The Dutch Maritime Network
Advancing the blue economy

# Navigating the **Netherlands** to **Prosperity**

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# **1. Introduction**

Water has been instrumental in shaping the Dutch identity, serving as a cornerstone of our prosperity. For centuries, the Netherlands has navigated trade and diplomacy through the vast international seas and inland waters of the Dutch delta. A staggering 90 percent of our goods arrive by sea, while two-thirds of our exports also take place via water.

Our coastline isn't merely the edge of our country; rather, it marks the beginning of the world. International shipping by sea and on our rivers has made our country rich, but the importance of the maritime sector extends well beyond the accumulation of wealth.



Connector of the Dutch maritime sector

#### 2. Why is the maritime sector so important for The Netherlands?

It is February 24th, 2022 when Europe changes forever. The Russian invasion of Ukraine marks a pivotal moment in the evolving landscape of global power dynamics. In the ensuing days and months, Europe grapples with a stark realization: an overreliance on unpredictable foreign powers imperils its prosperity and comforts. Due to our strong dependence on Russian oil and gas, our country, and with it the rest of Europe, faces an imminent energy crisis. With winter approaching, anxiety mounts among many people. Will they still be able to pay their energy bills or will they be left in the cold?

In a race against time, a floating terminal for liquefied natural gas (LNG) is swiftly built in the Eemshaven area. Here LNG, which is supplied by tankers from Norway and the United States undergoes conversion into gas before integration into the existing gas network. This monumental effort is a crucial step towards ensuring the Netherlands and Europe's future energy independence and bolstering the security of our energy supply.

This would never have been possible without ships, without our maritime infrastructure and without our maritime expertise. The impact of the war in Ukraine on the Netherlands would have been many times worse.

In conclusion, the maritime sector occupies a central position, extending beyond its pivotal role in the national and international transport chain. It is key to meeting our growing demand for (renewable) energy, ensuring our security amid escalating geopolitical tensions, and protecting us against the mounting threat of rising sea levels.

# 2.1. Energy transition and sustainability

The maritime sector plays a crucial role in the energy transition and sustainability of the Netherlands. The transition to green energy sources and reduced dependence on fossil fuels are essential for a viable and future-proof country.

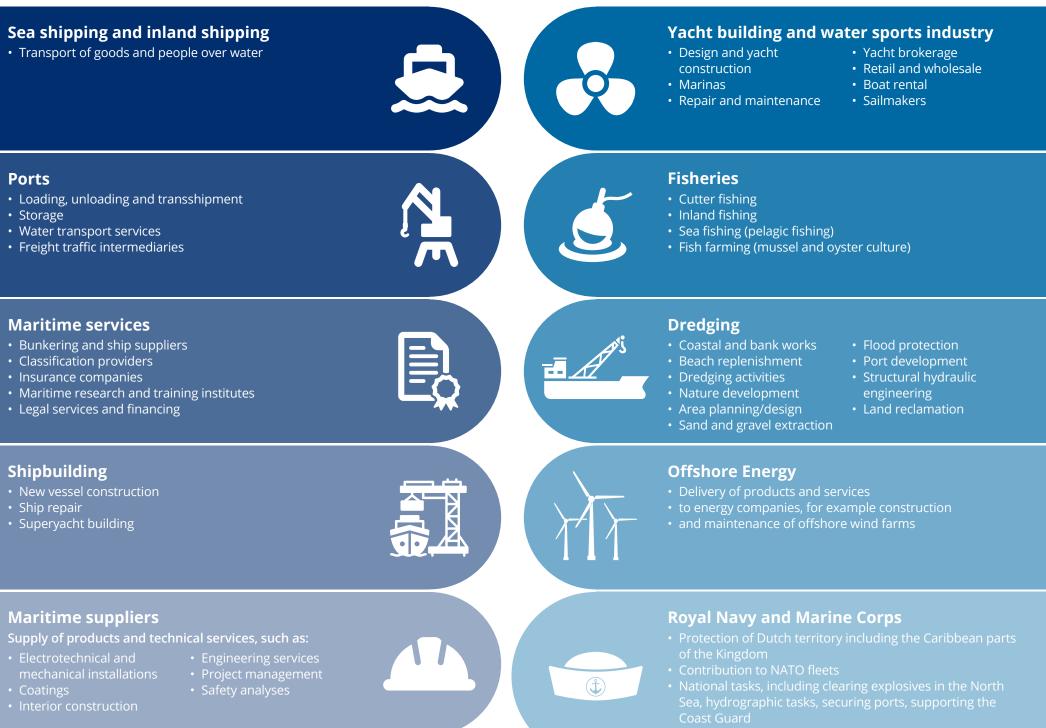
Offshore wind energy is central to this, with plans to generate 21 gigawatts of wind power annually by 2030. This will cover 75% of our electricity consumption. In addition, plans are being made for large-scale green hydrogen production in the North Sea. Green hydrogen, produced with renewable energy sources such as wind and solar energy, will become an important link in our energy mix.

