

# Green Inland Ports

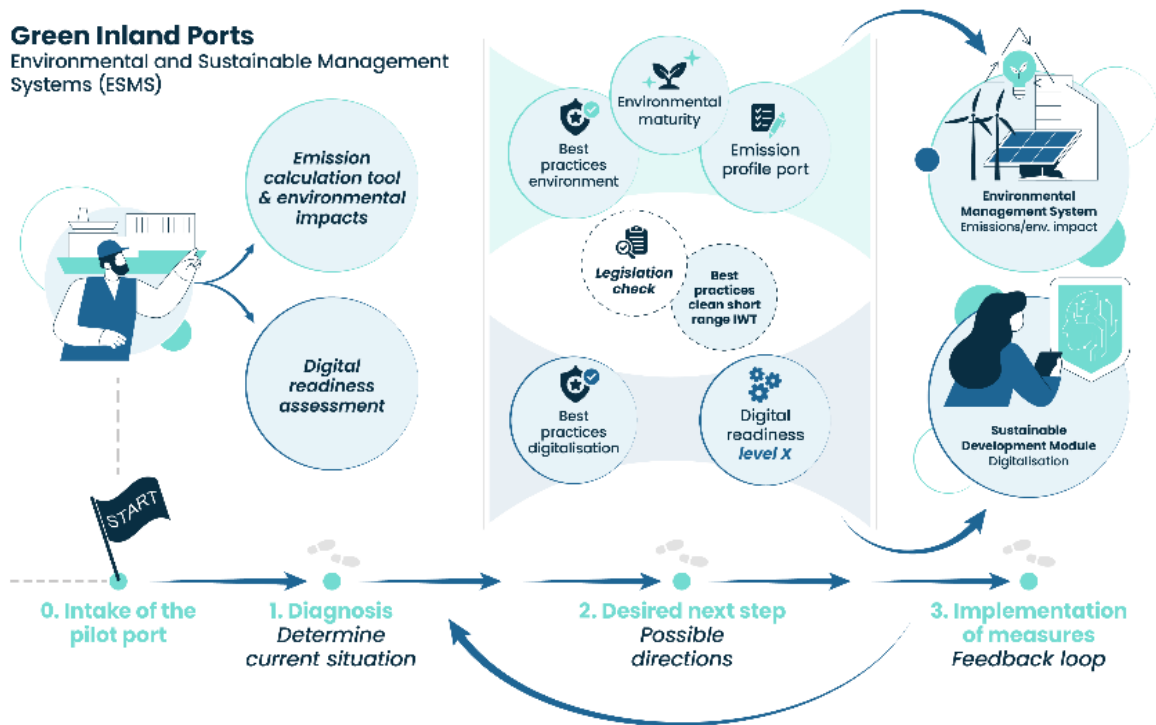
## ESMS pilot application Relevance for the “Joint Statement of the Danube Port Authorities and Ports Stakeholders

Robert de Leeuw van Weenen

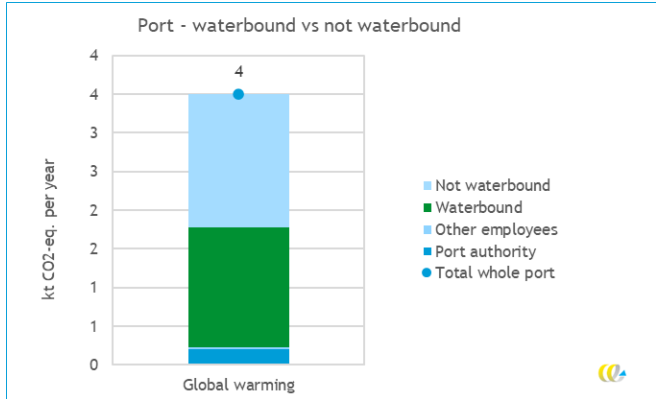
Funded by the  
European Union



# The GRIP-ESMS



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**Port Environment Impact Calculator** - calculates the environmental impact of your inland port.

