

# PEER REVIEW OF THE POLISH SHIPBUILDING INDUSTRY

Q1 2024





### *Foreword*

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## 1. Executive summary

Poland has a long and dynamic history in the shipbuilding industry and was one of the largest producers of ocean-going vessels in the world. However, the shipbuilding industry in Poland was affected by social and political changes in the late 1980s. Whereas most of Poland's shipyards were owned by the State, the transition to a market economy in the late 1980s led to less involvement of the state in the shipbuilding industry, which was further reinforced after Poland's accession to the European Union (EU). Ship production declined significantly as the Asian shipbuilding industry developed.

Ship completions declined sharply following the 2008 financial crisis and the withdrawal of government subsidies to state-owned shipyards in line with the EU's state aid rules. Poland's market share in global ship completions peaked at 2.6% in 2000 and decreased sharply in the 2010s to reach 0.1% in 2020.

Since 2009, Polish shipyards have moved from the construction of new ships to ship repair and maintenance. Gdansk Shiprepair Yard Remontowa S.A. is the largest repair shipyard in Europe. According to Statistics Poland, the number of employees in construction and repair of ships and boats has increased since 2018 and has not decreased during the COVID-19 pandemic, reaching approximately 28,000 people in 2021.

The yacht industry plays an important part in the exports of the Polish shipbuilding industry. According to the Polish Investment and Trade Agency, the exports of the Polish yacht sector have been growing. They amounted to USD 318.6 million in 2013 and increased more than three and a half fold to reach USD 1,172.5 million in 2022.

The Ministry of Infrastructure is the public entity in charge of the regulation of the Polish shipbuilding industry. The ministry announced the Strategy for Responsible Development (SRD) for enhancing the competitiveness of Polish shipbuilding industry in 2017. The Strategy focuses on increasing research and development investments, the modernization of shipyards, and the increase of employment in the sector.

As in many other economies, labour and skills shortages have become one of the main challenges for the shipbuilding industry in Poland. With the largest shipyards shutting down in the 2000s, experienced technicians decided to seek employment overseas. In addition, shipbuilding is perceived as an old industry for young Polish workers, although Polish companies have put in place actions to attract young talent to the shipbuilding industry.

## 2. Introduction

In 2012, the OECD's Council Working Party on Shipbuilding (WP6), which became on the 1<sup>st</sup> of January 2024 the OECD Shipbuilding Committee, introduced a peer review process focused on support measures provided by governments to their shipbuilding sectors. Under this process, each economy participating in the Shipbuilding Committee undergoes an in-depth study of its shipbuilding industry and related government measures. Non-Shipbuilding Committee economies may also join the process and be the subject of a Shipbuilding Committee review.

The main goal of the peer review process is to strengthen the identification of government policies, practices and measures affecting the shipbuilding sector and to support the discussion of these measures within the Shipbuilding Committee. The analysis of the support measures is accompanied by contextual details of the industry to provide a rich discussion of shipbuilding policies and their impact. A key element of the process is the active debate and discussion of peer review drafts by Shipbuilding Committee participants, with a view to promoting transparency and sharing experiences.

Poland, together with Croatia, Italy, Denmark, and Romania, is subject to a Shipbuilding Committee peer review in 2023, following the reviews of Japan (2012), Portugal (2013), Korea (2014), Germany (2015), Norway (2016), Finland (2017), the Netherlands (2019) and Republic of Türkiye (2021). In 2018, the Shipbuilding Committee decided to conduct an ad hoc review of the shipbuilding sectors in selected non-Shipbuilding Committee members, including China, Indonesia, Malaysia, the Philippines, Singapore, Chinese Taipei, and Viet Nam. In 2020, the Secretariat also prepared a report on China's shipbuilding industry and policies affecting it.

The information in this report is based on publicly available information, and statistical series available to the Secretariat and information such as ship production, exports and shipyards provided by Poland.

The report includes five substantive parts: global perspectives, overview of Polish shipbuilding industry, structure of the Polish shipbuilding industry, and finally policies affecting the shipbuilding and marine equipment industry.

### 3. Global perspective

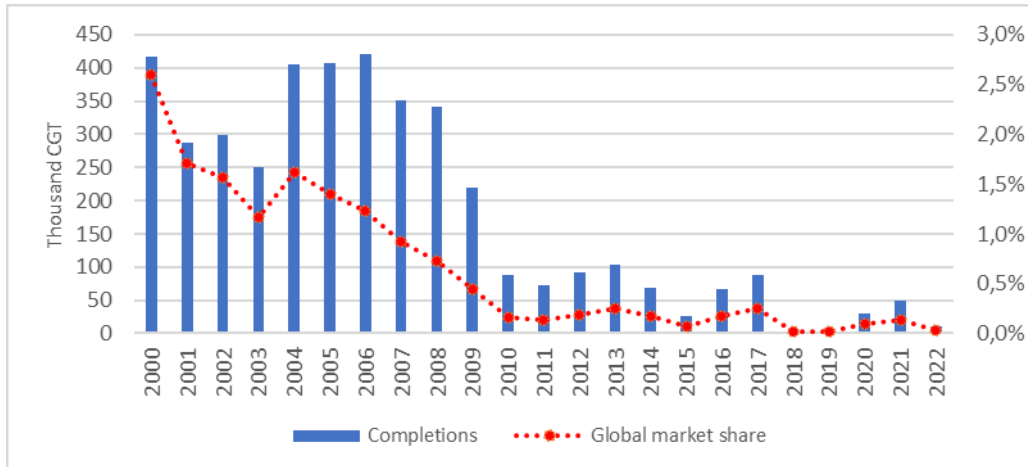
Shipbuilding has a long and dynamic history in Poland, which dates back to the 1850s when the first docks were constructed in the cities of Gdansk and Szczecin<sup>1</sup>. After World War II, production continued in these shipyards with new important shipyards being developed in Gdynia. Back in the 1980s, the shipbuilding industry was one of the largest sectors in the Polish economy and the country was one of the largest producers of ocean-going vessels in the world<sup>2</sup>.

