



## Green Inland Ports

Sustainable Management System boosts  
inland ports' sustainability while  
maintaining competitiveness

Task 4: Green Inland Ports

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How to use the Green Inland  
Port Environmental Sustainable  
Management System



Inland ports ensure their sustainability by developing and executing practices to monitor and reduce their negative environmental effects (water quality, soil, noise, light and air quality) while taking social issues into consideration.

Inland ports engage with their **local communities** and manage their operations in a way that ensures the equilibrium between environmental performance, operational, business efficiency and social responsibility. Inland Ports set **SMART** – Specific, Measurable, Achievable, Realistic and Timely – goals to help them focus their efforts and increase the chances of achieving their goal of sustainability and ensure their financial viability. Aside from setting SMART goals and implementing sustainable practices, ports need to keep **up to date with developments** in freight transport and logistics such as **digitalisation, automation, new technologies** (electrification etc.) and offering **innovative services** (such as fostering Inland Waterways (IWW) city logistics services).

## What is the Green Inland Port Environmental Sustainable Management System (GRIP – ESMS)?

The GRIP-ESMS is a process tool which aims to deliver environmental protection and sustainable development in the inland ports that apply it.

The GRIP-ESMS ensures that the inland ports that apply it **develop in a sustainable way** while complying **with international environmental regulations**. It builds clear environmental responsibilities, helps inland ports to put **SMART objectives and targets in place** regarding their environmental sustainability and economic viability and gives them a target to aim for. The GRIP – ESMS also acts as a framework that helps ports to identify their **Significant Environmental Aspects (SEAs)** and then **gives them guidelines** on how to address them to deliver sustainability.

The GRIP-ESMS aims to **create an equilibrium between environmental performance, operational and business efficiency and social responsibility**, incorporating components and guidelines that, if applied, can deliver both economic and environmental sustainability. The tool proposes a system to support the internal business sustainability of an inland port while proposing appropriate environmental management measures to mitigate the effects port operations can have on the external environment (noise, air and water pollution etc.).

The GRIP-ESMS **assigns roles, responsibilities and accountabilities** not only to staff but also to contractors, supplies and other stakeholders. It ensures that there are enough **financial and human resources** to deal with the environmental responsibilities of the inland port. It describes a clear **communication plan**, identifies when progress reports should be issued and how feedback can be given from the various stakeholders. The system includes risk **management and emergency preparedness and response procedures** while at the same time it measures and evaluates results.

The GRIP-ESMS follows a **modular approach** and is developed in various phases. It first starts with **establishing a framework of good practices** and it is adapted as the circumstances of the port change. The tool is timely and topical for the inland port sector, as it enables them to establish baseline performance indicators. Successive reviews would **yield benchmark performance** for individual ports and the sector as a whole.

Instead of reinventing the wheel, GRIP-ESMS builds on existing Environmental Management Systems from maritime ports, like the ESPO EcoPorts (PERS) standards, and tailors them to the unique needs of inland ports.

## Why should an inland port apply the Green Inland Ports ESMS?

We outline the key reasons why inland ports should apply ESMS below:

1. **Adaptable and scalable:** It is a practicable process tool in a modular format. From smaller inland ports in mainland Europe to bigger inland ports, the tool can support ports of all sizes
2. **User friendly:** The system is designed to be easy to use and implement.
3. **Goal oriented:** It can help your port set SMART environmental goals and to also comply with UN sustainable goals and Corporate Social responsibility (CSR) reporting responsibilities. It provides processes, tools guidelines and best practices to ensure that these goals are met.
4. **Compliance:** It can ensure that all port activities are in compliance with I, European and international regulations
5. **Adaptable to change:** The whole port sector is experiencing a period of dynamic change in terms of political, commercial, social and environmental context. For the individual inland ports priorities frequently change. Hence, the GRIP-ESMS is configured to cope with these changes
6. **Visibility and reputation:** Implementing GRIP-ESMS can increase the visibility and reputation of your inland port.

## How can I apply to GRIP-ESMS?

The following steps are being followed to apply the GRIP-ESMS:



### **Self Assessment Methodology (SAM)**

SAM is a checklist that allows the identification of the environmental status of the port. The port can reply to a set of questions to identify what is the environmental level of the port. SAM is also used to permit ports identify the SEAS and set SMART targets to be met in the coming years.

1. **Determine the current status.** Start by applying the Self-Assessment Methodology (SAM) to determine the port's current environmental status. Identify the Significant Environmental Aspects (SEAs) and establish a clear sustainability vision and positioning for the port.

The GRIP-ESMS includes a content component that offers inland ports:

- **Tools:** for environmental calculations and monitoring
- **Best practices:** actions and lessons learnt from other inland ports
- **Guidelines** to help inland ports:
  - Engage stakeholders
  - Develop a digitalization vision
  - Economic evaluation (cost-effectiveness, feasibility, roll-out potential)

2. **Initial targets and actions.** Develop an initial set of actions to address the identified SEAs. Some of these actions should be reviewed in consultation with local stakeholders to ensure their concerns are addressed and their priorities are reflected.
3. **Evaluation.** The economic and social sustainability of the actions is being evaluated. Inland ports are assisted to conduct an economic evaluation of the proposed actions. In addition relevant port stakeholders can be engaged to ensure the development of a sustainable port strategy.
4. **Roadmap.** The GRIP-ESMS aids inland ports choose the final set of actions and define a sustainability strategy. The roadmap should include key themes, strategies, focus areas, targets and actions. "

**Start your sustainability journey today. Learn how to apply the GRIP-ESMS!**





