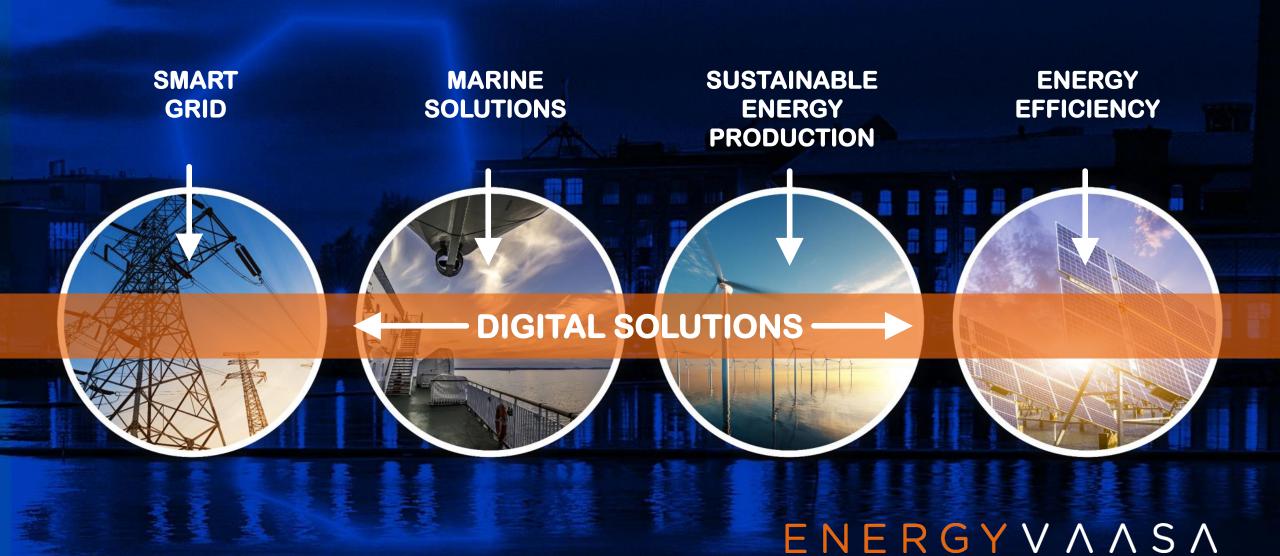


# Our statements "We are world leaders in several key areas..."



### **Long traditions**



The Wickström brothers start their engine factory in Vaasa

1906



War in Finland forced Wärtsilä and Strömberg to move manufacturing to the Western part of Finland. War reparations 1944-1952 increased the efficiency of production

Strömberg generators and transformers to Vaasa Wärtsilä starts to manufacture diesel engines in Vaasa

