



# Association of the leading European River Cruise Companies

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PRESENTATION 12/05/2025

BUDAPEST DANUBE COMMISSION

# These are two consecutive Reports, covering both, the Inland Waterways and EU Coastal Cruising

KNOWLEDGE BASIS FOR THE EUROPEAN CRUISE INVESTMENT PLAN

## Status report

Cruise Lines International Association (CLIA),  
European River Cruise Association (IGRC)

Report no.: 2024-1605, Rev. 2

Date: 2024-07-31



KNOWLEDGE BASIS FOR THE EUROPEAN CRUISE INVESTMENT PLAN

## Foresight report

Cruise Lines International Association (CLIA),  
European River Cruise Association (IGRC)

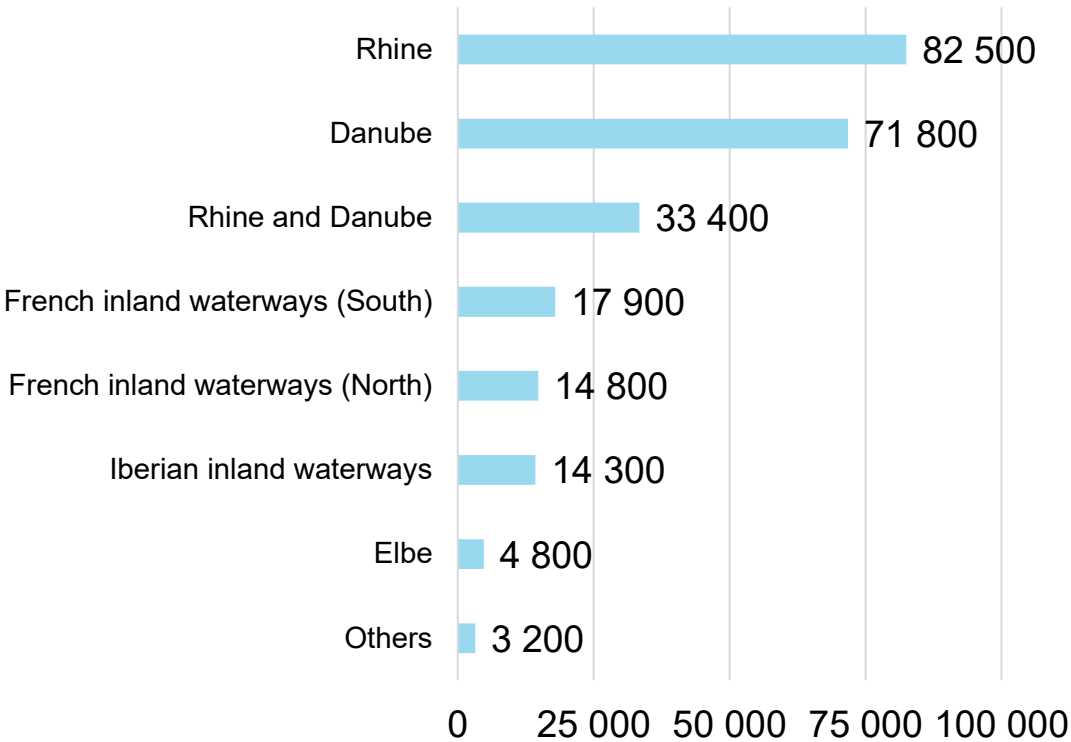
Report no.: 2024-1971, Rev. 2

Date: 2025-02-27



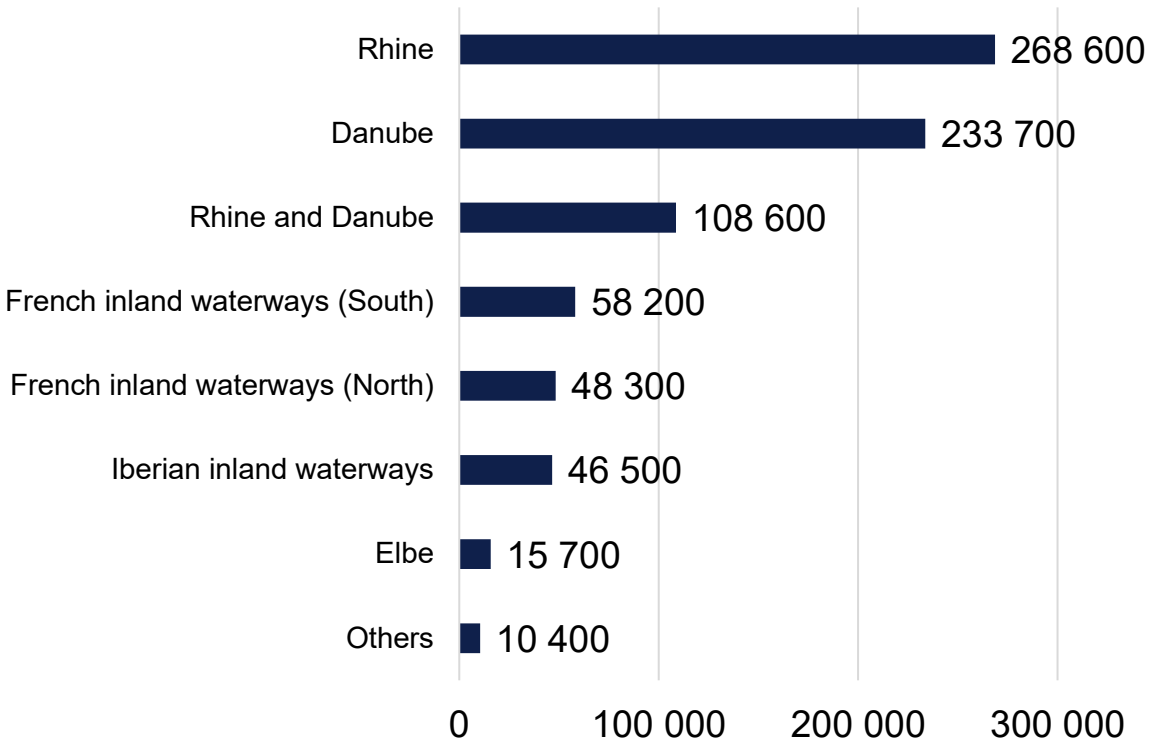
# Fuel consumption and GHG emissions are concentrated on vessels with itineraries covering Ten-T Network Routes

## Fuel consumption



Estimated annual fuel consumption (tonnes MGO)

## Tank-to-wake GHG emissions



Estimated TtW annual GHG emissions (tonnes CO2-eq.)

# Scenario development – Inland Waterways

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## **Inland Waterways**