However, the shipbuilding industry in Poland has faced social and political changes since the late 1980s. Like other European countries, ship production has begun to decline significantly from the 1980s, at the same time as Asian shipbuilding industries expanded.

In addition, since Polish shipyards were mostly owned by the State, the transition to a market economy in the late 1980s had a significant impact on Polish shipyards. The number of ships built decreased gradually from the late 1980s onwards. Shipyards had to adapt in this period of transition from a centrally controlled economy to a market economy. The collapse of the Soviet Union and the following cancellation of military orders, overemployment, a relatively low productivity and suboptimal management practices weighed on the performance of the industry<sup>3</sup>.

Furthermore, the ship completions of the Polish shipbuilding industry also declined sharply following the 2008 Financial Crisis and the withdrawal of government subsidies to state-owned shipyards to comply with the EU's state aid rules. Over the last twenty years, Poland's global market share in ship completions in compensated gross tonnes (CGT) peaked at 2.6% in 2000 (Figure 1), decreasing sharply in the early 2010s, reaching 0.10% in 2020.

**Figure 1. Completions in CGT and global market shares by Poland, 2000-2022**

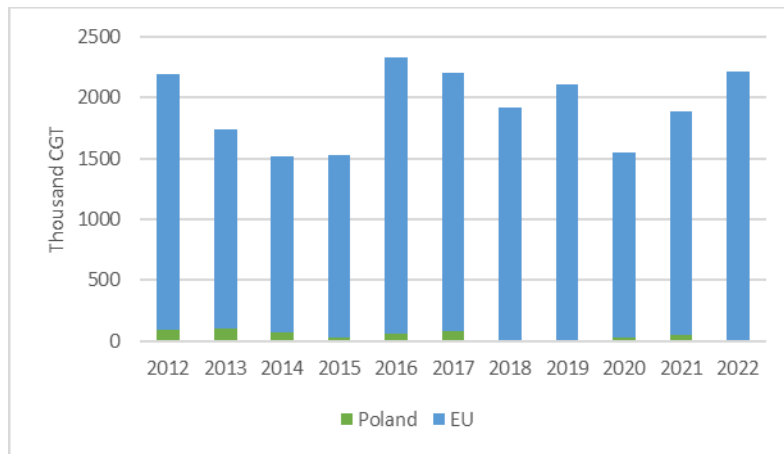


Note: This figure includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>. Back

Poland represented about 0.46%, 2.63% and 2.01% of the EU's CGT production in 2022, 2021 and 2020 respectively. The EU shipbuilding industry was greatly affected by the COVID-19 pandemic, and the completion rate in 2020 decreased by 27% compared to 2019. However, it has followed an upward trend since 2020, recording 6.3% of the world's CGT of selected vessels, 7% in 2021 and 9% in 2022. Polish ship completions continued to be low regardless of the pandemic (Figure 2).

**Figure 2. Completions of selected seagoing vessels in the European Union and Poland in CGT**



Note: This figure includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>. Back

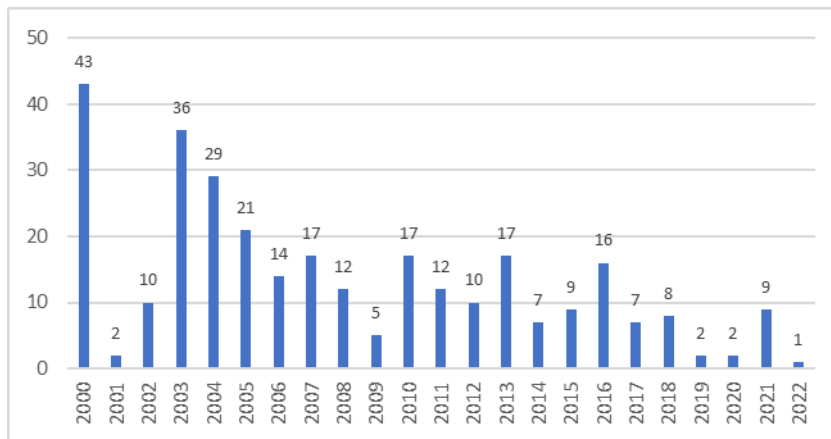
## 4. Structure and characteristics of the Polish shipbuilding industry

### 4.1. The shipbuilding industry

#### 4.1.1. Recent market trends

Over the past twenty years, new orders at Polish shipyards have dramatically decreased, notably in the 2010s (Figure 3 and Figure 4). Although on average 19 ships were contracted annually between 2000 and 2010, this number decreased to eight between 2011 and 2022.

