

Table of contents

1 In	ntroduction	3
1.1	KEDS preparation process	4
1.2	KEDS links with other strategic documents	5
2 M	ajor trends	6
3 K	laipėda: baseline situation	7
3.1	Demography	7
3.2	Economy	7
3.3	Education	10
3.4	Attractiveness of the city	apibrėžta.
3.5	Success stories	12
3.6	Results of the economic specialisation analysis	13
3.7	SWOT Analysis	14
3.8	Baseline development scenario	15
4 V i	ision and strategic directions	16
4.1	Economic development strategy for Klaipėda	18
4.2	Economic development indicators of Klaipėda	19
5 In	nplementation model	20
5.1	KEDS implementation management model	20
5.2	Priority measures for KEDS implementation	
6 A	ction plan	23
6.1	Objective 1 - to create favourable conditions for business, investors and talent	24
6.2 need	Objective 2 - to develop an innovative education and science system that would ds of tomorrow's economy	
6.3	Objective 3 - to become an attractive, engaging and accessible regional centre	·37
6.4	Objective 4 - to use marine environment sustainably	45
6.5	Objective 5 - to create bio- and clean technologies	48
6.6	Objective 6 - to become a high-tech industry centre of excellence	50
6.7	Objective 7 - to develop digital creative and professional services	51
7 A	nnexes	53

1Introduction

The city of Klaipėda is one of the main engines of Lithuania's economy, an industrial and services centre with a competitive, development-geared, ice-free port and a strong free economic zone. As a transport hub with favourable investment climate, the city successfully attracts foreign investments in logistics and the manufacturing sector. Such global players as Emerson, Philip Morris and Fortum have already invested and operate in the city. Klaipėda is situated in natural surroundings and has a long-standing history in international relations with Germany, Scandinavian countries, and the Hanseatic cities, and a strong cultural and artistic tradition.

Despite all these strengths, due to emigration and aging of the population the city feels an increasing competition in attracting young talent. This is a familiar trend across the entire Central and East European region. The following Economic Development Strategy for Klaipėda (KEDS) was prepared in order to win the competition for investment and talent and thus to ensure a sustainable population and economic growth of the city. The strategy would allow for targeted investment of the limited resources and would streamline development trends of the city.

The 2030 vision of Klaipėda is to become a world-class blue economy city offering rapid solutions: the best place to live, work, rest and invest in the Baltic region.

For the purposes of defining the ambition for the economic development, economic modelling of Klaipėda region was carried out along with active public consultation, and advice was obtained from various foreign and Lithuanian experts and the representatives of Klaipėda Municipality, business and academic communities. The aim of the economic leap is a twofold increase in economic output, the average gross salary of EUR 1,500 and the population of over 190,000 in the city of Klaipėda by 2030.

In order to turn this vision and economic ambition into reality, four priority areas of economic growth and three horizontal priorities.

Subsequently, aims, objectives and currently relevant measures were identified for each area. These measures will be implemented through cooperation structures formed during KEDS preparation and the city's economic, urban and innovation development organisations.

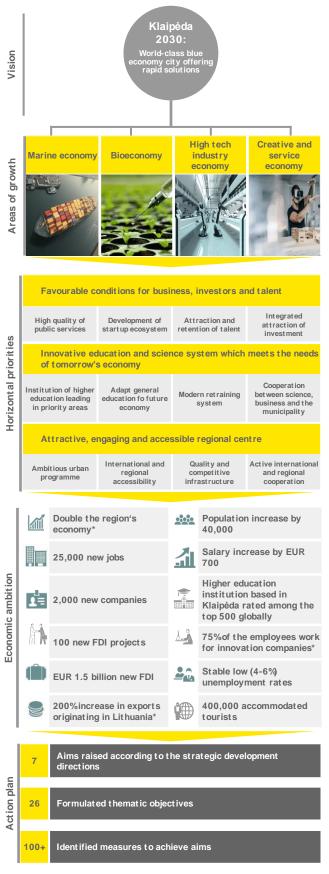


Fig. 1. Summary of the Economic Development Strategy for Klaipėda. * - asterisk shows the indicator of Klaipėda County.

1.1 KEDS preparation process

Preparation of the Economic Development Strategy for Klaipėda was initiated by Klaipėda Municipality together with five partners: Klaipėda State Seaport Authority (KVJUD), Klaipėda University (KU), Klaipėda Free Economic Zone Management Company, Association of Klaipėda Industrialists and Klaipėda Chamber of Commerce, Industry and Crafts. Partners have jointly invested funds, efforts and time.

KEDS was developed in three phases:

- In phase one of the project a detailed feasibility study was carried out which provided the analysis of international trends and good practices, and areas of prosperity, competitiveness and economic specialisation of Klaipėda.
- In phase two of the project, macroeconomic modelling of Klaipėda region was carried out together with the analysis of the measures for promoting targeted sectors. Public consultations and seminars involving specialist area experts took place as well.
- In phase three of the project, on the basis of the results of the preceding stages an action plan was drawn up and the KEDS implementation model was defined.

During the preparation of the strategy, much attention was paid to the inclusion of stakeholders. In each phase, sessions with the relevant project management groups and thematic working groups took place. In total 10 sessions with project partners and 20 thematic sessions - port city, tourism, business, city identity and marketing, urban development, education and science - were organised. Over 300 representatives of business, education and other organisations in Klaipėda participated in the sessions.

Kokios vertybės apibūdina Klaipėdą ir klaipėdiečius?

Kitokie ymasis ટુ



Fig. 2. Results of the voting conducted during the KEDS marketing session (phase 2).

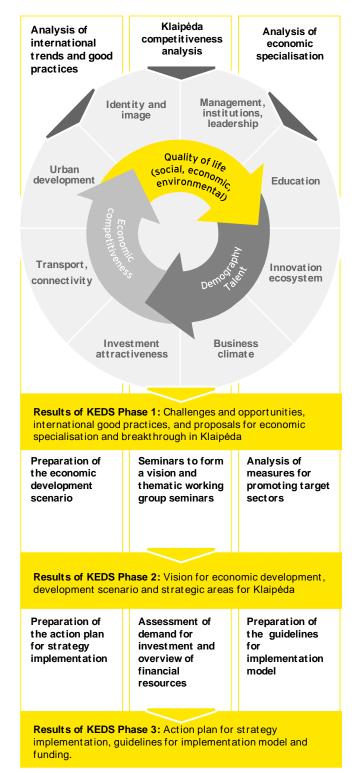


Fig 3. Summary of the preparation of the strategy for Klaipėda.











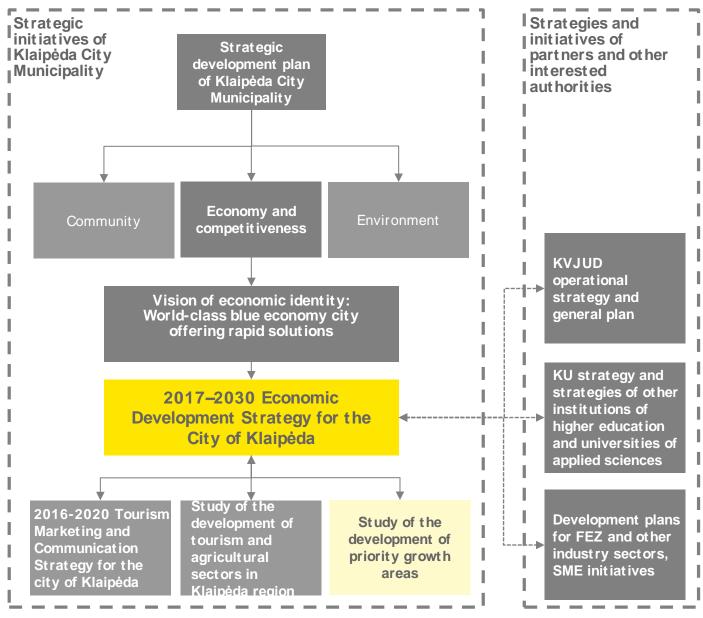


1.2 KEDS links with other strategic documents

KEDS is an agreement among the most important stakeholders regarding the directions of economic development of Klaipėda. One of the premises of successful economic development is the use of existing strengths, so some of the measures have already been included in the strategy documents of individual institutions. On the other hand, the content of the document and the outlined economic ambition are broader than the capacity of any individual institution in Klaipėda to implement it single-handedly. As a result, KEDS should be considered a coordinating document oriented towards a long-term strategy. On the basis of the document, cooperation between strategy promoters and other stakeholders should continue during the implementation of the action plan.

Measures for the implementation of the action plan defined in KEDS should be carried out on the basis of strategic planning processes and the planning cycle as set out by different organisations and (or) legal acts. The stakeholders should include the measures of the KEDS action plan in their strategic planning documents by taking into account the budget for the proposed measures, their impact and implementation period.

The success of the measures of the KEDS action plan directly depends on whether the strategy implementation partners and other stakeholders will include the measures in their strategic planning documents and whether they will allocate the required financial and/or human resources.



 $Fig.\ 2.\ \textit{KEDS links with other strategic documents}.$

2Major trends

In order to determine the optimal development directions until 2030, it is necessary to know what trends will be important in the next decade. The following six major trends can be identified.



Trade trends: Relocation of the economic centre of gravity from the West to Asia, increasing importance of China in EU trade

➤ To develop an integrated transport corridor acting as the gateway for the East into Scandinavian countries



FDI trends: FDI – in the regions located close to manufacturing and realisation markets and in the innovative ecosystems

- ➤ To attract FDI with orientation to the Scandinavian market, particularly investment in manufacturing
- ► To develop startup ecosystems



Energy trends: Climate change – increasing regulation and promotion of clean technologies

- ➤ To integrate into the clean technology ecosystem of Scandinavian countries and to promote environmental solutions of local market players
- To continue LNG expansion, to provide bunkering services



Industry 4.0: Improvement in technologies will allow to replace major portion of today's jobs

- To promote relocation of business services related to industry to Klaipėda
- ▶ To adapt the education system for the needs of Industry 4.0



City attractiveness trends: increasing importance of creative industries, cultural migration and population aging

- ► Klaipėda must form a unique and attractive identify of the city
- ➤ To facilitate development of creative industry activities



City governance trends: involvement of businesses and empowerment of the citizens

- ➤ To use PPP opportunities more actively
- ▶ To engage inhabitants in city governance through e-platforms and open data

3Klaipėda: baseline situation

3.1 Demography

3.1.1 Population

Emigration affects the entire Central and Eastern European region. Klaipėda is no exception. In 2017, the population of the city of Klaipėda was 151,300. Over the past ten years, nearly 45,000 residents have emigrated to other regions. Some of them moved to the suburbs of Klaipėda, however, the overall demographic situation in the city and the district continues to worsen.

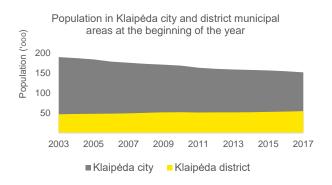


Fig. 3. Population change in Klaipėda city and district municipal areas in 2003-2017. Source: Statistics Lithuania

3.1.2 Demographic structure

Although the population of Klaipėda is among the youngest in Lithuania, population aging trends are clearly noticeable like in many other European cities. At the beginning of 2017, the average age of the city's inhabitants was 42 years, which is up from 39 years ten years ago. The main reason for population aging in Klaipėda region is emigration of young people.

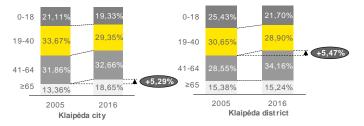


Fig. 4. Distribution of the population in Klaipėda city and district municipal areas by age. Source: Statistics Lithuania

The ambitious population growth is unlikely without the attraction of highly qualified employees from abroad. It is also necessary to convince the existing city population to stay and to encourage the return of emigrants to Klaipėda.

3.2 Economy

3.2.1 Economic structure

Following the financial crisis of 2009-2010, Klaipėda region saw economic growth, but in recent years growth rates have slowed down and in 2016 lower GDP than in 2015 was recorded.

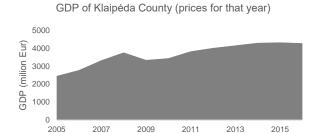


Fig. 5. Population change in Klaipėda city and district municipal areas in 2003-2017. Source: Statistics Lithuania

Orientation to relatively low added value sectors in Klaipėda has contributed to the economic slowdown. Traditional sectors such as logistics and manufacturing account for 45% of the added value of Klaipėda region (seeFig. 6.). These sectors take advantage of natural strengths of Klaipėda as they rely heavily on use of the seaport. This allows them to be productive, especially when compared with other sectors in Klaipėda. However, even these sectors have high growth potential and as there is a significant productivity gap compared to EU.

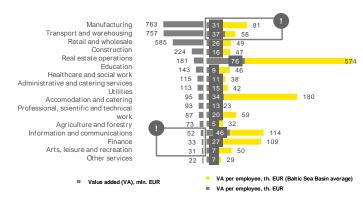


Fig. 6. Economic structure in Klaipėda in 2015 by sectors. Source: Statistics Lithuania, Eurostat

3.2.2 Investments

Foreign direct investment (FDI) is an important source of economic prosperity, transfer of knowledge and competence development. In 2016, the city of Klaipėda attracted EUR 828 million FDI. The year 2015 was particularly successful for Klaipėda as it attracted additional EUR 165 million or 23.7% more than in 2014.

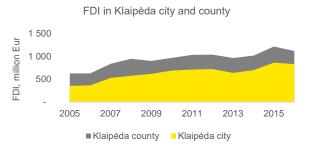


Fig. 7. FDI in Klaipėda County, million EUR. Source: Statistics Lithuania

Over the past 12 years, FDI in Klaipėda increased by an average of 8.1% each year. However, the FDI potential in Klaipėda is not yet fully tapped. A similar growth rate has been recorded in other cities of Lithuania. Vilnius has attracted over three times more investment per capita than Klaipėda.

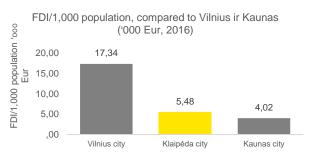


Fig. 8. FDI/1,000 population in major cities of Lithuania, '000 EUR. Source: Statistics Lithuania.

Klaipėda successfully attracts manufacturing, logistics and transport enterprises, which invest in Klaipėda due to its strategically convenient geographical location, strong port and preferential treatment granted by Klaipėda FEZ.

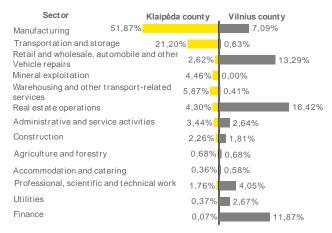


Fig. 9. FDI structure in Klaipėda County by economic sectors. Source: Statistics Lithuania

Companies operating in Klaipėda mainly invest in output expansion (improving infrastructure, etc.), however it is thought that the companies can create additional value through investment in the development of high added value processes.

The main barriers to larger investments were the shortage of employees with technical and engineering competencies, geopolitical threats and the lack of a single investment attraction programme. So far FDI attraction to Klaipėda relied on the efforts of individual organisations.

