



TOWARDS THE FIRST OFFSHORE WIND PARK



MISSION =
Latvia



Latvia does not have oil fields or valuable mineral resources, but we have access to the sea and wind – an invaluable resource and the new gold of our time. Latvia has a lot to be proud of. Determined, capable, and ambitious people who prove that WE CAN succeed beyond our country's borders. Distinguished figures in arts, culture, sports, and business allow us to experience a wide range of emotions. At LIAA, we are also proud of living in an energy secure country, ranking third among European Union nations in renewable energy usage. These values drive us to do even more with greater confidence and in an even “cleaner” way.

We believe that these goals will be achieved by the joint Estonian - Latvian project ELWIND – a promising cross-border initiative to become the first offshore wind park in Latvia. ELWIND has the potential to generate more than 3.5 TWh of clean wind energy annually in the Baltic region, ensuring energy independence for the people of Latvia. A great reason to feel proud, isn't it?

We live in a time when energy is no longer just an economic driver. As part of the European Union, Latvia has set a clear course towards a green and secure energy sector. By combining key principles – connectivity, clean energy, and energy security – we are not only responding to today's needs but also proactively shaping a sustainable future. The transition to greater use of renewable energy resources is our promise to future generations. This journey requires bold decisions, active participation, and shared responsibility. I am confident that by implementing the ELWIND project, we will have every reason to be truly proud!

Laura Štrovalde

Deputy Director in charge of investment and energy,
Investment and Development Agency of Latvia (LIAA)

What is ELWIND?

ELWIND is a cross-border project between Latvia and Estonia for the construction of an offshore wind park in the Baltic Sea. It is an ambitious and environmentally friendly renewable energy project with a total capacity of up to 2 GW across joint wind parks. ELWIND will enhance the region's energy independence and security, maintaining affordable energy prices, thereby reducing electricity costs for businesses and households. Additionally, it will create new business opportunities.

ELWIND aims to bridge the gap in large-scale renewable energy production within the region and promote a more efficient open energy market. The offshore wind park is expected to be constructed and operational by 2035.

The pre-development phase of the ELWIND project is scheduled to be completed by 2028, culminating in a planned auction, where the rights to use the offshore wind area will be awarded to a qualified developer.

ELWIND Development Timeline

2020–2022

Signing of the Memorandum of Understanding between the Ministry of Economics of the Republic of Latvia and the Ministry of Economic Affairs and Communications of the Republic of Estonia to initiate cooperation and select project areas

2024–2028

Conducting EIA and technical studies, preparing auction conditions

2030–2035

Construction of the wind park, establishment of grid connections, and commissioning

2023

Submission of the project application to the Connecting Europe Facility (CEF) program, initiation of the Environmental Impact Assessment (EIA) process, and preparation of procurement documentation for necessary studies

2029

Completion of the EIA process and auction implementation





Location of ELWIND wind park in Latvia



Location of ELWIND wind park in Estonia



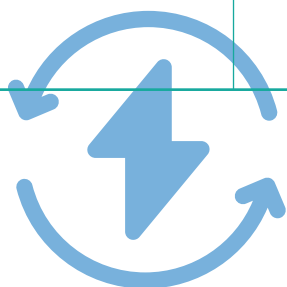
Indicative hybrid interconnection corridor

Value Chain and Benefits for Latvia

The development of the joint Estonian - Latvian offshore wind project ELWIND brings several benefits, enabling Latvia to proactively attract investment and foster innovation development.

Enhanced Energy Security

Stable and affordable electricity prices for households and businesses with a strong emphasis on the country's energy independence.



Clean Energy

Electricity production from renewable energy sources, gradually phasing out the use of fossil fuels in energy generation, as well as the development of the hydrogen sector.

Connectivity

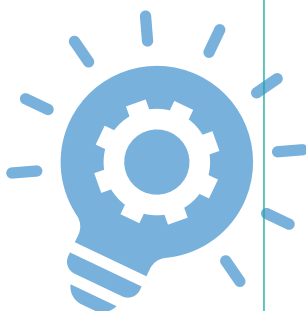
A powerful cross-border electricity transmission network. Its development is one of the fundamental requirements for the implementation of ELWIND.

