



**Klaipėda 2030: Vision,
Development Scenario and
Strategic Directions**

November 2017

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Introduction – The Importance of Strategy

Klaipėda city is one of the major Lithuanian economic engines and the centre of industry and services, located in the heart of a competitive transport corridor, featuring a development-oriented ice-free port. Being an investment-friendly transport centre, the city has been successfully attracting foreign investments into the fields of logistics and production. The global companies that have already invested and are currently operating in Klaipėda include: General Electric (Advantec), Emerson, Philip Morris, Fortum and others. The city is surrounded by nature and also has a long history of internationality and connections with Germany, Scandinavia, the Hanseatic cities, as well as a strong cultural and artistic tradition.

Despite all these strengths, the city is engaged in increasing competition regarding young and talented people – the scale of emigration is increasing and the citizens of Klaipėda are getting old. These tendencies are not something new to the entire surrounding region of Central and Eastern Europe. The leaders of Klaipėda city, business and community understand the necessity to take decisive action and win the competitive battle: make aggressive investments to create excellent life quality and business conditions thus enabling the city to grow. For this reason it was decided to create a strategy for the city's economic development.

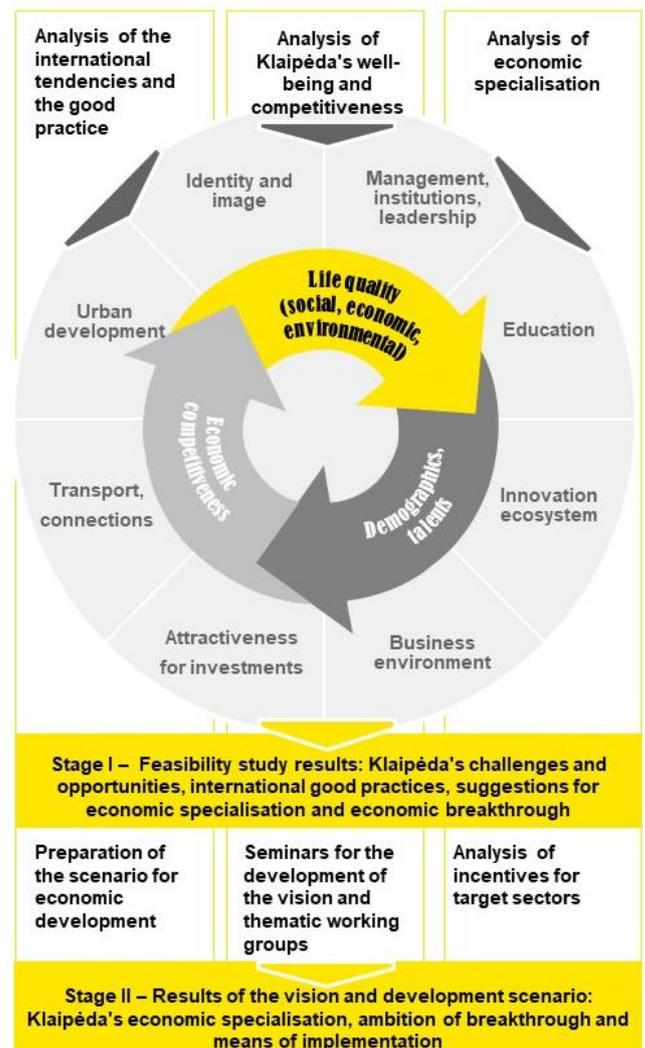
This strategy enables to:

- • Focus the major interested parties of the city on common goals and include them into the implementation of specific measures;
- • Make a purposeful allocation of resources for target investments (both “soft” and “hard” infrastructure);
- • Clarify the direction of the city's development, which creates confidence and makes the city more attractive to investors and new citizens.

