



Suurteollisuuspuisto Harjavalta Industrial Park

Enabling green transition





Suurteollisuuspuisto Harjavalta Industrial Park



Ecosystem of several international companies



Turnover more than € 4 billion per year

Over 90 % of the production is exported



Work place for more than 1200 employees



Prizztech

Location in Satakunta industrial zone

- By the highway
- By the railroad
- By the Kokemäenjoki river
- Nearby ports of Pori and Rauma
- In a region, which produces ca. 40 % of the electricity consumed in Finland. Electricity is produced without CO₂ emissions using nuclear power and renewable energy sources.



Important producer of technology metals

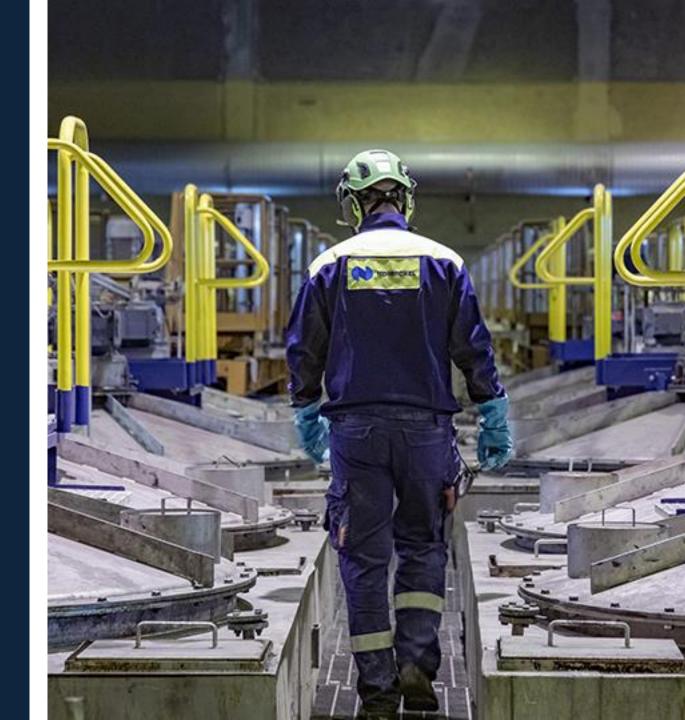


Harjavalta Industrial Park is a heart of the battery and technology metal cluster in Satakunta.



Metals produced in the area are crucial to electrification and the green transition of the society.

Metals produced in Harjavalta Industrial Park are further processed in other companies of the cluster.

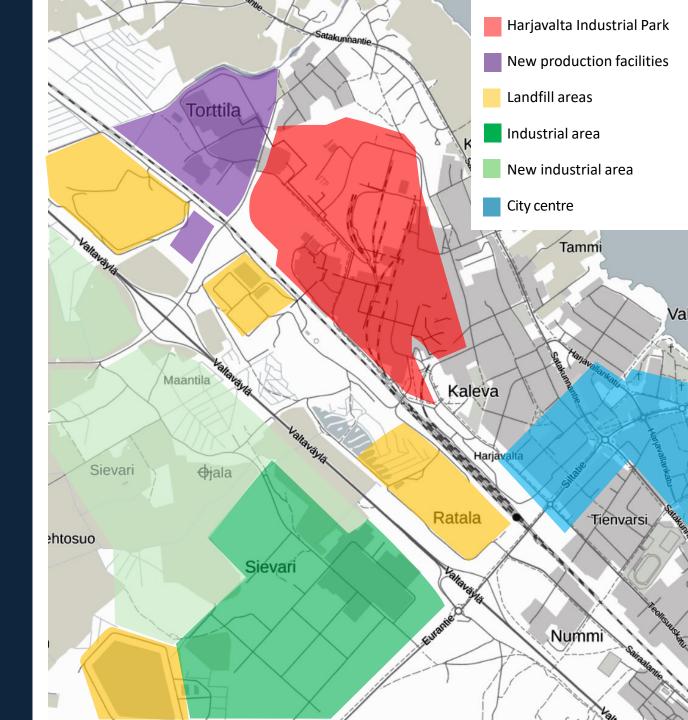


Expanding IndustrialPark

Harjavalta Industrial Park includes ca. 300 hectares of industrial area in the city of Harjavalta.

