



# Polish Maritime Cluster

# Polish Maritime Economy

2016

# Revitalisation of the shipbuilding industry!



Revitalisation of the shipbuilding industry by recovering the ship production in Gdynia and Szczecin is the main objective related to the rebuilding of the maritime economy. Shiprepair yards are equally important in these plans.

These plans will be implemented through the action plan prepared by the Ministry of Maritime Economy and Inland Shipping. First of all, I mean the act on stimulation of shipbuilding

industry and complementary production, a draft of which was prepared and now will be subject to governmental and public consultations.

The solutions proposed in the project should restore shipbuilding and recreate the entire chain of suppliers associated with shipbuilding, destroyed by political decisions to close the shipyard in 2008. The project is the key to the re-industrialisation based on Polish entities, provided with adequate conditions in capital, logistics, legal, and most importantly, technological areas.

We are aware that the maritime economy cannot develop without the shipbuilding industry. Through stimulation of this sector, based on Polish entities, we will activate the whole area of sub-contractors, exploit the potential, which is being wasted, and create thousands of new jobs.

It should be emphasized that the recovery plan for the shipbuilding industry is a vital part of the country's re-industrialisation programme, launched by deputy prime minister Mr. Mateusz Morawiecki.

We have determined our shipbuilding potential with regard to the production of new ships. It's really impressive. In the next decade, investments are estimated at about PLN 25 billion. They include, inter alia, the replacement of the exploited fleet of the national carriers - Polska Żegluga Morska (Polish Steamship Company) and Polska Żegluga Bałtycka (Polish Baltic Shipping Company) with 8 new ferries and two extra ones (following their plans to launch new routes).

The shipbuilding industry revitalisation project plays a significant role in investment plans of the Ministry of National Defence as well. The Ministry plans to build 6 ships under the Miecznik and Czapla programmes and 3 submarines in the Orka programme. It's a huge opportunity for our shipyards.

Depreciated level of the Polish fisheries and the need to build at least 45 fishing boats cannot be neglected. We also hope that the development of inland waterway transport, treated as a priority, should also create orders for building the river fleet.

The act mentioned above will allow to fulfil our shipbuilding potential which should become the driving force for the whole maritime economy.

Marek Gróbarczyk,  
*Minister of Maritime Economy and Inland Shipping*

# Polish Maritime Cluster



Polish Maritime Cluster is an important Central and Eastern European Cluster, an active maritime cluster player in the Baltic Sea Region and the EU, as well as a member of the European Network of Maritime Clusters. The Polish Maritime Cluster focuses on transferring knowledge and organizing business, science and administration cooperation on a global and regional scale. The cluster thinks globally, but acts locally.

Polish Maritime Cluster (PMC) is an effective promoter of Maritime Poland and utilises Polish coastal location as a national treasure. The cluster acts as a partner and a participant in numerous endeavours regarding Polish maritime economy, including by creating it as an equivalent of the national and European intelligent specialisation. The cluster also interacts in the International Ocean Governance programme.

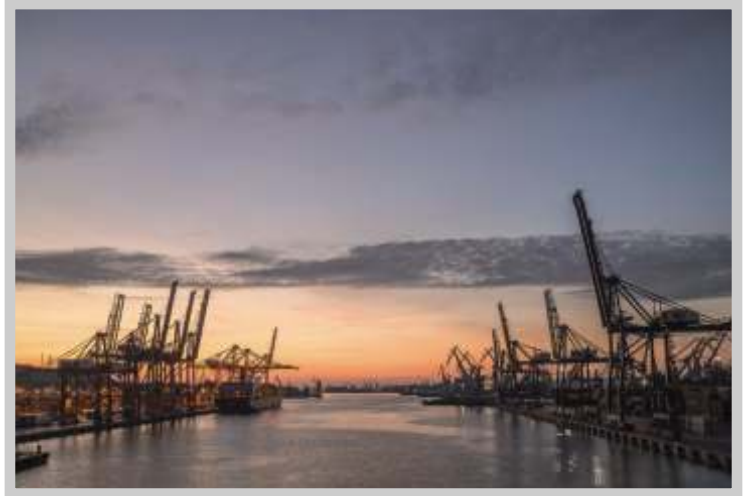
It owes its high position in the domestic and international market to its supporting participants who publish up-to-date relevant information on [www.klastermorski.com.pl](http://www.klastermorski.com.pl) and FB/TW. The cluster registers up to a thousand website visits or browser search per day. It is a significant outcome, remembering cluster's exclusive and international-wide character. Such website section, as for instance, Clusters Observatory, Maritime Law, Baltic Sea Region Maritime Clusters Network, Port Community System, Maritime Policy, Baltic Sea Region Programme 2014-2020, Smart Specializations, Maritime Think Tank, requires greater recognition.