The first stage of this project featured a detailed feasibility study, which included analysing international tendencies and good practices, the directions of well-being and competitiveness, as well as economic specialisation. The second stage included the macro-economic modelling of Klaipėda region, analysis of the means of promoting target, as well as organising seminars for thematic working groups, involving making decisions regarding the application of specific strategic directions and

measures in Klaipėda. A lot of attention was focused on the involvement of interested parties: there were 5 sessions with the project management group and 12 thematic sessions: city-port, tourism, business (this one took place 2 times), city identity and marketing (3), urban development (2), education and science (3). These sessions were attended by more than 100 representatives of business, science and other organisations in Klaipėda.

Fig. 1 Summary of the preparation of Klaipėda's strategy





Vision and Directions of Development

Klaipėda 2030 is a global-level city of blue economy and fast solutions: the best place to live, work, make investments and rest in the region of the Baltic Sea.

This vision is a binding promise to Klaipėda citizens, businesses, investors and tourists, stating that we will seek for high living standards and sustainable knowledge-based economic growth by strengthening our marine identity.

In order to make this vision a reality, we will implement the strategy of Klaipėda's economic breakthrough for 2030, provided in this document, which features economic maritime, biotechnological, creative and services-related growth, as well as three priority directions that we must invest into to create conditions for economic growth.

In order to achieve sustainable growth of the blue economy:

- 1) We will practice sustainable use of the sea and the coast. In 2030:
 - Klaipėda will feature a modern, developed and environmentally-friendly complex of transport, logistics and industry, processing at least 15 per cent of the cargo on the eastern coast of the Baltic Sea. Along Melnragė there will be a mixed-use outer deepwater port to satisfy both the city's and the port's needs. Developed southern port territories that create added value.
 - There will be a developed LNG cluster, which will help Klaipėda become a centre of LNG technology and distribution in the Baltic region. This cluster will develop and commercialise clean LNG-related technology.
 - Klaipėda's resorts – Smiltynė and Giruliai – will offer exceptional recreation, featuring sea views and wellness centres. Giruliai will offer geothermal SPA treatments, while Smiltynė and Klaipėda will be connected by an additional ferry line. There will also be several small ports on Dangė river, the Curonian Lagoon and Smiltynė. The southern shore of Klaipėda lagoon and Wilhelm's Channel will be used for recreational purposes. There will also be a daily ferry from Klaipėda to Gdansk.
 - Klaipėda will have the best infrastructure for sports and active tourism in Lithuania, featuring the best bicycle trails and bicycle sharing infrastructure, skating yards, as well as infrastructure for wakeboards and other active water sports
- 2) We will develop and implement bio and clean technological solutions. In 2030:
 - There will be a developed newly-established bioeconomic cluster, uniting the region's chemical and wood industry, as well as other bioeconomic companies and scientific institutions from Klaipėda, etc. Klaipėda will produce bioproducts that have little negative impact on the environment, as well as develop and apply waste management and recycling technology.
 - Klaipėda's scientific institutions will actively participate at the blue technology research programmes of the Baltic Sea, this technology will be successfully applied in the development of the region's aquaculture together with Klaipėda's businesses.
 - Klaipėda will become the leading Lithuanian region in the field of renewable energy use and production, especially in the development of production in the open sea, the depths of the earth and using the biomass.
- 3) We will become a centre of Industry 4.0 competencies. In 2030:
 - Klaipėda will feature an automated centre for solution development competencies, in cooperation with global leading companies. Highly-competent small and medium-sized businesses will create automation solutions for industrial, logistics and transport sectors.
 - Klaipėda FEZ and southern industrial territories will host producers of electric equipment, autonomic systems, robots and robotic equipment, creating high added value. Klaipėda will also have a developed industry, related to the use of the LNG technology, featuring the production of the first LNG locomotive in Lithuania.
- 4) We will also offer digital art and professional services. In 2030:
 - Klaipėda will feature dozens of business service centres of Scandinavian, German, etc. logistics and industrial companies, especially focused on the fields of engineering, technology and IT.
 - The city centre will feature a quarter of creative industries, featuring cooperation premises and places for young artists, designers and programmers.
 - Klaipėda will be particularly strong in adapting creative industries in industry, resulting in creative digital solutions for local and foreign industrial companies.
 - Klaipėda will have a well-developed business tourism and host thematic international events. The city will become famous as a summer office for Lithuanian and foreign business representatives, who want to combine their work with active and healthy recreation.