Workforce

The highest demand for workforce is expected during the construction phase, but the ELWIND project will also create jobs at the electricity production phase, which will last for at least 25 years. Well-paid jobs will be created in Latvia, especially along the Kurzeme coast, in sectors such as energy efficiency, transport and logistics, wind turbine maintenance, energy supply and storage.

Innovation and New Products or Services

The implementation of the ELWIND project will also contribute to achieving related energy and climate policy goals, including energy efficiency, energy security, and greenhouse gas reduction. Working on the project will promote the development of new products and services across various sectors.



Education, Training, and Educational Programs

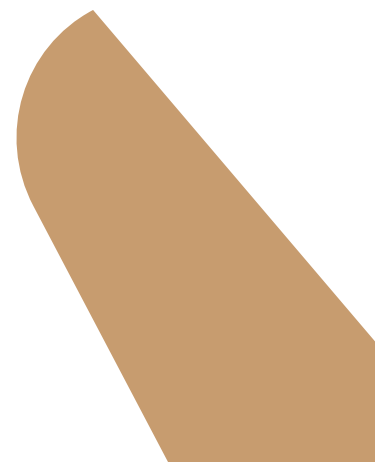
To encourage greater involvement of the local community and workforce, Latvian educational institutions already offer training in skills and professions required for wind park construction and maintenance, including wind turbine mechanics and technicians, renewable energy specialists, programmers, smart electrical engineering experts, environmental engineers, robotics specialists, and more.

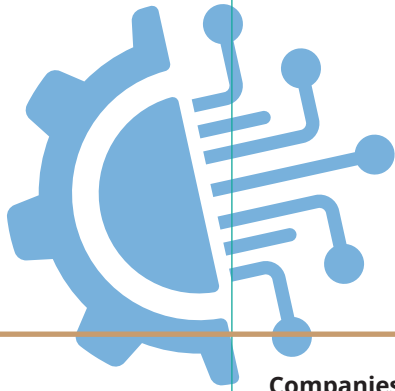
Research and Development

Extensive opportunities in marine and offshore technology research, the expansion of scientific institutions, and the creation of industry startups.

Legal Framework

The establishment of a transparent and comprehensible regulatory framework, balancing national and investor interests. Faster permit issuance is needed not only for ELWIND but also for other large-scale investment projects.





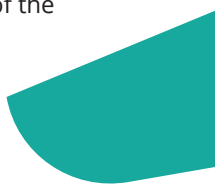
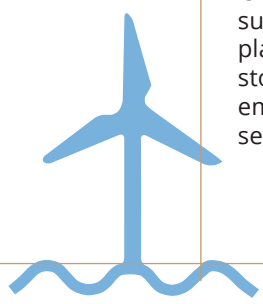
Infrastructure Development and New Business Opportunities

With the implementation of the ELWIND project, investments are planned for strengthening the electricity grid and road infrastructure. Significant opportunities will also emerge for the ports of Liepāja, Ventspils, Riga, and Salacgrīva, which could become regional service hubs for offshore wind parks in Latvia, Estonia, and Lithuania, both during construction and operation.



Companies are already engaged in various investment and development projects.