**+ Regulatory Check**

environmental maturity of your inland port please reply to every question below from the drop down menu in each question. [Change scale values](#)  
[Please do not change the values on any other EMI](#)

Level	EMIT	Assessment Question	Result	Maximum Points
Level 1	1.1	Do you monitor the national legislation?	Yes	2
	1.2	Do you monitor the international legislation?	Yes	0
	1.3	Do you monitor the European legislation?	Yes	2
	1.4	Apart from monitoring the legislation how you can plan goals to improve your environmental performance?	Yes	4
Total Score			6	10 points
Level 2	2.1	Have you set concrete, well-measurable goals for reducing energy use?	Yes	2
	2.2	Have you set concrete and measurable goals for measuring to reduce energy aspects, such as materials usage, lighting, heating, air conditioning, etc. (not related to pollution)?	Yes	2
	2.3	Have you set concrete, well-measurable goals for reducing air emissions (e.g. greenhouse gases, NOx, particulates) (not related to pollution)?	Yes	2
	2.4	Have you set concrete, well-measurable goals for monitoring other power systems, reducing diesel usage for your vehicles, or connecting with renewable energy?	Yes	2
	2.5	Have you set concrete and measurable goals for optimizing operations, including operational efficiency and reducing fuel consumption?	Yes	2
	2.6	Have you set concrete, well-measurable goals for reducing noise pollution?	Yes	2
	2.7	Have you set concrete, well-measurable goals for reducing water consumption?	Yes	2
	2.8	Have you set concrete and measurable goals for waste and water management?	Yes	2
Level 3	3.1	Have you set concrete and measurable goals for reducing CO <sub>2</sub> emissions?	Yes	2
	3.2	Have you set concrete and measurable goals to report GHG emissions?	Yes	2
	3.3	Have you identified your local stakeholders? How you provide a network of local stakeholders, including local citizens, types of industries, common needs, and plans to address them?	Yes	2
	3.4	Do you monitor your energy consumption?	Yes	2
Total Score			24	35 points
Level 4	4.1	Do you have digital systems in place to monitor your performance against the environmental goals? For example, sensors, digital indicators, dashboards, data, etc.	Yes	2
	4.2	Do you monitor air emissions (e.g., greenhouse gases and other pollutants)?	Yes	2
	4.3	Do you monitor your energy consumption?	Yes	2
	4.4	Do you monitor your water consumption?	Yes	2

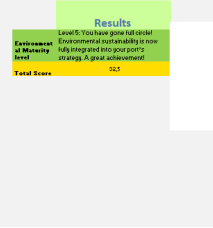
Select the score from 0 to 4 from the dropdown menu in table cells only

Level	Dimensions	Criteria	Obtained score	Maximum score
Level 1	Basic IT infrastructure	Availability of basic IT hardware, simple networking, use of basic office software	4	4
	Digital assessment and strategy consideration	Initial discussions or plans about digitalisation, management commitment	4	4
	Manual processes with minimal digital support	Balance on manual processes, use of basic digital tools like spreadsheets	4	4
	Basic communication tools	Use of email, mobile phones, radios for communication	4	4
	Minimal data collection and reporting	Basic data collection using simple tools (e.g., Word, Excel, Access, etc.) and absence of automated systems	4	4
Level 1 intermediate score			0	20
Level 2	Digital invoicing and billing systems	Use of digital invoicing systems for managing payments and billing	4	4
	Digital calculation of port fees and tariffs	Implementation of software for digital calculation of tariffs, fees, and service charges	4	4
	Digital customs declaration	Electronic submission and processing of customs documentation	4	4
	Digital cargo documentation	Use of digital systems for managing cargo-related paperwork (e.g., manifests, manifests, etc.)	4	4
	Basic administrative automation	Partial digital automation of administrative tasks without digitalisation of port infrastructure	4	4
Level 2 intermediate score			0	20
Level 3	Infrastructure connectivity	Sensors on physical objects - connectivity of quays, gates, bridges, storage areas, etc.	4	4
	Operational monitoring	Real-time monitoring of port activities (cargo, vehicles), basic automation	4	4
	Data collection and storage	Centralised data collection, basic data storage systems	4	4
	Digital infrastructure interoperability	Different digital tools (e.g., IoT sensors, monitoring systems, databases) within the port facility are used and capable of wireless data exchange	4	4
	Initial data-driven decision-making	Use of collected data for basic operational decisions	4	4
Level 3 intermediate score			0	20
Level 4	Data sharing with internal & external port stakeholders	Secure data sharing with the port and with external partners	4	4
	Collaborative planning	Joint planning tools for coordinating operations with stakeholders	4	4
	Supply chain visibility	Real-time tracking and visibility of goods throughout the supply chain	4	4
	Digital communication platforms	Degree of use of advanced communication tools (forums, collaborative software) that provide broader and more advanced digital spaces for all types of interactions, implementation of data analytics tools for reporting decision-making	4	4
Level 4 intermediate score			0	20

Select score from the dropdown menu in table cells only

Scoring	Description
0	Non-existent or very minimal
1	Basic or initial efforts
2	Moderate or partially implemented
3	Advanced or nearly complete
4	Fully implemented and optimized

**Digital Readiness Index Tool** - calculates how digital advanced is your port.



**Environmental Maturity Index Tool** - calculates how environmental mature is your port.

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## Why to become a pilot?