PMC participates in numerous ENMC initiatives together with Mr. Karmenu Vella (European Commissioner for Environment, Fisheries and Maritime Affairs), and Mrs. Gesine Meissner (European Parliament, "Seas and Coastal Areas Intergroup" of the European Parliament). PMC interacts also in the annual European Maritime Day by organising workshops and discussion panels (Gdansk, Brema), cooperates with the Polish Chamber of Maritime Commerce, Polish Nautical Association and other maritime clusters in Poland, i.e. Westpomeranian Maritime Cluster in Szczecin, Maritime Cluster of Western Pomerania and Transport-Logistics North-South Cluster.

Marek Grzybowski, Ph.D.  
*Polish Maritime Cluster  
Gdynia Maritime University*



City of Gdynia is Poland's gateway to the world, located at the intersection of major international transport corridors, from Scandinavia and North-Eastern Europe in the direction of Southern Europe and the Mediterranean. Gdynia is the service centre for the Port of Gdynia, freight forwarders and logistics seat of Polish Ship Managers Association, with 18 specialised shipyards, 60 port equipment manufacturers, over 40 repair services providers and 50% of region's agencies operating in the city. The City of Gdynia hosts Baltic Port of New Technologies, a centre of modern technologies supporting innovative entrepreneurship on the post-shipyard area, and offering complex consulting services and knowledge transfer. Innovative IT solutions are developed in Pomeranian Science and Technology Park that hosts nearly 200 creative companies. Investors, designers, construction engineers can develop and test their most technologically advanced projects, "from concept to product" in the Constructor's Park



prototyping areas, workshop spaces, design studios and various laboratories. Gdynia introduced TRISTAR, the largest in Europe intelligent traffic management system, a solution consistent with urban and natural environment of the TriCity metropolis. Gdynia is Poland's open window to the world.

CITY OF GDYNIA

Marshall Pilsudski Ave.  
81- 364 Gdynia

phone: +48 58 668 21 11  
fax: +48 58 668 21 12

[www.gdynia.pl](http://www.gdynia.pl)  
[wyzd.wspolpracy.analiz@gdynia.pl](mailto:wyzd.wspolpracy.analiz@gdynia.pl)



# Gdynia Maritime University

Coordinator of Polish Maritime Cluster



Gdynia Maritime University is the largest state school of higher maritime education in Poland and one of the largest in Europe. Since 1920 the University has been preparing graduates for officer positions on board merchant marine vessels and for managerial positions at the land-based institutions and companies representing the maritime industry and seaside regions. The University four Faculties offer degree in Navigation, Marine Engineering, Marine Electrical Engineering and Business Administration. At present Gdynia Maritime University provides studies for 6000 students.

The programs of studies satisfy both Polish educational standards provided by the Ministry of Education and also the requirements of the International Maritime Organization IMO. The academic staff representing doctor of science degree and scientific titles of a professor accompanied, in many cases, by the highest marine diplomas of a Master Mariner, Chief Engineer Officer and Shipboard Electrical Engineer supported by the laboratory facilities offering 25 specialised simulators and ISO 9001 education quality management system implemented by the University.