1954

Vacon starts to manufacture frequency

1993

converters



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

Lot of business for EnergyVaasa companies

1880

Beginning of energy technology

1940

Strengths: Know-how and efficient production 1988

oy Stromberg Ab

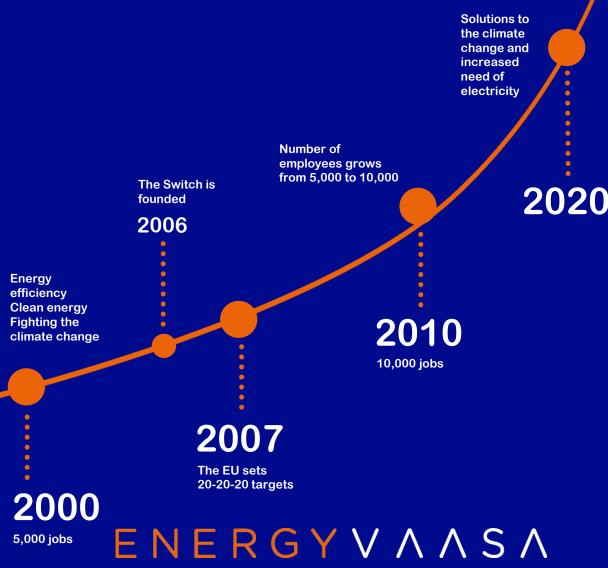
Strömberg becomes a part of ABB

Spin-offs like VEO, Vacon and VAMP 2000

5,000 jobs

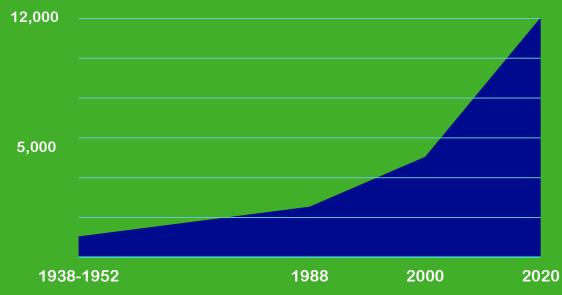


## ...and high goals





### Timeline vs. number of jobs



OF THE FINNISH ENERGY SECTOR WORKFORCE

**EMPLOYS** 1/5 MORE THAN FAMILIES

13,000 UNIVERSITY STUDENTS

>110

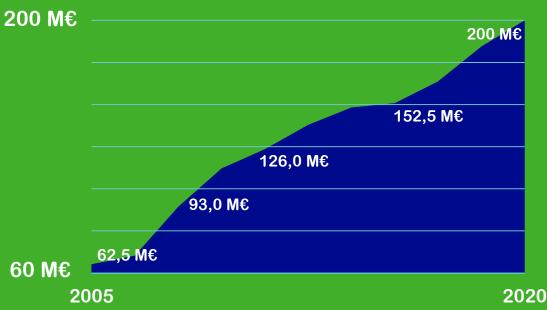
45% OF THE PEOPLE IN THE **VAASA REGION HAVE A DEGREE** IN HIGHER EDUCATION

**NATIONALITIES** 



>60% Most Green Patents in the Nordics

More than 90% of the Finnish R&D in electrical and automation solutions





# MORE 160



BUSINESSES, SEVERAL OF WHICH ARE GLOBAL MARKET LEADERS IN THEIR FIELD

12,000 THITHT

25% OF TOTAL MANPOWER IN THE FIELD OF ENERGY IN FINLAND

20/0 OF FINLAND'S POPULATION GENERATES

**†** † † † † † † † † †

EXPORT: 5.5%, TECH EXPORT: 12% ENERGY TECH EXPORT: 30%



TOTAL BUSINESS TURNOVER SOME 5 BILLION EUR ANNUALLY



EXPORT 80%

BILLION EUR BY 2025



**ENERGY TECHNOLOGY INFRASTRUCTURE INVESTMENTS BY LEADING COMPANIES** 

R&D



200 MILLION ANNUALY

IN ENERGY TECHNOLOGY OF **WHICH 80% IS PRIVATELY FUNDED** 

MORE THAN

160

R&D 200



**BUSINESSES, SEVERAL OF** WHICH ARE GLOBAL MARKET **LEADERS IN THEIR FIELD** 



IN ENERGY TECHNOLOGY OF WHICH 80% IS PRIVATELY **FUNDED** 

BILLION EUR BY 2025

**POPULATION** 



**ENERGY TECHNOLOGY INFRASTRUCTURE INVESTMENTS BY LEADING** COMPANIES

**EXPORT: 5.5%** 

**TECH EXPORT: 12%** 

**ENERGY TECH EXPORT: 30%** 

**TOTAL BUSINESS TURNOVER** SOME

**BILLION** 



80%

CURRENT NUMBER OF EMPLOYEES: 12,000

25%

OF TOTAL MANPOWER IN THE FIELD OF ENERGY IN **FINLAND** 



# World Leader in Electrical and Automation Technology

- 100% of countries have EnergyVaasa technology in their electrical network systems
- More than 90% of Finland's electrical and automation development takes place in the Vaasa region
- The region provides the world's finest technology to all corners of the world



### Wärtsilä

"By emphasising sustainable innovation. total efficiency and data analytics, we maximise the environmental and economic performance of the vessels and power plants of our customers."



### Vaasan Sähkö

"We are one of the largest wind power producers in Finland, and all our future investments in primary energy will be renewable."



### **Danfoss**

"Our AC drives help save the planet by reducing the global electricity consumption by 8% by 2040."