In order to ensure blue growth, the city will invest funds, time and effort into horizontal priorities:

- 1) Seeking to create **favourable conditions for business, investors and talents**, the city will become a centre of fast and efficient decisions:
 - Will refocus public administration on excellent service and fast decision-making for solving various issues of citizens, investors and tourists.
 - Will have a multifunctional Klaipėda Economic Development Agency, the best in the region in attracting investors and helping Klaipėda's businesses improve their entrepreneurship, brand, as well as export their products and services.
 - There will be an effective business incubator and accelerator, focused on companies of priority fields.
 - The new centre for attracting and integrating talents will ensure purposeful talent information, help Klaipėda attract new citizens from other Lithuanian regions, returning Lithuanian emigrants, as well as highly qualified migrants from Eastern Europe and other regions.
- 2) Steps to create an **innovative system of education and science, which meets the needs of the future economy**, will include:
 - A transformed, competitive and international educational system, which meets all the needs of the future economy and investors.
 - A developed efficient platform for retraining and acquiring relevant skills.
 - A developed "Marine Valley", as well as other innovation and business valleys. The valleys will have all the necessary equipment and hard infrastructure, attracting target numbers of local, Lithuanian and international experts. The valleys will also act as a platform of sharing technology, experimenting and helping to commercialise new innovations.
- 3) Seeking to make the city an **attractive, inclusive and available centre of the region**, there will be:
 - An ambitious urban development program, combining the city's identity, social, environmental and economic purposes. A revived old town with an exceptional mega-object of attraction near the Curonian Lagoon (e.g. a congress and concert hall or a museum centre), a city tramway and a third ferry line, connecting the southern part of Klaipėda with Smiltynė.
 - A good connection with the city, attracting international flights from target countries (Germany, Sweden, etc.) to Palanga Airport and ensuring airport accessibility by public transport, high-quality rail connections with Vilnius and Belarus. A developed city infrastructure (southern bypass, the development of transit streets, connecting industrial and port territories) and solved city traffic jams.

Determining the ambition of economic development involved conducting an economic modelling of Klaipėda region (see Appendix No. 1 - Scenarios for Klaipėda's Development) and thematic consultation sessions with Klaipėda's representatives. The assessment of the planned economic breakthrough involved defining three economic and demographic indices:

- At least 5.5 per cent average annual growth of the gross domestic product of Klaipėda region
- At least 5.0 per cent average annual growth of the average salary in Klaipėda
- At least 2.0 per cent average annual growth of Klaipėda's population

Achieving these ambitious goals would double the economy of Klaipėda region by 2030, resulting in an average salary of 1 500 Eur before tax for Klaipėda citizens and in more than 190 thousand people calling this city their home. Achieving these goals will require fundamental economic and social changes. To this day the annual economic growth of Klaipėda region reached merely 3 per cent¹ with the city losing about 2 thousand citizens every year². Such ambitious growth is possible only by focusing on international markets: attracting target clients from abroad, increasing exports from Klaipėda's companies and integration into the value chains in Scandinavia and Germany.

The next page features a scheme to sum up the strategy of Klaipėda's economic development (2Fig.). The table of tasks and major measures is provided in the appendix (see Appendix No. 2 - Tasks and Means of Klaipėda's Economic Development).

¹ The added value created in Klaipėda City Municipality in 2011-2015 increased 6.97% every year, calculating production costs. This research didn't include some of the companies and institutions, thus the GDP of the district is a more appropriate index. In 2011-2015 the annual growth of the GPD of Klaipėda District was approximately 3%. Source: Statistics Lithuania.