The Maritime University actively cooperates in the conduct of joint research projects, preparation of young generation academic staff and in the exchange of students with 41 maritime institutions of higher education and within international organisations such as: International Association of Maritime Universities (IAMU), International Maritime Organization (IMO), Institute of Electrical and Electronics Engineers (IEEE).

The new strategy for further growth and development adopted by the Senate of Gdynia Maritime University will ensure the strengthening of the University role as a worldwide marine-oriented centre of studies and training preparing professionals citizens of the world.



foto: Tomasz Degorski



foto: Tomasz Degorski



foto: Tomasz Degorski

GDYNIA MARITIME UNIVERSITY

Morska 81-87 Str.  
81-225 Gdynia

phone: +48 58 621 70 41  
fax: +48 58 620-67-01

[www.am.gdynia.pl](http://www.am.gdynia.pl)  
[rektorat@am.gdynia.pl](mailto:rektorat@am.gdynia.pl)



Port of Gdynia is one of the leading ports in the Baltic Sea Region. It specializes in handling general cargo, including containers, ro-ro, ferry and other unitized cargo, as well as all types of bulk cargoes. With its dense network of regular container, roll-on roll-off and ferry lines, the Port of Gdynia connects sea routes with national and European road and rail networks.

The Port of Gdynia is:

- a logistic hub forming part of the 6th corridor of the Trans-European Transport Networks (TEN-T)
- an important logistics platform for the transport of goods on Scandinavian-Central and Southern European routes
- one end of the Gdynia - Karlskrona route, classified as part of the Motorways of the Sea Network in 2010 by the European Commission
- a complex of modern handling terminals with universal or highly specialized operational capabilities

The ongoing modernization of the port infrastructure and the allocation of land for development, such as the area designated for logistics operations in the Western Port, enhances the Port's attractiveness to its ever-growing client and investor base. The cargo handling activity is performed by private operators which shareholders are the international investors, such as: Hutchison Port Holdings (the operator of GCT S.A.) and ICTSI (the operator of BCT-Baltic Container Terminal Ltd. since 2003).



PORT OF GDYNIA  
AUTHORITY S.A.

9 Rotterdamska Str.,  
81-337 Gdynia, Poland

phone: +48 58 627 40 02  
fax: +48 58 620 31 91

[www.port.gdynia.pl](http://www.port.gdynia.pl)  
[marketing@port.gdynia.pl](mailto:marketing@port.gdynia.pl)

The Port of Gdańsk is Poland's largest seaport, annually reloading over 35 tonnes of cargo. It is the first link in the BalticAdriatic transport corridor. Owing to its excellent location, it has the capacity to handle the largest vessels entering the Baltic Sea, giving the port almost a 50% share in maritime services in Poland.

The Port of Gdańsk's excellent standard, advantageous location and modern reloading terminals make it one of the most dynamically developing ports in the Baltic Sea basin. For the past four years it has been ranked second in the region in terms of the number of reloaded containers transported via Gdańsk in both feeder and intercontinental traffic with Asia.

Gdańsk is an extremely important industrial centre for the Polish economy, annually attracting domestic and foreign investors. The total value of infrastructure investments currently under way in the Port of Gdańsk and scheduled for the next five years is approximately €2 bn.



According to forecasts made for the purposes of the Port of Gdańsk's long-term development strategy, it is expected that by 2030 the volume of goods handled in Gdańsk will be tripled, which will make Gdańsk one of the key ports in the Baltic Sea basin.

PORT OF GDANSK  
AUTHORITY S.A.

Zamknięta 18 Str.,  
80-955 Gdańsk

phone: +48 58 737 97 10  
fax: +48 58 737 94 85

[www.portgdansk.pl](http://www.portgdansk.pl)

Monika.Wszeborska@portgdansk.pl



Pomeranian Special Economic Zone (PSEZ) is one of the fastest growing special economic zones in Poland. It covers 2,040 hectares located in its subzones in four regions of Poland: Pomerania, Kuyavian - Pomerania, Greater Poland and Western Pomerania.