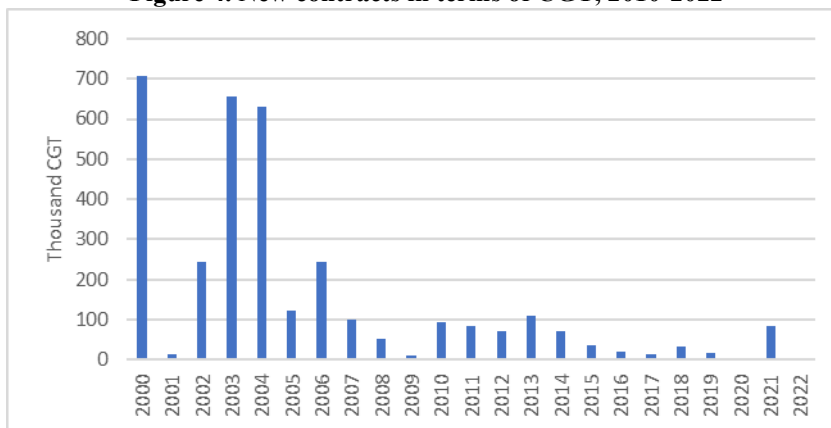
**Figure 3. Number of new contracts in Poland shipyards, 2010-2022**



Note: This figure includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>.

**Figure 4. New contracts in terms of CGT, 2010-2022**

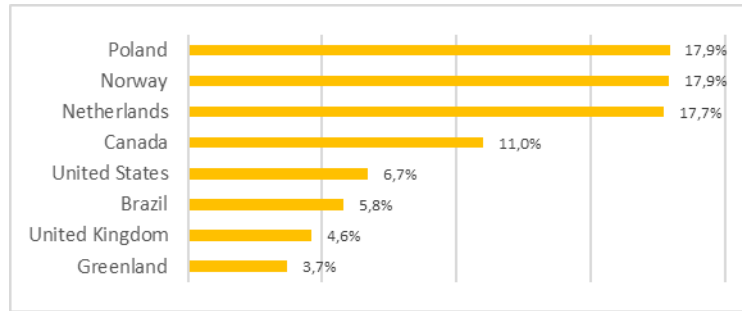


Note: This figure includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>.

Over the last ten years (2010-2022), Polish shipyards received new orders from 17 countries. About 18 % of the new orders came from Polish ship-owners, followed by Norway, Netherlands, and Canada (Figure 5).



**Figure 5. New contracts at Polish shipyards by ship owner nationalities, 2010-2022, in terms of CGT**

Note: This figure includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>.

Polish shipyards have been producing selected vessel types over the last ten years, including non-cargo carrying vessels<sup>1</sup> and ferries. Between 2010 and 2021, Poland accounted for 15.8% of the global production of non-cargo carrying vessels in CGT terms and 2% of the global production of ferries (Table 1). The shipbuilding industry's focus on the construction of non-cargo carrying vessels and ferries is also visible in the current orderbook of Polish shipyards. According to Statistics Poland, as of December 2021, the reported orderbook contained 10 vessels of over 100 GT, of which half are ferries and the other half are non-cargo ships.

**Table 1. Completions of seagoing vessels by builder country and by ship type in the world and in Poland, 2010-2022**

Ship type	World	Poland	
	(CGT, '000)	(CGT, '000)	Percentage (%) of World Total
Tug	12183	17	0.1%
Ferries	11590	235	2.0%
Other dry cargo	20548	108	0.5%
Offshore	30119	246	0.8%
Bulkers	168493	10	0.0%
FCC	81930	34	0.0%
LPG	12565	10	0.1%
Other non-cargo	165	26	15.8%
Dredgers	3245	25	0.8%

Note: This table includes all seagoing vessels from 100 GT.

Source: OECD calculations based on Clarkson Research Services Limited (January 2023), *World Fleet Register*, <https://www.clarksons.net/wfr>.

According to the data of the Maritime Advanced Research Centre in Gdansk<sup>4</sup>, Polish shipyards have been specialising in the construction of hulls for years. Between 2018 and 2022, 23 fully equipped ships were completed, compared to 168 hulls which were produced in the same period (Table 2, Table 3). Almost all these hulls are intended for exports.

**Table 2. Types of ships produced in 2018-2022, in terms of number**

Types of ships	2018	2019	2020	2021	2022
Ferries	2	1	3	2	1

<sup>1</sup> Buoy/Lighthouse Tender, Icebreaker, Search & Rescue and Work/Repair vessels are included.

Fishing	2	2	0	1	0
Other non-cargo	0	0	3	2	2
Containers	0	2	0	0	0
Total	4	5	6	5	3

Source: Data of the Maritime Advanced Research Centre in Gdansk

**Table 3. Types of hulls produced in 2018-2022, in terms of number**

Types of ships	2018	2019	2020	2021	2022
Ferries	1	1	0	1	0
Fishing	12	24	19	16	14
Other non-cargo	2	12	14	9	8
Passengers	0	1	2	3	21
Tankers/Chemical Tankers	3	0	1	1	0
Ro-ro ships	0	0	0	1	2
Total	18	38	36	31	45

Source: Data of the Maritime Advanced Research Centre in Gdansk

#### 4.1.2. Employment

According to Statistics Poland, the number of employees in the construction and repair of ships and boats has increased since 2018 and did not decrease during the COVID-19 pandemic, reaching approximately 28,000 people in 2021 (Table 4). The female employment rate has also continued to increase over the past 4 years from 15.6% in 2018 to 18.8% in 2021.

