



European Federation of Inland Ports

Position of the European Federation of Inland Ports (EFIP) on Adapting to Climate Change Strategy

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As the unique representative of inland ports in Europe since 1994, EFIP is constituted of 200 inland ports located in 18 Member States of the EU and Switzerland, Serbia and Ukraine. Being enablers of green logistics, inland ports are committed to supporting the sustainability of Europe's logistics system and welcomes the upcoming Adapting to Climate Change Strategy.

The inland waterway transport (IWT) sector constitutes an essential part of the European logistics network. It services a wide range of businesses and segments of the economy touching the lives of all European citizens.

Over the last decade the impact of climate change has become undeniably clear as droughts have resulted in very low water levels. Coping with low water levels is as old as the IWT sector itself, with various organisations and institutions ensuring the navigability through water and infrastructure management. However, climate change has exacerbated the problem to levels previously unseen. In 2018, an unprecedented dry period resulted in a loss of business and long-term job loss¹, with the sector's tools being stretched to their limits. In the future this will happen more often.

As intersection points for IWT and other industries, Europe's inland ports call for an ambitious and comprehensive strategy that will support the IWT sector in becoming fully climate change resilient.

The European inland ports believe a Climate Change Adaptation Strategy should:

1) Ensure safe and reliable navigation

Climate change is impacting the IWT sector resulting in inland waterway transport being unable to operate for extended periods or having to operate at a diminished level. In the European economy, this has led to a reverse modal shift and a loss of jobs.

As such, it is of paramount importance that navigation on Europe's waterways remains reliable as climate change intensifies. This requires the improvement of existing infrastructure, the development of smart infrastructure systems, as well as regeneration, planning, adaptation and funding to respond to changing conditions.

Digitalisation is particularly important in this regard. Digital management systems will need to complement physical infrastructure development. Water management systems with predictive algorithms can enable the locks and other management systems to respond rapidly to extreme weather events.

¹<https://www.eur.nl/upt/nieuws/rapportage-economische-impact-laagwater>



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2) Facilitate bimodal contingency solutions

During extreme weather events, safe and reliable navigation may prove impossible. In these periods, contingency solutions to ensure logistics flows are transported quickly and efficiently on other sustainable transport modes - primarily rail - are crucial.

This requires fast transshipment from inland waterways to rail, including the planning of the replacement trip. In order to be able to offer robust contingency solutions, rail connections to the port will have to be future-proofed and the entirety of the network needs to have the necessary capacity to handle these shifted goods. This would include early warning systems predicting weather events in time for logistical chains to be altered. This will then enable smart logistical systems (such as the RPIS) to support these freight shifts and to give insight into the logistics chain.

Ensuring bimodal contingency solutions and the harmonious development of rail and inland waterway supply chains has the added value of providing sustainable backup plans between IWT and rail. As shown in the Rastatt tunnel collapse of 2017, contingency plans between inland waterway and rail are the only way to ensure a continued, resilient modal shift. However, this requires a strong and robust network that can accommodate these changes and the digital systems to facilitate them.

3) Bring new, modern vessel concepts to the market

Inland waterway shippers operate in a market where they are only competitive when transporting high volumes of goods. This generally requires a deep draught and the design of many modern-day vessels reflects this.

In low water events, the draught reduces and it is not possible to operate as normal. In order to make the inland waterway sector climate change resilient, new vessel designs and adjusted vessels will be needed. This will require R&D investments but also support mechanisms enabling the market uptake of these new vessels. This would include fiscal systems underpinning the use of these vessels.

In order to achieve these three objectives, the European inland ports suggest the following concrete actions:

- **Mainstream Climate Proofing in European legislation**

Addressing the challenge of climate change cannot be achieved in a single piece of legislation. It needs to be incorporated into the entirety of the institutional and legal framework as well as all relevant strategies that can support the inland waterway sector. This would include at the very least the inclusion of climate proofing into the upcoming revision of the TEN-T Guidelines and that the foreseen strategy and any future guidance take the TEN-T into account.

- **Develop Fit for Future Infrastructure**

Inland waterway infrastructure is largely not ready to address the challenge of climate change. This can be explained by the age of the infrastructure and the largely outdated designs. The changing



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climate conditions require flexible adaptability, which will be needed to address new realities as they become apparent. As such, a shift to quality and fit for future infrastructure is necessary. This infrastructure needs to be multifunctional and multi-purpose while incorporating life-cycle planning, adaptive strategies and measures to regenerate and upgrade existing infrastructures.

- **CEF and Financing**

Adapting to climate change would require EU level financial support. Projects to improve climate change adaptation are expected to have very high costs. However, the added value of adaptation and increased resilience cannot be adequately reflected in a traditional cost-benefit analysis and would require an adjusted approach. This calls for profound integration of climate adaptation in the Connecting Europe Facility (CEF), both in terms of mainstreaming climate resilience benchmarks to projects and of including specific calls on climate-resilient infrastructure. Climate change adaptation is important to many sectors and as such synergies between various European instruments has to be foreseen. This could include, but is not limited to, synergies between CEF, Life, Next Generation Europe and others.

Additionally, more funding is needed to realise multimodal connections in ports in order to have at our disposal the needed bimodal contingency solutions when extreme weather events occur.

- **Support for research and development**

Currently the available tools, methodologies, construction approaches, data and pre-normative research are still insufficient to address the challenge of climate change. This constitutes a profound knowledge gap that needs to be bridged in order to ensure actions will be optimal.

This research and frontrunner pilot projects should result in planning and design tools that allow for the creation, implementation and maintenance of climate change resilient infrastructure. Subsequently, these tools should also be able to adequately evaluate the success of infrastructure and any needs in order to adapt to them accordingly. These methodologies should be integrated into financial calls, to reliably reflect the huge need of climate change adaptation and the high opportunity cost of not adapting to climate change.

Research into early warning systems will be essential, like for instance the Waterway Monitoring System (WAMOS). Such systems should be integrated with other similar warning systems to ensure the efficacy of those systems.

- **Dialogue and coordination**

Climate change adaptation requires cross-border and cross-sectoral action and guidance. Collaboration and coordination with water-related sectors and users will be fundamental to any actions. Only through collaboration will a sufficient understanding of the problem be achieved, reducing the exposure to risk and realising a resilient system. It would also prevent collateral damage in other affected sectors. This could be done through EU level working groups and regional coordination mechanisms.