More than a dozen companies operates in the industrial area. These companies are specialist in metallurgy, chemical industry and process energy as well as industrial services.

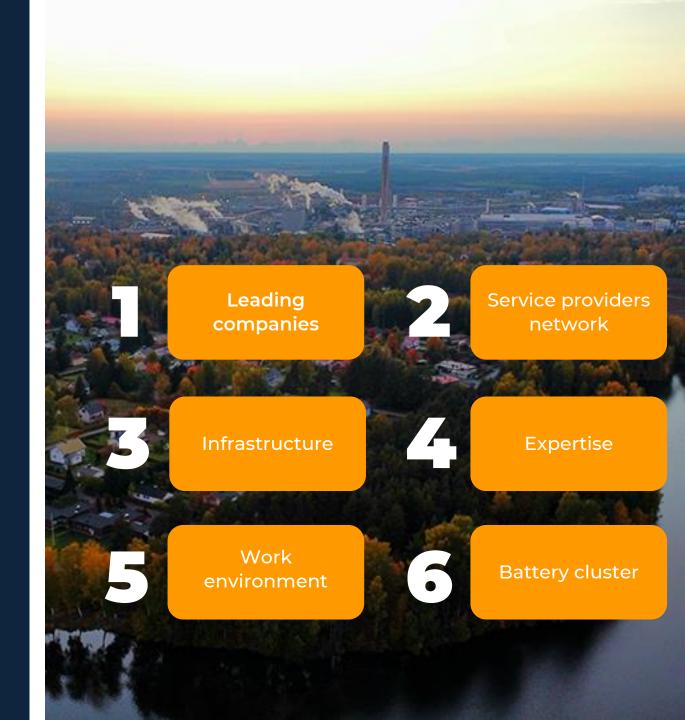
Industrial ecosystems in Harjavalta are growing as new production facilities are being built next to the Harjavalta Industrial Park.



Success factors support the growth

Companies operating in the area have identified six success factors which make Harjavalta Industrial Park an attractive location for new businesses and experts.

- 1. Strong leading companies
- 2. Wide network of service providers
- Modern, large scale industrial infrastructure
- 4. Expertise and industrial culture
- 5. Versatile work environment
- 6. Growing battery cluster



1 Strong leading companies

- Belong to the most significant copper and nickel refiners in Europe
- Develop constantly their processes and production
- Invest to expand their production
- Work determinedly to control their environmental impacts

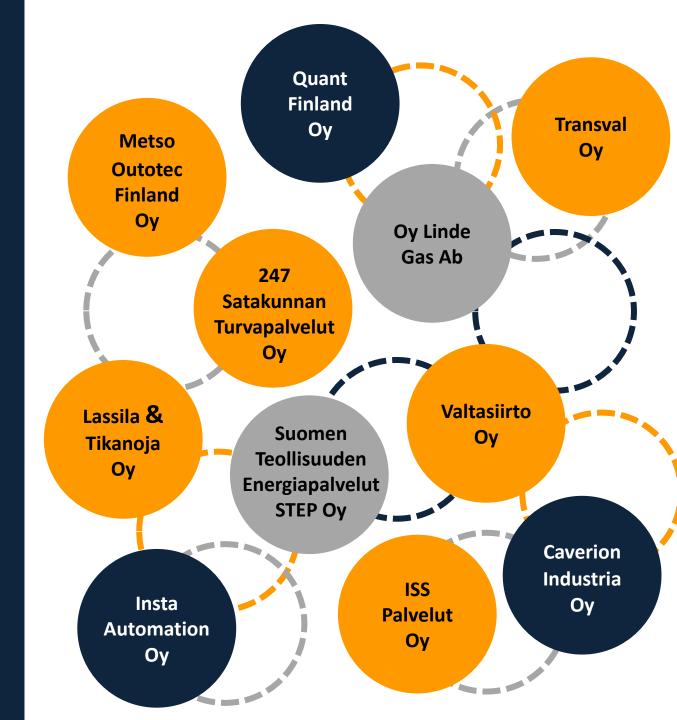


2 Wide network of service providers

Companies providing industrial services in Suurteollisuuspuisto represent many different sectors e.g.

