#EnergyVaasa
#WeAreEnergyVaasa

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ENERGY EDUCATION PATH IN VAASA

In Vaasa, the energy capital of the Nordic countries, students master the skills of working life and energy competence.

STUDENTS GET USEFUL SKILLS AND ABILITIES

We create models which promote learning the working skills of the future

- Identifying dynamic working life skills in the future and integrating these into education
- Education across language, school and educational stage boundaries

COMPETENT TEACHERS

We support and motivate teachers

- Structure
- Network of energy teachers
- Educating teachers
- Learning environments (virtual and physical)

1

EARLY CHILDHOOD EDUCATION

Raising interest and participation

- Energy documentation
- ICT ja basics of technology
- Small group, theme and project work

BASIC EDUCATION

Modern teaching resources
Multiprofessional projects

2

3

4

UPPER SECONDARY SCHOOL EDUCATION

Central focus

- Physics, Chemistry, Mathematics

Energy as a phenomenon

- In subjects and school activities

VOCATIONAL EDUCATION

Central focus

- Qualifications and further education in the energy branch

Proficient support group - Energy in professions

- Qualifications that support the energy branch
- All qualifications

ENERGY COMPETENCE GROWS IN THE SCHOOLS

Energy is a natural part of the educational content on all educational stages

- Energy is integrated into education
- Visits to energy companies
- Expert visits (virtual and live)
- Energy as a subject in education and degrees

POLYTECHNIC EDUCATION

Central focus

- Intelligent electricity technology, robotics and 3D
- International trade

Proficient support group - Energy in professions

- Education and research that support the energy branch

5

6

UNIVERSITY EDUCATION

Central focus

- Degree programmes in Energy

Proficient support group - Energy in professions

- Energy-related themes and know-how in other degrees
- Energy as a minor subject

YOUNG PEOPLE AND ADULTS ENTER INTO WORKING LIFE WITH GOOD SKILLS

The energy cluster attracts skilled people

- Work-oriented studies
- Teamwork between working life, students + teachers
- STEM subjects
- Optional subjects
- Club activities
- Educational path in FIN/SWE/ENG
- Further training

STUDENTS KNOW THE STUDY AND CAREER POSSIBILITIES WITHIN THE ENERGY CLUSTER

Interaction between schools and working life

- Training for study counsellors
- Excursion path
- Expert bank
- Business village
- Introduction to working life
- Precision days
- Summer jobs

ENERGIAPOLKU.FI

VAASA.