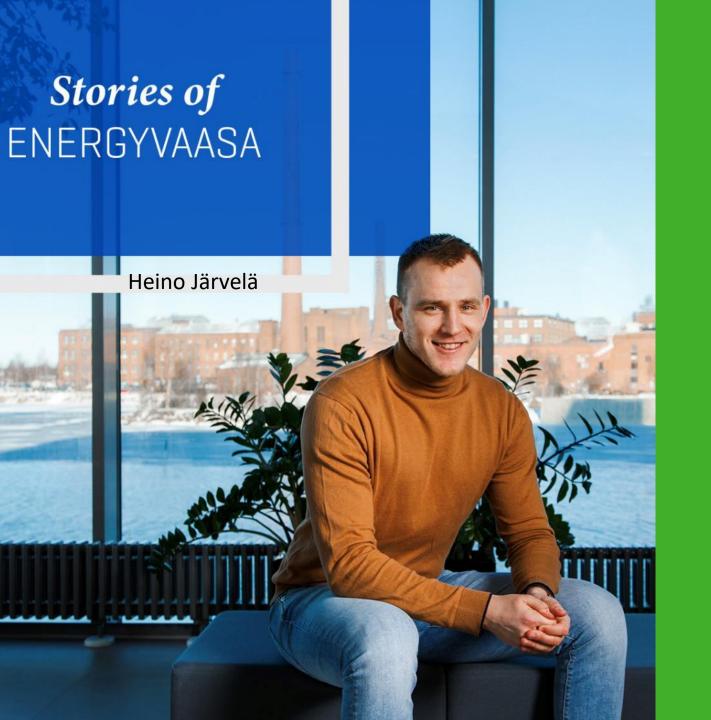


### **Gambit**

"Working closely with our customers, we have helped reduce their carbon footprint by digitizing their work processes and tools."



"... getting to know the energy sector is thrilling. I'm very excited to be part of all of this - the innovative ideas that we see here can hopefully be part of saving the world in the future,"



As a development engineer, Heino is for example, making sure that Vaasan Sähkö's products and services are as green and customer friendly as possible.



"I'm developing an application that will help the man on the street to become even more environmentally friendly."

It feels fantastic knowing that my coding can contribute to something so meaningful".



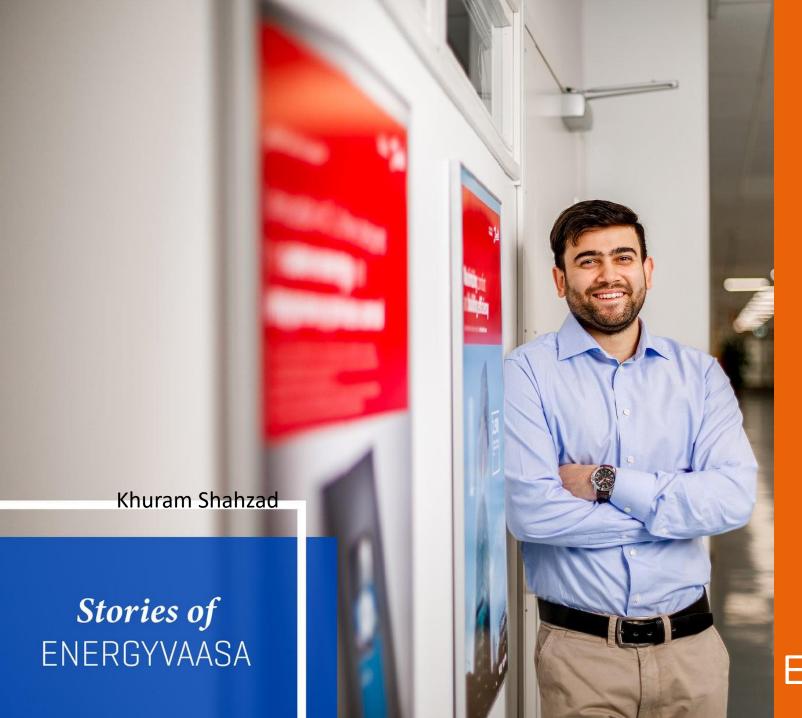
"I can't say I'm saving the world myself, but I'm making sure that my colleagues who do are fit for fight...

with team-building exercises are important building stones when we support our world savers."



Wärtsilä's visions of a Smart Marine Ecosystem and a 100% renewable energy future.

Wärtsilä's investment in the MantTechnology Hub in Vaasa is an essential part of how to turn these bold visions into reality.



Khuram Shahzad at Danfoss Drives is currently working on marine hybridisation solutions making, for example, Wasaline's new ferry as climate and customer friendly as possible.