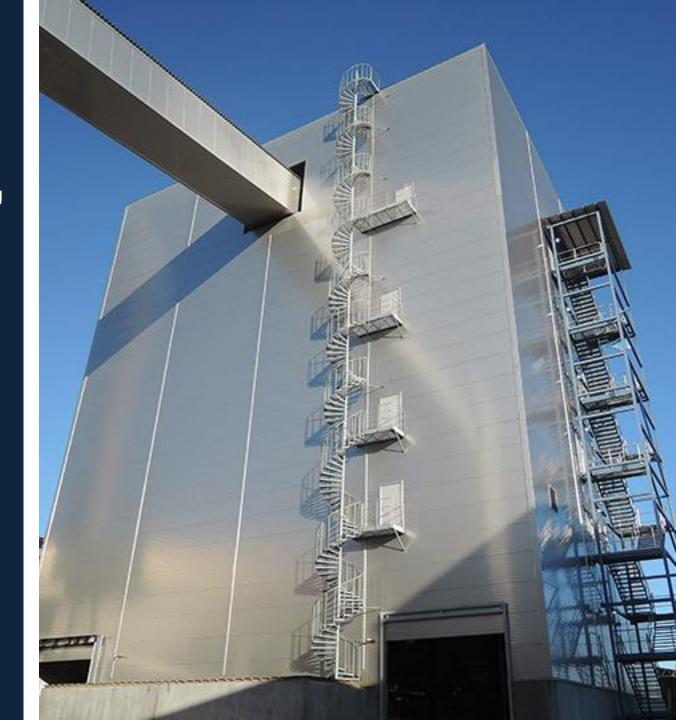
- Production commodities
- Maintenance
- Logistics
- Engineering
- Security
- Cleaning

There are over 500 employees working full time for these service providers in Harjavalta Industrial Park.



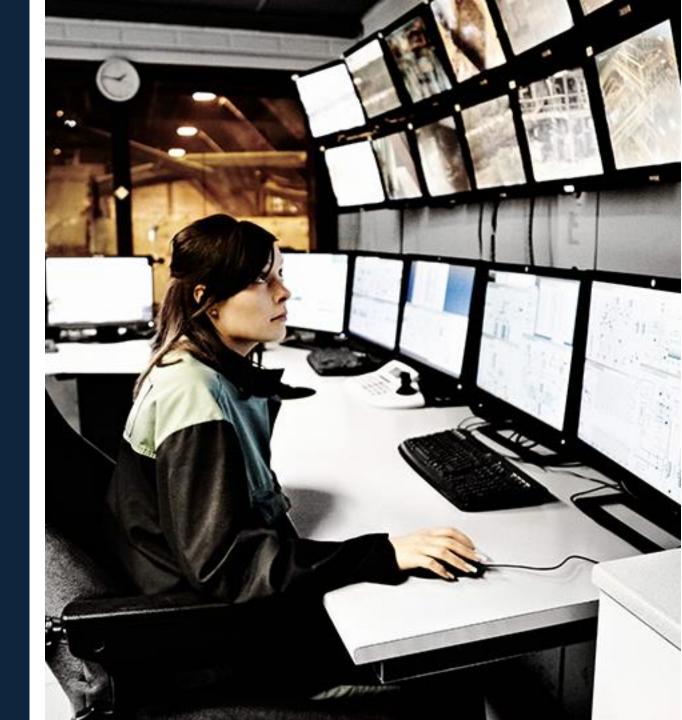
3 Industrial infrastructure

- Copper and nickel smelters + further processing
 - copper production 170 000 tons / a
 - nickel and cobalt products and intermediate products 100 000 tons / a
 - ammonium sulphate 80 000 tons / a
- Sulfuric acid plants: production 700 000 tons / a
- Largest air gas plants in Finland
- Multiple thermal power plants: combined production capacity of heat and steam 200 MW
- Hydrogen plants and LNG-terminal
- Waste water treatment plants of Boliden and Nornickel
- Strong electric grid
- Industrial rail tracks



4 Expertise and industrial culture

- During its history of over 70 years the industrial area has become an essential part of the city of Harjavalta and the industrial cluster of Satakunta.
- Smelter in Harjavalta has been a pioneer in implementing energy efficient flash smelting method since the 1940s and the method is still actively developed in Harjavalta.
- Over the decades the employees have gained significant expertise. Through apprenticeships this knowledge is transferred to the next generation of workers. Constant trainings help employees to further develop their know-how.