In order to improve the investment climate, KEPA was expanded during the preparation of the strategy to provide one-stop-shop services to investors. In the future, cooperation between science and businessm as well as Klaipėda's FDI attraction and competitiveness must be improved.

3.2.3 Business environment

At the beginning of 2018, 5,469 companies operated in the city of Klaipėda. Over the past 12 years, the number of companies operating in Klaipėda increased by 1,208, the majority (95%) are micro companies (<10 employees).

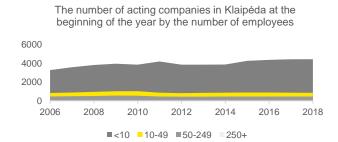


Fig. 10. The number of active companies at the beginning of the year by the number of employees. Source: Statistics Lithuania

Although over the long term the number of companies operating in Klaipėda has rapidly increased, in recent years there have been visible signs of a slowdown and considerable lagging behind the indicators of Vilnius and Kaunas. In 2017, on average 3.13 enterprises/1,000 population were registered in Klaipėda.

The number of registered companies/1.000

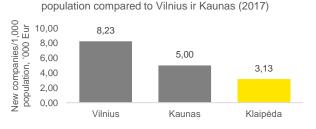


Fig. 11. Number of SMEs registered in a year per 1,000 population. Source: Statistics Lithuania

There is a relatively small share of very large companies within the overall corporate context of Klaipėda. SMEs make a significant contribution to the economy of the region.

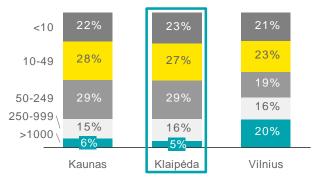


Fig. 12. Number of companies by the number of employees at the beginning of 2017. Source: Statistics Lithuania

A survey of companies in Klaipėda showed that representatives of the companies see the following essential areas for improvement:

- Adoption of decisions concerning business by municipal government could be faster and more favourable for investors.
- Land planning issues are particularly poorly viewed: there are few sites in the city designated for businesses, the issuance of design conditions takes a long time, and restrictions specified in the conditions often prevent businesses from implementing the planned investment projects.
- The existing services for businesses should be provided from one stop source, KEPA activities could be better adapted to the broader mission of the organisation - economic development.
- Few electronic services are available for businesses.
- The city lacks a common vision and strategy
- The education system in Klaipėda does not fully comply with business needs. Training of specialists required for local businesses (e.g. IT, engineering) should be strengthened.

The situation in Klaipėda could be substantially improved through a wider set of services and support for businesses, faster issuance of construction permits and more efficient area planning.

Opportunities for developing business incubators must be assessed. At the moment there are several business incubators - the incubator of Klaipėda University, Culture Factory and Castle Workshop. However, activities of these institutions focus on rental of premises. In the future, they could provide innovative services for start-ups (acceleration, funding) and development.

Strengthening of the communities of SMEs and business incubators and also regular events promoting entrepreneurship could also contribute significantly to Klaipėda's business climate.

3.2.4 Labour market

The unemployment rate in the city of Klaipėda is the lowest in Lithuania. In 2016, it was 4.6% and was even lower than the unemployment rate before the crisis in 2007. A further sustainable economic growth must be based on the creation of value added and innovation.

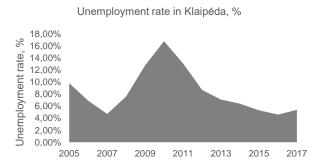


Fig. 13. The unemployment rate in the city of Klaipėda, %. Source: Statistics Lithuania

With the decrease in unemployment, the average salary in Klaipėda has increased. In Q1 2017, it reached EUR 840 and continues to grow steadily. Compared to other cities of Lithuania, the level of salaries is relatively high, but there are few high-skilled jobs created.

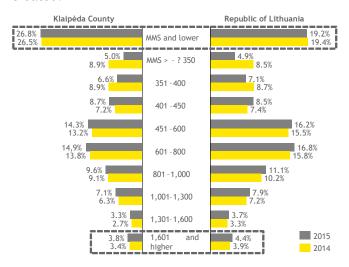


Fig. 14. The percentage of full- and part-time employees by the level of salaries. Source: Statistics Lithuania (MMS - minimum monthly salary).

3.3 Education

3.3.1 Education and research system

One of the most important aspects in attracting talent and investments to Klaipėda and improving the competitiveness of the economy is improvement of the quality of education and research.

Within the context of Lithuania, the level of general education in Klaipėda is high. Pupils' achievements, available infrastructure and learning conditions are among the best in the country. High quality general education in Klaipėda could be used as a tool to attract young families to the city. One of the few problems of general education is its poor internationality. There is no education institution in the city which offers the International Baccalaureate diploma programmes, neither there is any international preschool and general education institution where schooling is provided in the English language.

There are very strong institutions of higher education in Klaipėda specialising in the fields of marine sciences, health care and history. Despite this, with the decrease in student numbers and rising competition both between local and regional universities, a large number of the programmes have difficulty in attracting talented and motivated students. So there is an urgent need to increase the competitiveness of institutions of higher education. KU along with other institutions of higher education has already taken the required steps, but it is necessary to maintain the direction of reform: to focus on study programmes and to strengthen them so they would meet the needs of tomorrow's economy.

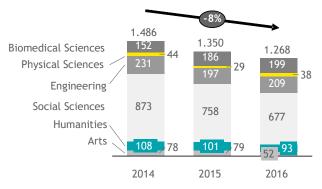


Fig. 15. The number of graduates and distribution by fields of science. Source Klaipėda University.

Following the efforts of KU and AB Klaipėdos Nafta (KN), LNG terminal engineering studies were introduced. Despite the cooperation precedents between the science business, a broader involvement of businesses is still required. Business needs for specific specialists and programmes must be consolidated and communicated to education institutions in a structured manner.

The survey of enterprises showed that in terms of the qualified personnel the companies mainly plan to employ professionals in the areas of management, engineering and IT. Accordingly, the study programmes in these areas must be strengthened.

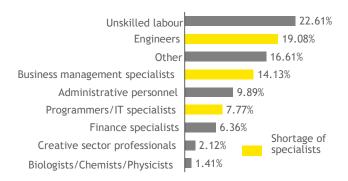


Fig. 16. Specialists planned to be recruited by Klaipėdas' businesses. Source: a survey of companies in Klaipėda.

3.3.2 Cooperation between science and business

The Marine Valley, one of Lithuania's integrated research, study and business centres, operates in Klaipėda. It has a developed physical ("hard") infrastructure and further development is planned by expanding the laboratories required for targeted research and purchasing equipment. At the same time it is necessary to develop the "soft" infrastructure to enable efficient functioning of the infrastructure: currently there is a lack of a technology transfer centre and project managers to ensure understanding of the link between applied science and business needs; the management with experience in running the marine science and business valley is also required.

Due to limited resources there is a large fragmentation and internal competition between the institutions which promote entrepreneurship and business-science cooperation in Klaipėda. Specialisation of such institutions and their role in the general ecosystem are not clear, there is a lack of dedicated resources and centralisation.

The clustering process of enterprises is in the initial stages in Klaipėda, e.g. the LNG cluster, the production innovation cluster for timber products (in Klaipėda District). Strengthening of cooperation is important to the enterprises aiming to create higher added value and to improve their position in the international markets.

3.4 City attractiveness

3.4.1 Urban development

Klaipėda is undergoing a clear suburbanisation process - inhabitants are moving to the suburbs of the city. This process often leads to the shortage of attractive housing in the city. It is not favourable to the city, because the city must develop social and "hard" infrastructure in the suburbs, while in the developed areas it is difficult to finance the necessary modernisation.

There is a clear divide between the northern and southern parts of Klaipėda. Monotonous mass construction blocks of the second half of the 20th century dominate the southern part of the city. This architecture does not have any direct connections with the identity of the port city. Meanwhile, in the northern part of the city there are some interesting and valuable urban structures.



Fig. 17. Map of Klaipėda. Source: material of the feasibility study (EY).

It is important for Klaipėda to strengthen its historical centre and to form subcentres thus creating opportunities for multifunctional use of the area. The revitalisation of the historical centre and development of its sites (development of the former castle site and the former site of Laivite, conversion of the area adjoining the River Danė and the use of the river for maritime tourism) are the cornerstones of the proposed urban development programme

3.4.2 Infrastructure

Klaipėda is a linear city, which facilitates planning and development of infrastructure. The road infrastructure is in good condition, but the growing number of motor vehicles and increasing volumes of stevedoring operations in the seaport cause increasing traffic congestion. The condition of public transport compared to other cities in Lithuania is relatively good, but the number of users is small, especially in Klaipėda District. So far there is a lack of convenient and coordinated public transport infrastructure.

The terminals in the northern part of the port are highly specialised and goods for loading are usually brought to the terminals by rail. The southern part of the port is serviced by road transport. After dredging the water area of the port, the volumes of stevedoring (and transportation) services have the greatest potential to increase. A southern bypass must be built, buffer zones must be created and the issues of problem streets (e.g. the crossroad of Baltijos Avenue) must be addressed.

In order to reduce the dependence of the inhabitants on private cars, a sustainable mobility plan has been drawn up, which provides for the development of public transport, and infrastructure. Regional accessibility

Klaipėda has low direct accessibility to major cities in Lithuania and abroad:



Palanga Airport offers flights to 8 countries and 10 destinations, only 4 of these are regular flights. There is no direct connection with Sweden or Germany.



Bus service is limited to a number of neighbouring countries: Poland, Latvia and Russia (Kaliningrad).



There are 2 ferry routes: Klaipėda-Kiel (Germany) and Klaipėda-Karlshamn (Sweden).



Public transport connection with Vilnius and Kaunas is neither sufficiently fast nor efficient.

To become a truly modern and global city, accessibility of Klaipėda must be improved by developing new transport corridors.

3.5 Success stories

3.5.1 Port of Klaipėda

In 2017, Klaipėda seaport handled over 43 million tonnes of cargo, a record output so far. In terms of cargo handling volume, Klaipeda is a definite leader within the Baltic Sea basin, and is ahead of all but a few Russian ports. While the overall cargo handling volumes in the Baltic Sea basin are barely increasing, Klaipėda port successfully grows by winning over other ports in the region. So far good performance of the port was determined by developed infrastructure, trust of businesses and competitive prices.

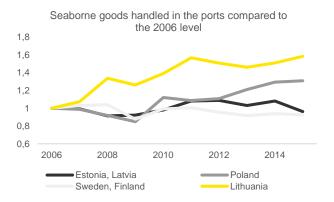


Fig. 18. Seaborne goods handled in the ports compared to the 2006 level. Source: Eurostat

Klaipėda port is also becoming a solid player in the cruise and passenger shipping market in the Baltic region. In January-November 2017, 355,000 passengers of cruise ships and DFDS Seaways ferries visited Klaipėda. More than half of all tourists come to Klaipėda by cruise ships or ferries.

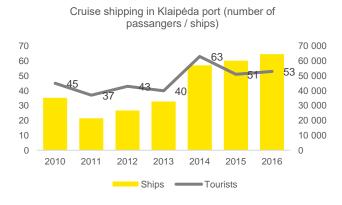


Fig. 19. The number of cruise ships and tourists in Klaipėda port. Source: KVJUD

Successful performance of the port would not have been possible without targeted investment. Such investments are needed to sustain the balanced growth of the port in the future.

3.5.2 Klaipėda FEZ

Klaipėda FEZ (Free Economic Zone) is one of the first and most effectively managed free economic zones in the region as measured by the attracted investments and number of created jobs.

Over 116 enterprises, mainly plastic and PET, food and metal processing, processing of petroleum products, automotive electronics, logistics, warehousing and packaging, operate in the FEZ. They employ over 4,300 people. A total of 28 companies have direct agreements with FEZ and get preferential treatment. Two thirds of all the FEZ companies are of foreign capital.

At the end of 2016, a total of EUR 498 million of FDI was accumulated in the FEZ, 60.1% percent of the total investment in the city of Klaipėda and 44.7% of FDI in Klaipėda County.

In 2010, FDI Magazine (*The Financial Times*) ranked Klaipėda FEZ as one of top five economic zones in the world in terms of its business conditions and infrastructure. In 2015, *The Financial Times* ranked Klaipėda FEZ among the most attractive economic zones in the world in terms of the conditions for local collaboration. In 2017, the FDI Magazine awarded Klaipėda FEZ with the Quick Launch Award in the "Global Free Zones of the Year 2017" and also for specialisation in the plastics sector.

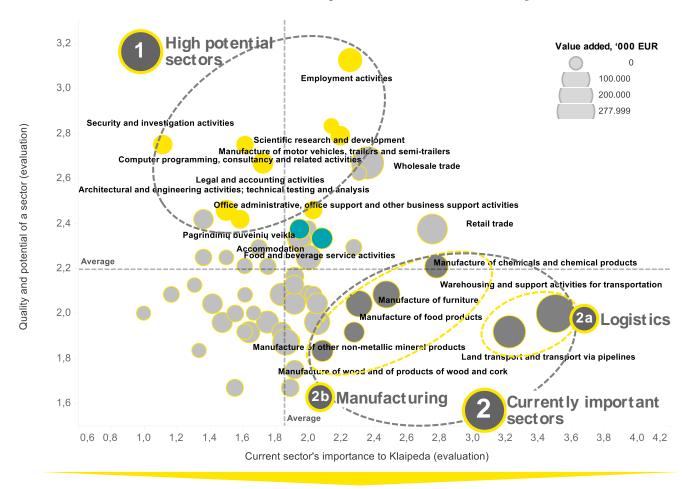
3.5.3 LNG cluster

The LNG cluster in Klaipėda successfully operates using innovative technologies. Members of the cluster include such national and international companies as Klaipėdos Nafta, Klaipėda University, Lithuanian Railways, Emerson, SGS, DNV-GL and others.

Since LNG is starting to dominate in the long distance gas trade, the cluster has an important role to play. In 2016, more than half of the gas in the long distance gas trade was transmitted via LNG terminals. It is forecast that the use of LNG will continue to increase worldwide, including the Baltic Sea region. LNG is forecast to account for up to 15% of the total energy mix in the future.

Klaipėda LNG cluster is expected to be further developed by directing research and consultancy services to the promotion of LNG use. Development of technologies for using LNG in transport and industrial processes is also planned.

3.6 Results of the economic specialisation analysis







Strengths of Klaipėda

- Klaipėda has access to the sea and developed maritime transport
- In addition to maritime transport. Klaipėda has relatively well developed other types of transport services (except for air transport).
- Klaipeda trains qualifies seafarers and engineering specialists related to port activities. There is potential to expand and strengthen other to port activities. The engineering studies.
- Klaipéda has some of the most productive companies in chemistry industry; wood processing (including furniture) industry creates considerable added value. There is a great synergy potential between these economic sectors both in developing new products and moving into new markets.

Highly potential sectors



Key trends

- Sea transport remains the main long-distance type of transport.
- Climate change: increasing regulation of pollution, promotion of alternative sources and more efficient processes.
- EU long-term strategy for reorientation to bioeconomy thus reducing the use of mineral resources/fossil fuel.
- When the main processes are automated, services, particularly oriented to services to business (B2B), will become the main economic
- Orientation of logistics to additional added value services.