Fokker Next Gen	In December 2023, a memorandum was signed between the Ministry of Economics and Fokker Next Gen regarding the plan to manufacture hydrogen-powered passenger aircraft in the Liepāja Airport area, contributing to the decarbonisation of the aviation sector.	Integrating environmentally friendly offshore wind power with green hydrogen production to fuel Fokker Next Gen's hydrogen combustion aircraft is not only a forward-thinking solution but also a critical step towards making air travel sustainable. This synergy can help meet emissions reduction targets, lower operational costs, and pave the way for a cleaner, more sustainable aviation industry.
JSC CIS Liepāja and the Liepāja Special Economic Zone (LSEZ)	The goal of the Norwegian, Swedish, and Latvian joint project <i>CIS Liepāja</i> is to establish a renewable energy complex, the "Power to X Terminal" at Liepāja Port. In November 2024, an Environmental Impact Assessment (EIA) procedure was applied for the establishment of "green" hydrogen and "green" ammonia production facilities within the Liepāja Special Economic Zone.	Anete Kleinberga <i>Fokker Next Gen Latvia</i> Managing Director
Van Oord, Euroports and Smulders	<i>Van Oord</i> and <i>Euroports</i> plan to establish a state-of-the-art terminal in Liepāja, which will support offshore wind projects across the Baltic Sea, optimise supply chains, and reduce emissions. In April 2024, an agreement was signed to establish a consortium between <i>Van Oord</i> , <i>Euroports</i> , and <i>Smulders</i> .	The development of infrastructure and logistics capabilities is key to supporting the growth of the offshore wind industry in the Baltic region. As a leading port operator, <i>Euroports</i> welcomes initiatives that enhance port capacity and strengthen supply chains for the industry.
PurpleGreen Energy C	<i>PurpleGreen Energy C</i> plans to build a "green" ammonia plant in the Ventspils Freeport area. The planned investment for plant's construction could exceed €1.3 billion. In November 2023, an agreement was signed with the Ventspils Freeport Authority to commence feasibility studies for plant's construction.	Philip Berckmans <i>Euroports</i> Strategic Development Director
NORSAF	<i>NORSAF</i> has signed a Letter of Intent with <i>JSC CIS Liepāja</i> for the purchase of "green" hydrogen and an agreement for land reservation for industrial development. This is necessary for the establishment of a sustainable aviation fuel (SAF) production plant and a CO ₂ export terminal for the storage and transportation of carbon dioxide emitted and captured in industry and energy sectors.	Currently, the pre-feasibility study process for the SAF production plant and CO ₂ terminal at <i>LSEZ NORSAF</i> is underway, and an initial Environmental Impact Assessment (EIA) evaluation will begin in the near future. Once the project is implemented, we plan to purchase approximately 25,000 tons of "green" hydrogen per year from <i>CIS Liepāja</i> . Offshore wind energy will be a crucial resource for ensuring this production volume. Our common goal is to promote the development of the energy sector and the Kurzeme coastal region.



ELWIND Project Steps

February 2023

LIAA signs an agreement with the Estonian Environmental Investment Centre (KIK) to initiate cooperation and submits a project application to the Connecting Europe Facility (CEF) program.



April 2023

LIAA participates in the *WindEurope* wind energy conference in Copenhagen – a large-scale event that provides insights into key wind energy development trends in Europe. The conference features discussions on all aspects of wind energy, including supply chains, permits, grids, sustainability, financing, resource assessment, and other topics, while also offering a forecast of future industry trends.



LIAA participates in and supports the organisation of the largest wind energy conference in the Baltic States, *WindWorks. Moving Energy*, which takes place in Riga with the participation of ELWIND project representatives.

Experts from various countries, policymakers, entrepreneurs, and other industry experts share their experiences and discuss legislative issues, the expansion of cross-border connections, new electricity storage solutions, and business opportunities for local companies in the development and maintenance of planned wind parks.

July 2023

ELWIND receives €18.7 million in support from the European Climate, Infrastructure and Environment Executive Agency (CINEA). The allocated co-financing will enable high-quality studies to assess the environmental impact of the ELWIND offshore wind park areas in Latvia and Estonia, as well as to plan cross-border connections for the wind park and integrate the electricity transmission network with the onshore power grid.

August 2023

Before the official initial public consultation, ELWIND organises informational seminars in Pāvilsta and Jūrkalne to enhance public awareness and provide residents with the opportunity to ask questions in person.

During the seminars, residents learn about the planned activities, the next steps of the Environmental Impact Assessment (EIA) process, upcoming studies, and other relevant topics.



January 2024

At the beginning of 2024, a survey was conducted to assess Latvian residents' attitudes towards offshore wind parks and the plan to construct an offshore wind park in Kurzeme.

The survey results indicate that 77% of Latvian respondents consider the sea to be the most suitable location for new wind energy parks. Additionally, 65% of respondents definitely or rather support the idea of building the wind park off the Kurzeme coast. Learn more at ej.uz/ELWINDaptauja

77%

Latvian population consider the sea to be the best place for wind parks



44,2%

Definitely support

33,2%

Rather support

6,1%

Rather not support

6,2%

Hard to say

10,4%

Definitely don't



ELWIND begins cooperation with Ventolines, a Dutch company providing technical consultancy services. Ventolines supports the preparation of procurement documentation for environmental impact assessments and technical studies.

