

VAASA Nordic Energy Capital



EnergyVaasa

The Nordic Hub for Energy Technology



EnergyVaasa THE NORDIC HUB FOR ENERGY TECHNOLOGY



Why Vaasa

WHAT MAKES 2% OF 0,075 ‰ THE WORLD LEADER IN ENERGY TECHNOLOGY

Tiny little Vaasa

World population: 7,5 billion



Finnish population: 5,5 million

= 0,75‰ of the world population

Vaasa region population: 115 thousand

= 2% of Finnish population

Tiny region provides world's finest technology to all corners of the world!

Timeline

1906 the Wickström brothers start their engine factory in Vaasa

1906

Wickström

Vrst. BOOTTHEIS

> War in Finland forced Wärtsilä and Strömberg to move manufacturing to the Western part of Finland.

1938-

1952

War reparations 1944-1952 increased the efficiency of production

1988 Strömberg became part of ABB

1988

oy fromberg as

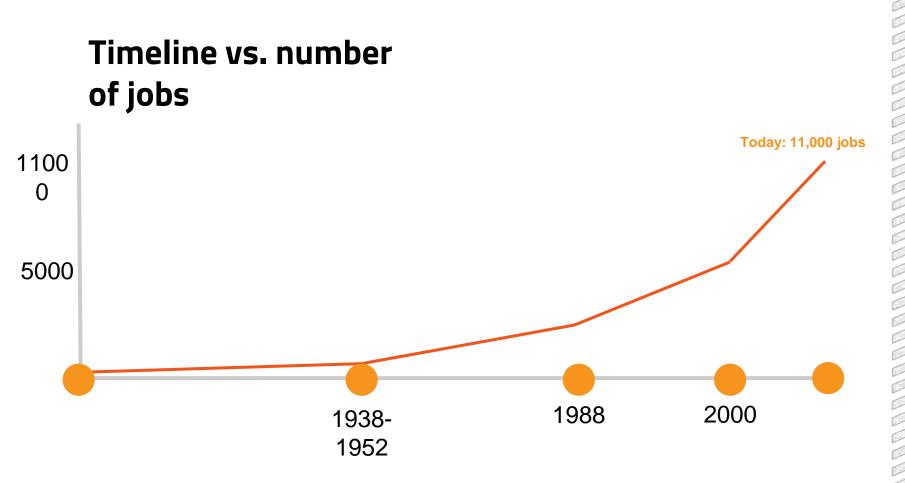
ABB

Spin-offs like VEO, Vacon and VAMP

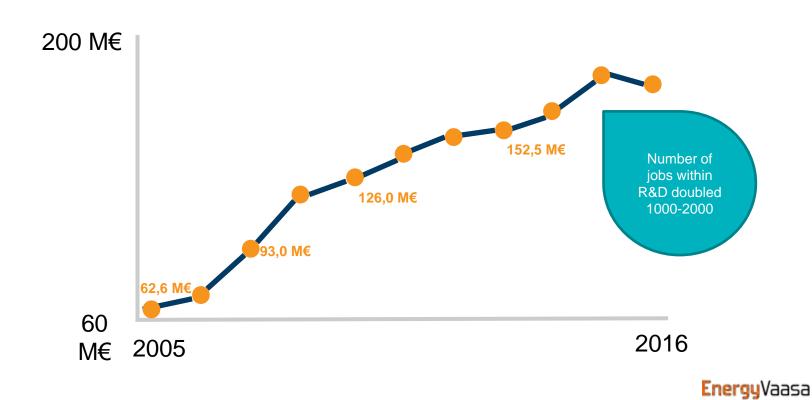
Increased environmental awareness & legislation after 2000 has changed the energy sector