Present

Potential

Growth areas







Fig. 20. Results of the economic specialisation analysis.

3.7 SWOT Analysis

Strengths

- Competitive transport corridor for international trade with a dynamic, ambitious, development-oriented, northernmost ice-free port, which successfully competes with neighbouring ports. A potential for expanding an offshore port.
- LNG infrastructure, internationally recognised competences for LNG project implementation, orientation of Klaipėda Nafta to the development of the centre of excellence and exports of services, LNG cluster.
- Favourable investment climate in the FEZ for logistics and manufacturing companies which use the transport corridor/sea transport offered in Klaipėda for exports/carriage of raw materials.
- Exceptional natural environment, the Curonian Spit National Park, in the city of Klaipėda is a UNESCO heritage site.
- Global investors in Klaipėda/brands: General Electric (Advantec), Emerson, MSC, Phillip Morris, Fortum, etc.
- High level expertise in Maritime Technology Science, well developed (and further developing) research infrastructure of the maritime Baltic Valley and collaboration with business in selling applied research (which is gaining speed).
- Optimum size city: sufficiently large to be competitive and to ensure the critical mass of talent and resources for change; not too large, so it can be flexible, adapt and implement changes relatively quickly.

Weaknesses

- Unfavourable climate for setting up businesses and attracting investments (in other than the FEZ zone): hardly any services provided for business, no one-stop-shop services, business development is restricted due to a complex building permit and area planning process, and lack of ecosystems for promoting highly potential businesses (startups).
- Klaipėda economy relies on transit cargo flows along the transport corridor.
- Basis of the economic structure traditional sectors (logistics, manufacturing), which in the long-term perspective have little growth potential, are insufficiently productive, and do not create sufficiently high-skilled or well-paid jobs. There are hardly any high added value services sectors.
- There are hardly any commercialised innovations developed in Klaipėda, collaboration between the world of science and the world of business is only at an initial stage (sale of research); there is a lack of the "soft" technology sale infrastructure.
- The city is unable to retain/attract young and talented people, the demographic situation is worsening (about 20% of the population has been lost over the past 10 years), sub-urbanisation, and the city centre is getting deserted
- There is a lack of a defined, clearly communicated and engaging city identity, pessimistic/passive mood and local (insular) mentality dominate.

Opportunities

- To form a specific and inspiring vision and ambition of the city and a group of city leaders who believe in it, who will encourage essential changes in the management of the city and create a wider breakthrough movement in Klaipėda.
- To become a transformational centre for creating added value for cross border trade flows (Asia-Europe/ Scandinavia).
- To use Industry 4.0 and automation trends and to develop a sector of high-tech equipment and automation services for industry.
- To encourage the essential city image change via the integrated and ambitious urban development programme; to use the port development as an opportunity to develop the infrastructure for the breakthrough of the city tailored to business tourism, population, and recreational shipping needs.
- To adapt Klaipėda for active recreation and business tourism
- To strengthen contacts (economic, cultural, social, research and education) with Scandinavian countries an opportunity to be the most international city in Lithuania most integrated into the Scandinavian sphere.

Threats

- Growing competition from the cities in Lithuania (Kaunas and Vilnius) and the neighbourhood, attractiveness in bringing businesses, investment and talent.
- With the decrease in the urban population, the critical mass of initiative, skilled people with leadership capacity may be lost and it will no longer be possible to generate the movement that would promote a breakthrough.
- The transport corridor may become uncompetitive (due to competition from surrounding ports, unfavourable tariffs, inadequate infrastructure development and/or geopolitical circumstances).
- Uncertainty in the geopolitical situation which reduces the attractiveness of Lithuania and Klaipėda to investors (in particular in the area of manufacturing and transport).
- In terms of higher education reform due to failure to make the necessary changes in the education and research system Klaipėda may lose its university.

3.8 Baseline development scenario

3.8.1 Modelling methodology and assumptions

During the preparation of the economic development scenario for Klaipėda, economic modelling of Klaipėda region was carried out. The model allows to determine the main indicators for achievables and to assess their feasibility and how realistic they are. Modelling also helps to identify the initiatives which have the highest potential.

This analysis was carried out at the level of Klaipėda County and covers the 2015-2030 period. Based on the economic theory and empirical data, the model assesses mathematical relationships between the population, GDP, productivity, sectoral structure, wages and FDI.

The forecast is based on the results of the Oxford Economics econometric forecasting model. The results reflect the development trajectory of Klaipėda region in the case where neither essential changes nor the breakthrough strategy are implemented.

3.8.2 Demography

It is forecast that by 2030 the population of Klaipėda County will decrease by 18.8% from 324,600 (2016) to 263,600. The population decrease in the city will be slower and by 2030 the population figure will fall from 154,300 (2016) to 126,200.

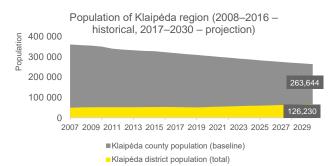


Fig. 21. Population of Klaipėda region (2008-2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

3.8.3 Added value

It is estimated that from 2016 to 2030 the added value created in Klaipėda County will increase by 27.7% and

will reach EUR 4,489 billion. It is worth noting that the growth in added value will markedly slow down starting from 2024. If there is no major breakthrough in Klaipėda, the growth cannot be expected to be higher than in other advanced economies (about 2-3% per year). This rate is not sufficient to compensate the loss of the population.

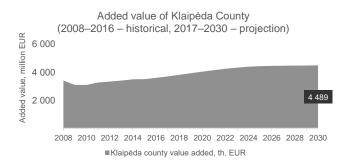


Fig. 22. Added value of Klaipėda County at the comparative prices of 2010 (2008-2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

3.8.4 Number of employees and productivity

Despite the population decline, until 2016 the number of employed people in Klaipėda remained stable. But due to the aging of the population this figure will gradually decrease and in 2030 should reach only about 130,000.

It is estimated that the added value per employee will be steadily increasing and over the next 13 years productivity will rise by as many as 60%. Even with such strong rise, productivity will still remain half that of the advanced countries of the Baltic Sea basin. Faster growth in productivity is unlikely without substantial economic transformation and talent attraction.

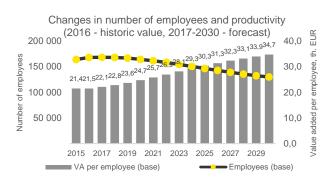


Fig. 23. Number of employees and productivity in Klaipėda County (2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

4Vision and directions

Klaipėda 2030 - world-class city of blue economy and fast solutions: the best place to live, work, rest and to invest in the Baltic region.

This vision is a binding promise to the population, businesses, investors and tourists in Klaipėda so that by strengthening our maritime identity, we will be aiming for a high standard of living and sustainable, knowledge-based economic growth.

In order to make this vision to become reality, the 2030 economic breakthrough strategy of Klaipėda provided in this document will be implemented. The strategy focuses on four areas of economic growth and three priority areas, in which we must invest and create the conditions for economic growth. In order to achieve blue growth:

- We will use the sea and the coastline sustainably. By 2030:
- A modern, environmentally friendly transport-logistics-industrial complex will be developed in Klaipėda to processes at least 15% of the cargo of the eastern shore of the Baltic Sea. A mixed-use offshore deep-water port will be built in Melnragė. It will satisfy both the needs of the port and the city. Areas in the southern part of the city will be formed and developed so that this part of the city would create added value.
- The LNG cluster will be expanded and will help Klaipėda become the LNG technology and LNG distribution centre in the Baltic region. The cluster will develop and commercialise clean LNG technologies.
- In the recreational areas of Klaipėda Smiltynė and Giruliai exclusive recreation with surrounding sea views and wellness centres will be offered. Giruliai will offer geothermal water SPA procedures. An additional ferry line will connect Smiltynė and Klaipėda. Small ports will be developed in the River Danė, the Curonian Lagoon and Smiltynė. The southern coast of the lagoon in Klaipėda will be tidied up and the Wilhelm Canal will be used for recreational purposes.
- The best sports and active tourism infrastructure will be developed in Klaipėda - the best bicycle path and bicycle sharing infrastructure, skateboarding sites, surfing and other active water sports infrastructure.
- 2) We will build and introduce bio- and clean technology solutions. By 2030:
- A new bioeconomy cluster will be established and will connect the region's chemical and wood-processing industries and other enterprises in the field of bioeconomy, and education institutions in

- Klaipėda and in other locations. Bioproducts with little negative environmental impact will be produced and waste management and recycling technologies will be created and applied.
- Research institutions in Klaipėda will actively participate in the Baltic Sea marine blue technology research programmes. These technologies will be successfully adapted for developing, together with businesses, the region's aquaculture.
- Klaipėda will be a leading Lithuanian region in the use and production of renewable energy, particularly in developing offshore production, production using ground resources and biomass.
- 3) We will become an Industry 4.0 competence centre. By 2030:
- In cooperation with the world leading enterprises, a centre of excellence for the development of automation solutions will be established in Klaipėda. Highly competent SMEs in Klaipėda will offer automation solutions that can be adapted for use in the industrial, logistics and transport sectors.
- Producers of high added value electric car components, autonomous systems, robots and robotics-related devices, plastic and clean chemical products will be based in Klaipėda FEZ and the industrial area in the southern part of the city. Klaipėda will develop industry related to the use of LNG technology the first LNG powered locomotive will be produced in Lithuania.
- 4) We will provide digital creative and professional services. By 2030:
- Dozens of Scandinavian, German, etc. logistics and industrial companies, service centres for business functions, in particular oriented to engineering, technology, and IT, will operate in Klaipėda.
- Favourable conditions for the development of creative industries will be provided in the city coworking premises will be opened for young artists, designers and programmers.
- Klaipėda will be known for particularly strong application of creative industries for industrial use; digital creative solutions will be offered to local and foreign industrial customers.
- Business tourism will be well developed in Klaipėda, international thematic events will be organised. The city will become known as the summer office for local and foreign business representatives wishing to combine work and active, healthy leisure.

To ensure development of blue economy areas the city

will invest money, time and efforts in horizontal priorities:

- In order to ensure favourable conditions for business, investors and talent,¹ the city will become the centre for quick and effective solutions:
- It will re-orient its public administration to provide excellent services and quick decisions aimed at solving the issues faced by citizens, investors and tourists.
- A multi-functional economic development agency will operate in Klaipėda that will be the best in the region in attracting investors and helping companies in Klaipėda to boost entrepreneurship and maturity of operations and to export products and services.
- An effective business incubator and accelerator oriented to businesses in priority growth areas will operate in the city.
- The new talent attraction and integration centre will ensure information provision to targeted talent and will help attract residents of other regions of Lithuania, Lithuanian emigrants and highly qualified immigrants from Eastern Europe and other regions to Klaipėda.
- 2) In order to have an innovative education and science system that would meet the needs of tomorrow's economy:
- All areas of the education system in Klaipėda will be transformed to build a competitive, international system meeting the needs of tomorrow's economy and investors.
- Effective retraining and skill acquisition platform will be developed.
- The Marine Valley and other innovation and business valleys will be developed. The valleys will have the necessary equipment and "hard" infrastructure to attract targeted local, regional and international experts. The valleys will play the role of technology transfer; a platform for experimentation that will help to commercialise innovation will operate.
- 3) In order for the city to become an attractive, engaging and accessible regional hub:
- An ambitious urban development programme will be implemented which will incorporate the city's identity, and social, environmental and economic goals. The city's Old Town will be revived, a mega

- object of an exceptional attraction (e.g. a congresses and concert hall or a museum centre) will be built in the vicinity of the Curonian Lagoon, and a city tram line and a third ferry line connecting the southern part of Klaipėda and Smiltynė will be opened.
- Good accessibility to the city will be ensured by attracting international flights from targeted countries (Germany, Sweden, etc.) to Palanga Airport and accessibility to the airport by public transport and high-quality rail connections with Vilnius and Belarus will be increased. Urban infrastructure (southern bypass, transit streets connecting industrial and port areas) will be developed and transport congestion in the city will be resolved.

For the purposes of defining the economic development ambition, economic modelling of Klaipėda region was carried out and thematic advisory sessions with the representatives from Klaipėda were organized. In order to assess the success of the economic breakthrough the following three economic and demographic indicators were identified:

- At least 5.5% average annual GDP growth in Klaipėda region;
- At least 5.0% average annual salary growth in the city of Klaipėda;
- At least 2.0% average annual increase in the population in the city of Klaipėda.

Once these ambitious objectives are achieved, by 2030 economy in Klaipėda region would grow twofold, the employees in Klaipėda would earn on average EUR 1,500 (gross) and the population of the city would increase to over 190,000. The pursuit of these objectives will require fundamental economic and social changes. Up to now, economy in Klaipėda region has grown only by 3%² annually and about 2,000 residents were lost each year³. The projected ambitious growth is possible only by orienting to the international markets.

The next page contains a summary of the economic development strategy of Klaipėda (Fig. 24.). Subsequently, the top-level aims were aligned with the detailed economic ambition indicators (Fig. 25.).

¹Talents means people who can contribute to the welfare development of the area. Talents can be both highly skilled leaders in a particular area of competence and simply qualified labour force.

²The added value produced in Klaipėda city municipal area in 2011-2015, based on production prices, grew by 6.97% annually. The study

does not include a certain portion of enterprises and agencies, therefore the GDP growth in the county is a more preferable indicator. In 2011-2015, the annual GDP growth in Klaipėda County was about 3%. Source: Statistics Lithuania.

³The population of Klaipėda city municipal area in 2012-2016 decreased from 160,100 to 154,300. Source: Statistics Lithuania.

4.1 Economic development strategy for Klaipėda

Vision

Klaipėda 2030:

World-class blue economy city offering rapid solutions

Growth areas

Horizontal priorities

Strategic directions

Marine economy



- Integrated portlogistics-industry complex
- LNG technologies and expansion of LNG use
- Marine and wellness tourism
- Active tourism

Bioeconomy



- Production of innovative bioproducts
- Generation and use of renewable energy
- Biomass and waste processing
- Development of biotechnologies, aquaculture

High tech industry economy



- Production of high added value electrical equipment, means of transport
- Automation solutions and their application in logistics, transports and industry

Creative and service economy



- Professional service centres
- Creative industries and digital creation
- Summer office for local and foreign businesses

Favourable conditions for business, investors and talent

- High quality of services, fast and efficient decision making
- Integrated programme for attracting investors and providing services to them
- Developed ecosystem for SME promotion
- Talent attraction and retention programme which ensures critical mass of highly skilled employees

Innovative education and science system which meets the needs of tomorrow's economy

- International higher education institution leading in the region in areas of marine, energy and biotechnology sciences
- General education system which meets the needs of local and international talent
- Developed innovation-oriented education, science and business cooperation ecosystem
- Modern specialist retraining and up-skilling system

Attractive, engaging and accessible regional centre

- Ambitious urban development programme and mega attraction objects
- Optimally balanced international and regional transport links
- High quality and competitive infrastructure
- Active regional and international cooperation

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GDP of Klaipėda County –	Gross averge salary in	Population of
EUR 9 billion	the city of Klaipėda – EUR 1,500	the city of Klaipėda – 190,000
5.5%average annual rate of growth	5.0%average annual rate of growth	2.0%average annual rate of growth

4.2 Economic development indicators of Klaipėda

1	Economic ambition indicator	Current indicator
	Double the region's economy*	EUR 4.2 billion (2016)
	25,000 new jobs	74,000 (2014)
1=	2,000 new companies	5,469 (2017)
	100 new FDI projects	54 (2016)
	EUR 1.5 billion new FDI	EUR 828 million (Q1 2017)
	200% increase in exports originating in Lithuania*	EUR 2.245 billion (2016)
••••	Population increase by 40,000	151,300 (2017)
<u>1</u> 1	Salary increase by EUR 700	EUR 842 (Q1 2017)
	A higher education institution based in Klaipėda rated among the top 500 globally	>1000** (2016)
100	75% of the employees work for innovation*** companies*	60% (2016)
	Stable low (4-6%) unemployment rate	5.4 % (2017)
	400,000 accommodated tourists	208,000 (2016)

Fig. 25. Economic development indicators of Klaipėda. * regional indicators. Prepared by the authors. Sources: Statistics Lithuanian, EY Monitor (FDI projects). ** Source: QS World University Rankings. *** An innovation company means an undertaking which applies innovation - commercial application of new technologies, ideas and methods by offering new or improved products to the market, introducing new (improved) technological production processes (service provision processes).