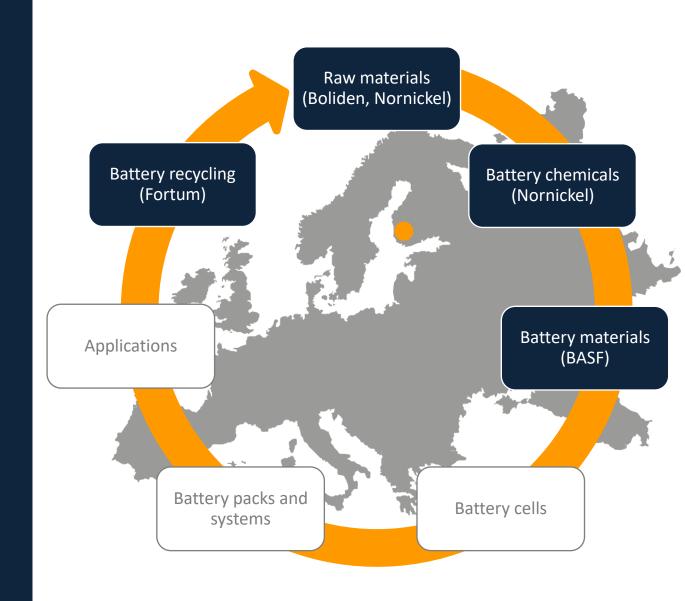
5 Versatile work environment

- Diverse industrial activities offer versatile work positions.
- Evolving work environment offers possibilities to learn new thigs and to advance in career path.
- Attention is paid to occupational safety.
- The number of employees in the area is increasing significantly with upcoming investments.



6 Growing battery cluster

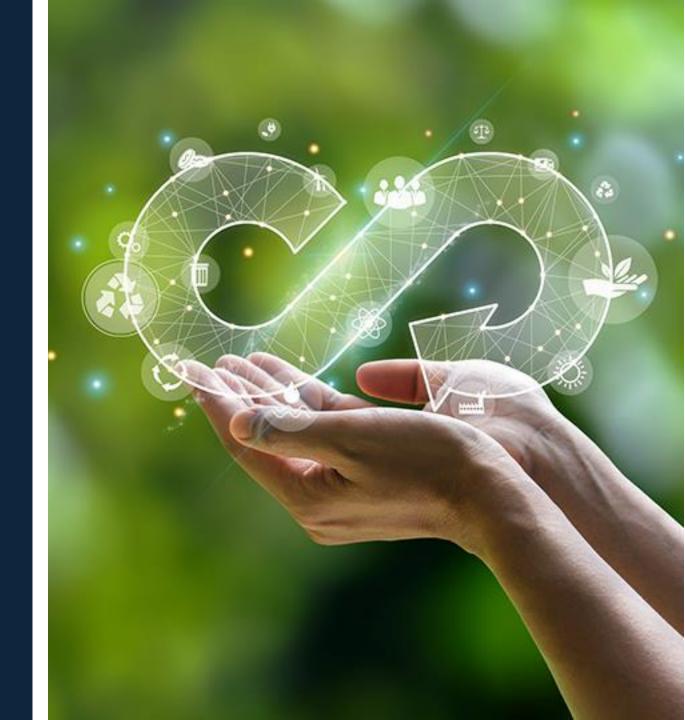
- Battery cluster in Harjavalta produces raw materials to the needs of electrification technology.
- Products of the cluster are in key role in the green energy transition.
- Nornickel produces nickel and cobalt sulphate which are used as raw materials in BASF's pre cathode material factory.
- Fortum recycles used battery materials to new raw materials for example to Nornickel.
- Operations in Harjavalta are an important part of the European battery value chain.



Circular economy in Harjavalta Industrial Park

Products and by-products are circulating from one company to the other forming strong and effective ecosystems.

