

Satakunta industrial growth programme

Industrial Pilot

A proposal for the industrial growth programme in Satakunta

Finland needs Satakunta

Satakunta industrial growth programme – Industrial Pilot
Proposition as the industrial growth programme of Satakunta

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Foreword

What is the Satakunta Industrial Pilot?

The Satakunta Industrial Pilot is a state of regional strategic intent. The Industrial Pilot is a manifesto about the significance of industry in Satakunta and its renewal, especially targeted at the industrial parks of the region.

The Industrial Pilot highlights the central matters of industry that need to be developed. The Industrial Pilot has been prepared in extensive cooperation with important private operators (i.e. Chambers of Commerce) and public operators (The Regional Council of Satakunta, Satakunta Centre for Economic Development, Transport and the Environment, cities, and municipalities).

Satakunta is one of the most industry-oriented provinces in Finland. In Satakunta, the share of industry of value added is 25.4% while in the rest of the country it is, on average, 16.9% (in 2013). In Satakunta, 19.6% of jobs are in industry, while elsewhere in Finland the number is 12.9% (31 December 2014). The share of industry of value added is 25% and the level of investments is high. In recent years, industrial investments of about EUR 1 billion have been made in Satakunta and further investments, worth over EUR 1 billion, are currently being planned. The exchange rate of foreign trade is double to that of elsewhere in Finland. Satakunta is an open, export-oriented and international province. There is a desire to revamp the existing industry and build new operations on the existing competence.

The Satakunta Industrial Pilot features a new kind of communication. In order to implement the Industrial Pilot, an annual work plan (2016–2019) will be designed. It focuses on the key areas and specifies the central phases of the development and cooperation process as well as the annual objectives, key themes and projects of implementation. The key themes and projects picked up from the programme plan will be promoted through discussions, workshops, and seminars as well as practical experiments.

The Satakunta Industrial Pilot is about new openings, pilots and practical actions. The matters brought up in the Industrial Pilot will be promoted, tested and piloted through various funding channels. The Industrial Pilot utilises AIKO (regional innovations and pilots) funding of Satakunta, EU's structural funds, national funding, and business projects. The practical operations are based on the strengths and competence base of the region.

The actions and new openings can also be targeted at facilitating regulations and standards and for creating new operational methods or models.

The Satakunta Industrial Pilot – these are the first themes (work plan for 2016):

1. Industrial parks as innovation platforms
 - Creating and testing a model on how industrial parks act as a growth environment of new business, increasing growth and competitiveness (MEAE).
2. Industrial parks as operational environment
 - Developing smart logistics solutions that enable growth and link the industrial parks together (Ministry of Transport and Communications and Finnish Transport Agency).
 - Closer development partnerships in the environmental field and dialogue in environmental matters related to industry (The Ministry of the Environment).
3. Industrial parks as reformers of work life
 - We will launch a discussion with the ministry of Education and Culture on how customised and specialised education enables flexible study paths that meet the companies' needs.

The Satakunta Industrial Pilot creates a basis for companies' independent development. An attractive operational environment creates prerequisites for independent development and investments. The Industrial Pilot encourages the companies to become active. The Industrial Pilot utilises both public and EU subsidies for the projects, for example, TEKES, MEAE, and EFSI by EIB.

The preparation process of the Satakunta Industrial Pilot is proof of the good cooperation and strong desire to reform the industry in Satakunta. We would like to thank all those who took part in the preparation project. We hope that our shared objectives will progress well. We will invite the ministries and departments to work with us in order to develop the competitiveness of industry and create growth. The Satakunta Industrial Pilot creates a basis for companies' independent development. An attractive operational environment creates prerequisites for independent development and investments. The Industrial Pilot encourages the companies to become active. The Industrial Pilot utilises both public and EU subsidies for the projects, for example, TEKES, MEAE, and EFSI by EIB.

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In Pori, 9 November 2016

Joni Hautojärvi, Chairman Satakunta Chamber of Commerce

Kari Pasanen, Chairman Rauma Chamber of Commerce

Marja Karvonen, Director-General Satakunta Centre for Economic Development, Transport and the Environment

Pertti Rajala, Region Mayor The Regional Council of Satakunta

Aino-Maija Luukkonen, Mayor City of Pori

Kari Koski, Mayor City of Rauma

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1. Background of the industrial pilot

1.1. Diverse industry in the Satakunta region

Satakunta is one of the most industry-heavy Finnish provinces, and the share of industry in its added value was 25% in 2013. Due to its history, Satakunta is a very open, export-oriented and international province with regard to its industrial operations. The terms of trade in the region are double the country's average. Satakunta has a strong, living industrial tradition, and also today, the basis of business life in the region is its diverse industry. All vital industrial sectors of Finnish national economy are strongly present in Satakunta, such as technology, engineering, metal, energy, food, and forestry industries. The diversity of the industrial sector has been an advantage to the Satakunta region and it also protects it against economic fluctuations and trends.