² During the period of 2012-2016 the number of permanent residents in Klaipėda City Municipality decreased from 160.1 thousand to 154.3 thousand. Source: Statistics Lithuania.

Economic Development Strategy for Klaipėda

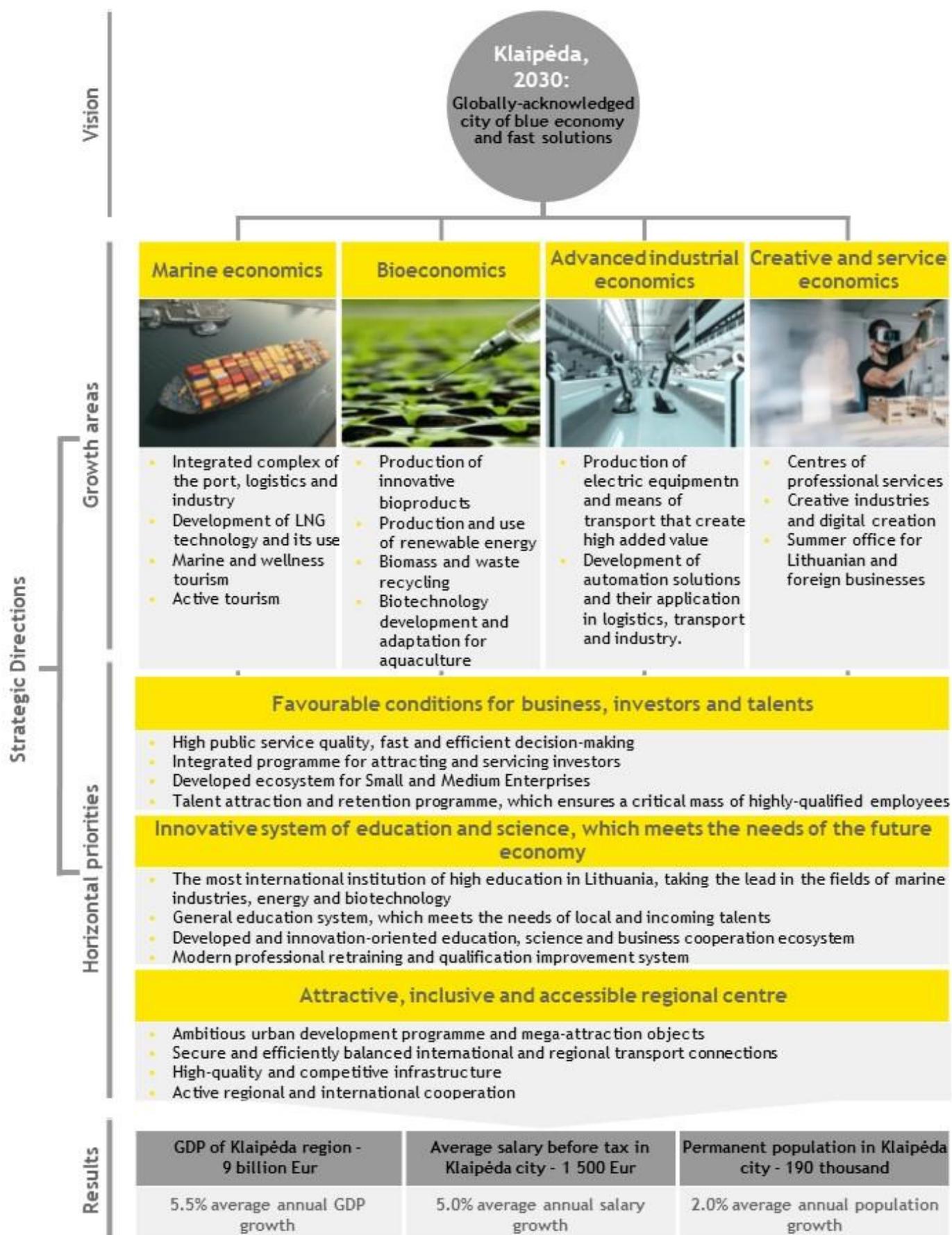


Fig. Economic Development Strategy for Klaipėda. The average growth rates are rounded to 0.5%. Prepared by the authors.