5Implementation model

5.1 KEDS implementation management model

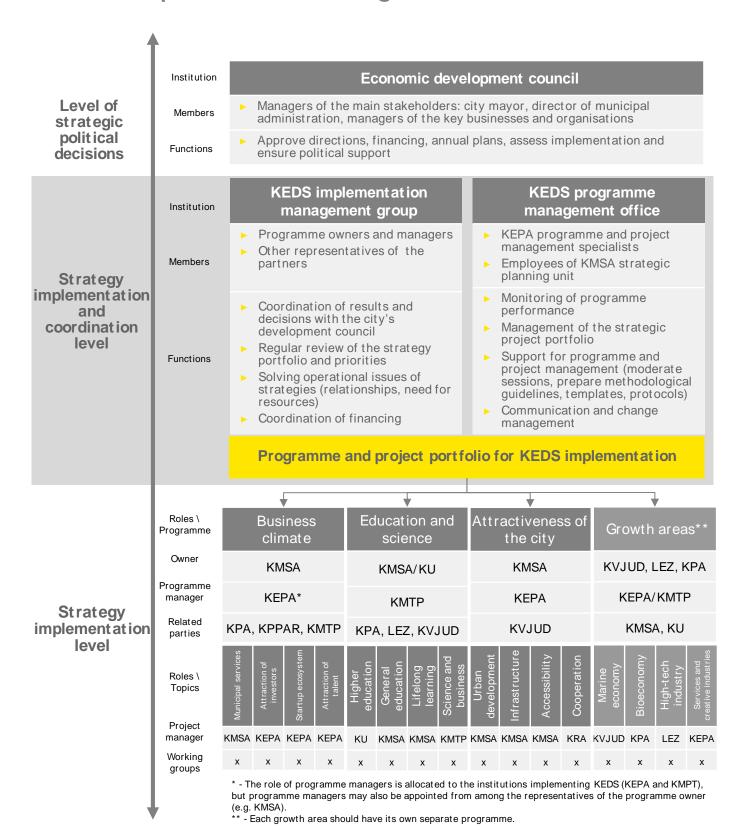


Fig. 26. KEDS implementation management model.

5.1.1 Guidelines for KEDS implementation model

In order to effectively implement KEDS, Klaipėda must develop a permanent stakeholder collaboration model. The stakeholder collaboration structure formed during KEDS preparation should serve as the basis for the platform. Maximum use of the existing institutions /current structures must be made and, if necessary, financial and human potential of these institutions must be strengthened.

The KEDS management and implementation model is defined in accordance with the best practice of strategic management - the project portfolio management methodology. The following are the essential elements of the KEDS implementation model:

- Economic Development Council: made from the managers of the main stakeholders. The main function of the council is to reconcile and adopt the essential strategic decisions regarding urban development trends and to form strategic tasks.
- rom the representatives delegated by the stakeholders and programme and project managers. The main function of the group is to address operational issues of the project implementation and, if necessary, to coordinate financing issues and decision-making.
- KEDS Programme Management Office: made from programme and project management professionals. lt is necessary to involve professionals with strong skills in managing change, stakeholders and projects. The office will primarily empower members of the Implementation Management Group by helping to moderate sessions, providing methodological assistance, project and change management competences and resources. In addition, the office will be responsible for monitoring of the strategy implementation performance, regular collection of indicators from partners, preparation of reports, communication and risk management.
- Thematic programme and project working groups: made from experts in certain areas. These working groups will be responsible for the implementation of projects.
- **KEDS implementation programme and project portfolio:** includes programmes and their strategic projects, on the importance and implementation of which the stakeholders have agreed. The principles for managing the programme and project portfolio management are set out in Annex 7.6.

5.1.2 Guidelines for KEDS financing model

It is envisaged that KEDS will be financed on the basis

of the semi-centralised model (alternative models are provided in Annex 7.5). The project partners will develop some measures which are important for the common economic well-being of the city (e.g. development and strengthening of KEPA activities) together. Most of the measures will be funded on the basis of a decentralised model, where funding is provided for specific measures and only by certain partners directly related to the project.

In order to formalise relations and ensure preconditions for successful collaboration. consideration shall be given to establishing an association. The association could also be used as a mechanism to finance approved initiatives of common interest, and to carry out procurement and other activities necessary for smooth implementation process.

All available financial resources must be used for the implementation of the strategy. It is also important to include private enterprises on the basis of the public-private partnerships (PPP).

Source type	Possible source of funding/funding programme
EU, regional and programme funds	 EU fund investment (CPVA) Horizon 2020 Interreg programme Bilateral programmes (LT and Norway, Switzerland) Baltic region (e.g. Nordplus)
National funds	· National programmes (budget funds, Eureka, Eurostars)
Municipal funds	 Municipal budget (grants, collected taxes)
Funds of institutions	· Own funds
Funds of private businesses	· Own funds (through PPP funding)
Municipal borrowed and other funds	 Borrowing through a variety of instruments (e.g. city bonds). Privatisation of municipal property

Table 1. KEDS sources of financing.

5.2 Priority measures for KEDS implementation

A detailed action plan has been prepared for successful implementation of KEDS. The figure below shows the essential measures which will help attain the ambitions of Klaipėda. Different colours of the measures indicate different strategic directions and the place of the measure in the diagram indicates its implementation period. These and other measures of the action plan are specified in detail in Section 6Klaida! Nerastas nuorodos šaltinis..

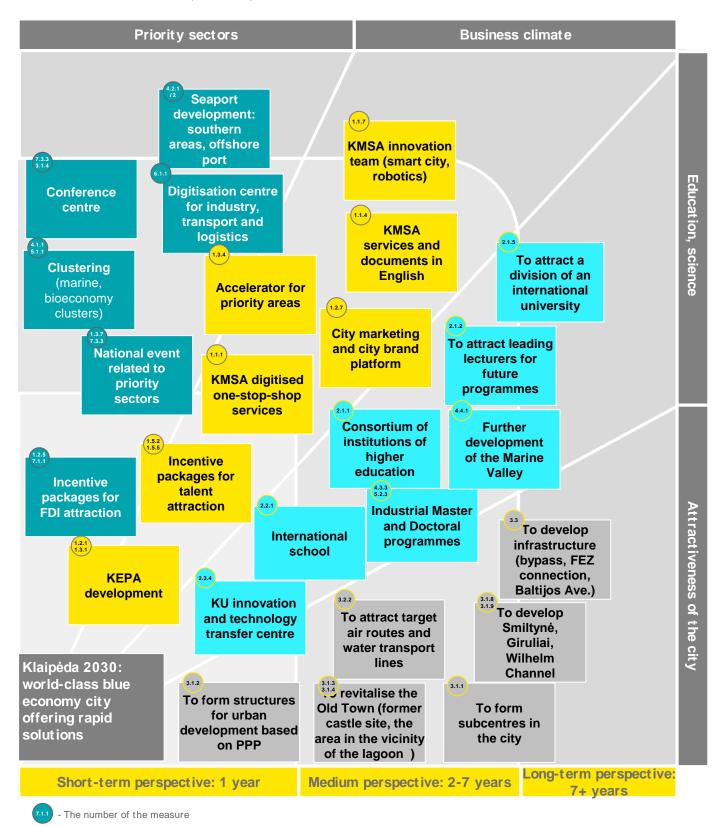


Fig. 27. KEDS plan - proposed priority measures.

6Action plan

7.1.

7.2.

7.3.

To attract professional service centres

To increase the use of creative industries in manufacturing

To develop a mechanism to promote business and event tourism

Each	strategic direction has its own aim, objectives and measures.
1.	To create favourable conditions for business, investors and talent
1.1.	To provide public services related to migration, construction and service provision to businesses and investors in a quality and expeditious manner
1.2.	To develop an integrated programme for attracting investors and providing services to them
1.3.	To develop a friendly ecosystem for small businesses
1.4.	To increase the capacities of Klaipėda to export and to integrate into the international value chains
1.5.	To create conditions for attracting and retaining talent
2.	To develop an innovative education and science system that would meet the needs of tomorrow's economy
2.1.	To increase the competitiveness of institutions of higher education in Klaipėda by focusing on the future needs of the economy and priority areas of biotechnology, maritime and energy sectors To adapt the pre-school and general education system to the needs of the local population and newly
2.2.	arrived residents
2.3.	To create an innovation-oriented education, science and business cooperation ecosystem
2.4.	To develop a modern specialist retraining and up-skilling system
3.	To become an attractive, engaging and accessible regional centre
3.1.	To implement an ambitious urban development programme
3.2.	To achieve optimal balance between international and regional transport links
3.3.	To develop high-quality and competitive infrastructure
3.4.	To increase regional and international cooperation
4.	To use marine environment sustainably
4.1.	To develop cross-sectoral cooperation of the companies in the marine sector
4.2.	To expand Klaipėda seaport ensuring compatibility with the interests of the inhabitants and to use expansion for creating added value and attracting investment
4.3.	To develop the use of LNG technologies
4.4.	To develop R&D activities in the field of marine science and the necessary infrastructure
4.5.	To develop marine tourism with wellness and active tourism elements
5.	To create bio- and clean technologies
5.1.	To develop cross-sectoral cooperation of bioeconomy companies and their integration into the international markets
5.2.	To develop R&D activities in bioeconomy
5.3.	To promote development of new bioproducts and establishment of bio-based startups
5.4.	To use the energy potential of Klaipėda region
6.	To become a high-tech industry centre of excellence
6.1.	To create conditions for developing high added value products
7.	To develop digital creative and professional services

6.1 Objective 1 - to create favourable conditions for business, investors and talent

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.1.	To provide public services related to migration, construction and service provision to businesses and investors in a quality and expeditious manner	- Assessment of satisfaction with the services provided in the prioritised areas by KMSA (%)	2018-2030	EUR 1-10 million	KMSA	KEPA, KPA, KPPAR, KVJUD, FEZ
1.1.1.	To optimize service provision in prioritised areas and to improve quality by reducing administrative burden for businesses and population, providing one-stop-shop services, reducing service provision time, introducing advanced management methods (e.g. LEAN), automating processes and moving provision of services online.	 Number of services, provision processes of which have been simplified and curtailed (quantity [Qty]) Number of implemented level 3-4 electronic services (Qty) 	2018-2020	EUR 0.3-1 million	KMSA	KMSA
1.1.2.	To define the procedure for providing services expeditiously (solving prioritised issues), which would allow to provide services in a shorter time than usual and to adopt decisions with respect to prioritised projects and initiatives.	- Adopted procedure for taking decisions expeditiously by KMSA when providing public services (Qty)	2018-2019	<eur 50,000<="" td=""><td>KMSA</td><td>VL, KPA, KVJUD, KPPAR</td></eur>	KMSA	VL, KPA, KVJUD, KPPAR
1.1.3.	To identify, assess and formalise cooperation instruments and channels between municipal authorities, businesses, business associations and other relevant bodies. Based on the cooperation plan, to be proactive in notifying businesses and related organisations about relevant new developments.	 A plan for notifying about the anticipated changes has been adopted and agreed with business partners (Qty) Number of conducted targeted surveys (Qty) Number of organised working sessions (Qty) 	2018	<eur 50,000<="" td=""><td>KMSA</td><td>KPA, KVJUD, KPPAR, FEZ</td></eur>	KMSA	KPA, KVJUD, KPPAR, FEZ

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.1.	To provide public services related to migration, construction and service provision to businesses and investors in a quality and expeditious manner	- Assessment of satisfaction with the services provided in the prioritised areas by KMSA (%)	2018-2030	EUR 1-10 million	KMSA	KEPA, KPA, KPPAR, KVJUD, FEZ
1.1.4.	To provide conditions for investors and talents to access the relevant public services and documents in English. To prepare bilingual document forms, to provide services and to accept documents completed in English.	 Portion of public services available in the English language (%) Number of documents in English accepted by municipality (Qty) 	2018-2020 EUR 50,000- 300,000		KMSA	KMSA
1.1.5.	To implement the performance monitoring system based on measuring indicators of processes, and to link the system to the employee assessment and motivation system.	- Implemented performance monitoring system (Qty)	2018-2019	EUR 50,000- 300,000	KMSA	
1.1.6.	To improve the open data platform in Klaipėda ensuring a convenient user interface and compliance with the open data provision standards.	 Number of open data sets at the municipality or companies managed by the municipality Number of hackathons organised on the issue of open data use (Qty) 	2018-2030	EUR 50,000- 300,000	KMSA	IVPK, KEPA
1.1.7.	To establish a municipal team of innovativeness which would be responsible for improvements in the municipality innovation development.	- Implemented pilot innovative service solutions (Qty)	2020- 2030	EUR 50,000- 300,000	KMSA	VL, KMSA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.2.	To develop an integrated programme for attracting investors and providing services to them	 Investment in tangible fixed assets (EUR) FDI (EUR) Attracted FDI projects (Qty) New jobs created by FDI projects (Qty) Results of the survey of entrepreneurs assessing investment climate (score) 	2018-2030	EUR 1-10 million	KEPA	IL, KMSA, FEZ
1.2.1.	To develop KEPA into a multifunctional service centre for investors, which will provide one-stop-shop services to investors covering the entire investment cycle. Services: presentation of the location (information structuring and dissemination, direct participation during investor visit), support for the implementation of investment projects (permits, coordination with other institutions, search for employees with the required competences), regular contacts (opinion surveys, direct contacts, search for partner).	 The map of services covering the entire investment cycle (Qty) Number of KEPA employees who work in the area of attracting investments (Qty) KEPA individual consultancy sessions to foreign entrepreneurs and investors (Qty) 	2018-2030	EUR 1-10 million	KMSA	IL, KEPA, FEZ
1.2.2.	To identify, assess and formalise cooperation instruments and channels with Invest Lithuania (IL) and regional institutions involved in attracting investment in order to adopt their best practices and to avoid duplication of services.	 A cooperation model with IL, which defines the distribution of functions and responsibilities across the entire investment attraction cycle (Qty) A signed cooperation agreement with IL (Qty) 	2018-2030	EUR 1-10 million	KEPA	IL, GO Vilnius, Kaunas IN
1.2.3.	To carry out the analysis of the value chain of the prioritised growth areas and to fill the gaps in the value chain. The analysis would help determine the existing problems and deficiencies in the value chain, which at later date could be rectified by attracting target companies.	 Value chain analysis for the prioritised growth areas and action plans for filling the identified gaps (Qty) Implemented measures specified in action plans for the rectification of deficiencies in the value chain (Qty) 	2018	< EUR 50,000	KEPA	IL, FEZ, KPA, KVJUD

