

NAVIGATING OUR WAY TO A SUSTAINABLE FUTURE

ETF position on Inland Waterways Transport's role in the green transition

European waterways are highly vulnerable to changes in climate. They heavily depend on natural precipitation in all its shapes and forms. Glaciers, for example, play an important role in the water supply of the Rhine. Climate change already does and will continue to drastically reshape the form, volume, and spread of precipitation. This has a constant and, above all, an unpredictable impact on the navigability of the European waterways. A far-reaching climate policy is urgently needed, and structural measures that shape the future of inland navigation and its role in sustainable transport are necessary.

The current state of the sector

The financial and economic crisis of 2008 shook European inland navigation. The situation was more difficult due to speculation that led to a huge casco overcapacity. Both wet and dry bulk freight transport were equally impacted, and a number of legal initiatives resulted in the obligation for more investments. This was especially pronounced in the case of tanker transport, where the legal initiatives resulted in an improvement of safety standards by upgrading to double-hull vessels. It took the sector almost ten years to recover, and the COVID-19 crisis further impacted the sector's capability for further investment.

The sector is dominated by micro-scale enterprises and characterised by the majority of vessels being in the hands of owner-operators. More than a decade after the previous economic and financial crisis, COVID-19 drastically impacted the sector, passenger, and freight transport. Whereas at the very beginning of the pandemic a slight increase in volumes was observed, we can see that now, after almost a year of hampered socio-economic life, freight volumes, in general, dropped by 30%.

An almost complete halt of passenger transport comes after years of growth in the sector. Currently, the River Cruise fleet counts over 346 vessels and a total of 50.616 in bed capacity. River Cruising is a booming business, and every year new vessels enter the sector. In 2017, for example, 17 new ships with an additional 2558 beds made their maiden voyage. The total fleet more than doubled since 2004. River Cruise activity increased between 2002 and now with 89% on the Danube - 128% on the Rhine - 295% on the Main-Danube. COVID-19 changed this positive evolution by halting the entire passenger sector almost overnight. The ongoing crisis had devastating consequences for the 2021 season as no cruises were booked due to the continued insecurity caused by the pandemic.

Currently, over 45.000 people work in the sector as mobile workers, working on barges and river cruise vessels. Many more work in infrastructure, inland ports and administration. Recognising the potential role of inland navigation in a sustainable future would spur the creation of additional green jobs in the sector.

Navigating the sector to a green and social future

The sectors' current financial capacity to innovate and retrofit is very thin to nonexistent, making additional **external investment essential if the sector is to reach its green transport potential and contribute to the European Green Deal's goals.**

There are some signs that the EU has recognised the green potential of inland waterways transport. The European Commission has contributed to the promotion of inland navigation via the NAIADES action programme. The present NAIADES II "Towards quality inland waterway transport" provides additional initiatives to create the conditions for a quality mode of transport: well-governed, efficient, safe, integrated, quality jobs occupied by a skilled workforce, and adhering to high environmental standards. And the newly announced NAIADES III programme will deepen the various issues to tackle.

While IWT is increasingly seen as essential for an environmentally sustainable future, we need to stay vigilant and ensure that it becomes socially sustainable. Automation and digitalisation are often presented as logical steps in reaching a sustainable future, without reflecting on the social aspects of such changes. The ETF believes that automation and digitalisation cannot be the default setting towards a zero-emission future. Instead, a human- and society-centred approach has to be envisaged. To reach that goal, **investments in human skills and resources must always be integrated into calls for investments into greening the sector.** These should be aimed at re- and upskilling and training. We advocate the elaboration of a compulsory periodic training scheme for all crewmembers (OL & ML) to ensure the optimisation of human potential.

Especially in the transition period that will create additional uncertainties, the sector's stability and attractiveness have to be the top priority to at least maintain the present workforce levels. **Training, retraining and re-skilling programmes will contribute largely to this attractiveness, together with quality living and working conditions both onboard as on shore.** If crewmembers have a long-term attractive prospect, they will continue to work in the sector and shape its sustainable future.

The new EU Strategy for adaptation to Climate Change includes a strong occupational Health and Safety dimension. Not only do we need EU regulations, but also stringent national implementation to guarantee the zero-accidents-benchmark.

Priority areas for a green transformation of IWT



ENGINES

The average turnaround time of IWT engines is above 30 years, so huge investments will be needed for renewal and retrofitting. In the [strategic Research Agenda](#), the waterborne sector in Europe aims for an ambitious vision - to have by 2030 zero-emission new short sea ships and new inland vessels. If we are to commit to that goal, we need to commit to truly modernising the fleet



FUEL

Limiting fuel consumption and emissions of greenhouse gases and pollutants needs to be a priority. There has been some innovation in the area already. Liquified natural gas, for example, looked very promising, but does not provide the scale the sector needs. The CDNI waste disposal points network's further development is also key for promoting better waste disposal, as well as the creation of concepts for treating gaseous residues of liquid cargoes are needed. All of these elements should be part of a regulatory framework.



INFRASTRUCTURE

Constant assessment of infrastructural performance needs to be prioritised as well to improve overall safety and navigational efficiency. The global climate changes create both high and low water levels hindering the overall reliability and performance of the sector and affect the safety of the crew.



SKILLS

In line with the aforementioned initiatives, investments in new skills is critical to ensure that workers are prepared and protected in the process of introducing new fuels and their handling procedures.

The EU green deal emphasises the need for modal shift towards rail and IWT. If we take those goals seriously, then the only way forward is massive investments. ETF is in favour of prioritising cross-border infrastructure in order to allow maximum opportunities for connected transport solutions. IWT has to become an integrated partner in the global supply chain.

Inland Waterway Transport can contribute significantly towards diminishing the negative effects of transport, as mentioned in the Green Deal. This contribution can

be made in two ways, both by shifting freight transport from the road and by allowing for more efficient energy use and increased use of alternative fuels, in the spirit of the targets of the Paris Agreement on climate change.

In a resolution adopted in February 2019, the European Parliament also confirmed that a modal shift from road to inland navigation is necessary to achieve the objectives of the Paris agreement. The EP acknowledged that inland waterway transport is essential to diminish further negative effects of transport. The transition towards zero-emission transport is also laid down in the [CCNR Strategy](#) and the [Mannheim Ministerial Declaration](#).

To realise these ambitious visions, inland waterway transport needs - more than ever before - significant investments in and benefit from financial support for research, development and innovation. If Inland Navigation wants to remain a frontrunner in terms of sustainability, Europe needs to stay ahead of its global competitors in terms of innovation both in hardware as in its human potential. In the coming years, research and innovation into new technologies will be crucial to compete and move towards zero-emission and allow the sector to roll out new innovative solutions to handle a bigger market share in freight transport.