are described in the research as 'critical interfaces' — not peripheral actors but central ones in Baltic water health.
- Acknowledge the dual reality: marinas are economically essential AND potential environmental hotspots. The goal is not to eliminate marinas but to make them part of the solution.

Slides 3–4: Six Pressures & Benchmark Methodology

Core Message

The six pressures are not theoretical — they emerged from real survey responses. The benchmark data represents what your peers across the region are actually experiencing.

- The six pressures to name on slide 3: water quality, waste management, invasive species, energy transition, hazardous substances, and structural/funding barriers.
- On slide 4, emphasise the insight: 'Operational managers are ready for change, but often lack owner buy-in.' This is likely to resonate strongly with the room — pause after saying it and allow acknowledgement.
- The survey covered Poland, Germany, Sweden, and Lithuania — acknowledge if your audience is primarily from one country, and note what the comparative data reveals about regional variation.

Slides 5–8: The Data Findings



Core Message

Each data slide reveals a specific operational blind spot. Present the numbers, pause, and ask the room whether the figure surprises them.

Slide 5 — Blackwater Reality:

- Only 53% of surveyed marinas manage wastewater via pump-out stations. That means nearly half have no functioning pathway for legal sewage disposal.
- Country comparison: Use this to stimulate discussion — which countries perform better and why? What structural conditions explain the difference?

Slide 6 — Hazardous Liquids:

- 56% of marinas have NO systems to prevent hazardous liquid spills. The most common reason given was 'Not Necessary' — a mindset problem, not just an infrastructure problem.
- Ask the room: 'How many of you have experienced a fuel spill in the last two seasons?' Allow hands to go up. Then ask: 'How many had a written procedure ready?' This contrast is the lesson.

Slide 7 — Operational Blind Spots:

- 37% of respondents believe invasive species measures are 'Not Necessary' — despite hull fouling being the primary vector for species transfer in the Baltic.
- Water quality monitoring is absent in most marinas, meaning managers cannot detect eutrophication spikes before they become visible problems.

Slide 8 — Solid Waste:

- Good news: most marinas have basic collection. Sufficient trash cans and regular cleanups are the top two implemented measures.
- Bad news: circularity is missing. Only 7 respondents confirmed having specific recycling facilities. Microplastics awareness is growing but infrastructure lags.
- Lithuania contrast: 71% of Lithuanian respondents have NO specific plastic reduction measures, vs. 73% of German and 86% of Swedish marinas that do.

Facilitation Tip

After presenting the Lithuanian/German/Swedish contrast, ask: 'What explains this difference?' Allow discussion — likely answers include funding, regulation, cultural norms, and owner attitudes. There is no single right answer; the discussion itself is valuable.

Section 4: Key Benchmark Data — Context & Commentary

This section provides background commentary on the key statistics from the D.2.1 Benchmarking Report, to help you discuss the data with authority and context.

Statistic	What It Means	Discussion Angle
97% of Baltic Sea affected by eutrophication	The sea is already under severe stress from nutrient overload. Marinas contribute through antifouling run-off, sewage, and stormwater.	<i>Ask: What does your marina contribute? What does it prevent?</i>
53% have pump-out stations	Nearly half of marinas surveyed provide no legal sewage disposal pathway. Boats visiting these marinas may have no choice but to discharge illegally.	<i>Ask: What happens to sewage from boats in your marina?</i>
56% lack hazardous liquid spill prevention	Majority of marinas are unprotected against fuel and oil spills — the most common and immediately damaging pollution event.	<i>Ask: What is your spill response procedure right now?</i>
37% believe invasive species measures 'Not Necessary'	A dangerous blind spot. Hull fouling is the primary mechanism for introducing non-native species to the Baltic.	<i>Ask: How many boat hulls were checked at your marina last season?</i>
Only 7 confirmed recycling facilities	Despite most marinas having waste bins, true waste segregation and recycling infrastructure is almost absent.	<i>Ask: What fractions can boaters actually separate at your facility?</i>
71% of Lithuanian marinas have no plastic reduction measures	Strong national variation suggests that policy environment and funding access — not just individual will — drives performance.	<i>Ask: What policy or funding support do you have access to?</i>



Section 5: The Six Pressures — Deep Dive

1. Water Quality & Wastewater Management

The pump-out data is the lecture's most important infrastructure finding. With 47% of marinas lacking pump-out stations, a significant portion of the Baltic marina network is structurally unable to comply with MARPOL Annex IV and the Water Framework Directive. Key talking point: This is not individual non-compliance — it is a systemic infrastructure deficit that requires investment, not just enforcement.

