



# Inspiration and practicality

by Alexa Ivy

**According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, more than a third of the Earth's natural resources are at risk of destruction by 2050. Such developments will have significant – and partly unpredictable – impacts on humans, as our well-being depends on the ecosystem services and resources provided by nature. According to the World Economic Forum, nature loss is the third biggest long-term risk to the global economy, after climate change and extreme events.**

**F**inland's goal is to halt the loss of its nature by 2030 and put biodiversity on a recovery path. After this, by 2035, the ambition is to achieve a nature-positive status, meaning that the state of nature is better than in 2020 – and to continue to improve thereafter.

More and more organizations are setting ambitious environmental goals for themselves and have recognized not only their own impacts on nature and the climate but also the risks of these changes to their own operations. The environmental responsibility has expanded from calculating carbon footprints to concrete and impactful actions, in which pioneers are increasingly taking into account the protection of natural diversity.

## **Foresight and knowledge**

To help in this effort, the Finnish Ports Association has recently launched its Biodiversity Roadmap. Specifically, it's a guide designed to assist the country's seaports in enhancing biodiversity. As hubs of trade, transport, and logistics, ports play a crucial role in economic growth – but also increasingly in environmental stewardship.

The Roadmap responds to this changing (and urgent) need by bringing together measures to promote biodiversity in seaports into a coherent and targeted whole, with the overarching aim of supporting ports on their nature-positive journey.

“Sustainable development requires foresight and knowledge,” says Kirsti Tarnanen-Sariol, Deputy Director at the Finnish Ports Association. She furthers, “Environmental impact assessment in project work and port management, environmental risk assessment and preparedness are already used to guide daily operations. Quality and environmental systems help manage processes and examine self-development. So why a Biodiversity Roadmap for the port sector? It clarifies the view of the importance of a diverse terrestrial and marine environment for the sustainability of ecosystems, the balance of livelihoods based on them, and human well-being. In short, it supports long-term choices in port operations, civil engineering, and other port activities. As a strategic tool, it proactively assists decision-making, the aim of which is to mitigate negative environmental impacts and support the preservation and development of biodiversity.”

## **Port-nature loop-back – regenerative or degenerative?**

The Roadmap – developed under the guidance of environmental experts from Green Carbon and with the help of the ports of Helsinki, Kokkola, Naantali, Oulu, Pietarsaari, Pori, and Turku – was created to raise awareness and competence in biodiversity, helping stakeholders to map port- & shipping-specific impacts on the environment (such as dredging and landfills, the spread of alien species through ballast water, risk of oil spills, or transfer of hazardous/contaminating substances into water or soil) and define concrete measures for preserving and enhancing natural habitats.

Port operations affect the environment on many fronts, but simultaneously, the impacts of climate change and habitat loss also extend to seaports. The Roadmap encourages the Association's members to pursue nature-positive operations, where port activities & developments not only minimize harm but actively support surrounding ecosystems.

While the port industry has already taken long-term measures towards environmental responsibility, primarily



Photo: Port of Oulu



Photo: Port of Helsinki/Veikko Somerpuro

focusing on port infrastructure construction matters and reducing greenhouse gas (GHG) emissions, measures related to stopping nature loss have so far been somewhat less pronounced. However, climate action often also has a positive impact on stopping nature loss. Among many, these include transition to renewable energy, (green) electrification, switching to bio liquefied natural gas as ship bunker, or blueprinting future port development that site works and the under-construction infrastructure have as low an impact on the environment as possible (and if that's not doable, compensating for the loss and rebuilding the habitat post-project). Sea and inland port authorities routinely measure, as part of their environmental permit for operating

a port, impacts on the environment, not only GHG emissions but also air, noise, and water pollution levels, to make sure they operate within the limits. These are useful routines to pinpoint the areas in need of amending on the Roadmap journey.

### Responsibility without sacrifice

The Roadmap will adapt as knowledge and practices evolve. Next steps for the years 2026-29 will involve strengthening

expertise, carrying out a baseline assessment, developing a biodiversity strategy & defining objectives, and, finally, implementing at least two-three new measures to enhance biodiversity. Progress will be monitored through surveys, with the first comprehensive sector-wide report expected in 2030. "The Roadmap is not a one-size-fits-all solution," notes Tarnanen-Sariola. "It allows each port to evaluate its own operations, identify opportunities for improvement, and implement strategies that are practical, locally relevant, and scientifically grounded."

The Roadmap is designed for both inspiration and practicality. It shows that traditionally industrial environments, like ports, can embrace ecological responsibility without sacrificing efficiency. With the Roadmap, the Finnish Ports Association intends to spark discussion, collaboration, and adoption of biodiversity-friendly practices across the global port sector. "The Roadmap reflects our commitment to sustainable and responsible port operations," concludes Tarnanen-Sariola.

By taking these steps, Finnish ports prove that green innovation and maritime excellence are not mutually exclusive. Instead, they are complementary goals that can shape a more resilient and sustainable future – for human and non-human species. □



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The Finnish Ports Association represents Finland's port authorities, promoting their shared interests and strengthening cooperation across the maritime sector. The organisation works to ensure the competitiveness, sustainability, and resilience of Finnish ports while supporting the development of safe, efficient, and environmentally responsible port operations nationwide. Visit [finnishports.fi](https://finnishports.fi) to learn more.