**Table 4. Full- and part-time employees in construction and repair of ships and boats (as of 31 December)**

	2018	2019	2020	2021
Total	25,719	25,748	25,689	27,811
Woman (%)	4,022(15.6%)	4,128(16.0%)	4,487(17.5%)	5,224(18.8%)
<b>Full-time employees</b>				
Total	25703	25044	24938	27149
Woman (%)	3,821(14.9%)	3,900(15.6%)	4,243(17.0%)	5,000(18.4%)
<b>Part-time employees</b>				
Total	560	618	671	598
Woman (%)	186(33.2%)	215(34.8%)	228(34.0%)	219(36.6%)

Note: Construction and repair of ships and boats are included in the category.

Source: Statistical Yearbook of Maritime Economy 2022, Statistics Poland

#### 4.1.3. Exports

According to the data of the Maritime Advanced Research Centre in Gdansk, from 2018 to 2022, Polish shipyards produced 23 vessels in total and exported 19 vessels (Table 5), an export share of 83%. The main destinations are Norway, Sweden and Iceland.

**Table 5. Number of Polish production of ships for export in 2018-2022, in terms of number**

	Ship production	Ships for export	Destination economies	Types of ships for export	Number of type of ships for export
2018	4	4	Iceland	Fishing	1
			Norway	Fishing	1

			Great Britain	Ferries	2
			Greenland	Containers	2
2019	5	5	Iceland	Ferries	1
				Fishing	1
2020	6	4	Norway	Fishing	1
			Norway	Ferries	3
			Sweden	Research vessel	1
2021	5	5	Norway	Fishing	1
				Ferries	1
			Sweden	Other non-cargo	2
2022	3	1	Canada	Ferries	1
			Finland	Ferries	1

Source: Data of the Maritime Advanced Research Centre in Gdansk

#### 4.1.4. Shipyards

Poland has shipyards specialising in newbuilding, assembling components of hulls and superstructure components or repairing ships. Table 6 shows the main shipyards in Poland. All three of them started as state-owned enterprises and moved to joint-stock companies. 23. Poland has shipyards specializing in building new ships, assembling hull and superstructure components, and repairing ships, respectively.

According to the Polish shipbuilding association, Forum Okretowe, Gdansk Shiprepair Yard Remontowa S.A. is the largest repair shipyard in Europe. It employs nearly 2,000 workers and has a similar number of permanent subcontractors and specialises in the repairs and conversions of technically advanced vessels: cable laying ships, passenger ships, and very complex offshore units, including drilling platforms and others.

For newbuilding activity, according to the Forum Okretowe, Remontowa Shipbuilding S.A. is employing nearly 400 workers and a similar number of permanent subcontractors. It specialises in the construction of LNG-powered ships, and is, next to Norway, a pioneer and a European leader in this field, entering EU markets with innovative projects, and recently also in Canada. It builds ships for the offshore oil and gas sector, offshore wind energy, passenger and car ferries and other medium-sized vessels: tugboats, multi-purpose hydrographic and evacuation vessels and others. In recent years, it has also been producing warships for the Polish Navy.

**Table 6. Main shipyards in Poland**

	Gdansk Ship repair Yard Remontowa S.A.	Remontowa Shipbuilding S.A.	CRIST S.A.
Location	Gdansk	Gdansk	Gdynia
Founded	1952	1945	1990
Main field of operation	repair, conversion	newbuilding	newbuilding
Ownership	Privatised in 2001	Privatised in 1993	Privatised in 2010

Source: Ministry of Infrastructure, Companies' website

## 4.2. Ship repair and maintenance industry

Ship repair and maintenance represent a high share of the Polish shipbuilding industry activity<sup>5</sup>. For example, according to Statistics Poland, in 2021, 455 ships with the total gross tonnage 1,704.1 thousand were repaired in Poland, while 8 vessels with the total gross tonnage 25.1 thousand were built in Poland. Since 2009, Polish shipyards have moved to ship repair and maintenance rather than the construction of new vessels. The implementation of the EU's state Aid rules and the 2008 global financial crisis accelerated this trend, contributing to a much more flexible business model for the shipbuilding industry, as ship repair yards can also be involved in the building of small ships<sup>6</sup>.



According to Statistics Poland<sup>7</sup>, over the last 5 years, the ship repair market in Poland has been stable in terms of number of vessels (Table 7). During the period, more than 80% of the work is ship repair for export every year.

**Table 7. Ship repair market in Poland**

	2018		2019		2020		2021		2022	
	Total	For export (%)	Total	For export (%)	Total	For export (%)	Total	For export (%)	Total	For export (%)
Number of ship repairs	527	433 (82%)	504	429 (85%)	444	384 (87%)	455	384 (84%)	571	509 (89%)
Value in millions of USD	282.0	242.8	292.2	260.7	310.8	275.9	293.9	275.9	324.1	309.8

Note: 2018, the value of ship repairs in million Euro

Source: Data of the Maritime Advanced Research Centre in Gdansk

### 4.3. Yacht industry

Poland is the European leader and the world's second producer of motor yachts with full length up to 11 meters with outboard engines<sup>8</sup>. It is estimated that the annual production potential of Polish shipyards amounts to more than 25,000 units<sup>9</sup>.