- ❖ By **becoming a pilot port**, you can :
  - ❖ Achieve the **benefits of an ESMS**.
  - ❖ **Provide input and be among the first** that apply a system that has the potential to become an industry standard.
    - ❖ Experiences in the pilot phase will be used to **improve and finalise** the ESMS.
  - ❖ **Gain visibility** with the Commission.
  - ❖ Get assistance with the **measures** described in the **Joint Declaration**.



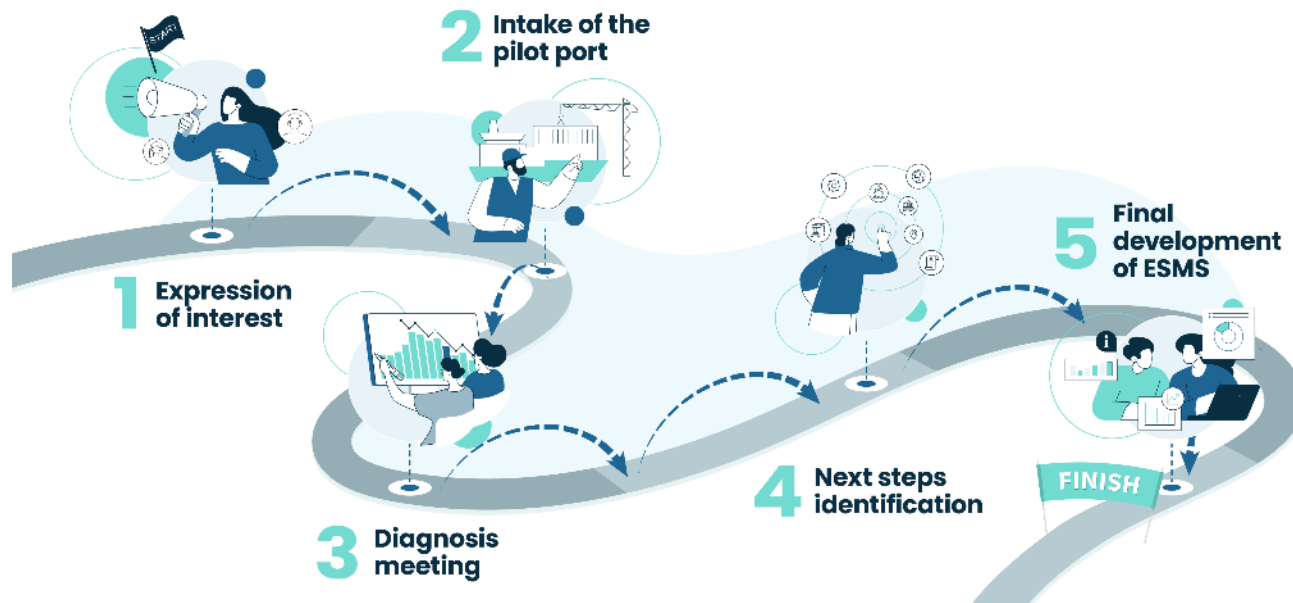
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## Relevance of GRIP – ESMS to the Joint Declaration

1. **Identify, assess and monitor the environmental impact** → *Env. calc. tool, EMIT, best development of actions via the GRIP-ESMS*
2. **Develop and implement ESMS** → *Application of the GRIP ESMS*
3. **Identify and implement env. friendly solutions to support energy efficiency, energy transition and zero-emissions operations** → *Best practices, EMIT development of actions via the GRIP-ESMS*
4. **Facilitate the implementation of alternative and renewable fuels infrastructure** → *Best practices, development of actions via the GRIP-ESMS*
5. **Support urban and short-distance IWT** → *Best practices, roll-out potential, development of actions via the GRIP-ESMS*
6. **Facilitate the exchange of know-how and other cooperation activities** between ports → *be part of the GRIP pilot port community*
7. **Opportunities from digitalization of port management and operations** → *DMIT, roadmap, development of actions via the GRIP-ESMS*

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# How to become a pilot port ?



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# Mentimeter session

- The next mentimeter questions reflect the **pillars** around which the five levels of the Environmental Maturity Index Tool are structured.
  - Level 1 : Monitoring of the legislation.**
  - Level 2:** The inland port has set sustainability goals.
  - Level 3:** The inland port monitors and reports its progress on the goals.
  - Level 4:** Port has implemented sustainability actions.
  - Level 5 :** Sustainability is fully embedded in the corporate plan.

