



Transport via ports and rivers

More efficient, yet in greater
harmony with nature

New and established international ports face the challenge of becoming more efficient, yet in greater harmony with nature. Their ambition is shared by the inland shipping industry, which connects ports with the hinterland. Progress towards these goals has economic benefits and makes the shipping sectors more sustainable.



What's the issue?

All over the world, particularly in Asia and Africa, many new ports are being built. New and established ports face the challenge of operating in a way that is more energy-efficient, yet in greater harmony with the natural environment. In addition, the inland shipping sector that connects maritime ports with the hinterland needs to become more efficient and environmentally friendly. Progress towards these goals means more sustainable value chains and greater economic benefits.

More sustainable and more efficient

Efficient ports reduce the pressure on public finances and provide employment. Ecologically friendly ports can also be cost-efficient. Efficient maritime and inland shipping will make value chains more sustainable on a cost-efficient basis.

Against this background, the focus is on themes such as technical port and equipment design, river morphology, maritime and inland shipping, port construction, engineering, management, implementation and finance. Equally important are trade and transport flows, port-hinterland connections, vessel and equipment design, and related occupational training. Developments are taking place in terms of consortium formation and finance, with the aim of attracting concession-based private finance. Major technological and ecological advances are also being made in sustainability, international and European regulation, and the development of standards.

Dutch expertise

The Netherlands has considerable expertise in port construction and inland shipping, and is keen to help other countries improve the efficiency and ecological value of their ports and inland shipping systems. As a global hub, the Port of Rotterdam can help set efficiency and ecological standards, for instance on the recovery of residual heat from industrial sources. Dutch experts are keen to share their know-how on port construction and management, engineering, shipbuilding and shipping, and to deliver training programmes at all levels. In addition, the Netherlands has specific expertise within the individual links of the transport chain. For example, its shipbuilding and maritime supply industries, in tandem with its maritime knowledge centres, can produce environmentally-friendly vessels adapted to local conditions, as well as navigation systems that promote safe shipping.



As part of the International Water Ambition (IWA), comprehensive plans are being drawn up with port authorities all over the world, with the aim of securing port development, particularly on the basis of public private partnerships. Efforts are also being made to form consortiums aligned with the market demand from numerous countries.

Contact and further information

Maritime by Holland

www.maritimebyholland.com

Maritime by Holland is an initiative linking twelve maritime sectors: ports, offshore, maritime supply, shipbuilding, sea shipping, hydraulic engineering, maritime services and knowledge centres, inland water transport, the Royal Netherlands Navy, aquatic and nautical sports, and fishing.

The port of Rotterdam

www.portofrotterdam.com

Platform for Ports of the Future, a joint initiative involving

WWF, Deltares and the Port of Rotterdam

Download the full report using the following link:

[www.deltares.nl/app/uploads/2015/12/](http://www.deltares.nl/app/uploads/2015/12/Port-of-the-Future-report.pdf)

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