Appendix No. 1 - Scenarios for Klaipėda's Development

Modelling methods and preconditions

The preparation of the scenarios for Klaipėda's economic development involved implementing the economic modelling of Klaipėda region. This model allows to determine the major indices of the ambition pursued and assess if they are feasible and realistic. Modelling also enables to determine, which initiatives have the greatest potential.

The modelling analysis, conducted in Klaipėda district includes the period of 2015-2030. The model analyses mathematical connections between population, gross domestic product (GDP), productivity, sector structure, salary and direct foreign investments, based on economic theory and empirical data.

The model examines these scenarios:

- **Basic scenario** (based on the results of Oxford Economics econometric prediction model), which reflects the development trajectory of Klaipėda region in case of failure to implement essential changes and implementing the breakthrough strategy.
- **Intervention scenario** – Predictions for the development of Klaipėda region, based on the assumption that the essential changes, provided in Klaipėda's breakthrough strategy, will be implemented.

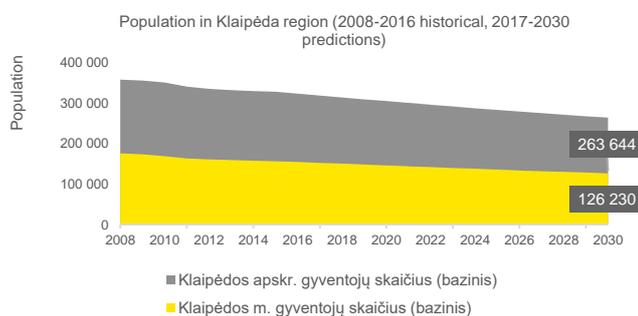
The scenario results and conclusions are provided below. The effect of the interventions provided were assessed as well.

Basic scenario

Demography

It is predicted that until 2030 the population in Klaipėda district should drop down by 18.8%, shrinking from 324.6 thousand (in 2016) to 263.6 thousand. The decrease in the population in the city until 2030 will be slower, dropping down from 154.3 thousand (in 2016) to 126.2 thousand.

3Fig. Population in Klaipėda region (2008-2016 historical, 2017-2030 predictions) Source: Oxford Economics

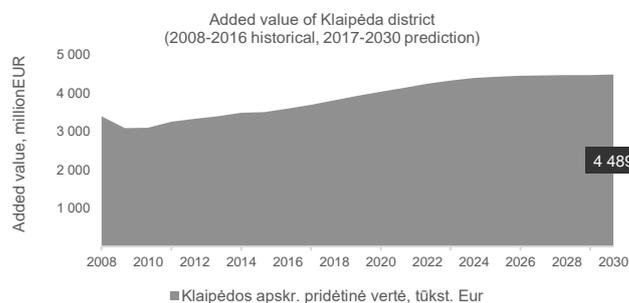


Oxford Economics

Added value

It is predicted that until 2030 the added value created in Klaipėda district should grow from the level in 2016 by 27.7 per cent, reaching 4.489 billion EUR. It should be noted that the growth of the added value will notably slow down as of 2024. If Klaipėda doesn't make

an essential breakthrough, then we cannot expect to grow faster than other advanced economies (circa 2-3 % per year). This speed is insufficient to compensate the population drop.



4Fig. Added value of Klaipėda region with comparative prices of 2010 (2008-2016 historical, 2017-2030 prediction) Source: Oxford Economics

Staff number and productivity

Despite the decreasing population, Klaipėda managed to maintain a stable number of employees until 2016. However, due to ageing population, this number should systematically decrease to a mere 130 thousand employees in 2030.