- Boliden produces sulphuric acid as a byproduct of the metal refining processes.
 Acid is used in other companies in the area.
- Heat and steam formed in smelters are utilized by the other companies in the area and also by the district heating network of Harjavalta city.
- Battery materials are circulating from Fortum's recycling facility to Nornickel's battery chemical production and further to BASF's battery material factory.



Commodities for new arrivals

Companies in Harjavalta Industrial Park produce main and by-products that can be utilized by new operations located in the area. For example:

- Battery chemicals for example nickel and cobalt sulphate (Nornickel)
- Chemicals: sulphuric acid (Boliden), ammonium sulphate (Nornickel) aluminium sulphate and sodium bisulphate (Kemira)
- Air gases: nitrogen, oxygen, argon and hydrogen (Linde Gas)
- Heat, steam, compressed air and industrial water products (STEP)
- Green hydrogen, oxygen, synthetic methane and heat (P2X Solutions)

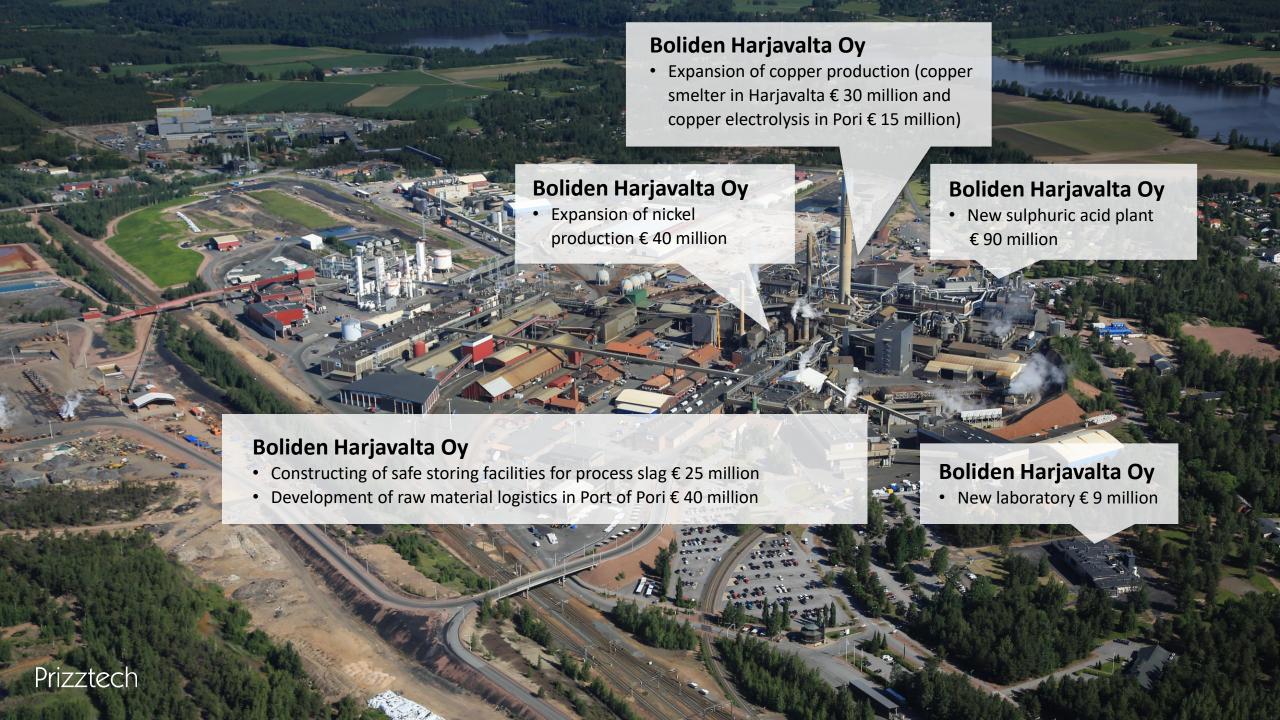






Investments for the future in Harjavalta Industrial Park









Lammaisten energia Solar power New electrical substation and Boliden is planning for 18,3 MW 110 kV connecting lines solar power plant to their slag **P2X Solutions Oy** storage areas, € 15 million Production plant for green hydrogen ca. € 70 million, 2024 **Electrical substation** Finland's transmission system operator Fingrid builds new electrical substation to Harjavalta to enable Oy Linde Gas Ab Oy Linde Gas Ab new plants to join to the power grid, 2026 Modernization of air gas plant and new gas Modernization of hydrogen plant plant, 2016 and change of fuel type, 2016 **Logistics infrastructure** Upgrade of the Harjavalta rail yard € 1,2 million, 2023 Plans for doubling the private rail capacity in Harjavalta Industrial Park € 7 million, 2024 Plans for four lane highway between Harjavalta and Pori Hydrogen fueling station next to the P2X Solutions Oy green hydrogen plant Prizztech