Currently, in the zone operates 115 investors who created almost 19 thousand work places and invested amounted over 2,5 billion Euro. PSEZ owns Gdansk Science and Technology Park (GSTP) and the Baltic Port of New Technologies (BPNT) that promote the development of enterprises in the field of research and development conducted in cooperation with national and foreign scientific institutions.

GSTP and BPNT are a platform for business cooperation in various fields, especially economic and scientific-research operating in goal of promoting new technological solutions.

Pomeranian Special Economic Zone actively creates conditions for development of entrepreneurship - in addition to implementation of measures set by the law regarding special economic zones. PSEZ also acts as an intermediary coordinator of cooperation between investors, contractors and universities.



POMERANIAN SPECIAL  
ECONOMIC ZONE

Władysława IV 9 Str.,  
81-703 SOPOT

phone: +48 58 555-97-10  
fax: +48 58 555-97-11

[www.strefa.gda.pl](http://www.strefa.gda.pl)  
[headoffice@strefa.gda.pl](mailto:headoffice@strefa.gda.pl)





# Security & Safety Research Institute (SASRI)



Safety and Security Research Institute (SASRI) was founded in 2008 by representatives of science and industry, whose passion and purpose was to create best conditions for the flow of experiences and knowledge between these areas. SASRI is a nonpolitical and voluntary association of scientists and entrepreneurs who study the safety of business, institutions, organizations and regions. We analyze business security, information security, energy supply security, as well as financial and physical aspects of safeness.

The vision is to create the finest quality knowledge provider in global transport, port and maritime business security. That is why current staff consists of professionals from universities and leading Polish companies. Our specialists have knowledge of management, law, computer science, economics, PR, marketing, securitology, protection of persons and property. We also associate specialists in maritime transport of energy resources, information security and confidentiality.

We prepare and implement solutions that require the knowledge of ongoing dynamics in economy and politics. We identify decision-making and regulatory processes, so our customers can successfully develop their business. We also believe that only customer's needs tailored solutions can benefit our Clients. The success of our client becomes our pride.

From the early beginning our Institute has been involved mainly in implementation of European regulations, strategic information and communication for port and energy companies, as well as safety and security consulting, both for national authorities and private entrepreneurs. We offer specific organizational and legal solutions in the area of economic security and anti-terrorism. Our top area of interest are market regulations, business development and market analysis. Energy sector is strategic to every economic system. SASRI cooperates with companies representing Gas&Oil sector and supports them in their development and in crucial business decisions. We lead a strategic advisory project regarding diversification of oil supplies.

We also provide scientific research, expertise and advice on the safety of energy supplies.



SECURITY & SAFETY  
RESEARCH INSTITUTE

Żeromskiego47/4 Str.  
81-349 Gdynia

phone: +48 691 69 66 33

[www.sasri.eu](http://www.sasri.eu)  
[zdlugosz@poczta.onet.pl](mailto:zdlugosz@poczta.onet.pl)



# R&D Maritime Technology Centre JSC



R&D Maritime Technology Centre JSC, belonging to the Polish Armaments Group, specialises in the delivery of integrated mission systems for ships as well as naval weapon systems. Thanks to its expertise and research facilities, it has supplied its solutions to the Polish Navy and foreign customers for many years. In addition, it has participated in ambitious projects within the European Union and NATO. CTM is actively participating in the Polish "Combating threats at sea" programme by executing the delivery of: the integrated mission systems for ships, the passive defence system and selected sensors and effectors for the newly constructed "Kormoran II" minehunter.



R&D Maritime  
Technology Centre JSC

62 A. Dickmana Str.,  
81-109 Gdynia,

phone: +48 58 666 5 318  
fax: +48 58 666 5 425

[www.ctm.gdynia.pl](http://www.ctm.gdynia.pl)  
[ctm@ctm.gdynia.pl](mailto:ctm@ctm.gdynia.pl)





# ASE Group



The mission for the ASE Group companies is to provide and deliver safety technologies and industry solutions for infrastructure, including the maritime industry.