2000

Lot of business for EnergyVaasa companies



R&D Investments



WORLD LEADER IN ELECTRICAL AND AUTOMATION TECHNOLOGY

of Finland's electrical and automation development takes place in Vaasa region

of countries have EnergyVaasa technology in their electrical network systems

100%

Leading energy cluster

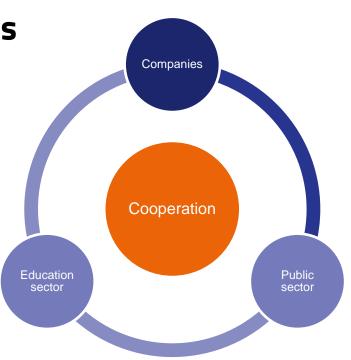


Variety of business areas

Wind and Solar power | Distributed energy solutions | Hydro power plants | Waste to energy | Geo thermal energy | Regional energy production | Frequency converters | Energy eficiency | Smart grid | Marine solutions | Power distribution | Energy and buildings | Planning and Project management | Finance | Education | Subcontracting



Cooperation and strong networks



EnergyWeek

- Takes place each year in MarchWhole week full of events and program
- In 2018 we had 4500 visitors from 34 countries
- Next time 18.-23. March 2019



Energy with passion.

1 Section

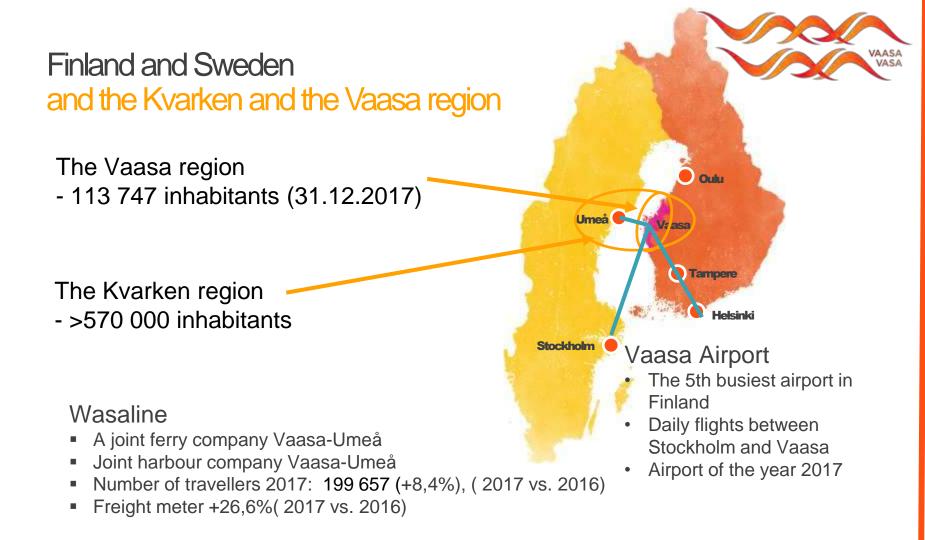


VAASA Nordic Energy Capital



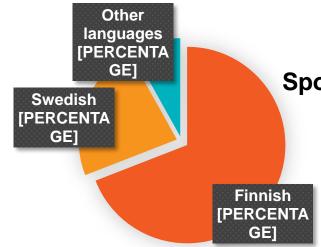


Dynamic Innovative Competitive International Productive Safe Passionate





67 620 inhabitants



about 100 different languages and 120 different nationalities

Spoken languages in Vaasa



The most common Vaasa resident is a 23-year-old man.