1.2. Significant industrial parks

The nationally notable industrial parks located in Satakunta are Kupariteollisuuspuisto (Copper Industry Park) and M20 Industrial Park in Pori, Seaside Industry Park in Rauma, Suurteollisuuspuisto Industrial Park in Harjavalta, Agro-ecological Industrial Park of Kirkkokallio in Honkajoki, and the foodstuff business areas of Southern Satakunta. The growth of the region's export-oriented industry can also be seen in the development of Finland's national economy.

Industrial parks employ 8,000–9,000 people in Satakunta, and the companies located in the industrial parks have investment plans worth EUR 1.3 billion. The industrial parks offer an excellent innovation platform for improving industrial competitiveness and creating new solutions. Industrial parks and areas have been built on the basis of the common interests of their businesses, supported by land use plans and logistics. The parks have been created with the support of infrastructure on the basis of existing industry and industrial hubs and along excellent traffic connections. In the current industrial parks, the companies benefit from the shared operations by utilising efficiently the common infrastructure provided by the park. Growing synergy benefits can also be achieved in logistics, material stream management, procurements, subcontracting and suppliers as well as in support operations by utilising shared resources. To further develop industrial parks, optimising operational models further will be necessary, for example, with regard to the physical environment, the shared network of the companies' operational models, business opportunities and marketing. Innovation operations and product development are actions where major advantages could be achieved through shared pilots between industry and institutes of higher education.

1.3. Connections of the industrial pilot

The future prospects of industry in Satakunta have been reviewed in Teollisuusvisio 2020 (Industrial vision 2020) programme that was created through business-centred preparations based on an initiative by the Satakunta and Rauma Chambers of Commerce in 2013. The goals set in the programme were more productive interaction between the regional operators, strengthening the role of Satakunta industry in Finnish industrial policies, and strong independent reform of industrial companies. One of the key themes of the vision is "Steadier synergy and profit from industrial parks". The Satakunta Industrial Pilot is based on the views of the Teollisuusvisio 2020 programme and it implements its goals. The province has a shared view of the development needs and the government programme goals as well as a strong will to support the renewal of industry.

Rauma Seaside Industry Park Jenni Mäenpää. Photo by: Antti Partanen

FIGURE

competitiveness through reform across borders

strong independent renewal of industrial companies

More productive interactions between industry and the regional operators of Satakunta

Reinforcing the role of Satakunta industry in the Finnish industrial policies

Figure 1. The themes and goals implementing the Satakunta industrial vision (Satakunnan Teollisuusvisio 2020 programme).

Industry reform is also one of the key actions of Satakunta's provincial strategy programme. The Industrial Pilot will support and complement the provincial strategy programme. The Industrial Pilot is connected to the Industrial Corridor application proposition made by the Pori City Region for the Ministry of Economic Affairs and Employment within the framework of the growth agreement procedure in January 2016. The Industrial Corridor and Industrial Pilot make up one unit that attempts to renew industry and develop its operational conditions.

With regard to its theme, the Industrial Pilot is connected to the Northern Growth Zone cooperation network with 13 cities and six provinces in the Southern Finland, in relation to which the proposition to the growth agreement procedure by the Ministry of Economic Affairs and Employment has been made. The growth zone brings together the central representatives of the state, cities, business life, and research and development organisations in its area to create new business, jobs, and vitality in Finland. The objective of the Northern Growth Zone is to, for example, increase the competitiveness of Finland in export markets, create sustainable traffic and transport services, increase innovation operations and cooperation, and reinforce the attraction of Finland as an operational business environment.

In 2016–2018, the strategic focus point of the Northern Growth Zone is the cross-administrative and cross-border development of transport chains and logistics solutions that are vital to business life.

The Industrial Pilot is linked to Seutukaupungit – Soveltamisen mestarit (Seutu-ohjelma) (Regional cities – The masters of adapting regional programme) AIKO funding application prepared by the Ministry of Economic Affairs and Employment, in which the Cities of Rauma and Huittinen are participating.

Thematically, the Industrial Pilot is also linked to the Satakunnan Ennakoiva Rakennemuutos (ERM, Proactive Structural Change of Satakunta) preparedness plan.

2. Goal of the industrial pilot

The goal is to implement the growth programme of Satakunta industry – the Industrial Pilot – between 2015 and 2019.

The Industrial Pilot utilises the varied industrial structure of Satakunta and the industrial parks located in the region as the development platforms of innovation operations, develops the industrial parks as operational environments and investment targets, and utilises the industrial parks as reformers of work life. The industrial growth programme is based on experiments, and it creates and tests an industrial park strategy that reforms industrial operations in a diverse manner and that can also be applied as a national operational model. The goal is to create the world's best pilot environment based on industrial areas.