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.2.	To develop an integrated programme for attracting investors and providing services to them	 Investment in tangible fixed assets (EUR) FDI (EUR) Attracted FDI projects (Qty) New jobs created by FDI projects (Qty) Results of the survey of entrepreneurs assessing investment climate (score) 	2018-2030	EUR 1-10 million	KEPA	IL, KMSA, FEZ
1.2.4.	Together with Invest Lithuania, to create a system for identifying the targeted foreign and Lithuanian companies, which could promote development of prioritised growth areas, and for maintaining relationships with them.	- Main companies identified by targeted areas (Qty)	2018-2019	EUR 50,000- 300,000	КЕРА	IL, FEZ, KPA, KVJUD
1.2.5.	To create investment incentive packages tailored to the needs of the investing company. The packages may include the development of the required infrastructure, financial subsidies and various other means.	- Number of incentive packages (Qty)	2018-2019	< EUR 50,000 Estimated cost of a process, but the volume of motivational financial packages	KEPA	IL, KMSA, FEZ, KVJUD, KPA, LJKKA, KPPAR
1.2.6.	To structure and disseminate information via the appropriate channels about the investment environment in the city and investment projects. The information would include facts about the existing ecosystems, competences and labour force, services to investors and incentive packages.	 Created database for investment objects (Qty) Number of visits at InvestInKlaipėda.com (Qty) Number of events where investment opportunities in Klaipėda were presented (Qty) Number of organised visits of business delegations (Qty) 	2018-2030	< EUR 50,000	KEPA	IL, KMSA, FEZ, KTMP
1.2.7.	To establish a city brand platform responsible for the creation of a city brand and the promotional material about the city.	 Created city marketing platform (Qty) Created marketing material for the city and city brand (Qty) 	2018-2030	EUR 0.3-1 million	КЕРА	KMSA, KTIC

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.3.	To develop a friendly ecosystem for small businesses ⁴	- Number of Economic Entities (Qty)	2018-2030	EUR 1-10 million	KEPA	VL, KPPAR, KMTP
1.3.1.	To develop KEPA into a multifunctional service centre for business. KEPA should become a full partner of the municipality, businesses and investors, it should coordinate the areas of entrepreneurship, SME competitiveness and promotion of integration into the international value chains.	 A map of the services for starting and developing business (Qty) Number of KEPA employees who work in the area of promoting entrepreneurship and business skills (Qty) 	2018-2030	EUR 1-10 million	KMSA	VL, KEPA, KPPAR, KMTP
1.3.2.	To identify, assess and formalise cooperation instruments and channels between KEPA, local government, businesses and other relevant bodies. Based on the cooperation plan, to prepare periodical, coordinated e-blogs, to carry out regular sectoral surveys, to organise thematic working sessions and other forms of cooperation.	(Qty) - Number of questionnaires (Qty) - Number of e-newsletters (Qty)	2018-2019 (initial activities by2019, subsequently continuous operations)	< EUR 50,000	KEPA	KMSA, KPA, KVJUD, KPPAR, KMTP
1.3.3.	To assess and develop the capacities of the existing business incubators in helping the startups in priority areas to grow, to create the required spaces and "soft" infrastructure. The "soft" infrastructure should include organisation of collaboration activities for residents and provision of targeted information about events.	- Incubated startups (Qty) - Incubated startups in priority areas (Qty)	2018-2019	EUR 0.3-1 million	KEPA	KMTP, KU
1.3.4.	To set up a business development accelerator a structured programme spanning over several months during which the startups selected with the help of the representatives of the leading areas of Klaipėda would be given a specific timeframe to realise the ideas and products.	- Number of accelerated startups (Qty)	2019-2030 2019 first accelerator	EUR 0.3-1 million	KEPA	KPA, FEZ, KVJUD, KMTP, KU

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 $^{^{\}rm 4}\,{\rm Small}$ businesses include micro and small enterprises, including startups.

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.3.	To develop a friendly ecosystem for small businesses ⁴	- Number of Economic Entities (Qty)	2018-2030	EUR 1-10 million	KEPA	VL, KPPAR, KMTP
1.3.5.	To support conversion of the premises suitable for co-working and opening of the premises for co-working in the locations attractive to talents by partly financing the costs of setting up such spaces, transferring the spaces managed by the municipality.	 The amount of co-working premises (Qty) Occupancy of co-working premises (%) Number of businesses operating in the co-working premises (Qty) 	2018-2030	EUR 0.3-1 million	KMSA	KEPA, KMTP
1.3.6.	To coordinate and disseminate information via the appropriate channels about entrepreneurship promotion events and programmes.		2018-2030	< EUR 50,000	КЕРА	KMTP, KPPAR
1.3.7.	To organise niche international mega- events on the issues of priority areas and entrepreneurship promotion.	- Organised thematic conferences with more than 500 participants (Qty)	2019-2030	EUR 0.3-1 million	KEPA	KMTP, KMSA, KPA
1.3.8.	To organise a cycle of events for entrepreneurship promotion, which would include the issues of setting up and developing a business (from idea to sales).	- Prepared plan of events to promote entrepreneurship, including the concept of events (Qty)	2019-2030 (2019 first cycle)	EUR 0.3-1 million	KEPA	KMTP, VL, UKMIN, MITA, KMTP
1.3.9.	To develop a cooperation mechanism between the municipality and startups.	- Established KMSA "needs bank", problems which could be solved with the contribution of startups (Qty)	2018-2030	< EUR 50,000	KEPA	KMSA
1.3.10.	To develop a financing mechanism for startups	 Attracted funds for startups in Klaipėda region (EUR) Established fund for financing startups (Qty) 	2018-2030	EUR 1-10 million	КЕРА	KMSA, KU
1.3.11.	To prepare and disseminate information via the appropriate channels about financing sources for SMEs (EU, national, municipal support funds, risk capital and other alternative sources of funding), and to provide individual consultancy.	Klaipėda region (EUR)	2018-2030	< EUR 50,000	КЕРА	VL, INVEGA, Risk capital companies

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.4.	To increase the capacities of Klaipėda to export and to integrate into the international value chains	- Lithuanian exports per capita (EUR)	2018-2030	EUR 1-10 million	КЕРА	VL, KPPAR
1.4.1.	To develop a competitiveness centre for enterprises in Klaipėda (operating post- KEPA) aimed at increasing corporate governance maturity in the companies in Klaipėda and their abilities to expand their exports in the current and new markets. Together with VL, to collect centrally and publish information on the target export markets of important companies and clusters in Klaipėda region.	- A map of the of services provided to enterprises in Klaipėda and intended for export expansion (Qty) - Number of KEPA employees who work with the competitiveness centre for enterprises in Klaipėda (Qty) - Disseminated export market sectoral reviews (Qty)	2018-2030	EUR 1-10 million	KEPA	VL, KMTP, Creditinfo/ Centre of Registers, KPPAR
1.4.2.	To identify, assess and formalise cooperation instruments and channels with Enterprise Lithuania (VL) in order to adopt their best practices and to avoid duplication of services.	 Report on cooperation opportunities with VL (Qty) Signed official cooperation agreement with VL (Qty) 	2018	< EUR 50,000	КЕРА	VL
1.4.3.	To prepare a plan for the organisation of export promotion thematic events (conferences, hackathons, seminars, etc.), including the concept of events (topics, audience, frequency of events); organise events as per the plan.	- Number of export events (Qty)	2018-2030	EUR 50,000- 300,000	КЕРА	KMTP, KPPAR
1.4.4.	To increase application of the quality and process standards in the companies; in cooperation with the Lithuanian Standards Body to prepare regularly and publish summaries of the standards relevant in a specific sector, the benefits of the standards to SMEs and the associated success stories, and also additional information sources.	- Number of companies in Klaipėda region which meet the requirements of the standards for the quality and/or processes (Qty)	2018-2030 By 2019 (primary structurisation)	< EUR 50,000	KEPA	LSD, VL, KPPAR

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.5.	To create conditions for attracting and retaining talent	Number of domestic immigrants (Qty)Number of international immigrants (Qty)	2018-2030	EUR 1-10 million	КЕРА	KTIC, KMSA
1.5.1.	To develop KEPA into a multifunctional service centre for attracting, integrating and retaining talent; the centre would be responsible for the marketing of the city in order to attract talent and for coordination of the programmes with national authorities (VL, LSA) and NGO.	 - A map of the services aimed at attracting and integrating highly skilled immigrants (Qty) - Number of KEPA services to attract talent (Qty) - Number of KEPA employees who work in the area of attracting talent (Qty) 	2018-2030	EUR 0.3-1 million	KMSA	VL
1.5.2.	To identify targeted talent groups and regions to which talent-oriented programmes will be directed.	- Prepared report on targeted talent groups and regions (Qty)	2018	< EUR 50,000	KEPA	KU
1.5.3.	To prepare and disseminate information via the appropriate channels aimed at attracting, retaining and integrating talent (high-skill employment, innovative employers and living conditions).	 Prepared packages of information about Klaipėda relevant to talents (Qty) Information relevant to talents integrated into KEPA and national portals (Qty) 	2018-2030	< EUR 50,000	КЕРА	VL, KMSA, KTIC
1.5.4.	To strengthen ties with emigrants from Klaipėda by establishing alumni of the city of Klaipėda, participating in the Global Lithuania and other national initiatives, organising mentoring programmes, and helping emigrants from Klaipėda to find a traineeship placement or a job in Klaipėda.	- Number of the Klaipėda Alumni Network (Qty)	2018-2030	EUR 50,000- 300,000	KEPA	KMSA, LSA, KTIC, GLL

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
1.5.	To create conditions for attracting and retaining talent	Number of domestic immigrants (Qty)Number of international immigrants (Qty)	2018-2030	EUR 1-10 million	КЕРА	KTIC, KMSA
1.5.5.	To develop incentive packages oriented to targeted talents and to determine their content (direct financial support, partial or full coverage of resettlement and living costs in Klaipėda), evaluation criteria for targeted talent (higher education, R&D activities, etc.) and channels and conditions for granting incentives (e.g. after starting a job in R&D at KPA partners' or establishing an innovative startup).	 Number of developed packages for attracting talent (Qty) Number of hospitality packages (premises for creative work, accommodation, special scholarships) for resident artists (Qty) Support provided on the basis of the incentive packages for attracting talent (EUR) 	2018-2020	EUR 0.3-1 million	KEPA	KMSA, KPA, FEZ, KVJUD
1.5.6.	To provide social integration services (soft landing) to foreigners: to help integrate into social life of Klaipėda, find jobs for spouses of talents.	 Assessed KMSA capacities to provide integration services oriented to highly skilled foreigners (Qty) Number of foreigners who benefited from KMSA social integration services (Qty) 	2018-2030	EUR 50,000- 300,000	KMSA	KMSA, FEZ, KVJUD, KPA, KMSPC
1.5.7.	To evaluate the channels and initiatives (seminars, English language courses, etc.) for promoting tolerance and ability of residents in Klaipėda to work with foreigners; to prepare events related to this issue and a marketing organisation plan which would include a concept of events (topics, audience, frequency of events); based on the plan to organise initiatives and events.	 Prepared initiatives plan for the ability of residents of Klaipėda to work with foreigners (Qty) Number of initiatives (Qty) 	2018-2030	EUR 0.3-1 million	KMSA	KTIC, KEPA

6.2 Objective 2 - to develop an innovative education and science system that would meet the needs of tomorrow's economy

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
2.1.	To increase the competitiveness of institutions of higher education and research in Klaipėda (hereinafter - institutions of higher education), their international aspect by focusing on the future needs of the economy and priority areas of biotechnology, maritime and energy sectors.	 International ranking of institutions of higher education in Klaipėda (rating) International ranking of the programmes which reflect the priority areas of economic growth (rating) Total number of students (Qty) 	2018-2030	EUR 1-10 million	KU / Consortium	KMSA, LJAM, KVK, LCC, SMM
2.1.1.	To build and develop a consortium of institutions of higher education with the management and financing mechanism which would involve institutions of higher education, the state, municipality, regional and international businesses.	 A consortium of institutions of higher education formed (Qty) Bylaws and operational documents were prepared and the board was formed (Qty) 	2018-2022	EUR 1-10 million	KMSA	LAJM, KVK, KMSA, KU, SMM
2.1.2.	Strengthen targeted study areas using targeted funding, creating new programmes and/or joint programmes with foreign institutions of higher education and attracting highly qualified lecturers.	 Number of students in the programmes which correspond to the priority areas of economic growth (Qty) Number of programmes that correspond to the priority areas of economic growth (Qty) Number of highly qualified lecturers from abroad who teach in the programmes that correspond to the priority areas of economic growth (Qty) 	By 2022 programmes that correspond to the priority areas of economic growth must be prepared. Subsequently, continuous operation	EUR 50,000- 300,000	KU / Consortium	LAJM, KVK, KMSA, SMM

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
2.1.	To increase the competitiveness of institutions of higher education and research in Klaipėda (hereinafter - institutions of higher education), their international aspect by focusing on the future needs of the economy and priority areas of biotechnology, maritime and energy sectors.	 International ranking of institutions of higher education in Klaipėda (rating) International ranking of the programmes which reflect the priority areas of economic growth (rating) Total number of students (Qty) 	2018-2030	EUR 1-10 million	KU / Consortium	KMSA, LJAM, KVK, LCC, SMM
2.1.3.	To provide conditions for horizontal and vertical integrity and continuity of higher education studies.	 Number of study programmes according to the model (3+2+4) (Qty) Student mobility when continuing studies at different institutions of higher education (Qty) Number of programmes which were eliminated to avoid duplication (Qty) 	2018-2220	< EUR 50,000	KU / Consortium	LAJM, KVK, KMSA, SMM
2.1.4.	To increase cooperation between institutions of higher education in Klaipėda and the leading Lithuanian and international institutions of higher education by offering joint study programmes and participating in international cooperation programmes.	- Number of joint study and cooperation programmes (Qty)	2018-2220	< EUR 50,000	KU / Consortium	LAJM, KVK, KMSA, LCC, LT and foreign universities
2.1.5.	To attract a division of an international university with high study quality and orientation to technological sciences to Klaipėda.	- A division of an international university ranked among top 500 universities (Qty)	2018-2220	EUR 1-10 million	KEPA	KMSA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
2.2.	To adapt the pre-school and general education system to the needs of the local population and newly arrived residents	- Number of adapted educational institutions (Qty)	2018-2030	EUR 1-10 million	KMSA	
2.2.1.	To establish international pre-school and general education establishments with the English language of instruction.	 Number of international preschool establishments with the English language of instruction (Qty) Number of international general education schools with the English language of instruction (Qty) Number of pupils and children, educated at the international education establishments (Qty) 	By 2020 to establish an international general education institution. From 2020 - continuous operation	EUR 1-10 million	KMSA	General education institutions in Klaipėda, SMM
2.2.2.	To establish university-affiliated classes and a university-affiliated pre-school establishment, a gymnasium and a progymnasium where the curriculum would be coordinated with Klaipėda University.	 Number of established university-affiliated schools (Qty) Number of lecturers from Klaipėda University who work at university-affiliated schools (Qty) 	By 2020 to establish a university-affiliated gymnasium. From 2020 - continuous operation	EUR 1-10 million	KU	KMSA, General education institutions in Klaipėda, SMM
2.2.3.	To increase the number of schools which major in Science, Technology, Engineering, Mathematics and Arts (STEAM)	- Number of pupils studying under the STEAM programmes (Qty)	2018-2030	EUR 1-10 million	KMSA	General education institutions in Klaipėda, SMM
2.2.4.	To establish a centre for Science, Technology, Engineering, Mathematics and Arts (STEAM).	- Number of pupils attending the STEAM centre (Qty)	2020 - 2030. By 2022 to establish a gymnasium. From 2020- continuous cooperation	EUR 0.3-1 million	KU	KMSA, General education institutions in Klaipėda, SMM