A successful region focusing on the future

Competitiveness consists of the following factors: Innovation • The employment rate **Business Dynamics** Labour productivity The level of education Tutki Industry koulu kaupunkien Kaupunkien kehitykselle. arvosanat 1. Vaasa 9.6 Jukka Harju HS 2. Helsinki 9.5 Tampere 3. Turku 9,1 4. Kuopio 9,0 KAIKKI Snomen kaupungit ja 5. Porvoo 8,8 seutukunnat saivat kouluarvo-5. Tampere 8,8 htion tutkimuk-

ettiin niiden

008 nvkv-

Vaasa, ja

Helsinki.

on muu-

stokanpun-

Study rated

the cities

according to

urban

development

7. Hämeenlinna B.7 7. Seinäjoki B,7 9. Oulu 8.5 9. Kokkola 8,5 11. Lappeenranta 8,3 11. Rauma 8,3 13. Jyväskylä 7,9

13. Joensuu 7,9

Urban

ratings

A 8 HELSINGIN SANOMAT KESKIVIIKKONA 2

Kaupungit: Kehitystä mitanneen tutkim



Cities: Vaasa has taken the leading place in research measuring development

The university cities are at the top



Turku

Yliopistokaupungit ovat parhaimmassa vireessä

Sustainable development Goals and agreements

Carbon neutral Vaasa 2035 Covenant of Mayors SEAP Energy efficiency agreement

Energy and climate programme









Energy Ecosystem as an innovation platform

TRIPLE HELIX Business, university and city engagement

Legislation based on decentralization Regional ecosystems in focus Glocal business activities

Strong Cooperation with Universities R&D Skilled labour



Impact of multinationals during all stages of the ecosystem Financing National, Nordic and European funds Programs to support R&D activities.

Supporting development services Regional development companies and technology centers ie. startups, incubators, accelerators

MEGA CLASS INNOVATION PLATFORMS



GigaVaasa Perfect ecosystem and location for battery factories





GigaVaasa factory area enables the start-up of large battery factory projects in 2018

The width of the investigated area for the development of GigaVaasa's land use is about 1000 hectares.

Planning underway

Nature inventories and other investigations in relation to the plannings of both areas and processes for evaluation of environmental impact of both areas were started already in March. The planning, both in terms of the component local master plans and the local detailed plan are underway in order to be shown in both municipalities already this year

Unanimous local support

"We are moving fast forward, since the Vaasa region has stood unanimously behind the battery factory project ever since it was made public" *Tomas Häyry, The Mayor of Vaasa*



Location

Size of the total area

Areas to be planned

Site sizes

Ongoing processes and timetable goals North-east of Vaasa Airport, partly in Vaasa and partly in the municipality of Korsholm, with a border in the west to the airport area, in the north-east to the railway and in the south-east to the Tuovila village.

About 1000 hectares.

In Vaasa about 500-600 hectares, in Korsholm about 300 hectares.

Sites of different sizes, the largest 150-200 hectares.

Nature inventories and other

investigations, completition in autumn 2017 and 5/2018. Security investigation, completed 11/2017. Environmental impact assessment program with current state evaluation, completed 12/2017. Component local master planning and local detailed planning in both municipalities, decision considerations 6-9/2018.

Building permit readiness 8-11/2018.

Building for the future The largest university city in Finland

- Vaasa is number one in the comparison of research in Finnish cities.
- 6 institutions of higher eductions
- > 13 000 students
- > 30 multilingual qualifications in 3 languages
- > 4 000 students in adult vocational education
- every 5th person is a university student
- High level of education
 - education completed72 %
 - upper secondary education 39%
 - university degree

33 %





Working together for the future

- Energy Education Strategy: In Vaasa, energy education includes all stages from primary education to university studies.
- Citizen's Engagement Programme 2017-2020
- Equality and Non-Discrimination program
- Member of the Finnish Sustainable Communities
- Member of the Urban Agenda for EU Energy Transition Partnership



The sea is always close and the city full of life

- Apartments, summer cottages and business premises are much cheaper than the most expensive in Finland
- Live by the sea, in the countryside, or in the heart of the city
- And a city with a rich culture life and full of activities and events.







End result: The Vaasa region and its inhabitants have been proven to be energetic, full of life and passion!

and the second second

VASAREGIONEN tusentals lyckliga berättelser



Maria Backman Development manager, International affairs



+358 40 554 1900 maria.backman@vaasa.fi