2.1. Industrial growth, competitiveness, renewal and intelligent specialisation

The Industrial Pilot helps promote industrial growth by developing the operational environment. The growth is enabled by the companies' existing business operations, development of new products and finding new business areas. The measures of the Industrial Pilot improve the competitiveness of industrial companies and promote their renewal. The theme of re-industrialisation must also be taken into account in industrial renewal. The programme supports European Union's Vanguard initiative and, within its scope, the goals of Satakunta's intelligent specialisation, in which the Industrial Pilot focuses on the goals of, in particular, resource efficiency, marine operational environment, ICT and manufacturing industry. The key is to increase the volume of research, development and innovation operations (RDI) in Satakunta and to achieve goal-oriented cooperation between the major companies, SMEs and startups. The educational and research institutes also have a significant role in the utilisation of new information, application of new

technologies and development of business models regards to industrial parks. Industrial parks have a special opportunity to develop business models on "joint venture" basis.

2.2. Securing industrial operations, minimising the hindrances of growth, and proactive structural change

The purpose of the Industrial Pilot is to secure the operational conditions of industry and minimise the hindrances of growth as well as promote the operational method of proactive structural change. In order to secure industry operations, it is important to develop the operational environment in a way that supports the competitiveness of companies, improves their operational conditions and ensures that the operations continue in Satakunta. When removing the hindrances of growth, the actions of public operators, such as the municipalities and the state, have the main role in themes such as land use, housing, traffic, education and public infrastructure. The predictability of regulations and easier license and permit practices are important factors in a favourable operational environment. With regard to the Proactive Structural Change (ERM), the key aspect is to be prepared for structural changes in advance through active development of livelihoods in the region, so that the detrimental effects of the changes remain small. The objective of the Industrial Pilot is, on its part, to implement the measures of the Proactive Structural Change, which facilitate the quick and experimental new measures in the region, and reinforce the companies' ability to adapt to the change of business structure.

3. Implementers of the industrial pilot

The Industrial Pilot will be implemented in a horizontal cooperation with different ministries (e.g. the Ministry of Economic Affairs and Employment, the Ministry of the Environment, and the Ministry of Transport and Communications), central departments (the Regional State Administrative Agency, the Centre for Economic Development, Transport and the Environment, Tekes, Tukes, and Finnish Transport Agency), and Satakunta-based operators. The Satakunta-based operators that have a central role are the industrial parks and their companies, development companies (Pohjois-Satakunnan Kehittämiskeskus and Prizztech), Satakunta and Rauma Chambers of Commerce, the Regional Council of Satakunta, municipalities and cities, and educational institutes (e.g. Satakunta University of Applied Sciences, University Consortium of Pori, WinNova Länsirannikon Koulutus Oy Ltd). In the strategic outcome evaluation meeting of Satakunta Centre for Economic Development, Transport and the Environment, the ministries expressed their willingness for cooperation in the Industrial Pilot. The programme's practical implementation will be carried out through RDI projects that promote the goals set in the programme. The projects can be implemented in cooperation by the Satakunta-based public operators and companies within the terms set by the applied financial instruments.

4. Measures of the industrial pilot

The Satakunta Industrial Pilot is an entity that consists of the partnership discussions between the region and the ministries, the programme's practical management and coordination done by a regional preparation and implementation group, and company groups that bring in the industrial viewpoint and substance. In the interactive management process, the implementers decide together the objectives of the Industrial Pilot, coordinate the programme and evaluate the decisions.

The focus points of the Industrial Pilot are:

1. Industrial parks as innovation platforms
2. Industrial parks as investment targets and operational environments
3. Industrial parks as reformers of work life
- 4.1. Industrial parks as innovation platforms

In the Industrial Pilot, the industrial parks will become an innovation platform where the industrial companies, SMEs, startups, and educational and research institutes will work in accordance with the open

innovation paradigm in shared innovation operations. Open innovation highlights the significance of knowledge and innovations that come outside the companies' own product development and research operations. In recent years, in addition to a closed innovation process, a more and more significant aspect has emerged: refinement of new ideas and technologies together with external parties, such as startups and educational institutes.