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
2.3.	To create an innovation-oriented education, science and business cooperation ecosystem	 Total investment in patents and licenses (EUR) Number of projects R&D projects (Qty) Income from research and applications (EUR) 	2018-2030	EUR 0.3-1 million	KU / Consortium	KU, FEZ, KVJUD, KMSA
2.3.1.	To develop the Science and Technology Park in Klaipėda (KMTP) as a centre of innovation, technology and their commercialisation in Klaipėda region; the centre should promote innovation, development of innovative products in the areas relevant to Klaipėda (maritime, bioeconomy, manufacturing and energy).	 Number of KMTP employees (Qty) Number of products commercialised by KMTP (Qty) Income of KMTP from activities related to commercialised products (EUR) 	2018-2030	EUR 0.3-1 million	КМТР	KU, Baltic Valley
2.3.2.	To identify, assess and formalise cooperation instruments and channels with MITA and regional technology parks in order to coordinate MTEP activities at the national level, to adopt best practices and to avoid duplication of services.	 Prepared and signed cooperation agreement with MITA (Qty) Number of meetings, events with MITA and other regional representatives of science parks (Qty) 	2018	< EUR 50,000	КМТР	MITA, KU, KEPA
2.3.3.	To identify and participate actively in targeted national, Baltic Sea basin and EU (e.g. Horizon 2020) R&D programmes.	 A platform actualised by science and business partners for problem issues (Qty) Number of the Baltic Sea basin R&D programmes in which Klaipėda R&D institutions participate (Qty) Funding allocated to R&D institutions in Klaipėda (EUR) 	2018-2030	EUR 50,000- 300,000	KU	KMTP, Baltic Valley, KEPA, KPA
2.3.4.	To establish a KU innovation and technology transfer centre - cooperation between KU and businesses of Klaipėda Region based on the onestop-shop principle.	 KU innovation and technology transfer centre established (Qty) Number of employees at the KU innovation and technology transfer centre (Qty) Number of joint KU and business projects (Qty) 	2018-2030	EUR 0.3-1 million	KU	KMSA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
2.4.	To develop a modern specialist retraining and up-skilling system	- Unemployment rate (%)	2018-2030	EUR 0.3-1 million	KMSA	KEPA, KPA, Vocational schools
2.4.1.	To create pilot apprenticeship or equivalent schemes in the priority sectors, in cooperation with the companies of Klaipėda region. To increase the attractiveness of the apprenticeship programmes.	 Number of apprenticeship programmes in the priority sectors (Qty) Number of graduates from vocational training programmes 	2018-2020	EUR 0.3-1 million	КРА	FEZ, KVJUD, KEPA, Vocational schools
2.4.2.	To initiate an inter-institutional agreement between the establishments (organisations) which offer retraining and up-skilling in the city of Klaipėda regarding training programmes and courses oriented to the needs of the city economy and priority areas of urban development.	- Number of training programmes and courses to develop targeted skills (Qty)	2018-2020	< EUR 50,000	KMSA	Labour exchange, KU - Institute of Continuing Training
2.4.3.	To train educators for city and regional progress	 Number of trained teachers who are employed at the educational institutions (Qty) Establishment of the advanced practice base for teachers (Qty) 	2018-2030	EUR 0.3-1 million	KU	KMSA, KVK
2.4.4.	To create a career development model that would help pupils, students and other target groups of the city to train their competences in order to choose the learning area or profession.	 Created model (Qty) Number of students affected (Qty) Number of businesses affected (Qty) Career fair in Klaipėda (Qty) 	2018-2030	EUR 0.3-1 million	KMSA	KU, LCC, LJAM, KVK, KPA, KVJUD, FEZ

6.3 Objective 3 - to become an attractive, engaging and accessible regional centre

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.1.	To implement an ambitious urban development programme	- Investment allocated/attracted for urban development (EUR)	2018-2030	> EUR 100 million	KMSA	
3.1.1.	To update the city's urban planning document by taking into account the prioritised city development zones and developing a polycentric urban structure. To strengthen the historic centre and sub-centres of the city providing opportunities for the multifunction use of the area.	- Approved master plan (Qty)	2018-2020	< EUR 50,000	KMSA	
3.1.2.	To form effectively functioning real estate development function in the city (define the structure, tools, competences), which would enable to use PPP mechanisms for active development of the urban real estate projects.	- Developed organisational structure (on the basis of KMSA, KEPA or a new organisation), tools and competences required for a proactive search and implementation of PPP projects (Qty) - To initiate urban development projects via PPP (Qty)	2018-2022	EUR 0.3-1 million	KMSA	KEPA, CPVA
3.1.3.	To develop the former site of Laivite by building an object of exceptional architecture. Potential use of the object: consolidation and relocation of KMSA administration, KVJUD relocation, cultural objects.	- Investment allocated/attracted for the development of the former site of Laivite (EUR)	2018-2024	EUR 10-100 million	KMSA	KEPA, KVJUD
3.1.4.	To develop the former castle site	- Investment allocated/attracted for the development of the former castle site (EUR)	2018-2024	EUR 10-100 million	KMSA	KEPA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.1.	To implement an ambitious urban development programme	- Investment allocated/attracted for urban development (EUR)	2018-2030	> EUR 100 million	KMSA	
3.1.5.	To intensify the linear centre of the city along Taikos Avenue axis by forming areas attractive for commerce and service centres.	- Employees who work in the companies located on Taikos Avenue (Qty)	2018-2030	EUR 0.3-1 million	KMSA	
3.1.6.	To promote relocation of industrial companies from the central part of the city, conversion of the sites for residential, leisure and commercial purpose. Industrial sites are concentrated in FEZ and the southern part of the city.	 Industries which have relocated from the historic city centre (Qty) Number of objects (space) adapted for cultural, artistic and leisure needs (Qty) 	2018-2024	EUR 1-10 million	KMSA	
3.1.7.	In the centre of the city, in the vicinity of the River Danė to develop mixed residential and commercial zones.	 Number of new real estate projects in the vicinity of the River Danė (Qty) Number of tidied (developed) spaces⁵ located near the River Danė (Qty) Constructed Bastion Bridge (Qty) Investment allocated/attracted for the development of the site in the vicinity of the River Danė (EUR) 	2018-2030	EUR 1-10 million	KMSA	
3.1.8.	To develop Smiltynė as a resort site, to develop the infrastructure required for acquiring the status of a resort, to create objects of attraction, to increase accessibility of Smiltynė	 Smiltynė recognised as a resort site (Qty) Number of people travelling to Smiltynė (Qty) Number of recreation centres in Smiltynė (Qty) Investment allocated/attracted for the development of Smiltynė (EUR) Ferry lines and other transport 	2018-2030	EUR 10-100 million	KMSA	KTIC, AB Smilynės Perkėla, Directorate of the Curonian Spit National Park

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 $^{^{\}rm 5}$ Tidied (developed) spaces include bicycle paths, quays, parks, playgrounds, etc.

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.1.	To implement an ambitious urban development programme	- Investment allocated/attracted for urban development (EUR)	2018-2030	> EUR 100 million	KMSA	
		connections to Smiltynė (Qty) - Adaptation of the spaces beside water bodies and other areas for recreation to cultural and artistic needs (Qty)				
3.1.9.	To develop Giruliai as a resort site, to develop tourist infrastructure and to establish recreation centres (e.g. to build SPA centres which will make use of geothermal water).	- Giruliai recognised as a resort site (Qty) - Number of recreation centres in Giruliai (Qty) - Investment allocated/attracted for the development of Giruliai (EUR) - Adaptation of the spaces beside water bodies and other areas for recreation to cultural and artistic needs (Qty)	2018-2030	EUR 10-100 million	KMSA	KTIC, KEPA
3.1.10.	To build a small and recreational craft marina in the Curonian Lagoon. The use of the recreational potential of the Wilhelm Channel and the area between the channel and the lagoon.	 Completed marina (Qty) Prepared concept of the development of the area (Qty) The Wilhelm Channel connected with the Curonian Lagoon (Qty) Investment allocated/attracted for the development of the area (EUR) Number of PPP projects implemented in the area (Qty) 	2018-2030	EUR 1-10 million	KMSA	KVJUD
3.1.11.	Development of the old market	 Investment allocated/attracted for the development (modernisation) of the old market (EUR) 	2018-2030	1 - EUR 10 million	KMSA	

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.1.	To implement an ambitious urban development programme	- Investment allocated/attracted for urban development (EUR)	2018-2030	> EUR 100 million	KMSA	
3.1.12	To identify and assess the opportunity of building an object of exceptional attraction in the central part of the city, which would be unique within the 500 km radius and would act as a tourist attraction.	- Prepared investment project of the object (Qty)	2018-2030	EUR 50,000- 300,000 Only the price of the preparation of the investment project is estimated	KMSA	KEPA
3.1.13.	To develop programmes for improvement in public spaces and local projects for the revival of urban structures.	- Number of newly formed or updated (humanised) public spaces in the southern and northern part of the city (Qty)	2018-2030	1 - EUR 10 million	KMSA	
3.1.14.	To increase the integrity of urban transport modes by implementing the measures provided for in the sustainable mobility plan of Klaipėda.	- Implemented measures provided for in the sustainable mobility plan of Klaipėda (Qty)	2018-2030	> EUR 100 million	KMSA	

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.2.	To achieve optimal balance between international and regional transport links	 Number of ferry lines (Qty) Number of flight destinations from/to Palanga airport (Qty) 	2018-2030	EUR 1-10 million	KMSA	Municipal Administrations of Klaipėda Region, LG, KVJUD, LOU
3.2.1.	To set target international air and water transport routes, taking into account talent groups and global enterprises in priority sectors whose investments are being expanded or attracted.	- Prepared report on targeted international air and water transport routes (Qty)	2018	< EUR 50,000	KMSA	KU, KEPA
3.2.2.	To attract target international and regional flights to Palanga airport.	 Number of airlines flying from/to Palanga airport (Qty) Number of destinations from/to Palanga airport (Qty) Number of passengers flying from/to Palanga airport (Qty) 	2018-2030	EUR 1-10 million	KMSA	Municipal Administrations of Klaipėda Region, LOU, KEPA
3.2.3.	To attract additional target ferry lines. Prioritised directions - Gdansk (Poland) and Stockholm (Sweden).	Number of ferry passengers (Qty)Number of ferry lines (Qty)	2020-2030	EUR 1-10 million	KMSA	KVJUD, Klaipėda Region Association, CKT
3.2.4.	To increase regional and international accessibility by rail.	 Klaipėda-Vilnius travel time by rail (min) Number of international rail routes accessible from Klaipėda(Qty) 	2020-2030	< EUR 50,000	KMSA	LG, Klaipėda Region Association
3.3.5	To develop a financing mechanism for increasing accessibility to Klaipėda region (attract air and water routes).	- Developed and approved legal package which allows to finance projects that increase accessibility of the region	2018-2030	< EUR 50,000 Only the creation of a financial mechanism is assessed	KMSA	Municipal Administrations of Klaipėda Region, KEPA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.3.	To develop high-quality and competitive infrastructure	*	2018-2030	> EUR 100 million	KMSA	KVJUD, FEZ, LAKD, LG
3.3.1.	To build a southern bypass of a suitable throughput.	 Southern bypass built in Klaipėda (Qty) Built streets (km) 	2018-2024	EUR 10-100 million	KMSA	KVJUD
3.3.2.	To modernise entry to the central transport artery (junctions of Baltijos Avenue)	- Reconstructed junctions (Qty)	2018-2024	EUR 5-20 million	KMSA	
3.3.3.	To build an extension to Statybininkų Avenue starting from Šilutė Road all through the FEZ site and up to Road 141.	- Reconstructed or built streets (km)	2018-2024	EUR 5-20 million	KMSA	FEZ
3.3.4.	To form the main express public transport axis by building a tram route or purchasing other transport alternatives.	- Built tram line (Qty) - Purchased green express buses (Qty)	2018-2030	EUR 10-100 million (Depending on the selected option the budget may vary significantly)	KMSA	

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
3.4.	To increase regional and international cooperation	- Number of international and regional projects (Qty)	2018-2030	EUR 50,000- 300,000	KMSA	Klaipėda Region Association
3.4.1.	To form a cooperation platform for the region of Western Lithuania, which would include Klaipėda, Telšiai, Tauragė and Šiauliai counties and would be consistent with the planned functional region.	- The region of Western Lithuania recognised as a functional region (Qty)	2018-2022	< EUR 50,000	Klaipėda Region Association	KMSA, municipalities of Western Lithuania
3.4.2.	To expand cooperation in Klaipėda County, which contains 7 municipalities, in solving the issues of attractiveness of the entire region.	- Number of joint projects of municipalities in Klaipėda County (Qty)	2018-2030	< EUR 50,000	Klaipėda Region Association	KMSA, municipalities of Klaipėda Region
3.4.3.	To get involved in the target international networks, which unite the cities of the Baltic and wider region, and to participate in working groups and joint projects related to the topics of economic stimulus.	- International strategy projects for the Baltic region in which representatives of Klaipėda participate (Qty) - Associated membership of Klaipėda in the Eurocities network (Qty)	2018-2030	EUR 50,000- 300,000	KMSA	
3.4.4	To get involved in the target national working groups which solve economic development issues important for Klaipėda region (e.g. smart specialisation).	- Number of working groups which employ the representatives of Klaipėda region (Qty)	2018-2030	EUR 50,000- 300,000	KMSA	KEPA

