

MARITIME CONNECTIONS

Elimination of obstacles to innovative shipping and facilitation of a modal shift in transport



CLEAN SHIPPING			SMART SHIPPING	SEA RIVER SHIPPING
Offshore energy to <i>"</i> X"	Acceleration of competence development in environment-friendly and low- carbon shipping		Lead the way in advanced, digitised and autonomous maritime/nautical operations in harbours and offshore	Acceleration of competence development in environment-friendly and low-carbon shipping
 Demo of offshore hydrogen production from renewable energy combined with storage & bunkering 	 Sustainable fuels (SF) Pilot projects regarding the use of hydrogen in combustion engines. Logistics, incl. offshore storage and bunkering of SF for shipping. R&D and pilot projects regarding the use of SF (excl. hydrogen) in fuel cells Fully electric or hybrid propulsion in shipping; Exploring the potential of wind energy for fishing vessels. 	 Making shipping more sustainable (incl. nautical aspects in harbours) System for compensating peak power consumption R&D and pilot projects regarding optimisation of the design (incl. hull) of vessels. Pilot projects regarding Carbon Capture on vessels Piloting shore power Reducing the spread of invasive species. Supporting the market uptake of fouling release coatings; exploration of sound-based systems 	(Semi-)autonomous shipping: R&D and pilot project regarding (semi-)autonomous inland shipping and maritime operations (incl. offshore wind farms) Demonstration of shore control capabilities Advanced, nautical aspects for harbours, islands and offshore installations: Mitigation of the impact of offshore wind farms on radar systems Offshore mooring & transshipment SMARAGD SSAVE	 Detailing of shipping routes and conditions for sea river shipping Economic and environmental decision model for vessel guidance Optimisation of the design of estuary vessels