To realize these ambitions, many different types of ships are needed. This includes transport ships that move crew and material to and from offshore wind platforms, but also work ships for the installation of offshore infrastructure. The Dutch maritime sector is a leader in the development, construction and use of these specialist ships. It is important that we maintain our knowledge and expertise in this area, so that we are able to meet our own energy needs in the future. At the same time, shipping is one of the most sustainable forms of transportation. This is thanks to high fuel efficiency and the large transport capacity per ship. Transport via sea and inland shipping also contributes significantly to reducing traffic congestion. Despite this, global shipping is responsible for 3% of global greenhouse gas emissions, including  $CO_2$ . On an annual basis, this amounts to 1076 million tons of  $CO_2$ . To achieve our climate goals and keep our planet habitable, emissions, including from ships, must be drastically reduced. In this context, the International Maritime Organization (IMO) has concluded a climate agreement for international shipping in which it has been agreed to be completely climate neutral in or around 2050.

Therefore, the Dutch maritime sector has joined forces with the Dutch government, including the Royal Netherlands Navy and the National Shipping Agency, as well as research institutions to realize the Maritime Master Plan. With this plan we will develop, build and use 40 climate-neutral ships for coastal and inland shipping, marine engineering, offshore wind and maritime safety. In this way we accelerate the transition to climate-neutral ships for the Netherlands and, thanks to the knowledge acquired, we can also help others to make the transition on time.



## **MARITIME CLUSTER**



Protection of our maritime trade routes

## 2.2 Climate adaptation

Over the past 130 years, the sea level along the Dutch coast has increased by approximately 24 cm. This increase primarily stems from the expansion of warming waters and the consequential melting of glaciers and land ice, attributed to global warming. Forecasts indicate that this rise in sea levels will persist over an extended period, even in scenarios where there's a drastic reduction in CO, emissions.

In a nation partially situated below sea level, a robust maritime sector becomes an indispensable necessity. This sector, particularly in hydraulic engineering, serves as our safeguard against floods by meticulously upholding and fortifying dikes, alongside the vital task of river dredging. In the event of emergencies stemming from intensifying weather extremes, entities such as the Department for Public Works and Water Management (Rijkswaterstaat), the Royal Netherlands Navy, and private shipowners, leveraging their expertise, competencies, and specialized vessels, play a pivotal role in ensuring the safety and security of our populace.



### 2.3 Vital functions at sea

Besides energy generation and transportation, communication is one of the most vital functions at sea. In today's rapidly digitizing world, the seabed plays a crucial role in global connectivity. Submarine data cables form the backbone of our modern communication network and are increasingly essential. These cables, spanning across oceans and connecting continents, are indispensable for international internet and telephone traffic. The Dutch North Sea bed harbors several critical internet hubs.

But this submarine infrastructure is susceptible to disruptions. These disruptions encompass both natural causes, such as extreme weather, and deliberate sabotage by criminals, terrorists, and malicious states.

The consequences of such a disruption would be immediately noticeable: suddenly, the internet connection becomes slow or unavailable. News and social media are no longer at hand, and sending or receiving emails becomes impossible. Online banking faces disruptions, leading to problems in financial transactions. Telecommuting becomes nearly impossible, and international trade and logistics are severely disrupted, directly impacting the economy.