According to the Polish Investment and Trade Agency's quarterly report, "The Specialized Ships, Yachts and Boats Sector" published at the end of June 2023, the exports of the Polish yacht sector are increasing. In 2013, exports amounted to USD 318.6 million, and increased to USD 1,172.5 million in 2022<sup>10</sup>. Poland's main export destinations in 2022 were the United States, Germany, France, the Netherlands and Norway (Table 8)<sup>11</sup>.

**Table 8. Main Polish yachts and recreational boats export destinations in 2022**

	Destinations	Percentage
1	United States	18.80%
2	Germany	14.06%
3	France	8.27%
4	The Netherlands	6.97%
5	Norway	6.90%

Source: Polish Investment and Trade Agency, "The Specialized Ships, Yachts and Boats Sector", June 2023

The Polish Investment and Trade Agency mentioned in the same report that Poland has been steadily developing production capabilities and R&D centres for yacht and motorboats production since the early 1990s. Moreover, strong cooperation between business and scientific and educational centres that train technical and managerial personnel contributes to the industry's success<sup>12</sup>.

### 4.4. Competitiveness

Table 9 provides a SWOT analysis of selected strengths, opportunities, weaknesses and threats of the Polish shipbuilding industry, revealing insights into its competitiveness. It is based on data and analyses detailed in the previous sections of the report.

**Table 9. SWOT analysis of the Polish Shipbuilding Industry**

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Successful conversion experience from newbuilding to ship repair and maintenance in the 2000s</li> <li>• Strong position in high-value markets such as yachts and motorboats</li> <li>• Stable employment in construction and repair of ships and boats even amid COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>• Significant decrease in newbuilding activities in the 2000s</li> <li>• Overseas outflow of manpower with the largest shipyards shutting down in the 2000s</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Increased global demand for luxury yacht market</li> <li>• Growing ship retrofit market along with the low-carbon trend</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulty to secure high-skilled workforce for the shipbuilding industry</li> </ul>

Many Polish shipyards successfully shifted from newbuilding to ship repair and conversion after 2000s. Poland has the largest repair shipyards in Europe. Poland also produces top-quality, high-tech yachts and motorboats. Growing global demand on ship retrofit along with the low-carbon trend and luxury yacht markets can be opportunities for the Polish shipbuilding industry. Additionally, Poland has maintained stable employment, even amid the COVID-19 pandemic in construction and repair of ships and boats between 2018 and 2021.

Despite these advantages, competitiveness is hampered by several factors. Newbuilding activity has decreased significantly since the late 1990s and with the largest shipyards shutting down in the 2000s, experienced workers left to overseas to get a job. Threats to competitiveness also include difficulties for securing high-skilled workforce in the shipbuilding industry.

## 5. Government policies affecting the shipbuilding industry

The Polish government has promoted an environment that supports growth and innovation in Poland's shipbuilding sector. Government initiatives are not characterised by a distinct set of comprehensive industrial and structural policies tailored specifically to shipbuilding. Instead, there is a more generalised approach, allowing the implementation of policies and measures that can be applied across a wide range of industries, as we will explore further.

### 5.1. EU Regulatory Framework

As a Member of the EU since July 2004, Poland abides by the common and general regulations, policies, and strategies that are established under the functioning framework of the EU, and that fall within its exclusive competence.

#### 5.1.1. EU treaty provisions

In accordance with Article 3 of the Treaty on the Functioning of the European Union, and considering all possible exceptions, the EU exercises exclusive competence in regulating a number of areas that are relevant but not limited to industry such as (a) common commercial policy; (b) the establishing of the competition rules necessary for the functioning of the internal markets; (c) customs tariffs and duties which shall cover all trade in goods; (d) the conservation of marine biological resources under the common fisheries policy, and (e) the exclusive competence for the conclusion of international agreements when its conclusion may affect common rules or alter their scope, among others.

In what pertains to the areas that fall within the exclusive competence of the EU, Poland, as an EU Member State, shall legislate or adopt legally binding acts only if so, empowered by the EU or for the implementation of EU acts. While the areas that refer to EU common and general regulations, policies and strategies interact with a broader range of industries, they influence Poland's shipbuilding industry.

Subsection 2 of Article 2, and Articles 4 and 6 of the Treaty on the Functioning of the European Union, confer a shared competence between the EU and Member States in certain areas where Member States might be able to legislate or adopt legally binding acts to the extent that the EU would not or has not yet exercised its competence, and also to coordinate, support or supplement regulations and policies that are already in place.

Areas of shared competence between the EU and the Member States can cover, for instance, social and employment policy, environmental and industry transition policy, internal market policy, consumer protection policy, and transport policy, among other policy areas, including policies related to specific common safety concerns on security issues and public health matters.

#### 5.1.2. Membership to international organisations

Considering the above-mentioned, the Polish shipbuilding industry has been shaped around the EU functioning framework. Furthermore, the sector has been influenced by Poland's membership of International Intergovernmental Organizations (IGOs) such as the World Trade Organization (WTO), where WTO standards, agreements and global rules for international trade have been incorporated and enforced.

Beyond its impact in international trade, Poland's membership to the WTO has extended its effects in the country's social and labour standards. This, through the alignment of WTO Member States with international core labour principles outlined by the International Labour Organization (ILO) on areas including freedom of association and no discrimination at work. Moreover, Poland has adopted the Agreement of Government Procurement (GPA) to regulate public procurement of good and services based on principles of transparency, openness, and non-discrimination.