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

1944–1952

Strömberg generators and transformers to Vaasa

Wärtsilä starts to manufacture diesel engines in Vaasa

1954

Strömberg becomes a part of ABB

Oy Strömberg Ab

ABB

Vacon starts to manufacture frequency converters

1993

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

Lot of business for EnergyVaasa companies

2000

5,000 jobs

1880

Beginning of energy technology

1940

Strengths:
Know-how and efficient production

1988

Spin-offs like VEO, Vacon and VAMP

ENERGYVAASA

…and high goals

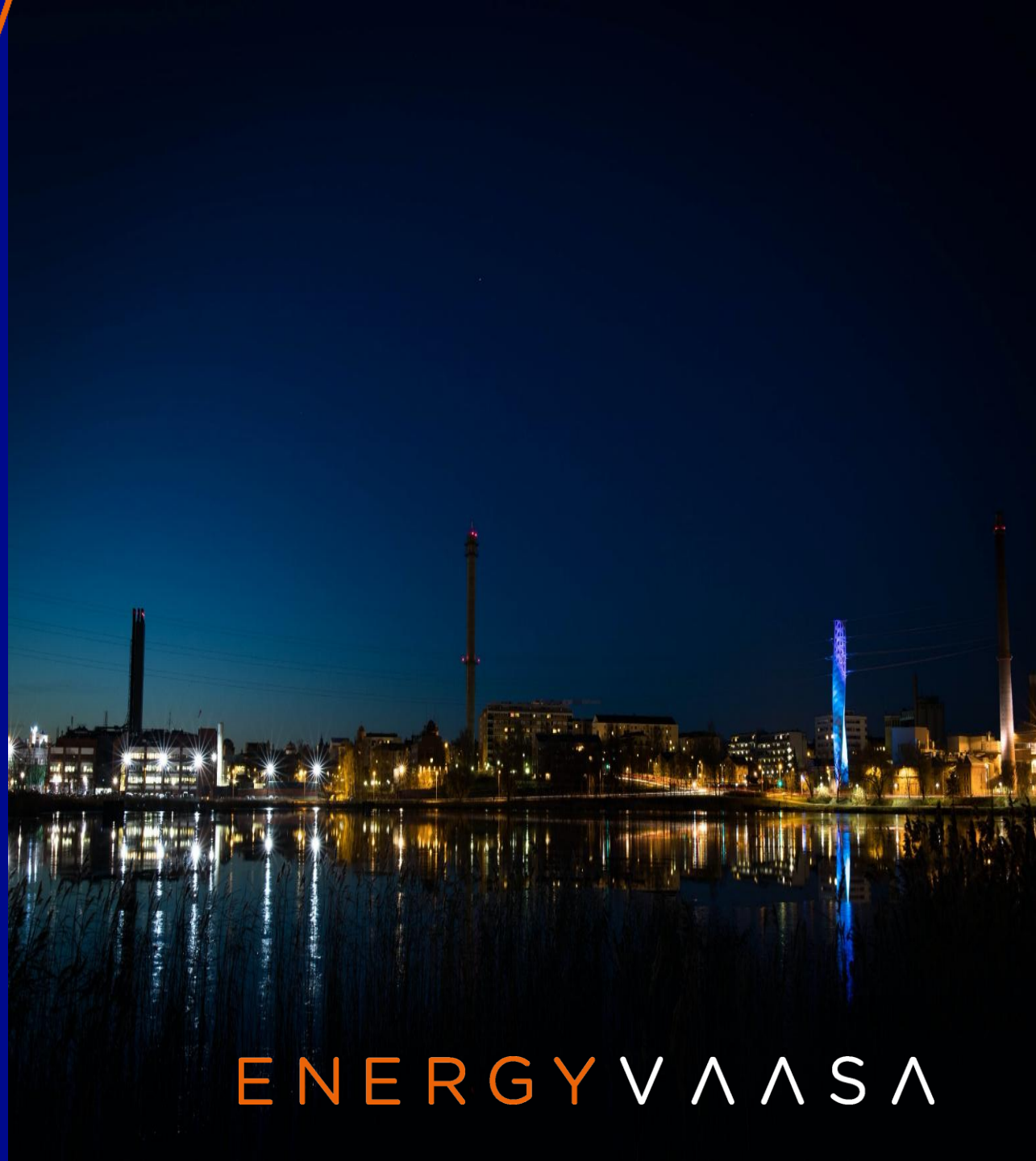
2000
5,000 jobs
Energy efficiency
Clean energy
Fighting the climate change