It is predicted that the added value for one employee will show a steady growth and increase by as much as 60 per cent in the next 13 years. Even with such rapid growth, the productivity will remain twice lower than that of the advanced countries of the Baltic Sea. Faster productivity growth is unlikely without essential economic transformation and attracting talents.



5Fig. Staff numbers and productivity in Klaipėda region (2016 historical, 2017-2030 predictions). Source: Oxford Economics

Intervention scenario

Interventions

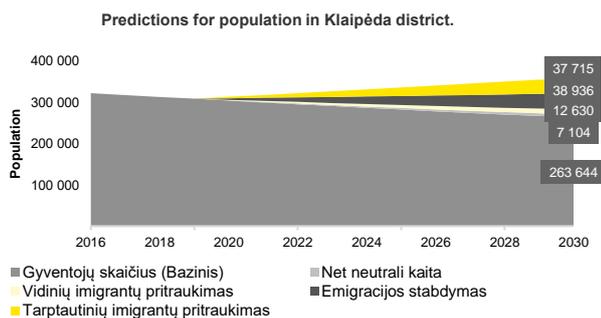
The modelled interventions are closely-related to the suggested means of Klaipėda's economic development. The assessment involved the following interventions:

- Targeted attraction of foreign investments – would enable to attract additional FDI, which would create well-paid jobs.
- Improving business conditions and promotion of target small and medium-sized business (SMB)/startup ecosystems – will enable to establish additional companies and create new jobs.
- Initiatives to increase the city's attractiveness and attracting talents – will help local business to attract experts with necessary competencies and encourage reinvestments and the development of current sectors.
- Promotion of innovation, cooperation between education, science and business – will help current sectors to create products/services of higher added value.

Demography

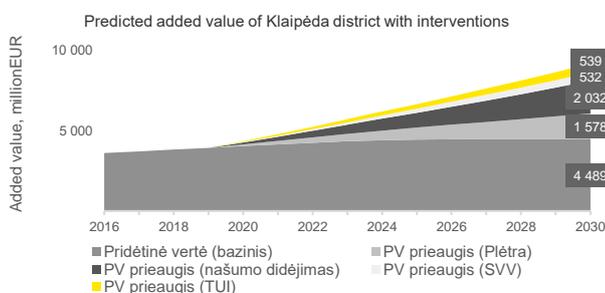
The ambitious population growth is less likely without attracting highly-qualified staff from abroad, as well as systematic work in order to maintain the current citizens and attract internal emigrants.

7Fig. Prediction of population in Klaipėda region for 2017-2030, calculations of the authors and Oxford Economics. Source: Oxford Economics



Added value

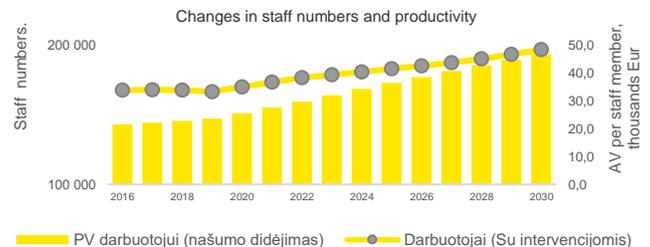
Refocusing on fields of higher added value requires increasing numbers of highly-qualified staff, increasing the maturity of the current sectors, which could be achieved by attracting FDI and cooperating with advanced SMB representatives in increasing productivity and the creation of added value.



8Fig. Prediction of added value of Klaipėda region for 2017-2030 with comparative prices of 2010, calculations of the authors and Oxford Economics. Source: Oxford Economics

Staff number and productivity

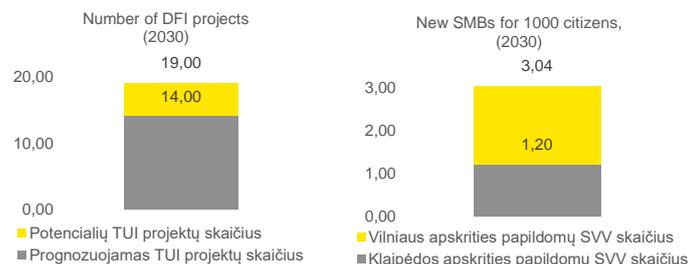
An increase of productivity is a must in order to enable business to pay higher salaries. A realistic WP ambition is directly related to the level of productivity: in order to bring the WP and living standards closer to the countries of the Baltic Sea, the productivity and the GDP per person should also move closer to that of these countries.