**Scenario 1: “Liquid drop-in fuels dominate” - MGO with transition into bio- and electro-based fuels**

**Scenario 2: “Electrons dominate” - Electrons in battery and hybrid solutions**

**Scenario 3: “High momentum for methanol” – MGO is replaced by methanol in the long term**

# Fuel Pathways are generally progressing well.

Table 4-3 Summary of the readiness level of diesel fuel pathways for cruise sector.

Fuel	TRL (1-9) / CRL (10-11)					
	2022	2025	2030	2035	2040	2050
Biodiesel	10	11	11	11	11	11
HVO	10	11	11	11	11	11
E-diesel	7	8	9	10	11	11

Table 4-4 Summary of the readiness level of methane fuel pathways for cruise sector.

Fuel	TRL (1-9) / CRL (10-11)					
	2022	2025	2030	2035	2040	2050
Natural gas	11	11	11	11	11	11
Biomethane	9	10	11	11	11	11
E-methane	7	8	9	10*	10*	11

Table 4-5 Summary of the readiness level of methanol fuel pathways for cruise sector.

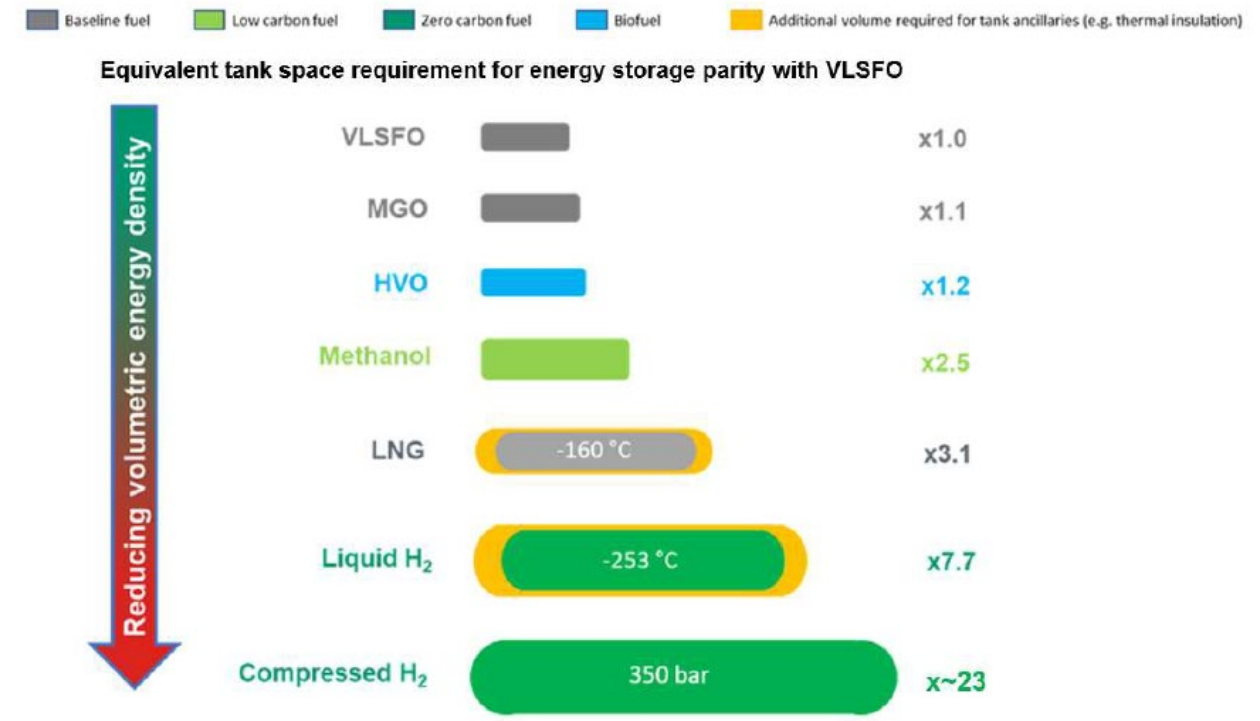
Fuel	TRL (1-9) / CRL (10-11)					
	2022	2025	2030	2035	2040	2050
Grey methanol	11	11	11	11	11	11
Bio-methanol	9	10	10	11	11	11
E-methanol	7	8	9	10	11	11