Specialized sensors and ships equipped with advanced technologies and tools are necessary for monitoring, securing, and swiftly detecting and repairing damages in case of emergencies. Additionally, maritime experts and technicians play a pivotal role in identifying damages and planning as well as coordinating recovery operations. Therefore, a robust maritime sector, equipped with the right personnel and resources, is essential to ensure the continuity of our communication infrastructure and to swiftly and effectively restore disruptions.

#### 2.4 Military security

The Royal Netherlands Navy plays a significant role in the military security of the Netherlands and its global interests by possessing the capability to detect, track, and neutralize threats on and from the sea when necessary. This includes safeguarding the waters within our kingdom and monitoring crucial sea routes important to the Netherlands, ensuring their openness and protecting Dutch ships and seafarers. The globally unhindered use of the sea greatly influences our prosperity. Consequently, the Royal Netherlands Navy is dedicated to combating piracy and crime on the open sea. Additionally, within NATO and coalition contexts, the Royal Netherlands Navy contributes to the security of our allies and partners, a vital aspect for stability in the Netherlands and Europe.

To effectively and reliably carry out its duties, the Royal Netherlands Navy requires a self-sustaining naval shipbuilding cluster capable of building high-quality naval vessels at a relatively low cost. A self-sustaining naval shipbuilding cluster enables the Royal Netherlands Navy to operate autonomously, reducing excessive reliance on foreign sources. This safeguards national security and sovereignty. Furthermore, such a selfsustaining cluster fosters technological innovation and generates highquality jobs, contributing to the economic and industrial foundation of the Netherlands. In essence, a self-sustaining naval shipbuilding cluster is indispensable in enabling the Royal Netherlands Navy to fulfill its crucial role in a rapidly evolving maritime environment.

## **2.5 Earning capacity**

A strong economy forms the foundation of societal wellbeing and stability. It contributes to increasing purchasing power, reducing inequality, and enhancing social cohesion. Additionally, a robust economy is a prerequisite for investments in much-needed sustainable development.

With its extensive history, innovative business culture, and ports especially in Rotterdam and Amsterdam serving as gateways to Europe, the maritime sector stands as a significant engine of the Dutch economy. The total added value of the port and maritime cluster amounted to 56.5 billion euros in 2021, equivalent to 6.6 percent of the GDP. Over 540,000 individuals earned their livelihoods in the ports and maritime industry, accounting for 5.5 percent of the total employment in the Netherlands.

Hence, modern, secure, and efficient ports are of crucial importance. They not only serve as hubs for international trade but also support a wide range of industries and services, from logistics to shipping and (energy) production. They are responsible for the transshipment and distribution of most goods entering or leaving our country. Ports significantly contribute to our competitive position in the global market and are instrumental in the earning capacity of many other sectors. Therefore, modernizing, strengthening, and safeguarding our ports are essential for the prosperity, well-being, and economic growth of the Netherlands.

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However, the economic potential of the maritime sector is even greater. The vast societal challenges, such as the energy transition, present a significant opportunity for sustainable growth. The Maritime Master Plan alone holds the potential to generate an additional added value of 33-40 billion euros until 2050.



View the Maritime Master Plan here

#### 3. What can you do?

The maritime sector is the lifeblood of the Netherlands and has shaped our history like no other industry. Now is the time for you to play a role in shaping the future of this crucial industry.

#### **Explore maritime careers**

Consider a career in the maritime sector or encourage young individuals to do so. It presents exciting opportunities and a chance to contribute to our national prosperity. For more information on courses, open days, and career opportunities, visit **www.maritimebyholland.nl** 

#### Learn and share

Dive into the rich history and innovations of the maritime world. Share your knowledge with others, from friends and family to your local community.

#### **Stay informed**

Stay updated on maritime developments by subscribing to the LinkedIn channel of Nederland Maritiem Land / The Dutch Maritime Network and visit our website: **www.maritiemland.nl/en/home/** 



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#### Visit and experience

Embark on maritime adventures! Explore ship museums, ports, and the coastline to experience the magic of the sea.



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