2. Hazardous Substances & Spill Prevention

The 'Not Necessary' mindset revealed by the survey is a cultural challenge as much as an operational one. Managers who have not experienced a significant spill tend to underestimate the risk. Anchor this section with a question about actual spill experiences in the room — this immediately shifts the discussion from abstract to concrete.

3. Invasive Species

The Baltic's slow water exchange makes it particularly vulnerable to invasive species introductions, as new arrivals face limited natural competition from marine predators adapted to open ocean conditions. The 'Check-in' hull protocol (mentioned in the action plan) is a simple, low-cost intervention that most marinas can implement immediately, requiring only a visual inspection form and staff training.

4. Solid Waste & Circularity

The gap between waste collection (widely present) and recycling infrastructure (almost absent) is the key message here. Marinas that have invested in segregated waste systems report that boaters respond positively — especially international cruisers from countries where segregation is the norm. This is both an environmental improvement and a customer experience improvement.

5. Energy & Electrification

While not a dedicated data slide, energy transition underpins the broader strategic context. Shore power provision, LED infrastructure, and energy monitoring are increasingly expected by inspectors and by environmentally conscious boat owners. Connecting this to the AFIR regulatory obligation (from the first lecture) reinforces the cross-lecture coherence.



6. Structural Barriers — Funding, Regulation & Owner Buy-In

Core Message for Slide 9

Managers want sustainability but face structural hurdles. The three most commonly cited barriers are: lack of funding, lack of regulatory clarity, and difficulty getting owner investment decisions made. Acknowledge these honestly — do not dismiss or minimise them.

- Funding barrier: Point to ECOMARINAS itself as one pathway, and to the USA Clean Vessel Act model (slide 12) as an example of dedicated public funding for marina infrastructure.
- Regulatory barrier: The benchmarking research found that managers often feel they receive contradictory guidance from different authorities — clarity on what is actually required, at what timeline, would significantly improve compliance rates.
- Owner buy-in: The insight that 'operational managers are ready for change but often lack owner buy-in' is one of the report's most practically important findings. Compliance culture starts at board level.

Section 6: Solutions — Nature-Based, Technological & Networked

Solution 1: Nature-Based Solutions (Slide 10)

The floating wetland concept from Mecklenburg-Western Pomerania is a powerful example because it is both simple and visible. Artificial floating islands planted with macrophytes (water plants) reduce nutrient levels through biological uptake and provide a visible demonstration of the marina's environmental commitment.

- Technical detail: Macrophytes absorb nitrogen and phosphorus directly from the water column, addressing eutrophication at source within the marina basin.
- Secondary benefit: The information board alongside the installation creates a public awareness function — boaters, visitors, and marina users learn about the Baltic's ecological challenges in a tangible way.
- Cost and scalability: Floating wetlands are relatively low-cost compared to engineered filtration systems, can be sized to the marina's needs, and require minimal maintenance.

Solution 2: Technological Interventions (Slide 11)

BATSECO-BOAT Pump-Out Model	Seabin & PortBin Technology
Network of 20 stations upgraded across Finland, Sweden & Estonia	Floating trash skimmer removing debris and surface oil
Result: Better accessibility = less illegal sewage dumping	Performance: Up to 1.5 kg of waste collected per day
Key lesson: Infrastructure accessibility is the critical variable	Deployed successfully at Kołobrzeg, Poland
Solving the 47% pump-out gap requires investment + accessibility design	Low-cost, visible, and appreciated by berth holders

Solution 3: The Power of the Network (Slide 13)

The risk of isolation is described in the presentation as 'reinventing the wheel' — each marina independently discovering solutions that already exist elsewhere in the network. The Sustainable Sailing Infrastructure Forum in Gdansk (2027) and cross-border study visits are the ECOMARINAS response to this structural weakness.



- Key argument: Solutions like Seabins, floating wetlands, and hull-check protocols exist and work — but awareness of them is low because information sharing across the Baltic marina network is fragmented.
- Network effect: A marina that cannot afford to pilot a new technology alone might participate in a shared pilot. Collective procurement of waste services or shore power infrastructure reduces costs for individual operators.

Invitation for Participants

The Sustainable Sailing Infrastructure Forum in Gdansk 2027 is the next cross-border gathering of Baltic marina professionals. Encourage participants to register interest and to bring their owner/board members — the buy-in gap identified in the research starts with leadership engagement.