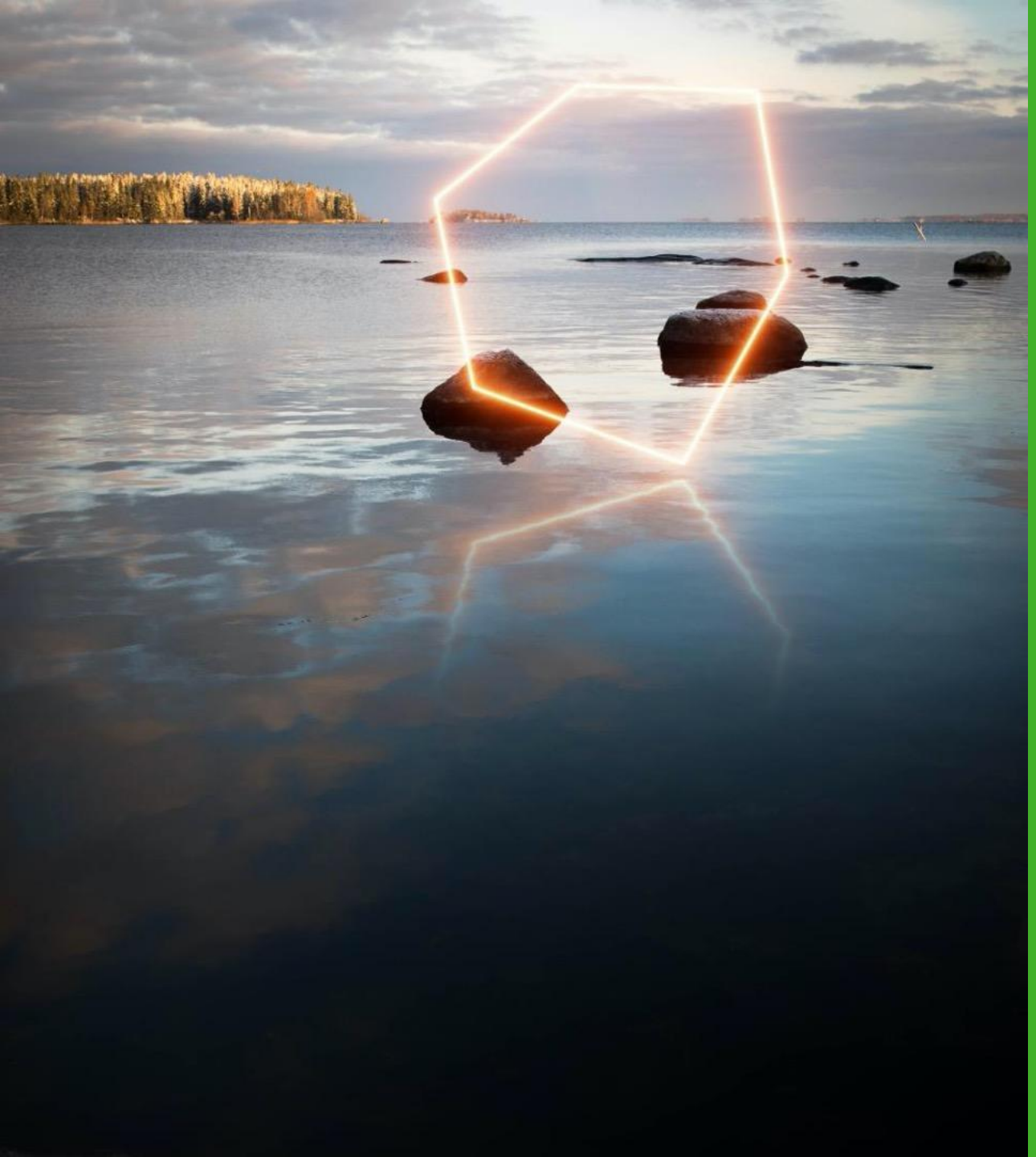
2006
The Switch is founded

2007
The EU sets 20-20-20 targets

2010
10,000 jobs
Number of employees grows from 5,000 to 10,000

2020
Solutions to the climate change and increased need of electricity

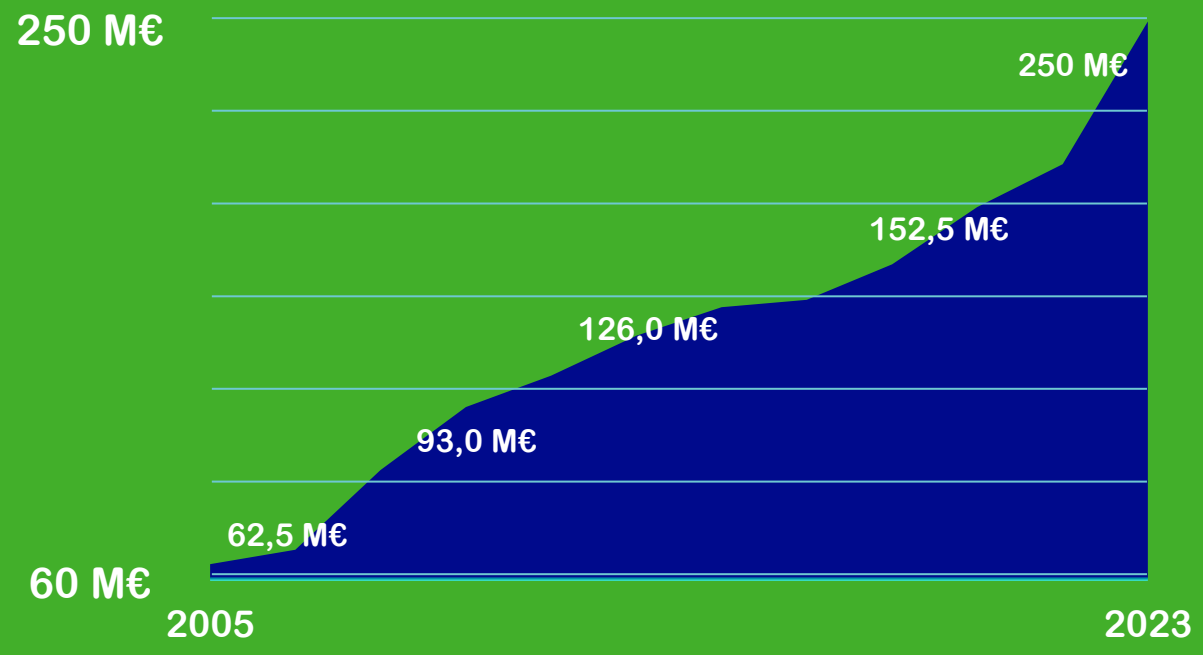