6Fig. Prediction of staff numbers of Klaipėda region for 2017-2030, calculations of the authors and Oxford Economics. Source: Oxford Economics

Growth (SMB and FDI) potential

Although attracting FDI is crucial for Klaipėda's economic development, its potential is limited by the general number of projects incoming to Central Europe and Lithuania. That's why Klaipėda can benefit from especially huge and unused potential – creating new SMBs.



9Fig. Number of additional FDI projects and SMBs required, 2030, calculations of the authors and Oxford Economics. Source: Oxford Economics

Ambition

The model allows to define which ambition – the basis for the vision of the city – is needed for Klaipėda, including the needed population, the intended economic structure and the average salary to be earned by an average employee. By the decision of the working groups for the preparation of the strategy, the ambition was defined as follows:

- The population in Klaipėda should grow and reach more than 190 thousand by 2030.
- The average salary should reach 1 500 EUR before tax and thus reach the 75 % of the average of the Baltic Sea region.
- Sectors of high potential (created by new SMB and FDI businesses) should create 15% of the entire added value of the economy.

Appendix No. 2 - Tasks and Means of Klaipėda's Economic Development

Field of development		Marine economics	Bioeconomics	Advanced industrial economics	Creative and service economics
		Horizontal priority		<ul style="list-style-type: none"> Integrated complex for port, logistics and industry with a new mixed-use outer deepwater port. Accelerator of the LNG use: LNG distribution, development and commercialisation of LNG technology. Marine and wellness tourism: New resort territories in Giruliai and Smiltynė, a bridge to Smiltynė, geothermal SPA treatment, wellness tourism. Sport and active tourism: bicycle trails, small ports on Danė, the Curonian Lagoon, Wilhelm's channel, water sports. 	<ul style="list-style-type: none"> Joint work of wood, plastics, etc. sectors, bioproducts, waste recycling technology. Blue economics: aquaculture, marine biotechnology. Production and use of renewable energy resources (sea wind, geothermal energy, biomass).
Business and investment environment Favourable conditions for business, investors and talents	<ul style="list-style-type: none"> To create an integrated programme for attracting and servicing investors To develop a continuous system for increasing the maturity of Klaipėda's companies and their export abilities. To develop a new business incubator and accelerator, focused on the companies of priority growth areas. To attract people from Lithuania, returning Lithuanian emigrants and high-quality immigrants from Eastern Europe. To develop a talent attraction and integration centre. 	<ul style="list-style-type: none"> Developing a marine cluster. Developing the LNG cluster by transforming into a cluster of clean technology. To attract logistics companies into the FEZ and Klaipėda's southern industrial territories. 	<ul style="list-style-type: none"> Establish a bioeconomic cluster, connecting region's chemical and wood industry, as well as other bioeconomic companies. To attract major participants of the biochemical and bioplastic production value chain. 	<ul style="list-style-type: none"> To attract manufacturers that create high added value by producing autonomous systems, marine equipment, robots and robotic equipment, to the FEZ and Klaipėda's southern industrial territories. 	<ul style="list-style-type: none"> Attracting administrative service centres for Swedish and German logistics and service centres. To create exceptional conditions for the establishment of the first service centres (reduced taxes, covering of the staff training costs, etc.). To create a constantly working team for attracting and developing international integrated events. To attract a mega-event, focused on international audiences and adapt it for wider contexts and longer duration.
