

Integrated Science, Studies and Business Centre (Valley)

for the Development of the Marine Sector of Lithuania

Interaction of Marine Science and Business



Saulius Gulbinskas
Director of the Association Baltic valley

Of all the Baltic Sea countries Lithuania has the shortest coastal line (about 90 kilometres) and the smallest marine water area (about 7000 km²). This accounts for 1.5 per cent of the area of the Baltic Sea. However, significance of the sea and the seashore to our small country is enormous in an economic, cultural and geopolitical sense. Today as much as 18 per cent of the total gross domestic product (GDP) created in Lithuania is related to marine business. On the other hand, a great unexploited potential lies in the Lithuanian seashore, which, with implementing innovations intensively and encouraging integration of science and business, can significantly increase the economic development and social well being of the country.



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Klaipėda
Seaport



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Klaipėda Seaport –
Vakarų laivų gamykla

The marine sector of Lithuania is the whole of different branches of business (sea transport, ports, fishing, extraction of minerals, industry, recreation, etc.), fundamental and applied marine scientific research and training of specialists in the marine spheres. Klaipėda Seaport occupies the central place in the development of the Lithuanian marine sector. The Port is noted for its unique geographical position, which creates excellent transit possibilities between the East and the West. The volume of cargo handling capacities of Klaipėda Seaport totals about 30 million tons per year. The following stevedoring companies have been established in the Port: *KLASCO AB*, *BEGA UAB*, *LKAB Klaipėdos SMELTĖ*, *Klaipėdos nafta AB*, *Krovinių terminalas UAB*, *Klaipėdos konteinerių terminalas UAB*, shipping companies *Limarko AB*, *DFDS LISCO* and others, ship building and repair companies *Vakarų laivų gamykla AB*, *Baltijos laivų statykla AB* and others. The present infrastructure of the Port is being expanded and improved. The possibility to build a new deepwater port is being considered.

Fishery is one of the branches of marine business that is of significance to the region. Four main branches of fisheries sector are being developed in Lithuania: sea fisheries, fishing in inland waters, aquaculture, and fish processing industry and the fisheries and aquaculture products market. With requirements to fishing in the Baltic Sea and protection of fish resources becoming stricter, this

branch is being reorganised, ever increasing attention is being paid to the development of aquaculture and recreational fishing.

The region of western Lithuania is an essential factor in assuring the development of recreation and tourism on the marine and inland waters. The Baltic Sea, the Curonian Lagoon and other inland water bodies create possibilities to develop tourism products devoted to an active rest. Prospects of recreation and tourism are related to a better use of the natural-cultural potential of the coastal region. The Curonian Spit (Kuršių Nerija) National Park, the object of UNSECO World heritage, is noted for its beautiful nature, the unique landscape of towering dunes, which was cherished and formed in the course of centuries under extreme conditions by means of human wisdom and hands, making use of the wind and plants, and correcting the mistakes that had earlier been made by nature. Other protected and NATURA 2000 territories are also significant for their natural values: the Nemunas Delta and Seaside Regional Park, the Curonian Lagoon Biosphere polygon, the Baltic Sea Talasologic Reserve.

Marine business is closely linked with maritime investigations. In the present-day society the development of any branch of marine business is impossible without the implementation of new technologies and thorough environmental investigations assuring the principles of sustainable development. The European Union's Integrated Maritime Policy approved in 2008 and the Baltic Sea



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▲ Klaipėda Seaport – Container terminal

Region Strategy developed specially to encourage the development of the Baltic States legalised these principles for a better use of the marine potential for the economic growth and protection of the marine environment. The supported measures include sea transport, tourism, the use of natural and mineral resources, energy, environmental protection and other activities related to the sea. The sea is a vitally important source of living and well-being and has a great potential of the economic growth. It is sought to achieve that this potential should be used as efficiently as possible by balanced means. The complex viewpoint being formed is to help us to avoid conflicts and increase interaction between different spheres of marine activities, strengthen their economic potential and protect the environment.

In 2008, the Government of the Republic of Lithuania approved the Programme of the integrated science, studies and business centre (valley). The Marine Valley is being created as one of five priority scientific centres in Lithuania and the only one in the coastal region — Klaipėda. The preconditions for that are created not only by well-developed marine business but also by science being developed at the international level and studies at the Klaipėda University. Trends of the academic activity that are not developed at other Lithuanian universities prevail at the Klaipėda University. They are: marine ecology and environmental studies, marine hydrology, geoinformatics, ichthyology and fisheries, management of technical exploitation of fleet, marine mechatronics systems, marine economy technologies, ships electrical equipment and automatics, ship design and shipbuilding. International Master and Doctoral studies according to the Erasmus Mundus programme are conducted there. Coastal Research and Planning Institute, the EU Centre of Excellence, investigates ecosystems of seas, lagoons and the coastal zone, creates models of forecasts. Seafarers and specialists for many other areas of maritime industry are trained at the Lithuanian Maritime Academy in accordance with the latest international standards.



The purpose of the Marine Valley is to create the economic nucleus of maritime knowledge: to concentrate the potential and create conditions for closer interaction between science, studies and business. Attempts are made to create modern infrastructure for general needs of scientific investigations, studies and technological development of the Lithuanian marine sector, to apply scientific research results in manufacture and business, to encourage the creation of new business enterprises of a technological trend, which are oriented towards scientific results, to create conditions for the knowledge intensive marine business companies, to co-operate with research and higher education institutions and groups of researchers, to increase competitiveness of Lithuanian marine science and technologies in the international market, to create conditions for attracting more foreign investments to business and science of the Lithuanian marine sector.

Taking into consideration the structure of the marine sector and having assessed the possibilities and needs for scientific knowledge and innovations of the initiators, partners and participants in the Marine Valley, the following two axes are being developed in the Valley: the marine environment and marine technologies. Global climate change, together with the anthropological effect, poses danger not only to the stability of the marine environment but also to

the quality of life of the coastal residents, has an effect on different economic sectors. Sea level rise, coastal erosion, degradation of protected areas, invasive species cause new concern to society. A rational use of natural resources must be based on the ecosystem approach and fundamental scientific research. Almost the whole sector of shipbuilding and repair of Lithuania, which receives much attention from the European Union, is concentrated in Klaipėda. It is sought to implement the principles of the LeaderSHIP 2015 strategy of the European Union shipbuilding and repair sector: to maintain technological leadership, to implement safe and environment-friendly shipbuilding and repair technologies.

In implementing this ambitious programme, the National Centre for Marine Science and Technology will start functioning at the base of the Klaipėda University by 2013, which will consist of the Marine Ecosystems, Marine Chemistry, Fisheries and Marine Aquaculture, Water Transport Technologies and Marine Constructions Reliability laboratories. To achieve this objective science and studies infrastructure has been commenced to be built: a building of scientific laboratories with all necessary laboratory equipment is being constructed, a new research ship-laboratory will be purchased.

For more information about the implementation of the marine valley programme see: www.balticvalley.lt ■

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