>60%

Most Green Patents in the Nordics

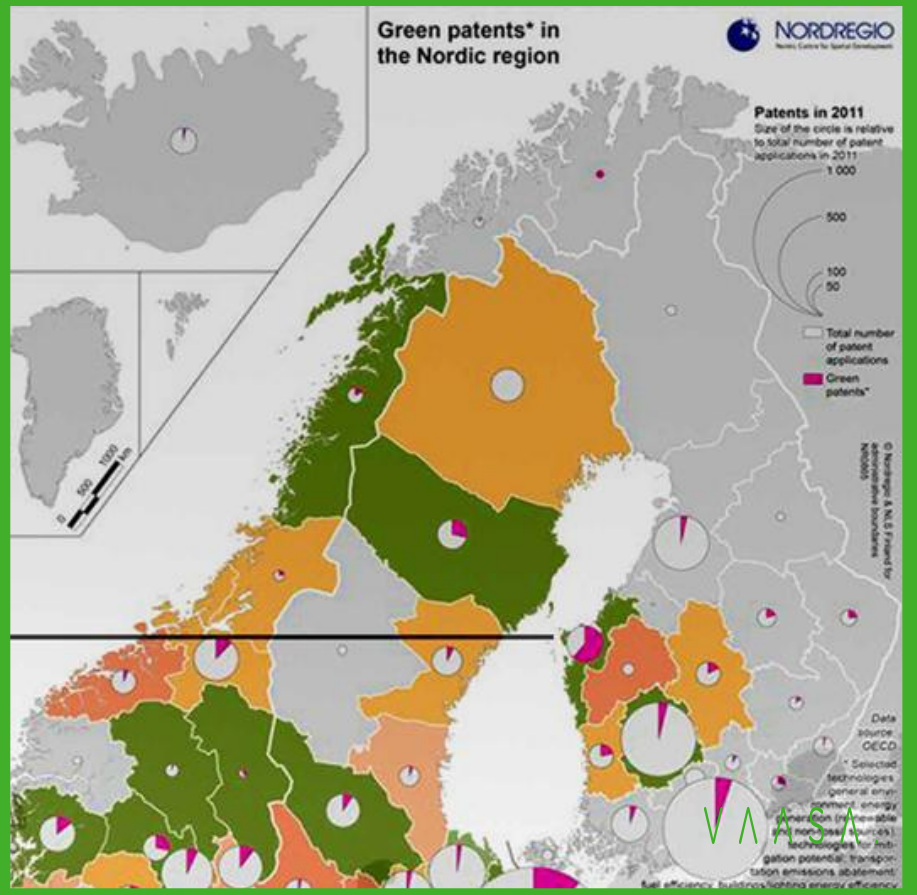
More than 90% of the Finnish R&D in electrical and automation solutions



ENERGYVAASA

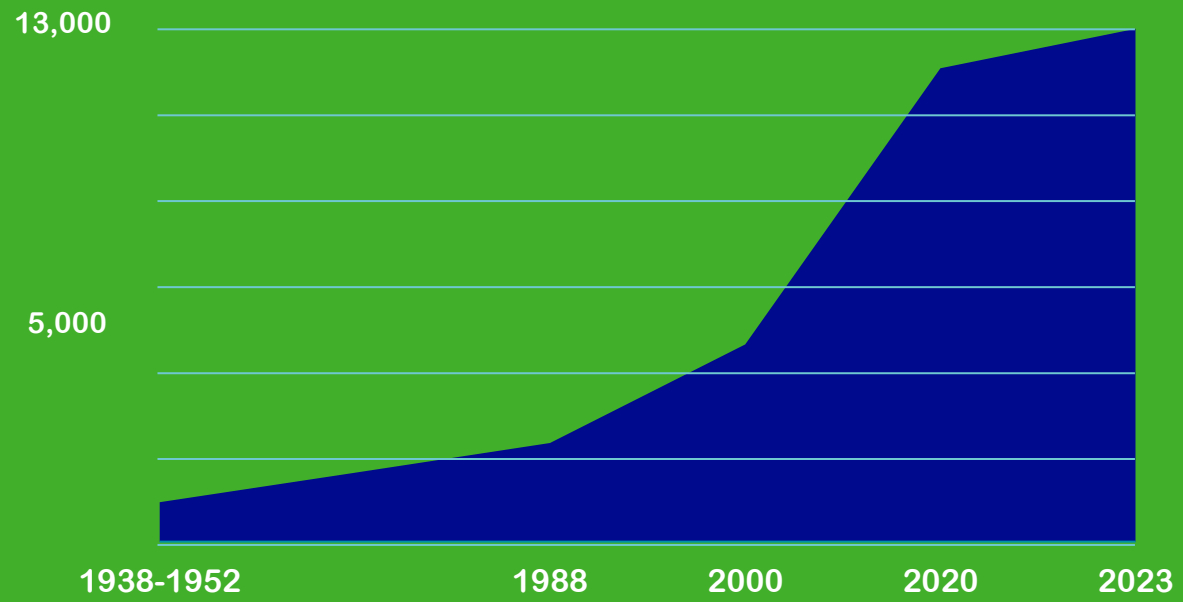
Green Patents

Most green patents in the nordic countries.