Table 4-6 Summary of the readiness level of hydrogen pathways for cruise sector.

Fuel	TRL (1-9) / CRL (10-11)					
	2022	2025	2030	2035	2040	2050
Grey hydrogen	9	10	11	11	11	11
Green hydrogen	8	9	11	11	11	11
Blue Hydrogen	7	9	10	11	11	11

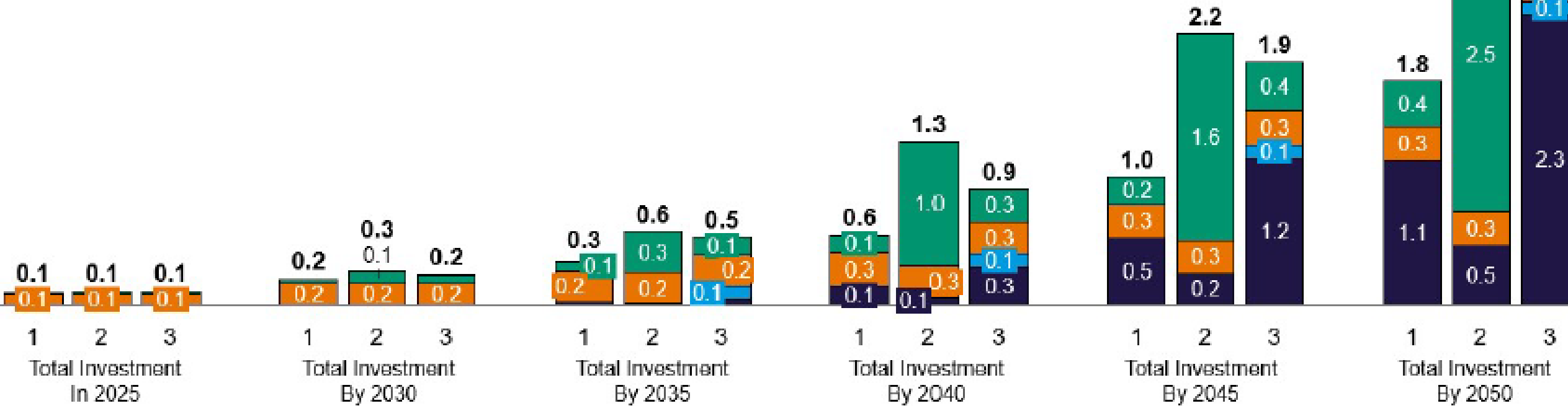
Table 4-7 Summary of the readiness level of carbon capture for cruise sector.

Technology / measures	TRL (1-9) / CRL (10-11)						Can it be retrofitted?	Relevance for cruise vessels (yes/no)	
	2022	2025	2030	2035	2040	2050		Ocean/ expedition	
								River	
Carbon capture (exhaust)	7	7	9	9	- *	- *	Yes	Yes	Yes
Carbon capture (fuel reformation)	6	7	8	10	- *	- *	Yes	Yes	Yes



# Cumulative Investment by Investment Category for All Scenarios (Billion 2024 EUR)

- Ship Technology
- Port Infrastructure
- Fuel Distribution
- Fuel Production



**Figure 6-11 Cumulative capital investment requirements from 2026 to 2050 (€bn) by river cruise scenario: 1- Biofuels; 2 - Electricity; 3 - E-fuels.**

### Inland Waterways

Scenario 1: "Liquid drop-in fuels dominate" - MGO with transition into bio- and electro-based fuels

Scenario 2: "Electrons dominate" - Electrons in battery and hybrid solutions

Scenario 3: "High momentum for methanol" - MGO is replaced by methanol in the long term