### *5.1.3. EU temporary measures and incentives*

It is relevant to mention that, within the framework of the functioning of the EU, and in accordance with what is stipulated in subsection 5 of Article 168 and subsection 4 of Article 2 of the Treaty on the Functioning of the European Union, several temporary measures and incentives were deployed to address the exceptional challenges pertaining the Covid-19 pandemic and Russia's war of aggression against Ukraine.

Some of the temporary measures and incentives put in place to tackle the challenges arising from the COVID-19 pandemic and Russia's war of aggression against Ukraine continue in effect and may impact, among others, the Polish shipbuilding industry.

For instance, strategies such as NextGenerationEU, operating through the Recovery and Resilience Facility (RRF) and within the framework of the EU's post-COVID-19 recovery plan, have set the ambitious goal of making Europe climate-neutral by 2050 by, inter alia, investing in environmentally friendly technologies, which is expected to push forward Poland's shipbuilding industry transition toward decarbonisation.

EU State Aid Temporary Framework has also given Poland a tool to support the economy in the face of the above-mentioned crises by allowing the country to implement support measures that are not specifically directed to the shipbuilding industry but applicable to various sectors. It is important to note that the EU State Aid Temporary Framework expired in June 2022, except in the areas of investment and solvency support, which remain in effect until December 2023.

### *5.1.4. EU regulation on shipbuilding*

As previously mentioned, the EU has established a set of common general regulations, policies, and strategies that influence industry in general and that affect or are foreseen to affect the Poland's shipbuilding industry. Nonetheless, in addition to the common general regulation, the EU has also issued common specific regulations that exclusively affect the Member States shipbuilding industry.

The common specific regulation on shipbuilding that the EU has put in place and that affects EU Member states including Poland is the following: i) EU Regulation 1257/2013 on ship recycling, which aims at enhancing the protection of human health and the EU marine environment, particularly regarding the proper management of hazardous materials on ships; ii) EU Regulation 2016/1013 on protection against injurious pricing of vessels, which punishes shipbuilders engaged in unfair pricing; iii) EU Directive 2009/21/EC, which aims to enhance safety and prevent pollution from ships flying the flag of a Member State; iv) EU Directive 2014/90/EU on Marine Equipment, which aims to increase marine safety and reduce the risk of marine pollution, and v) the International Convention for the Safety of Life at the Sea (SOLAS), which was ratified by all EU Member States.

Furthermore, as an EU member state, Poland is expected to implement EU regulations to encourage the decarbonisation of maritime transport. Starting January 2024, the EU Emissions Trading System (EU ETS) will include maritime CO<sub>2</sub> emissions from all large ships entering EU ports, irrespective of their flag. Additionally, the EU FuelEU Maritime regulation is set to be effective from January 2025.

It is important to mention that international maritime standards are developed by the International Maritime Organization (IMO), a United Nations (UN) specialized agency responsible for providing the regulatory framework for the shipbuilding industry.

## **5.2. National support measures**

### *5.2.1. Government Structure*

From 2018, the regulation of the Polish maritime industry has been under the responsibility of the Ministry of Infrastructure (MI). The ministry is responsible for transport, inland navigation, water and

maritime resources and exploitation. The MI has two departments in charge of maritime issues: the Department of Maritime Education (DEM) and the Department of Maritime Economy (DGM).

The DEM supervises policies affecting the maritime field in the education system. It also designs and implements policies improving the quality of maritime, fisheries and inland navigation and supervises maritime universities, including the Maritime University of Technology in Szczecin and Gdynia Maritime<sup>13</sup>.

The DGM designs and implements policies impacting the maritime economy<sup>14</sup>. This includes spatial planning and the development of Polish maritime areas, dealing with matters related to the protection of the marine, conducting work in the field of maritime safety and conducting projects related to the creation and operation of financial instruments dedicated to maritime economy, including shipyards and shipowners.

### *5.2.2. Industry associations*

The industry association Forum Okretowe represents the Polish maritime industries. It was established in 1993 as a result of the efforts undertaken to create a platform for multilateral business contacts among shipyards, their supply chain, and other institutions in the shipbuilding sector<sup>15</sup>.

Furthermore, Forum Okretowe is an active member of the Shipyards' & Maritime Equipment Association of Europe (SEA Europe).

Regarding social dialogue, Poland has a Tripartite Team for Shipbuilding which is one of the Tripartite Industry Teams which includes representatives from the government, trade unions and employers. The government is represented by agents from the following ministries: infrastructure, development and technology, family and social policy, finance, and national defence. The objective of the Tripartite Team is to develop, based on consensus, common positions on matters important from the point of view of governmental policy and the interests of employees and employers in the shipbuilding sector<sup>16</sup>.