ENERGYVAASA

Timeline vs. number of jobs



OF THE FINNISH ENERGY SECTOR WORKFORCE

1/5 EMPLOYS MORE THAN FAMILIES

14,300 UNIVERSITY STUDENTS

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

>110 NATIONALITIES

ENERGYVAASA

MORE THAN **180**

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

13,000

NUMBER OF EMPLOYEES

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

2% OF FINLAND'S **POPULATION** GENERATES

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

ENERGY VAASA

TOTAL BUSINESS TURNOVER OVER **6.0** BILLION EUR ANNUALLY

EXPORT RATE OVER **80%**

1.9 BILLION EUR BY 2030

ENERGY TECHNOLOGY INFRASTRUCTURE INVESTMENTS BY LEADING COMPANIES

R&D **250** MILLION ANNUALY

IN ENERGY TECHNOLOGY OF WHICH 80% IS PRIVATELY FUNDED

ENERGYVAASA

World Leader in Electrical and Automation Technology

- 100% of countries have EnergyVaasa technology in their electrical network systems
- MicroSCADA developed in Vaasa automates, supervises and monitors 10% of the global electricity distribution.
- 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

ENERGYVAASA

Our statements

”We are world leaders in several key areas…”

SMART GRID

MARINE SOLUTIONS

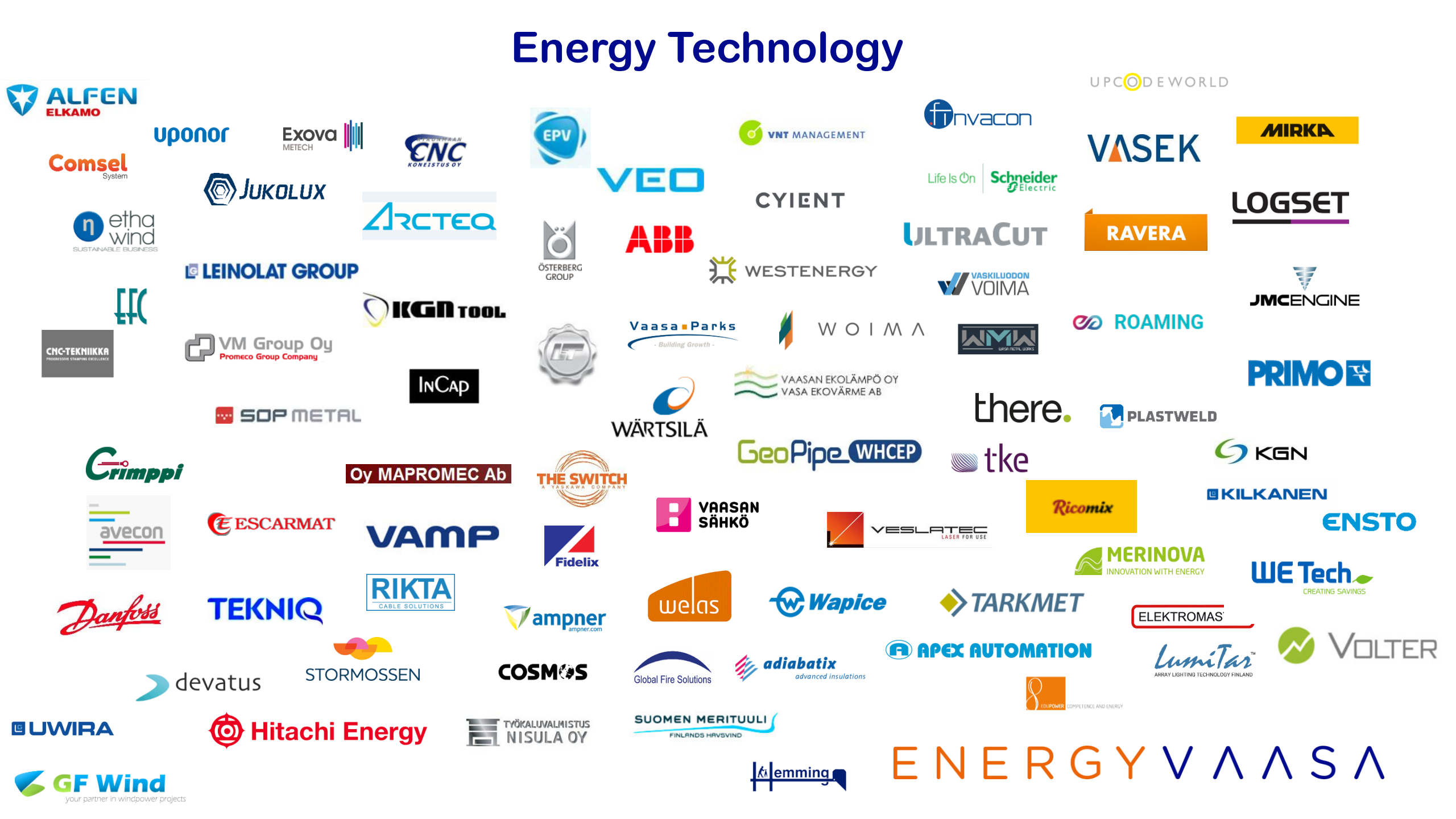
SUSTAINABLE ENERGY PRODUCTION

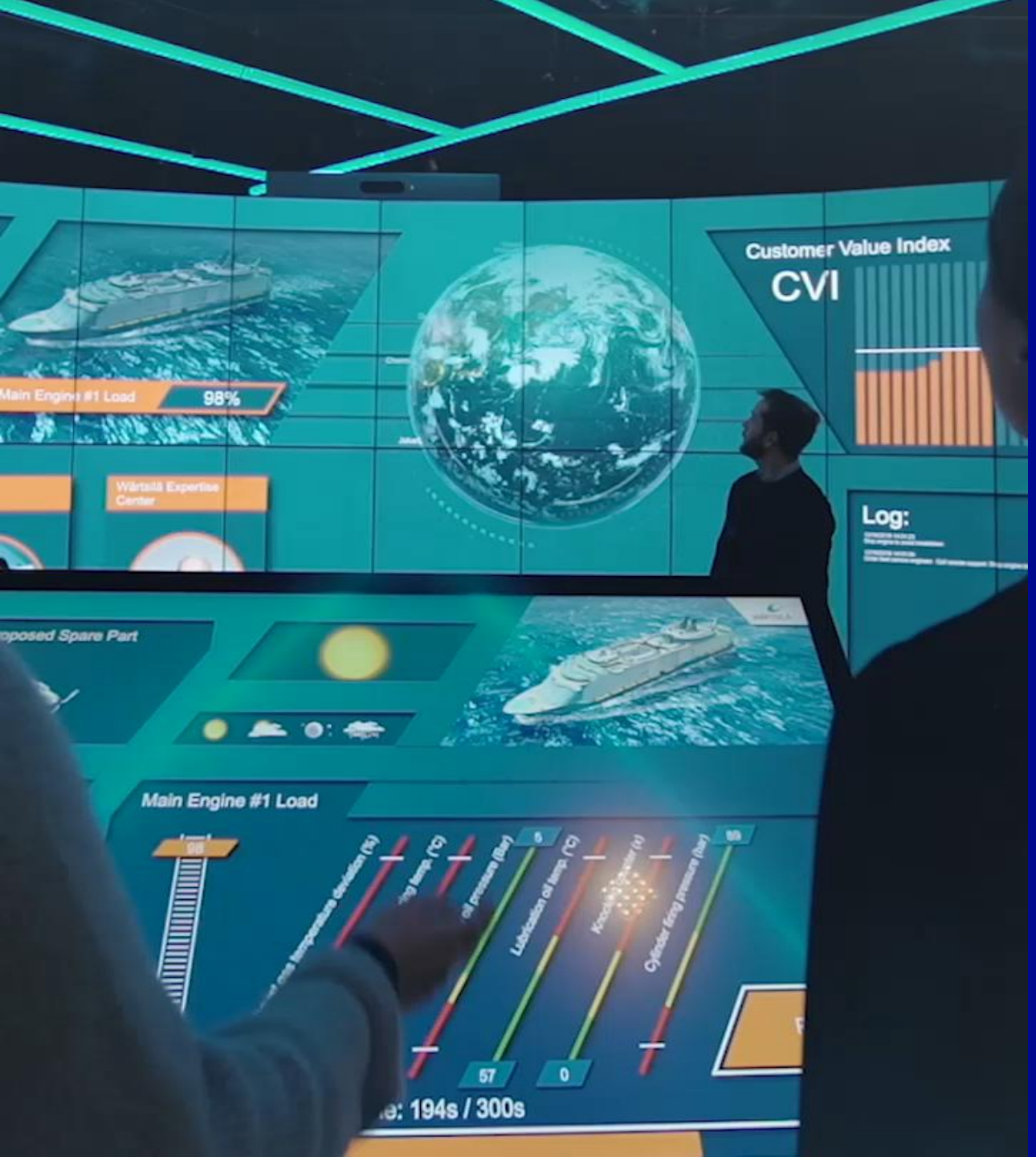
ENERGY EFFICIENCY

DIGITAL SOLUTIONS

ENERGYVAASA

Energy Technology

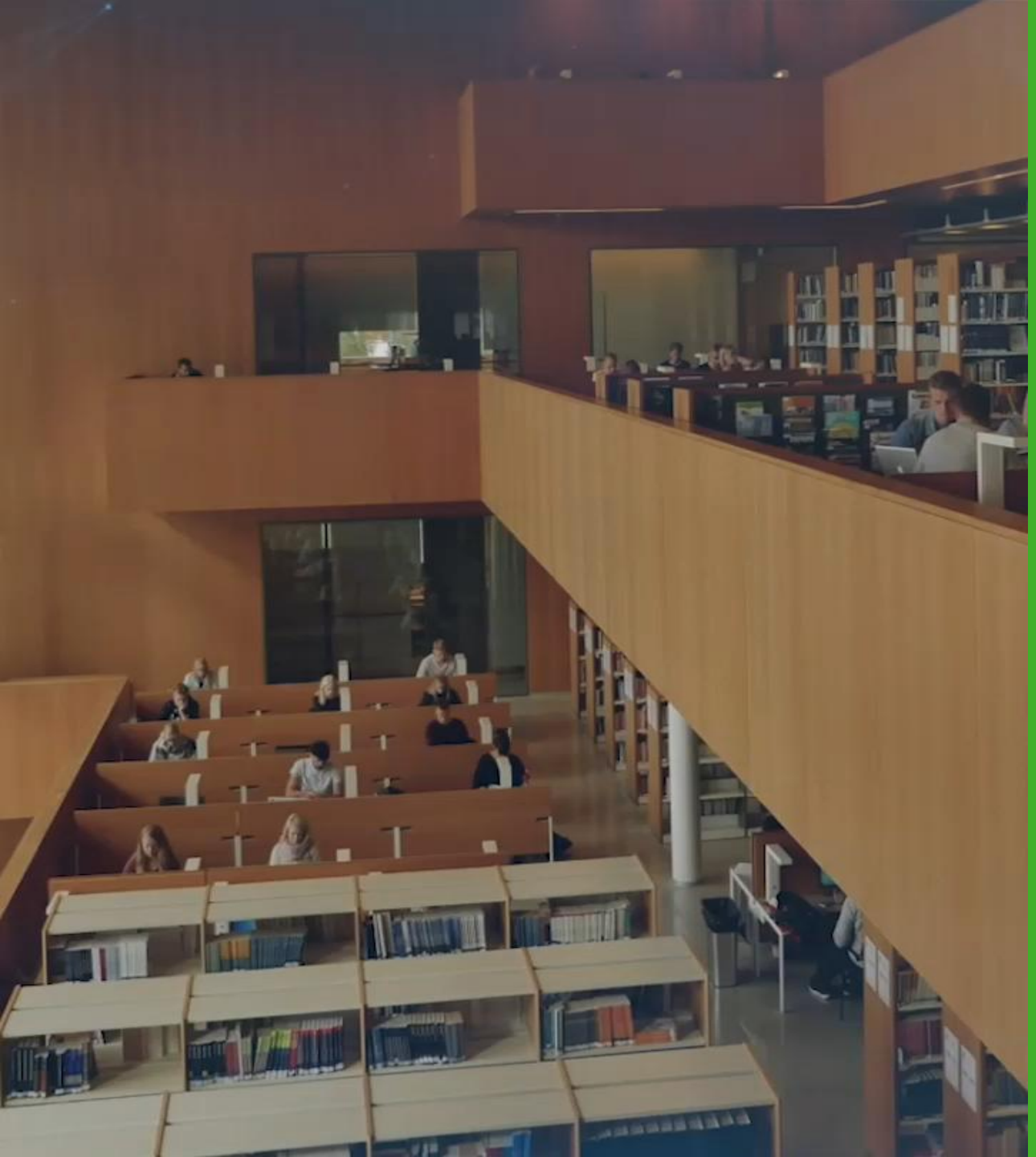




Wärtsilä