6.4 Objective 4 - to use marine environment sustainably

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
4.1.	To develop cross-sectoral cooperation of the marine sector companies.	- Number of projects of the maritime cluster (Qty)	2018-2030	High	KVJUD	КМТР
4.1.1.	To assess and, if necessary, to form a maritime cluster by including port cargo handling, shipping, shipbuilding, and logistics companies and educational institutions in the cluster and ensuring active cooperation between its members.	 Number of projects by maritime cluster (Qty) An accelerator created together with port companies and oriented to providing solutions to the problems of the port companies (Qty) 	To for the cluster by 2022	EUR 50,000- 300,000	КМТР	KVJUD, LG, LAKD, FEZ, LJKKA, LKA
4.2.	To expand Klaipėda seaport ensuring compatibility with the interests of the inhabitants and to use expansion for creating added value and attracting investment.	- Total cargo at Klaipėda Seaport (tonnes)	2018-2030 (2040)	> EUR 1,000 million	KVJUD	KMSA
4.2.1.	To build a mixed purpose offshore deepwater port near Melnrage in order to satisfy the needs of the port and the city.	 Quantities of cargo handled in the offshore port (tonnes) Investment for the construction and development of commercial and recreational facilities (EUR) 	2020-2040	EUR 600- 1,000 million	KVJUD	KMSA, LJKKA
4.2.2.	To form and develop the southern part of Klaipėda Seaport (near Kiaulės Nugara).	- Quantities of cargo handled in the southern part of the port (tonnes)	2020-2030	EUR 300- 600 million	KVJUD	KMSA, LJKKA
4.2.3.	To dredge Klaipėda Seaport (17 m) ensuring the possibility to accept the maximum draft Baltmax type ships in the Baltic Sea.	- Depth of Klaipėda Seaport (m)	2018-2030	EUR 100-500 million	KVJUD	KMSA, LJKKA

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
4.3.	To develop the use of LNG technologies	 Number of employees in the companies related to LNG technologies (Qty) Revenue of the companies related to LNG technologies (EUR) 	2018-2030	EUR 10-100 million	КМТР	
4.3.1.	To expand the LNG cluster.	The number of members of the cluster (Qty)The number of joint projects of the cluster (Qty)	2018-2030 (continuous operation)	EUR 0.3-1 million	КМТР	KN
4.3.2.	To increase the use of LNG in the Baltic countries.	 Number of companies in Lithuania, which use LNG (Qty). International LNG annual conference in Klaipėda (Qty) 	2018-2030 (continuous operation)	EUR 1-10 million	КМТР	KN
4.3.3.	To establish industrial doctoral programmes relevant for Klaipėda LNG undertakings.	- Number of industrial doctoral programmes (Qty)	2018-2030	EUR 0.3-1 million	KU	KPA, FEZ, KMTP
4.3.4.	To develop LNG storage and distribution infrastructure, bunkering facilities.	Number bunkering facilities operating in Klaipėda region (Qty)LNG bunkering vessels (Qty)	2018-2030 (continuous operation)	EUR 10-100 million	KMTP	KN, KVJUD
4.4.	To develop R&D activities in the field of marine science and the necessary infrastructure.	- Number of R&D projects in the field of marine science (Qty)	2018-2030	EUR 10-100 million	KU	КМТР
4.4.1.	To develop the Marine Valley by creating the required infrastructure, ensuring its public access for researchers, students and businesses.	 Number of institutions which use the infrastructure of the Marine Valley (Qty) Number of commercialised products (Qty) 	2018-2030	EUR 10-100 million	KU	КМТР
4.4.2.	To establish and develop a marine excellence centre.	 Number of services provided by the marine excellence centre (Qty) Number of institutions which use the services of the marine excellence centre (Qty) 	2018-2030 (continuous operations)	EUR 1-10 million	КМТР	KN, KU

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
4.5.	To develop marine tourism with wellness and active tourism elements.	- Number of tourists visiting Klaipėda, (Qty)	2018-2030	EUR 10-100 million	KMSA	KTIC
4.5.1.	To clean the River Dane, to build and develop small ports.	 Number of small ports in the River Danė (Qty) Number of yacht accepted in the River Danė (Qty) 	2018-2030	EUR 1-10 million	KMSA	KTIC
4.5.2.	To open a cruise ship berth in the area of Memel city.	- Number of cruise ships (Qty)	2020-2030	EUR 10-100 million	KMSA	KTIC, KVJUD
4.5.3.	To improve the cycling infrastructure of the seaside EuroVelo route to comply with the EuroVelo requirements	- The length of cycling routes in the seaside area which comply with the EuroVelo requirements (EuroVelo Routes 10 and 13) (km)	2018-2024	EUR 0.3-1 million	KMSA	Klaipėda Region Association
4.5.4.	To include tourist sites in Klaipėda into the regional tourist routes and to use them for positioning in the international context.	- Number of tourist sites in Klaipėda included in the regional tourist routes (Qty)	2018-2020	< EUR 50,000	KMSA	KTIC, KEPA, Klaipėda Region Association

6.5 Objective 5 - to create bio- and clean technologies

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
5.1.	To develop cross-sectoral cooperation of bioeconomy companies and their integration into the international markets.		2018-2030	EUR 0.3-1 million	КРА	КЕРА
5.1.1.	To strengthen and develop the cluster for wood processing and related manufacturing, which would unite wood, timber product and furniture manufacturers, other related businesses and educational institutions.	 Number of participants of the wood processing and related manufacturing cluster (Qty) Increased in export volumes of the wood processing and related manufacturing cluster (% or EUR) 	2018-2030	EUR 50,000- 300,000	КМТР	KEPA, FEZ, LKA, KPA
5.1.2.	To develop international partnerships with Scandinavian and German bioeconomy clusters by identifying the gaps in the international value chains which companies in Klaipėda could fill.	- Number of international partnerships (joint projects) with target clusters/business associations (Qty)	2018-2030	EUR 50,000- 300,000	KEPA	KPA, FEZ, KMTP
5.2.	To develop R&D activities in bioeconomy	- Number of target R&D programmes, in which Klaipėda R&D institutions participate (Qty)	2018-2030	EUR 1-10 million	KU	
5.2.1.	To establish a bioeconomy expertise centre and to ensure its continuous operation which would include establishment of Lithuanian and foreign bioeconomy technologies, participation in international R&D programmes.	- Number of employees of the bioeconomy expertise centre (Qty)	2018-2030	EUR 0.3-1 million	KU	КМТР
5.2.2.	To call for a tender to assess the economic, social and environmental impact of the cascading approach in using biomass and to identify priorities in the cascading approach in using biomass.	- Number of tendered studies (Qty)	2018-2030	EUR 0.3-1 million	KMSA	KU
5.2.3.	To establish industrial doctoral programmes relevant for bio- and clean technology sectors in Klaipėda.	- Number of industrial doctoral programmes (Qty)	2018-2030	EUR 0.3-1 million	KU	KPA, FEZ

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
5.3.	To promote development of new bioproducts and establishment of biobased startups.	 Revenue from commercialised bioproducts (EUR) Number of established/ attracted bioeconomy startups (Qty) 	2018-2030	EUR 1-10 million	KMSA	
5.3.1.	To develop infrastructure for the development of new bioproducts, which would include production of pilot bioproducts, technology research, technological expert consultations.	- Number of new bioproducts developed using the infrastructure (Qty)	2018-2030	EUR 1-10 million	KU	KMTP, Baltic Valley
5.3.2.	To prepare and publish information about the financial support to bioeconomy startups partially financing the setting up of business and development and demonstration of pilot products	- Prepared information for bioeconomy startups (Qty)	2018-2030	< EUR 50,000	KEPA	КМТР
5.3.3.	To increase innovative capacities of companies in product creation and introduction to the market through precommercial procurement (municipal R&D orders) for resolving social objectives.	- Number of municipal pre- commercial procurement calls in the area of bioeconomy (Qty)	2018-2030	EUR 50,000- 300,000	KMSA	КМТР
5.4.	To use the energy potential of Klaipėda region	- Offshore wind energy capacity (MW)	2018-2030	EUR 10-100 million	KMSA	
5.4.1.	To use the Baltic Sea potential to produce energy: wind and wave.	- Generated amount of energy (MW)	2018-2030	EUR 1-10 million	KU	PTPI
5.4.2.	The develop and implement bioenergy solutions in the industries of Klaipėda region in order to reduce the cost of energy and resources and to optimize the generated energy flows, allowing to ensure the sustainable bioeconomy ecosystem.	 A model distribution centre of different sources of energy - solar, wind, wave, geothermal, biomass (Qty) Additional products created from the surplus of alternative energy (Qty) 	2018-2030	EUR 1-10 million	KMTP	KEPA, FEZ, LKA, KPA

6.6 Objective 6 - to become a high-tech industry centre of excellence

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
6.1.	To create conditions for developing high added value products	 Added value per employee in the manufacturing sector (EUR) Number of employees in the manufacturing sector (EUR) 	2018-2030	EUR 10-100 million	FEZ	
6.1.1.	To establish a centre of excellence for automation and digitisation solutions oriented to solutions for industry, transport and logistics.	 Established centre of excellence for automation and digitisation solutions (Qty) Number of services provided by the centre of excellence for automation and digitisation solutions (Qty) 	2018-2030	EUR 1-10 million	KMTP	FEZ, KU, KEPA, KPA
6.1.2.	To promote local enterprises producing electric vehicles through precommercial procurement, renewal of Klaipėda bus fleet.	- Number of electric buses in Klaipėda bus fleet (Qty)	2018-2020	EUR 1-10 million	KMSA	FEZ, KMTP
6.1.3.	To attract producers of LNG powered vehicles (locomotives, trucks, buses).	- Value of parts and vehicles produced in Klaipėda region (EUR)	2018-2024	EUR 50,000- 300,000	FEZ	KEPA, KMTP
6.1.4.	To establish an electric vehicle industry cluster.	- Number of participants of the cluster (Qty)	2018-2024	EUR 50,000- 300,000	Association Visata	KEPA, KPMT, KU, FEZ, Vėjo Projektai
6.1.5.	To develop infrastructure in Klaipėda region adapted to electric vehicles.	- Number of charging stations (Qty)	2018-2030	EUR 10-100 million	KMSA	Gatvių Apšvietimas, ESO
6.1.6.	To develop design and production of innovative products.	- A business angels consortium of Klaipėda Region was established to promote innovative businesses in Klaipėda region (Qty)	2018-2030	EUR 0.3-1 million	KMTP	KEPA, KMSA

6.7 Objective 7 - to develop digital creative and professional services

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
7.1.	To attract professional service centres	- Number of professional service centres operating in the city of Klaipėda (Qty)	2018-2030	EUR 1-10 million	KEPA	KMSA
7.1.1.	To create attractive investment incentive packages for the first professional service centres.	 Investment incentive packages for attraction of professional service centres (Qty) 	2018-2020	EUR 1-10 million	KEPA	KMSA
7.1.2.	Position Klaipėda as an attractive region for small and medium-sized transport, logistics and manufacturing service centres. Target markets: Scandinavian countries, Germany, the USA and the UK.	- Klaipėda positioned as a region attractive for professional services at national level (Qty)	2018-2030	EUR 50,000- 300,000	KEPA	KMSA, IL
7.2.	To increase the use of creative industries (CI) in manufacturing ⁶	 Number of enterprises in creative industry (Qty) Share of added value of creative industries (%) 	2018-2030	EUR 1-10 million	КЕРА	KU
7.2.1.	To carry out a study of the demand of industries and businesses for individual CI sectors, to assess the resources of these CI sectors.	- Develop/updated platform-map of creative industries (Qty)	2018-2030	EUR 50,000- 300,000	КЕРА	FEZ, KVJUD, KPA, LINPRA, KU
7.2.2.	To establish a creative industry programme and an accelerator	- Created joint promotion programme and/or an accelerator (Qty)	2018-2024	EUR 0.3-1 million	КЕРА	KTMP, KMSA
7.2.3.	To establish a CI/IT education centre at the Culture Factory, which would operate 24/7.	 Established CI/IT education centre (Qty) Established work stations in the centre funded by business partners (Qty) 	2018-2024	EUR 0.3-1 million	КЕРА	KMSA
7.2.4.	To identify, assess and implement networking and entrepreneurship initiatives for the creative industry community.	- Number of networking and entrepreneurship events of the creative industry community (Qty)	2018-2030	EUR 0.3-1 million	КЕРА	KMSA

⁶ CI areas relevant for manufacturing: digital media (software, digital and creation, digital services, etc.), applied creation (architecture and design).

No	Objectives and actions	Indicators	Period	Budget	Responsible authority	Related authorities
7.3.	To develop a mechanism to promote business and event tourism	- Number of international events in Klaipėda (Qty)	2020-2030	EUR 10-100 million	KTIC	KMSA, KEPA
7.3.1.	To create a permanent team working in the area of attraction and development of international integrated events.	- Number of employees of KTIC and Public Institution Klaipėdos Šventės working in the area of event attraction (Qty)	2020-2030	EUR 1-10 million	Public Institution Klaipėdos Šventės	KTIC, KMSA, KEPA
7.3.2.	Develop conference tourism infrastructure.	- Attracted funds of private investors for establishing a conference centre of the international level (capacity 3,000-5,000 participants, food catering facilities, rooms for post-plenary meetings, and an exhibition hall) (EUR) Number of conference centres which can accommodate at least 500 participants in one room (Qty)	2020-2030	EUR 10-100 million	KMSA	KEPA, KTIC, Public Institution Klaipėdos Šventės
7.3.3.	To attract an international mega-event oriented to an international audience and to develop it into an event of a broader concept and longer duration.	- Number of mega-events (Qty)	2020-2030	EUR 1-10 million	Public Institution Klaipėdos Šventės	KTIC, KMSA, KEPA
7.3.4	To attract at least 4-star rated hotels.	- Number of at least 4-star rated hotels (Qty)	2020-2030	EUR 50,000- 300,000	КЕРА	KTIC

7Annexes

7.1 Definitions

Abbreviation	Explanation
СКТ	Central Klaipėda Terminal
GLL	Global Lithuanian Leaders
IL	Public institution Invest Lithuania
KEPA	Public Institution Klaipėda Economic Development Agency
KI	Creative Industries
KMSA	Klaipėda City Municipal Administration
KMSPC	Klaipėda City Social Support Centre
KMTP	Public institution Klaipėda Science and Technology Park
KN	AB Klaipėdos Nafta
KPPAR	Klaipėda Chamber of Commerce, Industry and Crafts
KRA	Klaipėda Region Association
KU	Klaipėda University
KVJUD	State Enterprise Klaipėda State Seaport Authority
KVK	Klaipėda State College
LAKD	Lithuanian Road Administration
FEZ	Klaipėda Free Economic Zone
LG	AB Lietuvos Geležinkeliai (Lithuanian Railways)
LJAM	Lithuanian Maritime Academy
LJKKA	Association of Lithuanian Stevedoring Companies
LKA	Lithuanian Association of Clusters
LOU	State Enterprise Lietuvos Oro Uostai (Lithuanian airports)
LSA	Association of Municipalities of Lithuania
LSD	Lithuanian Standards Board, National Standards Body
PTPI	Coastal Research and Planning Institute
SMM	Ministry of Education and Science of the Republic of Lithuania
VL	Public Institution Versli Lietuva (Enterprise Lithuania)

Table 2. Definitions.