All safety and hazard prevention tasks are conducted by the Automatic Systems Engineering company, whereas the ASE Expert department provides both the knowledge, analysis and relevant training. The ASE Integrator department offers specific devices and technical solutions. The range of services and products encompasses electrical and automated systems in the field of explosion protection, electro thermal industrial solutions, as well as specialised equipment for the off-shore sector.

The design of technological constructions for various industries such as the petrochemical, oil, gas and chemical industry is provided by the specialised design office BIPRORAF.

Furthermore, the design office PROJMORS, world renowned for its complex projects in the maritime sector, is specifically tasked with marine and offshore designs.

By combining the analytical capacity, design and implementation as well as the overall supervision, the ASE GROUP is able to carry out even the biggest and most technically advanced industrial facilities and infrastructure projects for the maritime industry. This is confirmed by numerous references attained from many ports, shipyards and factories in Poland and throughout the world.



ASE GROUP

Narwicka 6 Str.  
80-557 Gdańsk

phone: +48 58 520 77 61  
fax: +48 58 346 43 44

[www.ase.com.pl](http://www.ase.com.pl)  
[wojtekp@ase.com.pl](mailto:wojtekp@ase.com.pl)

HYDROMEGA is a company, which has been designing and manufacturing advanced solutions in the field of power hydraulics and drives since 1988. From the very beginning, it is bound up with the maritime and off-shore industries by cooperating with a number of shipyards in Poland and abroad.

Hydromega's strength is its own design office and innovative approach expressed in dozens of prototype devices produced each year. The company has also strong HPU's production department and service division.

Basing on its experience in the construction of hydraulic power packs Hydromega systematically implements new features of hydraulic power packs for the production. Currently, the company's offer includes a wide range of oil tanks, oil level indicators, return and breathing filters, inspection covers and other items. An interesting novelty are marine oil level indicators with type approval for use on ships.

Hydromega designs and manufactures advanced solutions in the field of mobile vehicles. Special vehicles with hydrostatic drive constitute a rapidly growing production department in our company. The result is cooperation with many institutes, universities and companies in joint projects. An example of such cooperation are technically advanced manned and unmanned vehicles, as well as modular parking system.

Hydromega has also the extensive experience in servicing hydraulic power systems and construction of new systems/pipelines. Thanks to this experience, Hydromega has developed technology of high-efficient hydraulic pipelines flushing, which significantly reduces the flushing time while increasing the purity parameters. The HAMER technology has been used for more than 10 years in the majority of Polish shipyards and shows very good results. The company's experience in the field of cleanness of hydraulic systems also led to the creation of oil filtration equipment, such as, handy oil transportation pumps, which are basic equipment of maintenance services and manufacturers of hydraulic power systems.



HYDROMEGA sp. z o.o.

Czechosłowacka 3 Str.  
81-969 Gdynia

phone: +48 58 664 77 04

fax: +48 58 664 72 92

[www.hydomega.com.pl](http://www.hydomega.com.pl)  
[hydomega@hydomega.com.pl](mailto:hydomega@hydomega.com.pl)



A modern, multidisciplinary research and design centre, delivering services and products to customers from maritime and land based sectors.

*The company offers:*

- experimental model testing of ships, yachts, offshore structures and other floating or hydro-engineering objects
- aerodynamic tests of model objects (e.g. ship, other floating structures, wind turbine)
- design of ship propellers and rudders, taking into account real operation aspects, including cavitation effects
- design, manufacture, supply and commissioning of research facilities and equipment, e.g. wind tunnels, cavitation tunnels, dynamometers, on-board equipment, installations and other ship auxiliary systems
- numerical analyses, such as CFD simulations, structure strength and modelling using the FEM method, thermal stress predictions, fatigue strength computations and vibration analyses
- examining the influence of fire, noise, vibration on means of transport and building structures, such as doors, windows, ventilation systems, roofs, ceilings, etc.
- facilitating the certification process of construction products and marine equipment
- measurement services, such as noise level, local and global vibration of structures, accommodations illumination
- resistance testing of devices for shock, impact and seismic signals
- research works related with medical engineering