FIGURE

Strategic development initiatives and infrastructure

Research and innovation services

Startups and SMEs

Industrial parks as innovation platforms

Setting goals

Funding

Experiments

Investments

Growth

Figure 2. Industrial parks as innovation platforms

Measures:

[A1. Developing the RDI cooperation between institutes of higher education and industry](#)

The RDI cooperation between institutes of higher education and industry will be developed by providing different operators with forums through which they can communicate and discuss interesting topics. These shared forums can be, for example, seminars, development groups between companies and institutes of higher education, theme days and other events organised through the projects. Through the shared multidisciplinary forums, ideas, technologies and operational models are actively sought outside the company together with educational and research institutes, with the purpose of creating new kind of value for the companies' customers. Through cooperation, we attempt to identify development areas that can then be promoted through common project preparations and RDI projects. Additionally, we will look for tools to utilise the principles and methods of open innovation operations, with which the newest knowledge and competence from educational and research institutes can be utilised more extensively in the industrial renewal aspirations. Industry must have a foothold and counterparts in educational and research institutes. In this, the University Consortium of Pori as the location of four different units as well as the Satakunta University of Applied Sciences with its new campuses in Rauma and Pori has a central role. With regard to the industrial renewal, the technical universities present at the University Consortium, Aalto University and Tampere University of Technology, have vital roles. Satakunta University of Applied Sciences has also been strongly branded as an industrial institute of higher education. The departments of the University of Turku also have a central position in the industrial cooperation. The Industrial Pilot creates the incentives for Aalto University to perform its national special duty also in Satakunta region. With regard to the Tampere University of Technology, the operational conditions of the departments located in Satakunta (TTY Pori, IHA Rauma, and ELT Rauma) will be developed. Regards to the education and research that support operational conditions, the Industrial Pilot also has connections to the goals of the Turku Future Technologies (TFT) network. The network includes several educational and research institutes as well as cities, for example, the City of Rauma.

Case: Industrial institute of higher education Among the Finnish institutes of higher education, the Satakunta University of Applied Sciences (SAMK) has been profiled as an industrial institute of higher education that emphasises renewal, export competence and functional abilities of workforce. The degree programmes in engineering, automation, energy technology, logistics and international business further support this image. With regard to the national strengths of SAMK, especially Automation and Industry 4.0, Logistics, and Energy Technology support the renewal of industrial operations and securing its competitiveness. SAMK is a pioneer of "business from technology and environment" competence.

Case: The Satakunta University of Applied Sciences' TuotekehitysPaja. TuotekehitysPaja, product development workshop, is a project entity intended for the students of the Satakunta University of Applied Sciences, loosely based on the Product Development Project of Aalto University. In TuotekehitysPaja, students carry out assignments determined by companies independently and responsibly. These projects are an excellent opportunity to showcase skills, develop competence and build networks, both for the students and the companies.

A2. Targeted funding pilot for reinforcing regional centres of excellence

Targeted funding pilots help reinforce the regional centres of excellence in Satakunta. The industrial parks Kupariteollisuuspuisto in Pori and Suurteollisuuspuisto in Harjavalta form a hub of metal finishing and metallurgy. By combining the material technology research of Aalto University with the competence of the region's companies, a new kind of centre of excellence can be created. The Seaside Industry Park in Rauma is a notable centre of excellence of marine industry and metal construction, which features competence in high-quality shipbuilding and marine technology. A significant, Satakunta-based centre of excellence of automation, electrical engineering, and robotics has been formed around the top companies of automation field in Ulvila.

Case: Metallurgy and metal refinement in the Aalto University. The Aalto University and the City of Pori have an agreement on multidisciplinary experimental co-operation, (Pori Urban Platform, PUPA). In accordance with this agreement, the co-operation between Aalto University and Satakunta industry has been increased in the most significant industrial sectors, for example in metallurgy and metal refinement. The first common development projects have been launched (Metallialan Ympäristö- ja Kiertotalous METYK (Environmental and circular economy of metal sector) project within Tekes' INKA programme).

Case: Arctic competence and offshore sector. Offshore as a term refers to oil and gas production and discovery at sea. Traditionally, Pori has held an internationally acknowledged status as a centre of the offshore sector. Several of the sector's leading businesses still operate in the area. Offshore operations require high quality standards and, in the future, operating in Arctic conditions will become more common and this, combined with a more extensive use of underwater technology, will further increase the standards of quality. Pori has the opportunity to brand itself as a centre of excellence of Arctic competence and operations in demanding conditions.

A3. Industrial symbiotic relationships: new circular economy and environmental solutions

The Satakunta region features plenty of heavy, energy-intensive industries for which the themes of resource efficiency enabled through industrial symbiotic relationships, a new kind of circular economy and environmental solutions are very important. Resource efficiency happens naturally in industrial parks, as the different processes are physically close to each other. Climate change, minimising carbon footprint, challenges of sustainable development and the tightening environmental regulations create the basis for the birth of new circular economy. Waste generation is avoided by new kind of resource efficiency and attempts to minimise energy consumption are made across the board. From the perspective of circular economy, the tightening legislation is not only a restriction, but also a source of many new business opportunities. For example, the new sulphur directive of ships was first seen as a hindrance, but new technological solutions have been developed in order to meet its standards, creating new business. Cleantech business, which produces environmentally friendly solutions, is one the central growth areas of industry.