Section 7: The Manager's Action Plan (Slide 14)

Slide 14 presents three categories of immediate actions. Use this as a participatory moment — ask the room which of these actions they could implement in the next 90 days without additional budget.

Category	Immediate Actions
Infrastructure	Install differentiated bins for hazardous, plastic, and organic waste. Invest in pump-out stations with high accessibility (easy docking approach, clear signage, working equipment at start of season).
Monitoring	Start basic water quality assessments — even simple visual monitoring and pH/turbidity testing provides baseline data. Implement 'Check-in' hull protocols for arriving boats: a brief visual biofouling inspection form at berth registration.
Operations	Standardise waste fees: incentivise delivery rather than penalising it (boats that pay separately to dispose of waste at the dock will avoid the fee by dumping at sea). Train staff on spill response and hazardous liquid containment — use the laminated card format described in the regulatory module.



Section 8: Discussion & Interactive Activities

Suggested Discussion Questions

- The survey found that 56% of marinas lack spill prevention systems and the most common reason was 'Not Necessary.' Do you agree with this assessment in your own marina context? What would change your mind?
- The data shows strong national variation — German and Swedish marinas outperform Lithuanian and Polish ones on several measures. What explains this gap? What could be done at a programme level to close it?
- If you could implement one item from the Manager's Action Plan today — without any additional budget — what would it be and why?
- The research identified 'owner buy-in' as a major barrier. How do you make the business case to your marina board for environmental investment? What arguments work, and which do not?
- What would convince you to attend the Sustainable Sailing Infrastructure Forum in Gdansk 2027? What would you most want to learn or discuss there?

90-Day Action Plan Exercise

As a closing activity for slide 14, ask each participant to write down on a card or piece of paper:

- One infrastructure change they will propose within 90 days
- One monitoring activity they will begin this season
- One operations improvement they will implement before peak season

Invite two or three participants to share their commitments with the group. This creates social accountability and ends the lecture with concrete, personalised takeaways.

Section 9: Global Lessons — Speaker Background (Slide 12)

Slide 12 presents three international models. The following background helps you discuss each with confidence:

USA: Clean Vessel Act

The Clean Vessel Act (1992) created a dedicated federal grant programme funding the construction and renovation of pump-out stations at marinas across the USA. It directly addressed the #1 barrier identified in the ECOMARINAS survey: funding. Within a decade, the USA saw a significant reduction in no-discharge zone violations as pump-out infrastructure became widely accessible. The lesson for the Baltic: the pump-out gap is solvable, but it requires dedicated public funding, not just regulatory pressure.

USA (Ohio): Green Infrastructure — Holiday Harbor Marina

Holiday Harbor Marina in Ohio implemented permeable pavements and bioswale drainage systems across the marina's land areas. Bioswales are shallow, planted drainage channels that filter stormwater run-off before it reaches the water body — removing phosphorus and other nutrients through biological uptake and soil filtration. Result: a significant reduction in nutrient loading from the marina's land area into the adjoining water body. This is directly applicable to Baltic marinas with large hardstanding areas for boat storage and maintenance.

New Zealand: Biofouling Control

New Zealand introduced strict 'Clean Hull' mandatory rules requiring vessels to have their hulls inspected and cleaned before arrival at New Zealand ports. This was driven by biosecurity concerns about invasive marine species arriving on international hulls. The ECOMARINAS relevance: the Baltic's invasive species problem (37% of managers believe no measures are necessary) mirrors the situation in New Zealand before their regulations were introduced. A voluntary 'check-in hull protocol' is the first step — a mandatory regime may follow as awareness grows.

Section 10: Resources & Further Reading

- ECOMARINAS D.2.1 Benchmarking Report — the primary source for all statistics in this lecture (available via the project team)
- HELCOM Baltic Sea Action Plan: www.helcom.fi — regional framework for Baltic environmental protection
- Seabin Project: www.seabinproject.com — technical specifications and deployment data for floating waste collectors
- USA Clean Vessel Act Programme — USFWS Boating Infrastructure Grant Programme



- Sustainable Sailing Infrastructure Forum, Gdansk 2027 — contact ECOMARINAS project office for registration details
- EU LIFE Programme — funding for nature-based solutions including floating wetlands: www.ec.europa.eu/life
- NOAA Recreational Boating & Fishing Foundation — pump-out station design and placement guidance