### *5.2.3. Shipbuilding strategy*

According to the MI, the development of the shipbuilding industry is widely mentioned in the Strategy for Responsible Development (SRD). Adopted by the Council of Ministers in 2017, the SRD is a key document prepared by the Polish government in the field of medium- and long-term economic policy<sup>17</sup>, and covers the period up to 2020 and the perspective up to 2030. The objectives of the part focusing on shipbuilding in the strategy include the following elements<sup>18</sup>:

- development of a concept to provide the legal, organizational, and financial framework necessary for the activation of the shipbuilding industry, and in particular the development of scientific research and development centers designing innovative types of ships;
- intensification of cooperation with business entities and research and development related to the shipbuilding industry;
- ensuring reindustrialisation and activation of the Polish shipbuilding industry, development of scientific research and development centers developing innovative types of ships (especially in terms of pro-ecological solutions), increase in employment in the shipbuilding industry, retention of qualified employees of the shipbuilding industry and related complementary production on the Polish market, guaranteeing competitive rules for the functioning of the Polish shipbuilding industry and complementary production in conditions of fierce and unequal competition on international markets;
- creating conditions for spending expenditures on investments, research and development and continuing the production of technologically advanced units.

The SRD includes two projects related to the activation of the shipbuilding industry. One is the strategic project called “Modern products of the shipbuilding industry”, which includes the Act of 6 July 2016 that applies a preferential Value Added Tax rate. The other project includes the flagship project “Batory” aimed at stimulating the development of technology, design and construction of Polish vessels and offshore structures, shifting the shipbuilding sector towards production, innovative products and specialized units with high added value.

Furthermore, according to the 8th National and 5th Biennial Report under the United Nations Framework Convention on Climate Change (UNFCCC)<sup>19</sup> submitted by Poland to the United Nations in December 2022, the Maritime policy of the Republic of Poland (PMRP) adopted by the Council of Ministers on 17 March 2015 is described as one of the key strategies, plans and programmes in the transport sector. The PMRP sets out the directions of the sustainable socio-economic development and the rational use of Poland’s situation on the seacoast. The most important directions of Poland’s sea-related development until 2030 include: strengthening the position of the Polish seaports, increasing the competitiveness of the maritime shipping and the employment in the maritime economy, as well as ensuring safety on the sea.

#### **5.2.4. Support measure**

Additionally, one support measure was included by Poland to the inventory of Shipbuilding Committee. The Ministry of Infrastructure refunds a part of costs when the marine companies participate in a market exhibition. The pool was PLN 1.06 million (approximately USD 238 thousand) in 2022.

### **5.3. Decarbonisation and environmental policy**

According to the 8th National and 5th Biennial Report under the UNFCCC submitted by Poland in December 2022<sup>20</sup>, Poland listed 54 key policies and measures carried out by Poland to reduce GHG emissions and to fulfil its commitments in this area.

Among those, the Maritime Policy of the Republic of Poland (PMRP) is included as one of the measures in the transport section. It is adopted by the Council of Ministers on 17 March 2015 and implemented by the Ministry of Infrastructure. The PMRP is implemented through the participation in the measures to protect the marine environment at the EU and IMO levels in order to fulfil the legal commitments to protecting the marine environment of the Baltic Sea, including the reduction of greenhouse emissions from ships, sampling procedures, checking the sulphur content in navigation fuels and increasing the use of alternative fuels.

In addition, in accordance with IMO decisions, the Act on the Prevention of Sea Pollution by Ships was amended in 2014 to include energy efficiency requirements: the Energy Efficiency Design Index (EEDI) for new ships and the Ship Energy Efficiency Management Plan (SEEMP). The EEDI enables the correct selection of equipment and the determination of the energy efficiency of a ship. The SEEMP plan contains a description of measures to limit energy consumption by equipment installed on ships.

Furthermore, off shore wind is expected to play an important role in the Polish energy transformation. According to the OECD (2023), some 6 GW are receiving state support and further capacity is to be allocated by competitive auctions in 2025, 2027 and 2028, totalling up to 11 GW by 2040<sup>21</sup>. The Deputy Minister of Infrastructure, Marek Grobarczyk pointed out that “The emerging new offshore sector is a good opportunity for local suppliers and contractors, including Polish shipyards that have unique experience in building vessels to install and operate offshore wind turbines.”<sup>22</sup>.



#### **5.4. Social and labour policy**

The Polish shipbuilding industry has had difficulty in finding qualified labour. With the largest shipyards shutting down in the 2000s, many welders and other very experienced technicians decided to leave and seek employment overseas, notably in Norway or the United Kingdom<sup>23</sup>.

Furthermore, with shipbuilding still perceived as an old industry with challenging working conditions, not many young Polish workers wish to join the industry and shipyards need to employ foreign workers. To convince young talent that it is worth working in the shipbuilding industry, Polish shipyards, design offices, classification institutions and subcontractors organise large gatherings to show their modernity and attractiveness and propose high-quality jobs<sup>24</sup>. One such example is the initiatives undertaken by Forum Okretowe.

## 6. Conclusions

Poland's shipbuilding has a long and dynamic history. Through the peer review, the industrial characteristics and policies of the Polish shipbuilding industry were studied. The main contents and implications of the report are described below.

First, the Polish shipbuilding industry faced challenges in late 1980s including the expansion of Asian shipbuilding industries and the transition from a centrally controlled economy to a market economy. Poland's global market share in newbuilding completions decreased from 2.6% in 2000 to 0.10% in 2020.

Second, although the newbuilding market has decreased, Polish shipyards have moved to ship repair and maintenance since 2009. The implementation of the EU's state aid rules and the global financial crisis in 2008 led to more flexible business model such as ship repair and maintenance. Gdansk Shiprepair Yard Remontowa S.A. is the largest repair shipyard in Europe.