Case: Bio-economy ecosystem of forestry in Rauma: The development of co-operation between forestry companies and the City of Rauma is moving towards a new kind of bio-economy ecosystem. A paper mill is located near the city centre, on the sea shore. The same factory area also features a pulp mill, tall oil distillery, and a power plant. Already, the factory area is responsible for treating the

wastewaters from the city and industry. In energy production, the companies in the factory area work closely together, and the power plant distributes the district heating required by the City of Rauma. These operations support the City of Rauma's Hinku project, i.e. its attempts to become a carbon neutral city, as over 90% of the energy produced by the factory area's power plant is produced using renewable fuels.

Case: Resource-smart food chain: A strong food business cluster has grown in Satakunta, and it is the pioneer of developing a food chain. The strengths of Satakunta are the highly developed quality and delivery chains in the contract production of raw materials and the high level of production technology in processing industries. Traditionally, most of the food industry's side streams have ended up being composted or used as animal feed or as a source of energy. Now, the food industry cluster in Satakunta is, through the agency of the Pyhäjärvi Institute and Satafood Development Association, investing strongly in a resource-smart food chain, i.e. in minimising waste generation and re-utilising it in a new way. The side streams of production include several valuable ingredients that can be refined to produce financial added value in food production. The objective is to look for more efficient processes and markets for new bio-based products on the basis of the current raw materials. A resource-smart food chain is strongly linked to the national bio-economy strategy.

Case: Agro-ecological Industrial Park of Kirkkokallio: The Agro-ecological Industrial Park of Kirkkokallio in Honkajoki, northern Satakunta, is an example of advanced eco-efficiency thinking. The industrial park concept represents the movement away from an industrial system and towards an ecosystem. The idea behind the operations is to achieve circular economy, which is implemented with energy- and resource-efficient closed systems. With regard to the use of resources, the industrial park's operations are as well optimised as possible. The companies utilise the energy use and production of each other as well as material and side streams and waste, working in a symbiotic relationship with each other. The industrial park concept is an answer to the challenges of sustainable development and climate change.

Case: Off-grid gas economy: The Pori region is a national pioneer of gas economy in an off-grid area. The first Finnish LNG import terminal was built in Tahkoluoto, Pori. This new form of energy may have a large impact on the economy of Satakunta, and it has launched a series of gas investments worth EUR 150 million in industry, distribution, and bio-gas production. New investment decisions are pending, and the next step for utilising the possibilities of gas economy is to start using gas in transport and developing the supply network. An operational model of decentralised bio-gas production is planned for Satakunta, and it could be the pilot for developing national bio-gas logistics.

A4. Industrial parks as the catalyst of startups and SMEs and as the growth environment of new business operations

In the Industrial Pilot, the co-operation between industrial companies and growth companies is one of the key tools of industrial renewal. The Industrial Pilot creates new interfaces between industrial companies and growth companies. The industrial parks will be made available for the innovation operations of industrial service providers and expert companies. In addition to this, new ways of launching co-operation between startups and industrial companies will be created. New innovative ideas and solutions will be looked for the development challenges of industry. New methods and applications, such as digitalisation, gamification and crowdsourcing are potential sources of new solutions. The objective is to create a new ecosystem, where different companies do their development work together, attempting to reach a deeper understanding of global customer needs. The method used for bringing together different companies of different sizes could be to utilise events similar to Innovation Challenge and Hackathon, which would be intended for the industrial companies, startups and SMEs of industrial parks. For example, the objective of Priztech's MatchINDUSTRY LAB is to promote experimental culture of industrial companies, in which new inventions are tested and piloted open-mindedly.

In the long run, a result of the quick experiments is a new, permanent ecosystem for company co-operation.

Case: Development programme of automation and robotics in Satakunta. Satakunta is the hub of Finnish automation and robotics field (70–80 companies), and automation research, application development competence and technological infrastructure have been built in Satakunta for over a decade. The dialogue between educational and research institutes, municipalities' business departments and business sector has been fruitful, and a Robocoast network was built through the cooperation of companies in the centre of excellence. The purpose of Robocoast is to develop a strong, common brand for the automation network of Satakunta and to market the expertise and products of individual companies in the network.

Case: Industrial event Match Industry: This contact event was originally launched under the name Match Marine in 2007 and it was intended for the purposes of Rauma shipyard and its supplier network. Over the years, it has grown into a two-day event.

From the very beginning, the focus of Match Industry has been on the marine and offshore industry, which has been complemented with environmental technology, nuclear power and the energy sector. In its current form, this annual event held by Prizztech Oy brings together 20 main supplier companies and 500 subcontractor, supplier and specialist companies into one effective contact event and international industrial seminar with a clear format.

