

GREEN INDUSTRIAL AREAS

your insight into 7 industrial areas in the Baltic Sea Region



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Interreg
Baltic Sea Region



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ENERGY TRANSITION

GreenIndustrialAreas



Dear Readers,

Welcome to our online brochure, dedicated to shedding light on the dynamic landscape of industrial development within the Baltic Sea Region. This brochure endeavors to be your first-glance guide to the current state and emerging trends in the evolution of industrial areas across our region.



In the pages that follow, we present seven industrial zones, of various levels of maturity, each contributing uniquely to the economic fabric of the Baltic Sea Region. Our goal is to provide readers with an insightful journey into these areas, unveiling the innovative initiatives, sustainable practices, and transformative projects that shape their industrial landscapes.



From fostering synergies among companies to embracing cutting-edge technologies, we navigate through the narratives of these zones and aim to introduce the reader to their significance in the broader context of regional development.



With a focus on sharing knowledge and promoting collaboration, this brochure serves as a touchpoint for stakeholders, policymakers, and industry enthusiasts alike. By highlighting current situations and emerging trends, we strive to ignite conversations that will drive future developments in these crucial hubs of economic activity.

We invite you to immerse yourselves in the selected stories of these industrial areas. Thank you for joining us in this exploration.

Sincerely,
Green Industrial Areas Team

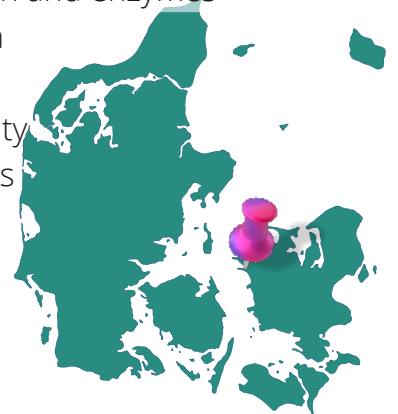


Kalundborg Symbiosis

Kalundborg Symbiosis is a pioneering industrial ecosystem located in Denmark. It currently consists of 17 private and public members, hosted by the broader industrial area. Kalundborg Symbiosis is governed by an association, involving representatives from the enterprises.

Established on the principles of symbiotic collaboration, it brings together industries to optimize resource utilization and environmental sustainability. Key features include the exchange of by-products and waste heat among member companies, fostering a closed-loop system that enhances efficiency and reduces environmental impact. The symbiotic model promotes economic and environmental benefits through shared resources and collaborative innovation, making Kalundborg Symbiosis a leading example of industrial ecology.

With the leadership of widely known companies such as Novo Nordisk, Novozymes, and Kalundborg Refinery, Kalundborg Symbiosis champions renewable energy production by employing renewable steam, generating green heat, transforming residues from the production of insulin and enzymes into biomethane, with a quality equal to natural gas, generating electricity from renewable sources and many other initiatives.



Grünes Gewerbegebiet Neustrelitz Industrial Area



The Neustrelitz industrial area is going to solve the problem of storing renewable electricity by employing the power-to-X plant, which will convert electricity into hydrogen and back when required.

GERMANY

AREA IN DEVELOPMENT

9 HA

ENERGY MIX

A new type of industrial area is planned in Neustrelitz. The idea is to provide the area with a self-sufficient supply of electricity and heat with the help of renewable energy sources: wind turbines, rooftop photovoltaic systems, and a portion of the electricity from the CHP plant. The industrial area plans to combine the existing renewable energy plants, which produce electricity from biomass and solar energy, with new renewable energy plants, including additional photovoltaic and wind power plants.

The storage system will be of key importance to the area and act as a central regulation and control element, creating a technically and economically viable link between renewable electricity generation and regional consumers.

Various sectors will be located in the planned industrial area. It will spread over 9 hectares of land and house service companies, manufacturing industry, commercial premises, office and administrative buildings as well as a petrol station.

The area's planning project aims to be supported from a technical and public relations perspective, as well as developing close cooperation with the existing network of universities, specialist planners, professional associations, and administrative as well as authorization bodies.

Eteläportti Industrial zone

Eteläportti industrial zone currently hosts 31 ambitious companies but has an aspiring goal to grow to 60 companies by 2030.