7.2 Methodology for economic specialisation of Klaipėda

7.2.1 Importance of specialisation

Correctly selected economic specialisation helps use the city's strengths in pooling resources and efforts into the areas with the greatest potential and avoid competition with other regions in the same areas.

Economic specialisation often indicates the initiatives in horizontal areas (education, investment attraction, urban planning) to be invested in and the coordination instruments to be used. Specialisation and investment in strengthening the specialisation are at the core of a clear vision of the city.

Exceptional conditions must be provided for the identified priority areas, but development of other sectors should not be restricted. The sectors which are less attractive today (e.g. healthcare sector) are part of the sustainable economic development of Klaipėda, except that they are not at the centre of the desired breakthrough.

7.2.2 Evaluation methods

In identifying priority sectors, EY methodology for evaluating sectoral attractiveness was used. The methodology consists of several stages and quantitative and qualitative evaluation criteria are used (seeFig. 28.).

In stage one, the current value of sectors and sectoral potential are assessed using quantified indicators. A complex index is devised for each sector. Additionally, qualitative assessment is carried out as to whether the sectors are sustainable and whether they increase the attractiveness of the city.

Selection of sectors was made on the basis of the EU sectoral classification. This classification does not allow to define such intersectoral economic units as clean technology, which are usually the basis for sectoral clusters. Therefore, in the next stage qualitative assessment of thematic sectors is carried out. It will identify the effect of sectoral synergies with the strengths of Klaipėda and the impact of key trends on these sectors.

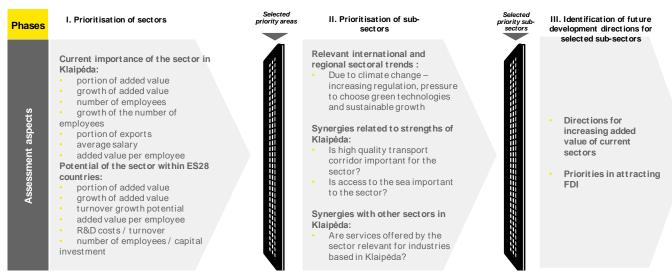


Fig. 28. Stages of evaluation of economic specialisation and evaluation aspects.

7.3 Proposals for urban development of the city of Klaipėda

7.3.1 Urban development intervention zones and directions

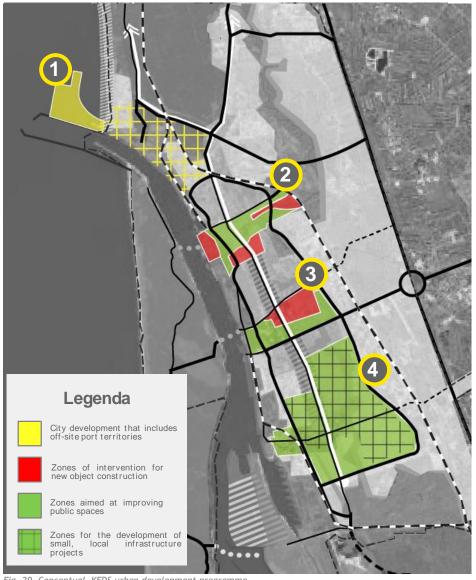
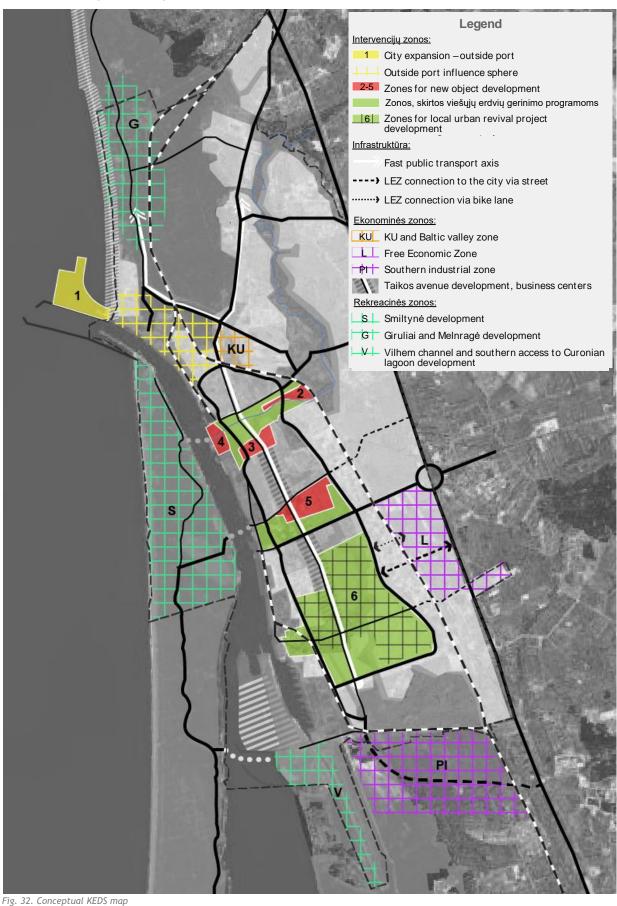


Fig. 29. Conceptual KEDS urban development programme.

Urban development intervention zones and directions Integrated port-city expansion into the sea as one of the largest investment projects in the history of Lithuania: Use of the offshore port and its adaptation to the needs of society Zone 1 - recreational, scientific activities Minimisation of the environmental impact by relocating port activities with least environmental impact to the offshore port Integrated development of Melnragė area Revitalisation of the Old Town, the site of the former castle and the centre: Integrated marketing of the Old Town Conversion of unused premises and industrial buildings Zone 2 Premises for service centres, co-working Attractive homes for professionals, families New municipality building (consolidation of existing facilities) New port administration building Consolidation of cultural objects to an exceptional building Development of a commercial and service zone: Development of business and service centres Zone 3 Development of commercial premises for business Construction of attractive residential buildings Transformation of public spaces Revitalisation of the southern zone: Modernisation of infrastructure required for the inhabitants Zone 4 (schools, kindergartens, etc.) Transformation of public spaces

7.3.2 Conceptual map of KEDS⁷



⁷ Conceptual KEDS map for indicative purposes. The borderlines, layout and level of detail may differ from the real situation and/or planning documents in Klaipėda.

7.4 Development scenarios

7.4.1 Modelling methodology and assumptions

During the preparation of the economic development scenarios for Klaipėda, economic modelling of Klaipėda region was carried out. The model allows to determine the main indicators for achievables and to assess their feasibility and how realistic they are. Modelling also helps to identify the initiatives which have the highest potential.

This analysis was carried out at the level of Klaipėda County and covers the 2015-2030 period. Based on the economic theory and empirical data, the model assesses mathematical relationships between the population, GDP, productivity, sectoral structure, wages and FDI.

The following scenarios are examined in the model:

- Baseline scenario (based on the results of the Oxford Economics econometric forecasting model) reflects the development trajectory of Klaipėda region in the case where neither essential changes nor the breakthrough strategy are implemented.
- Intervention scenario forecasting of the development of Klaipėda region on the basis of the assumption that essential changes will be implemented planned in the breakthrough strategy.

Below are the results and conclusions related to the scenarios. The effect of planned intervention is also assessed.

7.4.2 Baseline scenario

7.4.2.1 Demography

It is forecast that by 2030 the population of Klaipėda County will decrease by 18.8% from 324,600 (2016) to 263,600. The 2030 the population figures will fall from 154,300 (2016) to 126,200.

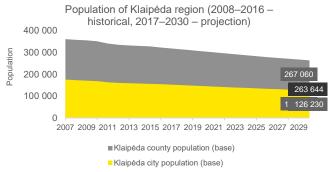


Fig. 30. Population of Klaipėda region (2008-2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

7.4.2.2 Added Value

It is estimated that from 2016 to 2030 the added value created in Klaipėda County will increase by 27.7% and will reach EUR 4,489 billion. It is worth noting that the growth in value added will markedly slow down starting from 2024. If there is no major breakthrough in Klaipėda, the growth cannot be expected to be higher than in other advanced economies (about 2-3% per year). This rate is not sufficient to compensate the loss of the population.

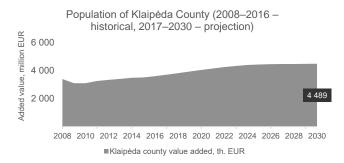


Fig. 31. Added value of Klaipėda County at the comparative prices of 2010 (2008-2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

7.4.2.3 Number of employees and productivity

Despite the population decline, until 2016 the number of employed people in Klaipėda remained stable. But due to the aging of the population this figure will gradually decrease and in 2030 should reach only about 130,000.

It is estimated that the added value per employee will be steadily increasing and over the next 13 years productivity will rise by as many as 60%. Even with such strong rise, productivity will still remain half that of the advanced countries of the Baltic Sea basin. Faster growth in productivity is unlikely without substantial economic transformation and talent attraction.

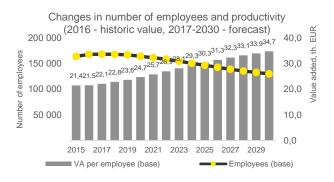


Fig. 32. Number of employees and productivity in Klaipėda County (2016 - historical value, 2017-2030 - projection). Source: Oxford Economics

7.4.3 Intervention scenario

7.4.3.1 Interventions

The modelled interventions are closely related with economic development measures for Klaipėda. The following interventions were assessed:

- Attraction of target FDI would allow to attract additional FDI, which will create well-paid jobs.
- Improvement of business conditions and promotion of ecosystems of target SMEs/startups are equally essential.
- Initiatives geared toward increasing the attractiveness of the city and attracting talent will help local businesses attract the necessary competences, and encourage reinvested and expansion of existing sectors.
- Promotion of innovation, education-sciencebusiness cooperation will help the existing sectors create more value.

7.4.3.2 Demography

Ambitious population growth is hardly likely without attraction of highly qualified foreign employees and systematic work aimed at retaining the existing population and attracting domestic emigrants.

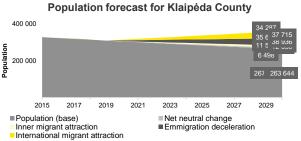


Fig. 33. Population forecast in Klaipėda County, 2017-2030 Calculated by authors and Oxford Economics. Source: Oxford Economics

7.4.3.3 Added Value

Reorientation toward high added value areas requires an increase in highly-qualified personnel and an increase of the existing sectoral maturity, which can

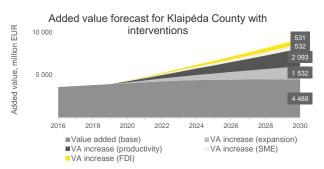


Fig. 35. Added value of Klaipėda County at the comparative prices of 2010, 2017-2030 projection). Calculated by authors and Oxford Economics. Source: Oxford Economics

be achieved by attracting FDI, cooperating with advanced SMEs, and other means.

7.4.3.4 Number of employees and productivity

Productivity increase is mandatory so that businesses would be able to pay higher wages. A realistic wage ambition is directly linked to the level of productivity.

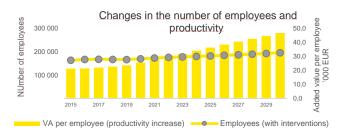


Fig. 34 Forecast for the number of employees and productivity in Klaipėda County 2017-2030. Calculated by authors and Oxford Economics. Source: Oxford Economics

7.4.3.5 Growth potential (SME and FDI)

Although FDI attraction is very important for the economic development of Klaipėda, its potential is limited by the overall number of projects which reach Central Europe and Lithuania. Klaipėda also has a great untapped potential of establishing new SMEs.

7.4.4 Ambition

The model allows to define the ambition - the basis for the city vision - that Klaipėda is seeking to achieve, what should be the population of Klaipėda, what should be the economic structure and what average salary an employee should earn.

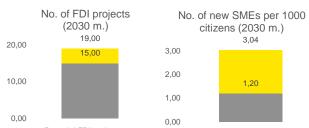


Fig. 39. Re<mark>t</mark>BPtentiaLFinberois⊂tsDI projects ar Nadaddidianan MEMErs\dnias36unt\algaeculated by tatements FDI projects ■Additional SMEs in Klaipeda county

Participants in the working groups preparing the strategy defined ambition as follows:

- The population of Klaipėda should grow and in 2030 should reach 190,000.
- The average gross salary should be EUR 1,500, 75% of the average of the Baltic Sea Region
- Highly potential sectors (created by new SMEs and businesses resulting from FDI) should create 15% of the added value of the economy.

7.5 Alternatives for KEDS financing model

Alternative	Centralized	Semi-centralized	Decentralized
Operation principle	All programmes and measures specified in the strategy are funded from the general fund.	Priority projects, which are beyond the interests of a single institution, competences or capacities, are financed from the general fund.	Financing is provided for the implementation of specific measures/projects.
Advantages	implementation management group may exert a direct influence on the funding of the selected strategic measures. Sustainable financing of the measures is ensured by externalizing the cyclical nature of the budget. The general fund would increase the likelihood of success in the implementation of the strategy due to interest of donors.	 Smaller direct financial contribution from partners (compared with the centralised model). Sustainable financing is ensured for important ongoing activities. The general fund would increase the likelihood of success in the implementation of the strategy due to interest of donors. 	Flexibility is retained. Simplicity of management.
Disadvantages	Requires large financial contribution from the partners. It is difficult to ensure coordination of interests, because some measures only indirectly contribute to the partners' interests. Requires fund management structures and procedures in place.	A general consensus must be reached that measures will be funded from the general fund.	Continuous financing will not be allocated to important measures.
Table 3. Alternatives for KEDS f	place.		

7.6 Management of programme and project portfolio

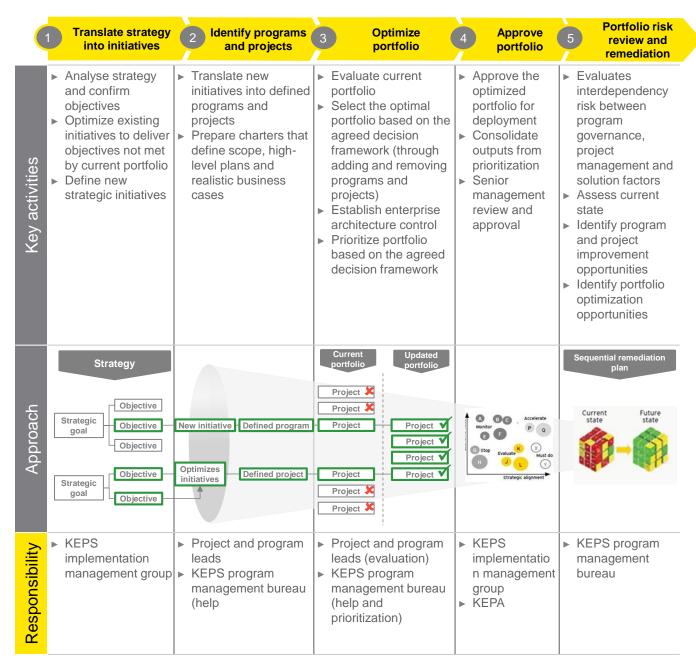


Fig. 36. Management of programme and project portfolio.