Case: Gaming industry in Satakunta Satakunta has an active ecosystem of gaming industry startups which, in relation to the Finnish gaming industry, is profiled by so-called serious games. Serious games are expected to become a third cornerstone of Finnish gaming business in addition to entertainment games and gaming assets (game characters and accessories). The development of gaming industry in Satakunta receives support from the research and development work of games and gamification carried out in the University Consortium of Pori. As co-operation between the Tampere University of Technology and the University of Turku, a new professorship related to gamification will be established in Pori. Through utilising gamification, it is possible to find applications for serious games in industrial operations and industrial environments in order to achieve cost savings and efficiency advantages. Possible applications include logistic solutions, development of workforce competence and safety, and occupational well-being issues.

4.2. Industrial parks as investment targets and operational environments

Notable investments have been implemented in the industrial parks of Satakunta and more are pending. Investments worth EUR 120 million have been launched for the marine wind farm in Tahkoluoto, Pori. Also the Finland's first LNG terminal, an investment worth EUR 81 million, is about to be completed in Tahkoluoto. Investments worth EUR 183 million in industrial infrastructure, various production plants and energy production have been launched in Suureteollisuuspuisto in Harjavalta. The new campus of Satakunta University of Applied Sciences is EUR 40 million investment that will be completed in 2017. In Rauma, large-scale industry has made some major investments recently. The investments of the bio-cluster (forestry and its side streams, in particular), which are partly in planning stages and partly in implementation, are worth EUR 172 million. The investments in the Seaside Industry Park are worth EUR 62 million and in the Lakari area EUR 126 million. The fairway investment of Port of Rauma and the investments of the port area, which are partly in the planning stage and partly being implemented, are worth EUR 100 million. All in all, industrial investments worth around EUR 1 billion have been made in recent years in the industrial areas and parks of Satakunta (excluding Olkiluoto 3 nuclear power plant project). In addition to these, the basic investments of industry in Satakunta have been annually around EUR 250 million.

Measures:

B1. Industrial infrastructure fund as an incentive of investments

The purpose of the Industrial Pilot is that the Satakunta-based companies and industries will also continue to be attractive investment targets. The Industrial Pilot develops the region's industrial parks as operational

environments that are worth the investments. For the future, it is very important to develop operational methods that enable investments. Funds, for example, are one way of directing capital to companies seeking growth.

Case: Growth fund of industry in Rauma region The objective of the fund is to carry out investment operations that have special impact on the employment, vitality and development of Rauma region and its employment area. The target of the investment operations, targeted at different business sectors, are, in particular, cleantech companies and changing industry that seeks to apply the principles of low-carbon operations. The investments of the around EUR 10 million fund are targeted at well-managed industrial companies or industrial service companies looking for growth.

B2: Development partnerships between authorities and companies

The Industrial Pilot creates new PPP operational models (public-private-partnership) for the development partnerships between public and private sectors. In matters related to the environment, occupational safety and well-being as well as permits and training, partnerships can make the operations smoother. The purpose is to make the operational environment more predictable for companies, give them time to prepare for changes, and avoid unnecessary costs. Environmental licence terms are one of the most central aspects of the development partnerships, as environmental licences have a large impact on the operational conditions on many companies, for example, in metal refinement industry in Pori Kupariteollisuuspuisto. The Industrial Pilot will develop the licence procedure in order to secure the operational conditions of industry and to attract more investments in Finland. Good practices that have managed to make the licence processes more effective will be used as examples. The most common goals of the co-operation partnerships are predicting the changes of environmental legislation, more effective communication, and increasing dialogue between the industry, official parties and NGOs.

Case: Park-specific environmental permit of the Seaside Industry Park. The industrial park located in the former shipyard area of Rauma is a notable hub of marine technology and metal products, which provides companies with shared infrastructure and services well-suited to large-scale assembly operations. Seaside Industry Park has applied for a park-specific environmental permit, which makes the application process more efficient. In addition to this, the new operational method has removed some of the overlapping work happening in permit processes and reporting, both in companies and on public operators' side. The environmental permit of the Seaside Industry Park was the first granted to an entire industrial park, and it was even granted in a record-breaking time. This operational model could be copied to other industrial parks and areas.

Case: Rescue exercise area of Western Finland. The rescue exercise area located in Pori has specialised in basic and service training. The exercise and training operations cover the Rescue Department, safety sector and civilian crisis management. The exercise area is used for practising different necessary skills of rescue operations and for accident situation training by utilising various conditions representing actual accident, rescue and environmental threat situations. The operations are developed as co-operation between public and private operations to serve the needs of industry more extensively, for example in gas and chemical safety.

CAPTIONS

Seaside Industry Park Rauma. Photo by: Antti Partanen

Photo by: Cimcorp Ulvila

Photo by: Antti Partanen

Rescue exercise area of Western Finland. Photo by: The Regional Council of Satakunta

Photo by: Antti Partanen

B3: Transport and other logistic solutions enabling growth

In the future, logistics will have an even larger effect on the competitiveness of industry. New logistic innovations and digital solutions have their role in the industrial reform. In industrial parks, developing logistics is the source of increasing efficiency and synergy benefits. The objective of the Industrial Pilot is to ensure the development of industry's logistic systems, solutions and infrastructure. Modern, ecologically sustainable and intelligent logistic solutions and systems are the focus point of the Industrial Pilot. The industrial parks and areas of Satakunta must be linked to the networks, hubs and international logistics corridors of material streams, traffic and transport chains. The development needs of ports, railway and road traffic as well as telecommunications and its networks must be taken into account extensively.