The Eteläportti Industrial Area holds a strategic focus on research, product development, design, manufacturing technology, and digitization, with flagship companies like DB Santasalo, Flender Finland, Woodspin, L&T, Procemex, and Caffitella leading the way.

Eteläportti has earned distinction as Europe's foremost digital service hub for the manufacturing sector. Integral to the industrial complex are state-of-the-art waste heat-capturing plants, contributing more than 5 megawatts of thermal energy to the city's district heating grid. Simultaneously, companies within the area prioritize the acquisition of carbon-free district heating to meet their heating requirements.

Eteläportti's commitment to excellence extends beyond its industrial operations, fostering robust partnerships with educational institutions. This collaboration ensures the provision of specialized professional skills to students, aligning them with the evolving demands of the modern industry.



FINLAND

GROWING AREA

40 HA

DIGITALIZATION

Industriegebiet Lübesse II NORTHERN PART Industrial Area

GERMANY

AREA IN DEVELOPMENT

50 HA

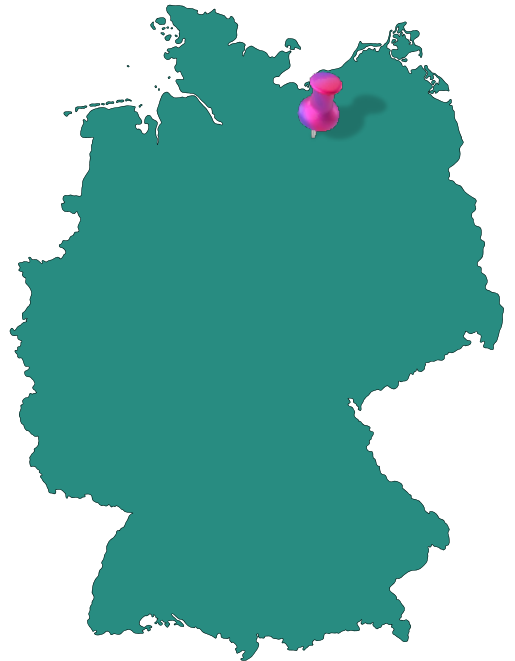
LOGISTICS

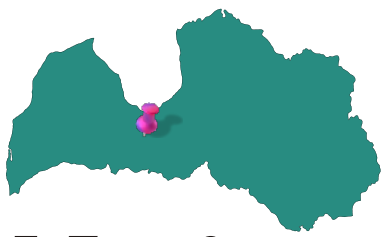
Hosting around 15 companies today, Lübesse II Industrial Area focuses strongly on two key areas: logistics and construction, attracting industry leaders to work close to each other.

Located south of the capital city of Mecklenburg-Western Pomerania, the Lübesse II Industrial Area currently spreads over more than fifty hectares and plans to add 30 more. Strategically placed next to a wind farm and a solar energy production site, the area strives to attract hydrogen production on-site.

A new company is planning to join the Lübesse II Industrial Area and develop hydrogen production capacity, using local wind farm energy as well as additional power from the grid. The waste heat is envisioned to be provided to other players in the industrial area as well as to the consumers in the neighboring residential area. On-site hydrogen production will open a window of opportunity to explore potential use cases of the application of hydrogen in the logistics sector.

The largest companies on-site include: Transport und Logistik Theurer (Logistics), Thomas Betonbauteile Fehrbellin GmbH & Co. KG (Construction), PS Fahling Fliesen und Natursteine GmbH & Co. KG (Construction), R-T-Logistik (Logistics), BuK Boots- und Kunststoffbau GmbH (Boat and vehicle construction).