SHIP DESIGN  
AND RESEARCH CENTRE

Szczecińska 65 Str.,  
80-392 Gdańsk,

phone: +48 58 511 6220  
fax: +48 58 307 4225

[www.cto.gda.pl](http://www.cto.gda.pl)  
[marketing@cto.gda.pl](mailto:marketing@cto.gda.pl)



# The Gdynia Maritime School



Gdynia Maritime College was founded in 1998 basing on experience accumulated over the years of running a training Centre for merchant fleet personnel and maritime economists. It operates as an independent vocational college training for the profession of navigation officer, engineer officer, seaman and motorman.

The 30-months course of study at the Maritime School consists of alternating theoretical classes and seamanship practice which lead to Watch Officer Diploma after 5 semesters (operational level). It also includes a set of specialist courses.

The Training Centre of the Gdynia Maritime School offers many various specialistic courses.

The Training Centre offers offshore courses and Dynamic Positioning: Induction, Simulator, Sea Time Reduction and DP Maintenance.

Lecture rooms are equipped with: overhead and multimedia projectors, sound equipment and computers connected to school's server and internet.



There're also many various simulators and labs, which are well equipped and include training exercises and useful tools that are helpful in a process of education.

The school occupies two floors of a modern building situated at 13A Polska Str.

GDYNIA MARITIME  
SCHOOL

Polska 13A Str.,  
81-339 Gdynia

phone: +48 58 6217541  
fax: + 48 58 6612655

[www.morska.edu.pl](http://www.morska.edu.pl)  
[szkola@morska.edu.pl](mailto:szkola@morska.edu.pl)



Gdynia based Stocznia Remontowa Nauta S.A. (Shiprepair Yard "Nauta" ) was founded in 1926. This year Nauta is proud to celebrate its 90th anniversary.

Nauta is one of the Polish leading shipyards that specialises in repairs and modifications of the vessels for the civil market, building hulls and vessels, as well as in repairs and upgrading projects in the defence sector.

NAUTA is:

- Ideal place for newbuilding activity and repairs of the largest vessels operating in the Baltic region.
- Perfect location and good road access.
- Access to the 379 m x 70 m and 240 m x 40 m graving dry docks.
- 4 floating docks including the one with a 12,000 tones capacity, capable of handling 210 - meter long vessels.
- 2 slipways at Gdansk facility

Nauta is a key player in the MARS Shipyards & Offshore group.

MARS Shipyards & Offshore is a market oriented, integrated group of companies whose core activity is ship repair / building or offshore production.

In 2014, companies of MARS Shipyards & Offshore Group joined Polska Grupa Zbrojeniowa (Polish Armament Group).

Nauta's location and growing production potential give Nauta new opportunities both on the civil and military market.



SHIPREPAIR YARD  
"NAUTA" S.A

Waszyngtona 1 Str.  
81-342 Gdynia

phone: +48 58 621 25 22  
fax: +48 58 620 36 37

Hamond Method is a modern opportunity for language development. It has been designed by a graduate -Maritime Gdynia's engineer Michał Hamond. That is a method of teaching languages that is mostly focused on the practical part of the language. It shows that all people have equal possibilities in learning process. It stimulates the areas of the brain that are responsible for speaking in a native language. Considering that point of view it turns out that all people on the planet have learned their language without explaining any grammar or theory. That proves that not only as children we have extraordinary possibilities in acquiring the knowledge, but as adults as well. The reason for that is that we still possess the same structures. We use them all the time without consciousness.

An important fact is that in the common way usually the aspect of theoretical measurements of the language is based on the grammar. The method approaches the practical matter of the language as the most important one. It shows the true abilities in the communication skills.

For many years Michał Hamond has been doing research on the ways of practical speaking. The effect of those efforts contributed to the foundation of the company in February 2012. At this moment, Hamond Method is an active, normalized method of learning languages that is the part of the Polish market. The headquarters are located in Gdynia.