Case: Utilising private railway traffic in industrial parks. A railway transport option between Harjavalta and Pori provided by private operator is being planned in Satakunta, based on the needs of the industrial plants. The railway transport option is planned in co-operation with Suurteollisuuspuisto in Harjavalta, Kupariteollisuuspuisto in Pori and the Kaanaa industrial park located in Meri-Pori. The granted safety permit for cargo transport is the first step towards an open competitive situation that challenges the monopoly of railway traffic.

Industrial plants are very interested in the option offered by a private operator.

4.3. Industrial parks as reformers of work life

Industrial parks are excellent reformers of work life, as the companies operating in them are already working together actively in any matters related to work life. Work force is a vital resource for industry, the efficient use of which can be promoted with innovative methods, such as shared use of labour between companies. An industrial park is a great platform for a resource bank that informs all the companies operating in the park about the demand and supply of internal work force and competence. Changes of working life may help achieve economic advantages, support the goals of life-long learning, improve occupational well-being, support the functional abilities of employees and increase the flexibility of job market.

Measures:

C1. Modernising specialised education and new channels of work.

One central development entity of the work life theme is new specialised education models. Specialised education and training is a flexible and efficient way for companies to hire competent employees. For the employees, specialised education is a good way to gain access to work life. Nowadays, many companies acquire all their employees through specialised education. Specialised education links degree education efficiently together with the companies' work assignments. However, current specialised education does not fully meet the changing needs of companies, but instead new, business-oriented models are required to reform the system. An example of this new kind of thinking is the new idea presented by Suomen Yrittäjät entrepreneur association: a wage model of apprenticeship training, which is tied to increasing competence. In the future, specialised training may also include some aspects of retraining. New channels to work should also be created in order to reform work life. It is necessary to be able to adapt to the structural change of industry and the faster and faster trends of economy more quickly than before. Industrial working methods, such as team work, must be taken into account in training. New educational models must be developed in order to meet the changing competence needs of industry and promote employment. Mentoring should also be utilised more extensively. A pioneer here could be the operational model by Pori-offshore club that could be extended through pilots to the entire Satakunta region.

Case: Studies supporting the transition to work life. In order to face the challenges of work life and increase the significance of on-the-job learning during studies, the Satakunta University of Applied Sciences has

decided to include the so-called studies supporting the transition to work life to the syllabus of all degree programmes. On-the-job learning is an alternative method of studying.

In this model, the required competence is acquired by working, and it facilitates the professional development of working students and their eventual degree. On-the-job learning combines learning done on the job and education received in a University of Applied Sciences. In workplace-oriented on-the-job learning, the workplace wants to offer degree studies to its employees.

In university-oriented on-the-job learning, an institute of higher education offers the opportunity to perform a part of the study periods in work life projects, for example.

C2. Developing cooperation between secondary education and higher education

Developing cooperation between secondary education and higher education is very vital with regard to the competence of companies' personnel. Obstacles between secondary education and higher education should be removed. The opportunity to move between secondary and higher education and update one's competence to meet the needs of work life also facilitates achieving the goals of life-long learning. It is important to recognise the study paths from secondary education institutes to institutes of higher education that benefit the various business sectors. Continuing studies on a higher level and accreditation of previous studies when entering universities of technology, for example, should be as easy as possible. Educational institutes could create study paths between work life, secondary education, and higher education in order to serve the needs of Satakunta-based industry.

Case Seafaring. Satakunta University of Applied Sciences and secondary education operator Länsirannikon Koulutus Oy WinNova have gradually combined the operations of seafaring education since autumn 2014. As a result, they are now able to utilise together the assets of seafaring education and research (human resources, premises, equipment and simulators).

This co-operation is linked to the more extensive Rauman Merikampus (Rauma Sea Campus) project, in which the Seaside Industry Park and the companies in the immediate vicinity of the campus area will form a new centre of excellence of marine and technology industry.

5. The programme's implementation process

Goals

In the Industrial Pilot, the principle of operations is the reform of companies. The Industrial Pilot brings together companies and public organisations to shared, new kind of interaction. The companies' development needs and ideas are gathered from the Industrial, HR and other committees of Chambers of Commerce as well as from business networks.

Through development work, these new ideas are refined into experiments and pilots, which will be implemented in the shared R&D&I projects of publish operators and companies. The Industrial Pilot is the umbrella operator for projects launched based on the industrial reform themes. The objective is to develop the operational conditions of companies, improve competitiveness, reform the industry and develop a new kind of Industrial Park 2.0 concept.