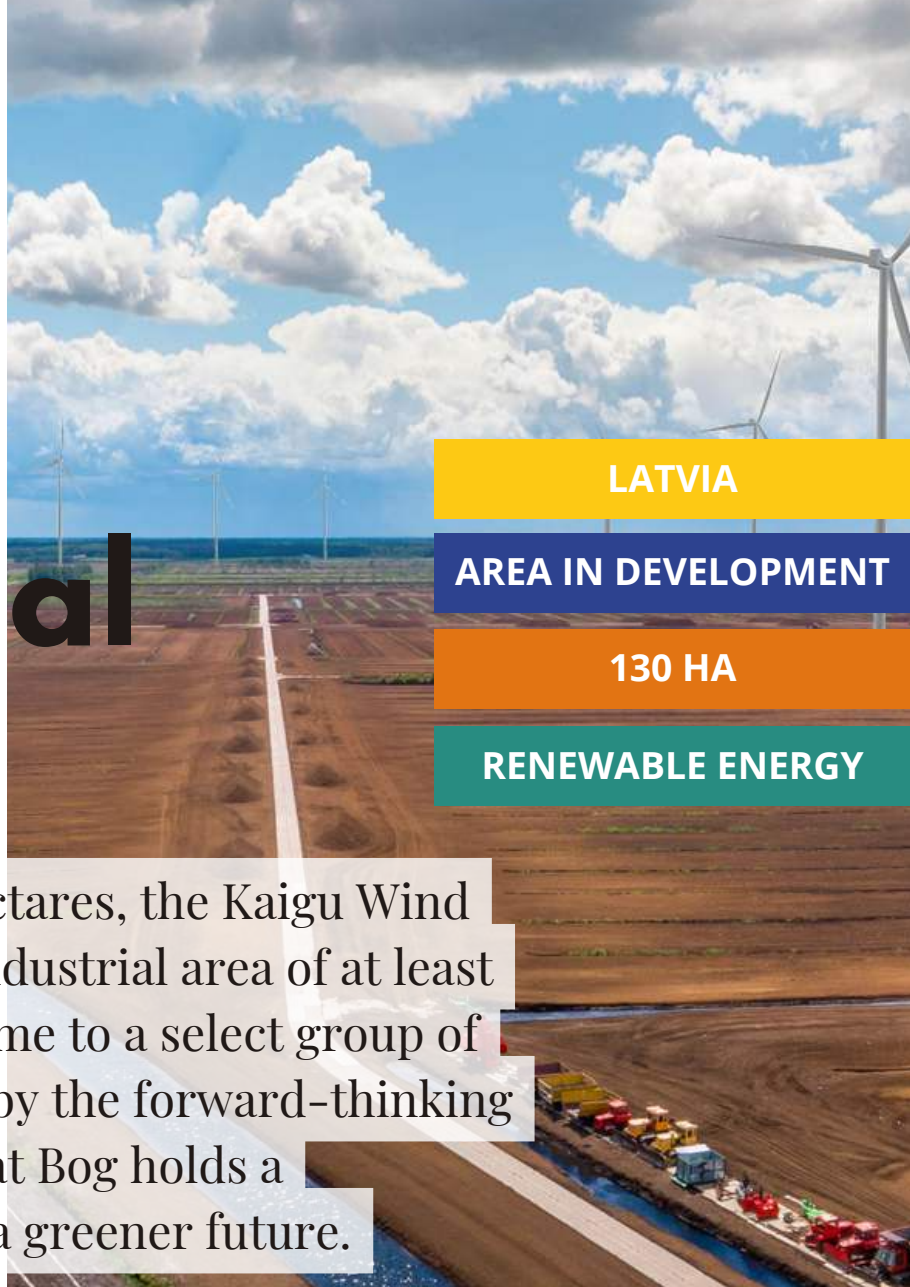


Kaigu Industrial Area

Spanning across 760 hectares, the Kaigu Wind Park includes a green industrial area of at least 130 ha, which will be home to a select group of 4-6 companies. Owned by the forward-thinking entity Laflora, Kaigu Peat Bog holds a collaborative vision for a greener future.

The Kaigu industrial area, situated in the Zemgale region, aims to attract high-energy companies and facilitate climate-neutral production through the development of innovative products aligned with the evolving climate landscape. This initiative not only aims to create sustainable employment opportunities but also seeks to generate alternative energy carriers, such as renewable hydrogen derived from wind energy. The project is poised to significantly enhance the proportion of renewable energy resources and alternative carriers in Latvia's energy mix, thereby contributing to the National Energy and Climate Plan targets for 2030, specifically the objective of achieving a 50% share of renewable energy sources in electricity final consumption.