Education, science and innovations Innovative system of education and science, which meets the needs of the future economy.	<ul style="list-style-type: none"> To transform Klaipėda's high education system into a competitive international leader in the fields of marine industries, energy and biotechnology. To adapt the general education system for the needs of local and incoming talents. To increase cooperation between different links of the educational chain to ensure the continuity of education and promote the acquisition of target skills. To develop an efficient platform for retraining and acquiring relevant skills. To develop platforms for inter-sectoral business and innovation cooperation by including business, public administration and science. 	<ul style="list-style-type: none"> To strengthen the Marine Valley by developing the necessary infrastructure and attracting experts. To strengthen marine studies at KU and the education of scientists of that field. To strengthen marine studies at the LMA and use them for attracting new students from the region and abroad. To create pilot internship schemes in priority sectors in cooperation with the port's companies. 	<ul style="list-style-type: none"> To develop infrastructure for sharing and commercialisation of bio and clean technology, necessary for target fields of education and science. To establish bio and clean technology programmes, important for the regional business. 	<ul style="list-style-type: none"> To establish a competence centre for digitalisation and automation solution development in cooperation with global leading companies. To introduce robotics and automation university programmes. To create pilot internship schemes in priority sectors in cooperation with Klaipėda's FEZ and other industrial companies. 	<ul style="list-style-type: none"> To establish a programme for promoting creative industries and their adaptation for production. To establish digitalisation university study programmes.
Urban and city well-being Attractive, inclusive and accessible regional centre	<ul style="list-style-type: none"> To increase the city's accessibility: ensure sufficient external transport connections (by air to Germany, Scandinavia, by water to Gdansk, as well as rail connections to other Lithuanian cities). To implement the urban development programme. To revive the old town and build a mega-object of attraction in the city centre, convert abandoned territories, increase access to the lagoon by transforming territories and arranging acceptable conditions with the companies working there. To develop advanced measures to ensure the involvement of all interested parties in the city and region into the process of making and implementing important decisions. To develop a cooperation platform for the Western Lithuanian region, which would include Klaipėda, Telšiai, Tauragė and Šilutė districts, creating a functional region (according to NUTS2 classification). To increase involvement at target international programmes. 	<ul style="list-style-type: none"> To build a mixed-use outer deepwater port, ensuring its compatibility with the citizens' interests. To develop LNG storage and distribution infrastructure/bunkering stations. To develop the southern part of the port of Klaipėda (along Kiaulės Nugara island). To develop sports and active tourism infrastructure (the best bicycle trails and bicycle sharing infrastructure, skating yards, as well as infrastructure for wakeboards and other active water sports). To develop Smiltynė as a resort area, increase Smiltynė's accessibility (opening the third ferry line, development of small ports). To develop Giruliai as a resort area. Construction of a SPA complex, using geothermal waters. 	<ul style="list-style-type: none"> To designate areas for waste and biomass recycling. To designate areas for wind power plant construction in the sea. 	<ul style="list-style-type: none"> Developed city infrastructure, connecting port and industrial territories (a southern bypass, a transit street, connecting the FEZ with the port). 	<ul style="list-style-type: none"> To build cooperation premises, focused on creative industries, information technology and digitalisation startups. To develop infrastructure for business tourism.

Table1. Summary of the tasks and means for Klaipėda's economic development. None: the list is not finite and will be supplemented during the preparation of the final strategy. Source: prepared by authors, based on the material from thematic sessions, international tendencies and the analysis of Klaipėda's situation.

Appendix No. 3 - Table of Abbreviations

Concept, abbreviation	Explanation
GDP	Gross domestic product
WP	Work payment
KEDA	Klaipėda Economic Development Agency, public institution
KU	Klaipėda University
LMA	Lithuanian Maritime Academy
FEZ	Free economic zone
LNG	Liquefied natural gas
SMB	Small and medium-sized business
FDI	Foreign Direct Investments
PI	Public institution

Table 2 Table of abbreviations