March 2024

ELWIND participates in the *WindEurope* wind energy conference in Bilbao. During the three-day event, representatives introduce attendees to both the ELWIND project and energy sector developments in Latvia. The conference features dozens of discussions on the role of wind energy in job creation, environmental protection, energy security, economic competitiveness, cooperation with local communities, industry trends, and key updates in EU legislation.



April 2024

In 2024, LIAA continues to be one of the supporters of the largest wind energy conference in the Baltic States, *WindWorks. Connecting Industries*. While presenting the ELWIND project to industry investors, LIAA highlights the future of wind energy in Latvia.

At the conference, international and local experts discuss increasing the pace of wind energy project implementation to enhance region's energy self-sufficiency and security.



An ELWIND project representative participates in a panel discussion at the *Baltic Sea Business Day* in Rostock, focusing on international cooperation in research and development, the ecological status of the Baltic Sea, digitalisation, the role of hydrogen in the logistics sector, and other key topics. We are proud to explain ELWIND's national significance and present expert findings on an international stage.



September 2024

ELWIND representatives participate in the *WindEnergy* exhibition and conference in Hamburg.

Project representatives provide information to investors, participate in B2B matchmaking events, meet with institutional partners, and strengthen ties with the head of LIAA's Germany office.



The ELWIND team organises and, together with representatives from Liepāja City, Ventspils, South Kurzeme Municipality, the Kurzeme Planning Region, and the Ministry of Climate and Energy, explores the renewable energy sector in the Netherlands.

Representatives from Latvian, Lithuanian, and Estonian municipalities and regions visit the Netherlands to learn about the Fryslân wind park and gain valuable insights from residents, municipalities, and businesses.



October 2024

In October, ELWIND is involved in the organisation of the trip and, together with the delegation of the Baltic States, visits Denmark to proactively participate in public education events, as well as to learn international experience useful for Latvia.

Municipal representatives and opinion leaders from Latvia, Lithuania, and Estonia, together with the ELWIND team, explore the implementation of various renewable energy projects and the collaboration processes between municipalities and local communities.



November 2024

ELWIND participates in the Baltic and Nordic Energy Conference in Tallinn, which brings together more than 100 energy industry leaders from across the region. During an expert panel discussion, an ELWIND representative presents how offshore wind energy opportunities are planned to be utilised in project's development.



ELWIND initiates cooperation on conducting the *Environmental Impact Assessment (EIA)* with *JSC Estonian, Latvian & Lithuanian Environment*, one of the largest environmental consulting companies in the Baltic region. The EIA will be carried out in collaboration with *Tetra Tech RPS Energy*, a partner with extensive experience in consulting and engineering services for renewable energy projects worldwide.



INSPIRING
ENVIRONMENT

At the end of the year, ELWIND participates in the *Offshore Energy* exhibition and conference in Amsterdam – an event for the entire offshore energy industry, where companies and industry professionals make contacts and explore the latest advancements and innovations. ELWIND meets with interested parties to discuss upcoming research procurements and other collaboration opportunities.





ELWIND's goal is to promote the transition to green energy in Estonia and Latvia, enhance energy independence and security, and drive innovation development by attracting investment and ensuring affordable electricity prices for households and businesses. By order of the Estonian and Latvian governments, a comprehensive feasibility study has been conducted, analysing various environmental, socio-economic, and technical criteria, including the potential impact on birds, fish, and nature overall, as well as seabed conditions, ice, and wind patterns, to identify the most suitable location for the potential offshore wind park.

~ 500

jobs during the construction
and operational phases

~ 50

newly established
companies

Latvia's offshore wind
energy potential is

15 GW

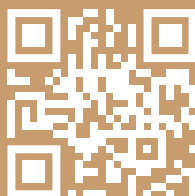
Lower
electricity

prices

Development of the
Power to X

hydrogen sector

Learn more at
www.elwindoffshore.eu



MISSION =
Latvia



Project developers

<https://www.liaa.gov.lv/en>



<https://kik.ee/en>