METODA HAMONDA  
- SZKOŁA JĘZYKÓW OBCYCH

Świętojańska 23b/20 Str.  
81-372 Gdynia

phone: +48 518 810 077



# Polish Maritime Economy



The Polish maritime economy with about 12 000 enterprises, is the important part of the blue sector in the Baltic Sea Region. With more than PLN 4 bln (1 bln Euro) of total investment every year blue economy is the most innovative business sector and engine for sustainable growth. Maritime sector generates about 30 million Euro of revenues from total activity. Polish Maritime Cluster has a strong position in the Baltic Sea Region and EU blue economy.

In 2015, Government of Poland has accepted 'Maritime Policy 2030' which anticipates further extensive development of maritime industries, science and education of the 'blue economy'. This policy underlines the Polish maritime potential and its position in the EU.

**Innovative industries.** Polish shipyards build the most innovative off-shore vessels in Europe (wind farm), ferries with ecological engines (gas and electric), and yachts, which in turn require noble recognition in the European and international markets. The shipyards produce vessels worth over 200 million Euro (an equivalent of five major ro-ro units with 5 000 cars cargo), redevelop ships for ecological vessels, including utilising electric motor and methanol technique.

According to The Polish Chamber of Marine Industry and Water Sports, Polish enterprises produce ca. 22 000 yachts annually, not mentioning the largest sails in the world production. Its receivers are operators and boatbuilders from the Netherlands, Germany, Denmark, Sweden and Russia.

**Ports.** Polish ports reload more than 70 million tonnes of cargo per year and around 2 million TEU, with total worth of 500 bln PLN. This activity is performed by numerous transport / logistic infrastructure operators, utilising innovative ICT technologies. One job in the port generates approx. 11 jobs on-land companies of IT, logistics, finance, security and insurance. The ports stimulate local and regional growth. Moreover, in the ports' hinterland operate Pomeranian Special Economic Zone Ltd. (2039,9903 ha), Baltic Port of New Technologies and 3 science and technology parks.

**Fishery industry.** Fish processing in Poland is one of the most modern and effective branches in Europe with over 800 vessels and 400 processing factories.

**Seamen and Maritime officers.** More than 40 thousand Polish officers, seamen and off-shore workers and employees work in the international maritime market. Their work implicates the activity of over 200 specialised enterprises in Poland. What is more, their revenue from various maritime contracts (on ships, oil platforms, harbors) is registered in Poland and amounts to 8 bln PLN. No other branch is more profitable for the Polish economy than the seamen labour market. The activity of those employees generates further services in transport, hotels, medicine, insurance and finance. Seamen and maritime workers are being educated and professionally prepared in maritime academies, high schools, both private and public schools in Poland, with more than 19 thousand students.

**Education and Science.** The education is conducted by three maritime academies, four universities with approx. 600 professors and Ph.D's/ EngD's. Polish technical maritime and economic universities and research institutes (Maritime Institute in Gdańsk, Maritime Fishery Institute, Institute of Oceanology of the Polish Academy of Science), as well as OBR CTM S.A. and Ship Design and Research Centre, play an important role in the international scientific cooperation and cooperate in all spheres of maritime activity (ship building, offshore energy, biological science, commodities, economy). Polish science institutions participate in forging the international research and interdisciplinary studies and handle projecting innovative solutions in technology and economy. Their findings and outputs are implemented in maritime economy and other branches, i.e. logistics, transport, food productions, housing etc.

*Marek Grzybowski, Ph.D.  
Polish Maritime Cluster  
Gdynia Maritime University*

**ENMC**  
European Network  
of Maritime Clusters

**POLISH  
MARITIME  
CLUSTER**



**POLSKI  
KLASTER  
MORSKI**

**Polish Maritime Cluster**

Gdynia Maritime University  
Morska 81-87 Str., 81-225 Gdynia

phone: +48 58 55 86 250  
mail: [klaster@klastermorski.com.pl](mailto:klaster@klastermorski.com.pl)