The process

The Industrial Pilot has been prepared as co-operation between the Satakunta Chamber of Commerce, Satakunta Centre for Economic Development, Transport and the Environment, the Regional Council of Satakunta, and the cities. The preparatory work of the Industrial Pilot has been carried out through close communication with the business life. The views of companies operating in the industrial parks, municipalities' business departments, representatives of SMEs and startups, and research and educational institutes have been integrated in the programme's objectives. When the Industrial Pilot is launched, the representatives of ministries will be invited to take part in the programme process and work that will include active partnership discussions between the region and the ministries.

Figure 3. Operational model of the Industrial Pilot. (GRAPH ON PAGE 16)

Industrial Pilot Document

Intent

Manifesto

Starting points

(updated every year)

Concrete ideas

Partnership discussions

region/ministries

(bi-annual)

Regional preparation and executive group

(quarterly)

Business groups

Chambers of Commerce

RDI groups

(as necessary)

Development themes

Annual work plan (2016–2019)

Projects

Funding:

AIKO, structural funds, Tekes, other national funding, and EU funding

The principles of the Industrial Pilot and the intent in Satakunta to develop the operational conditions of industry have been described in this document that acts as a manifesto. The programme measures and projects to be launched will be compiled into an annual work plan.

Benefits

The Industrial Pilot will provide companies with new competence and operational methods. The benefits for ministries and other organisations include common development themes that will have large national significance on with regard to developing industry and its competitiveness and ability to reform. An annual work plan will be made for the Industrial Pilot, which will present the actions and projects of the programme. The projects will be funded using different financial instruments, which include AIKO funding, structural funds, Tekes, other national funding, and EU funding.

POSSIBLE FUNDING CHANNELS OF SATAKUNTA INDUSTRIAL PILOT:

AIKO funding (preparation & catalyst funds)

- Quick experiments and pilots, for example €20,000–30,000 per pilot
- Utilising existing EU funding
- The Regional Council of Satakunta. (ERDF), Satakunta Centre for Economic Development, Transport and the Environment (ELY centre) (ERDF, ESF)
- Rural programme 2014–2020 (ELY, LEADER)
- National spearhead project investments (MEAE, Ministry of Agriculture and Forestry, Ministry of the Environment)
- TEKES funding
- Other national funding, companies

Possible funding tools for business projects

- EFSI funding (EIB), new SME initiative (supplementary funding EIB)
- Direct EU funding (e.g. Horizon 2020, Interreg programmes)

Figure 4. Funding channels of the Industrial Pilot.

6. Novelty value of the industrial pilot

With regard to the novelty value of the Industrial Pilot, central factors include regional development partnership and new kind of development concept for industrial parks.

The Industrial Pilot as a reinforcer of regional development partnership

The Industrial Pilot reinforces the regional development partnership between the government, i.e. ministries, and the regional authorities. The Industrial Pilot creates a new operational model for the co-operation between authorities and the business life in the industrial reform and development aspirations.

The development concept of industrial parks 2.0

The Industrial Pilot creates a development concept of industrial parks 2.0, which combines all the knowledge and experience gained through the programme on what the concept of success will be for the next generation of industrial parks.

The objective is that the industrial park concept is so generic that its applicable parts can be utilised in different business sectors and regions. However, the concept must be detailed enough to include all the essential aspects of a successful industrial park.

7. Role of the state

The Satakunta industrial growth programme, the Industrial Pilot, supports the spearhead projects of Finnish government with regard to the themes of employment, competitiveness, competence and education. Regarding employment and competitiveness, the Industrial Pilot offers new tools for spearhead project 1, "Strengthening competitiveness by improving the conditions of business life and entrepreneurship". One of the measures of this spearhead project, no. 5: "Launching regional innovations and experiments" is the core aspect of the Industrial Pilot.

In the theme of competence and education, the Industrial Pilot is strongly linked to spearhead project 5: "Reinforcing the cooperation between institutes of higher education and business life in order to commercialise innovations". The objective of the Industrial Pilot is to create strong centres of excellence based on the competence available in Satakunta and to compile R&D&I resources to reinforce these centres of excellence.

The Industrial Pilot supports the goals of the government's spearhead projects

The wish is that the government would support the Satakunta industrial growth programme, the Industrial Pilot, which supports the strategic government programme and the themes and objectives of its spearhead projects. It is hoped that the government participates in experimental culture, which attempts to create new kind of co-operation between different operators, economic growth and employment. The role of the government would be to enable active participation of ministries in the Industrial Pilot process and the development of industry's operational environment, partnership discussions as well as the co-financing process and funding of separate projects done within the pilot.

Work group

The Satakunta industrial growth programme, the Industrial Pilot, has been prepared in a multidisciplinary work group with the following members:

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