To realize these objectives, the focus lies on establishing the necessary industrial zone infrastructure capable of attracting energy-intensive businesses committed to climate-neutral production. This entails the creation of production buildings, designated areas, access routes, and associated infrastructure, all while ensuring a seamless supply of renewable energy for the production processes within the industrial zone. The initial plan is to develop infrastructure for companies that will work in green industrial area, which today is planned to be at least 130 ha large. Priority will be given to energy-intensive companies engaged in high-tech Bio-economy and related product manufacturing.



LATVIA

AREA IN DEVELOPMENT

130 HA

RENEWABLE ENERGY

Lintukangas Industrial Area



Lintukangas Industrial Area is currently in the early stages of development. Procedures of zoning and planning are still taking place in what is set to be one of the most forward-thinking industrial zones in the region.

The complete Lintukangas Industrial Area will take up around 40 hectares and focus on industries, causing no environmental impacts. The evolving industrial area is presently undergoing comprehensive development. In the ongoing assessment during zoning and planning phases, an exploration is underway to identify strategies aimed at elevating the sustainability standards within the area. Simultaneously, an examination is being conducted into the municipality's role in facilitating initiatives, particularly in promoting sustainability and fostering collaborative efforts within the industrial area.

A focal point of Lintukangas' strategic vision involves the conceptualization and implementation of an advanced area heating network. This system will be engineered to optimize the efficient utilization of waste heat, with specific attention directed towards Meltex Oy - a company close to Lintukangas - known for its substantial production of waste heat. The integration of this significant heat source into the overarching sustainability framework is a key component of the forward-looking industrial development plan.

FINLAND

AREA IN PLANNING

40 HA

WASTE HEAT RECOVERY



Suwalki Special Economic Zone



Suwalki Special Economic Zone was established in 1996, with the task of attracting domestic and foreign investors to create new enterprises, increase the production capacity of existing ones, and diversify or completely change the production process of an existing plant.

POLAND

MATURE AREA

2 641 400 HA

STRATEGIC LOCATION

Nestled within an expansive territory, the industrial area boasts a robust presence of 223 companies, spanning diverse sectors such as wood, furniture, metal, and more. Notable entities like MLEKPOL, KAN, and Danwood S.A. contribute significantly to the region's economic landscape. Under the management of Suwałki Special Economic Zone S.A., this area strategically sits at the crossroads of major European routes, facilitating an ideal environment for businesses to thrive.

Renewable energy initiatives are gaining prominence, with companies like MALOW and MASTERPRESS leading the charge. While specific data on the current share of renewable energy in the area is not available, a commitment to sustainability is evident. Several companies within the industrial zone have obtained certifications for low environmental impact, reflecting a conscientious approach to industry practices.

Entrepreneurs eyeing this region for investment enjoy substantial benefits. Its pristine environmental conditions make it particularly appealing for ventures in bioeconomy, pharmaceuticals, and renewable energy, aligning with global trends towards eco-friendly and sustainable business practices.



ABOUT THE GREEN INDUSTRIAL AREAS PROJECT

To diminish both the carbon dioxide emissions and the reliance on oil and gas imports in the Baltic Sea Region, a shift towards decarbonizing industrial activities is imperative. To foster and incentivize investments in decentralized renewable energy production, intelligent energy management, and the comprehensive utilization of energy sources in industrial processes, public authorities require innovative solutions. These solutions should effectively enhance energy efficiency, thereby leading to a substantial reduction in greenhouse gas emissions during industrial production processes.

The coexistence of various companies in close proximity within industrial areas presents a dual opportunity. On one hand, it allows for synergies that expedite the return on investment. On the other hand, public authorities can proactively instigate change through regulations, such as the planning of environmentally conscious green industrial zones. Given the uneven distribution of knowledge about available technological solutions, especially those involving smart tools, there is currently no transnational standard for certifying such areas within the BSR.

In response, partners behind the Green Industrial Area project aim to consolidate their expertise into a toolbox for transforming industrial areas into smart and climate-neutral environments. Simultaneously, we aspire to establish a transnational standard for certifying green industrial areas with a focus on achieving climate neutrality. These outcomes present strategies that any public authority in the region and beyond can adopt to stimulate investments and formulate instruments, fostering the accelerated decarbonization of industrial activities. Additionally, these efforts acknowledge and recognize pioneers in this endeavor through the award of a quality label.