



GREENPORT
Alliances



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Sustainable Maritime Operations and Green Port Technologies

Module number 8

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Lecturer contact info

Final reflections and course wrap-up

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Purpose of the session

- Consolidate knowledge from all modules
- Connect theory with practice from simulations
- Encourage reflection on daily application
- Define concrete next steps for sustainable operations



Simulation insights: Reflection questions

- How can tide and wind support efficient manoeuvres?
- What role does stakeholder communication play in efficiency and sustainability?
- Which sustainable behaviours were identified during ship handling?
- Did energy-saving ever risk compromising safety?
- What would you do differently next time?



Group reflection activity: Split into small groups (3–4 participants); Each group lists 3 key lessons learned; Share in plenary session

Consolidation of learning outcomes

- ❑ Understand sustainability concepts and environmental regulations (Green Deal, Fit for 55, FuelEU, EU ETS/IMO NZF) (Sessions 1, 2)
- ❑ Best practices and real-world examples of sustainable operations (e.g., alternative fuel, hybrid tugboats, OPS) (Sessions 3, 5)
- ❑ Emissions monitoring and digital for observing the evolution of emissions and fuel use (Session 3)
- ❑ Operational strategies: Eco Speed Steaming, scheduling with tidal windows (Session 4)
- ❑ Use energy saving techniques, identify and implement fuel-efficiency practices (Session 4)
- ❑ Change of operational behaviour to contribute to cleaner seas, green port operations, and eco-friendly logistics (Sessions 4,5,6,7,8)
- ❑ Simulation – applying eco-navigation in practice (Session 7)
- ❑ Practice teamwork, decision-making, and fuel-saving strategies in a simulated environment (Session 7)

This recap shows how each module builds towards a holistic view of sustainable port operations.

Feedback & Next Steps

- ☐ Which eco-navigation or handling practices will you try first?
- ☐ What barriers (infrastructure, cost, culture) may arise?
- ☐ How can leadership & peer influence drive change?
- ☐ How can stakeholder cooperation be improved?
- ☐ What role should digital tools play vs. human judgement?

Final takeaway



- ❑ Small, consistent actions → measurable improvements
- ❑ Collective impact supports EU & IMO decarbonisation targets
- ❑ Sustainable change relies on informed, cooperative decisions

Sustainable maritime operations are not achieved by technology alone, nor by regulation alone. They require every pilot, tug master, and port operator to make informed, cooperative, and proactive decisions.



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