Harjavalta Industrial Park

2030 VISION



Turnover € 6 billion (€ 4 billion in 2022)

Most of the production is still exported



1400 employees (200+ new jobs)



Harjavalta Industrial Park area has expanded significantly



Harjavalta Industrial Park 2030 BRAND

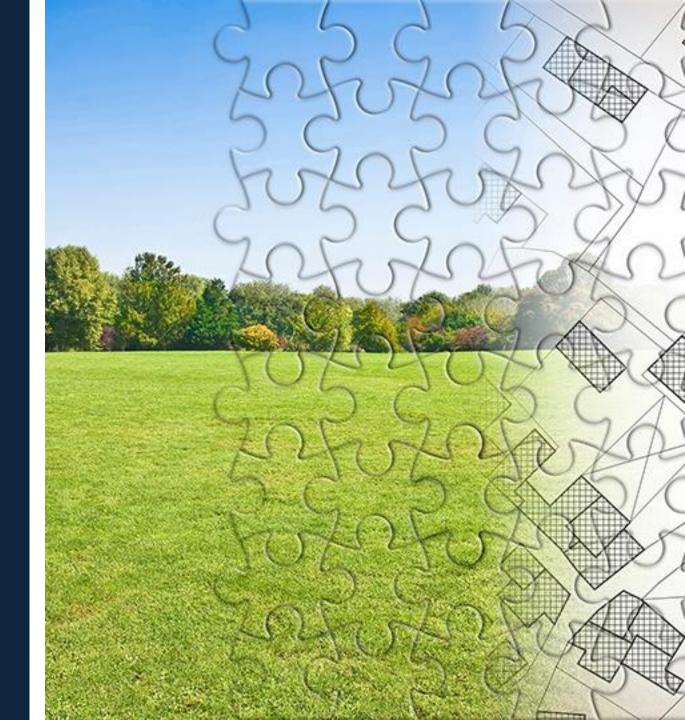
- Harjavalta Industrial Park is widely known and acknowledged for its significance in enabling the green transition.
- Industrial Park has a clear brand.
- Environmental protection measures carried out by the companies are well appreciated.



Harjavalta Industrial Park

2030 INFRA-STRUCTURE

- Areal strategy is formulated for the industrial park and it guides the cooperative development of the area.
- Transport operations in the industrial park serve all the operators equally. New ring road allows fast and safe transportation in the area.
- There are fueling stations of biogas, synthetic methane and hydrogen as well as plenty of charging points for electric vehicles.
- Suitable land areas are available for expansion of operations.



Harjavalta Industrial Park 2030 LOGISTICS

- Rail and road networks have been developed to serve the expanding industrial area.
- Emission free transportation utilizes electricity, hydrogen and renewable fuels.
- Transportation to the Harjavalta Industrial Park is easy.
- There is a new logistics center near the Harjavalta Industrial Park.



Harjavalta Industrial Park 2030 EXPERTS

- Industrial Park is a desirable workplace.
- Cooperation between companies and education institutions is intensive. Experts graduating from these institutions have both the knowledge and the skills to work in the Harjavalta Industrial Park.
- Cooperation between different companies is close and inspiring. Companies are committed to develop the area.
- Industrial Park is so comfortable and clean that the workers can be proud of it.



Harjavalta Industrial Park 2030 ATTRACTION

- There are new office and warehouse spaces close to the Industrial Park to serve the growing needs of the companies in the area.
- There are new companies located near the Industrial Park offering services like machine rental services, workshops, heavy traffic maintenance as well as building and maintenance supply sales.
- It is easy for new companies to join the industrial ecosystem.



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