Third, the Polish shipbuilding industry also shifted to small and medium-sized ships rather than large ships, and notably created a new market by specialising in high value-added markets such as yachts and leisure boats. The exports of the Polish yacht sector increased from USD 318.6 million in 2013 to USD 1,172.5 million in 2022, which is more than three times.

Fourth, after the decline and reorganisation of the Polish shipbuilding industry, the number of employees in construction and repair of ships and boats has increased since 2018 even amid the COVID-19 pandemic. However, the industry faces challenges in attracting a qualified workforce, as experienced workers sought employment overseas, and young talents are hesitant to join due to perceptions of challenging working conditions.

Fifth, the Ministry of Infrastructure promotes policies to enhance the competitiveness of the Polish shipbuilding industry. There are efforts to increase research and development investment, modernise shipyards, and increase employment within the sector. Moreover, Poland has implemented support measures in line with EU policies to attract foreign investment, promote research and innovation, and drive economic development.

Along with socio-political changes, the Polish shipbuilding industry has changed from newbuilding to repairs and high value-added ships such as yachts. Accumulated Experience in the ship repair sector along with the low-carbon trend is expected to make a significant contribution as demand for ship repair increases. In addition, as travel demand increases after the pandemic, the yacht market is expected to continue to establish itself as an important export source for the Polish shipbuilding industry.

## References

Clarkson Research Services Limited 2023, *World Fleet Register*, Clarksons group  
<https://www.clarksons.net/wfr>

TransNav (2016), *Fall and Rise of Polish Shipbuilding Industry*  
[TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)

Statistics Poland (2023), *Maritime economy in Poland in 2022*  
[maritime economy in poland in 2022.pdf \(oecd.org\)](#)

The republic of Poland (2022), *Eighth national communication and fifth biennial report under the United Nations framework convention on climate change*  
[Poland Report-NC8 BR5 27dec2022 20 281 29.pdf](#)

Polish Investment and Trade Agency (2023), *The Specialized Ships, Yachts and Boats Sector*  
[Yachts - Trade.gov.pl](#)

UNESCO (2020), *The Strategy for Responsible Development for the period up to 2020 (including the perspective up to 2030)*  
[Diversidad de las expresiones culturales \(unesco.org\)](#)

OECD (2023), *OECD Economic Surveys: Poland 2023*,  
[OECD Economic Surveys: Poland 2023 | OECD Economic Surveys: Poland | OECD iLibrary \(oecd-ilibrary.org\)](#)

MarinePoland(2022), *Maritime export catalogue 2022-2023*  
[Maritime export catalogue 2022-2023](#)

*Endnotes*

- <sup>1</sup> [TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)
- <sup>2</sup> [TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)
- <sup>3</sup> [TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)
- <sup>4</sup> The Ministry of Infrastructure provided the information based on the data from the research centre in Gdansk.
- <sup>5</sup> [Prospects for the ship repair and maintenance market in the era of the COVID-19 pandemic - Ministry of Infrastructure - Portal Gov.pl \(www.gov.pl\)](#)
- <sup>6</sup> [TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)
- <sup>7</sup> [maritime economy in poland in 2022.pdf \(oecd.org\)](#)
- <sup>8</sup> [Yachts - Trade.gov.pl](#)
- <sup>9</sup> [Yachts - Trade.gov.pl](#)
- <sup>10</sup> [The Specialized Ships, Yachts and Boats Sector - a PAIH report - Trade.gov.pl](#)
- <sup>11</sup> [The Specialized Ships, Yachts and Boats Sector - a PAIH report - Trade.gov.pl](#)
- <sup>12</sup> [The Specialized Ships, Yachts and Boats Sector - a PAIH report - Trade.gov.pl](#)
- <sup>13</sup> [Department of Maritime Education \(DEM\) - Ministry of Infrastructure - Portal Gov.pl \(www.gov.pl\)](#)
- <sup>14</sup> [Department of Maritime Economy \(DGM\) - Ministry of Infrastructure - Portal Gov.pl \(www.gov.pl\)](#)
- <sup>15</sup> [About us - Maritime Forum \(forumokretowe.org.pl\)](#)
- <sup>16</sup> [Tripartite Team for Shipbuilding \(at MRiPS\) - Social Dialogue - Portal Gov.pl \(www.gov.pl\)](#)
- <sup>17</sup> [Diversidad de las expresiones culturales \(unesco.org\)](#)
- <sup>18</sup> [Shipbuilding - Ministry of Infrastructure - Portal Gov.pl \(www.gov.pl\)](#)
- <sup>19</sup> [Poland Report-NC8 BR5 27dec2022 20 281 29.pdf \(oecd.org\)](#)
- <sup>20</sup> [Poland Report-NC8 BR5 27dec2022 20 281 29.pdf \(oecd.org\)](#)
- <sup>21</sup> [OECD Economic Surveys: Poland 2023 | OECD Economic Surveys: Poland | OECD iLibrary \(oecd-ilibrary.org\)](#)
- <sup>22</sup> [Maritime export catalogue 2022-2023](#)
- <sup>23</sup> [TransNav Journal - Fall and Rise of Polish Shipbuilding Industry](#)
- <sup>24</sup> [BALTEXPO 2023 – Poland’s shipbuilding industry will show state-of-the-art solutions - Poland at Sea - maritime economy portal](#)