To calculate the environmental maturity of your inland port please reply to every question below with a 'Yes' or a 'No' from the drop down menu in each question. [Change only values in Cells G5: G47. Please do not change the values in any other Cell.](#)

Points	Level number	Assessment Question	Reply	Scoring	Maximum Score
Leave note for cells J5 to F you collect 3 points for all J5 you collect 4 points.	Level 1	1.1 Do you monitor the national legislation?	No	0	10 points
		1.2 Do you monitor the international legislation?	No	0	
		1.3 Do you monitor the European legislation?	Yes	2	
		1.4 Apart from monitoring the legislation have you set in place goals to improve your environmental performance?	Yes	4	
<b>Total Score</b>				<b>6</b>	
Leave note for cells J10-13 you collect 2 points for all J20 you collect 2 points and for cell J21 3 points.	Level 2	2.1 Have you set concrete and measurable goals for reducing energy usage?	No	0	25 points
		2.2 Have you set concrete and measurable goals for transitioning to greener energy sources, such as renewable energy, hydrogen, or cleaner fuels?	Yes	2	
		2.3 Have you set concrete and measurable goals for reducing air emissions (e.g. greenhouse gases and air pollutants)? (note refers to air pollution)	Yes	2	
		2.4 Have you set concrete and measurable goals for repurposing or developing greener infrastructure, such as installing shore power systems, utilizing daylight energy for port buildings, or constructing more sustainable terminals?	No	0	
		2.5 Have you set concrete and measurable goals for optimizing operations, increasing operational efficiency and reducing fuel consumption?	No	0	
		2.6 Have you set concrete and measurable goals for reducing noise pollution?	No	0	
		2.7 Have you set concrete and measurable goals for reducing odour?	No	0	
		2.8 Have you set concrete and measurable goals for waste and water management?	Yes	2	
		2.9 Have you set concrete and measurable goals for maintaining soil quality?	No	0	
		2.10 Have you set concrete and measurable goals to support local jobs?	No	0	
		2.11 Have you identified your local stakeholders? Have you created a network of local stakeholders, including their names, types of industries, contact emails, and phone numbers?	No	0	
		2.12 Do you engage your stakeholders in your goal setting?	No	0	
<b>Total Score</b>				<b>6</b>	
Leave note for cells J23-29 you collect 2 points for all J30-J34 you collect 3 points and for J32 you collect 5 points.		3.1 Do you have digital systems in place to monitor your performance against the environmental goals? For example sensors, digital emissions calculation tools, etc.	No	0	25 points
		3.2 Do you monitor air emissions (e.g. greenhouse gases and other pollutants)?	No	0	
		3.3 Do you track your energy consumption?	Yes	2	
		3.4 Do you monitor soil quality?	No	0	

**Results**

Level 5: You have gone full circle! Environmental sustainability is now fully integrated into your port's strategy. A great achievement!

**Environmental Maturity level**

**Total Score** 32.5



## Mentimeter questions

- *Question 1: How would you describe your inland port's current progress towards achieving the goals of the European Green Deal?*  
(Choose one answer)
  - We have set clear goals but are yet to take action.
  - We have set goals and are actively monitoring our performance.
  - We have set goals monitor performance and have measures in place to achieve them.
  - We are still learning about the Green Deal's requirements for our port.
- *Question 2: What are the main environmental goals your inland port has set for the next few years? Can you please mention up to 3 goals that apply? (For example, reduce air emissions by 50% by 2030)*

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## Mentimeter Questions

- *Question 3: Which of the following environmental impacts do you measure at your inland port? (Select all that apply)*
  - Air quality and CO2 emissions.
  - Energy consumption and renewable energy usage.
  - Water usage and waste management.
  - Noise pollution levels.
  - Odor levels.
  - Soil quality.
- *Question 4: What key measures are being implemented (or planned to be implemented) to improve your inland port's environmental performance? Can you please mention up to 3 measures? (For example electrification of port equipment, development of alternative fuel infrastructure (LNG, hydrogen), shore electricity supply for vessels to reduce emissions)*

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**If you have not already, you  
will be hearing from us soon  
with an invitation to become  
a pilot port !!!**



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# THANK YOU !

For more info please visit: <https://green-inland-ports.eu/>

Or contact us @:  
[r.de.leeuw.van.weenen@panteia.nl](mailto:r.de.leeuw.van.weenen@panteia.nl)  
[i.kourouniotti@panteia.nl](mailto:i.kourouniotti@panteia.nl)