*"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."*

ENERGYVAASA



Vaasan Sähkö

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

ENERGY VAASA

Danfoss

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

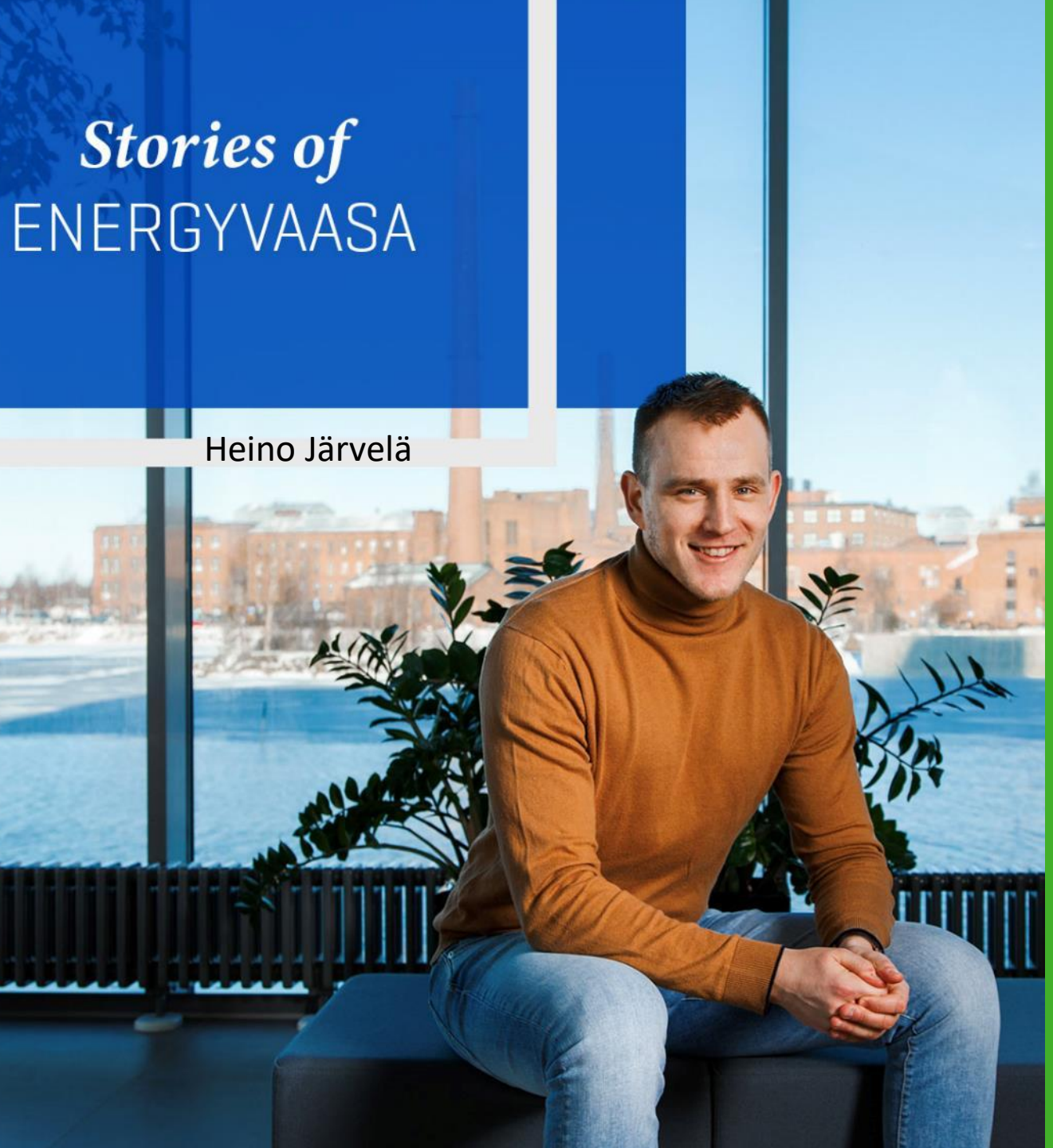
ENERGYVAASA

Matina Mitsobonou

Stories of
ENERGYVAASA

"... 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,"*

ENERGYVAASA



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.

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Paula Gonzalez,

*"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**".*

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Mette Karlman

Stories of
ENERGYVAASA

"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."***

ENERGYVAASA

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

*Wärtsilä´s investment in the #SmartTechnologyHub in Vaasa is an essential part of how to turn these **bold visions into reality.***

ENERGYVAASA

Khuram Shahzad

Stories of
ENERGYVAASA

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.

ENERGYVAASA

VAASA Winner 2026
EUROPEAN GREEN LEAF

WELCOME NEXT YEAR!

EnergyWeek

March 15th to 18th 2027

ABB · CAPALO · Danfoss · Energiateollisuus · EXPOMARK · HITACHI · MERINOVA · OSTROBOTHNIA CHAMBER OF COMMERCE · SIEMENS Gamesa RENEWABLE ENERGY · VAASA · VASA · VAASAN SÄHKÖ · VAMK · VASEK · Vaasan yliopisto · VEO · Wapice · WESTENERGY · WÄRTSILÄ

ENERGYWEEK.FI

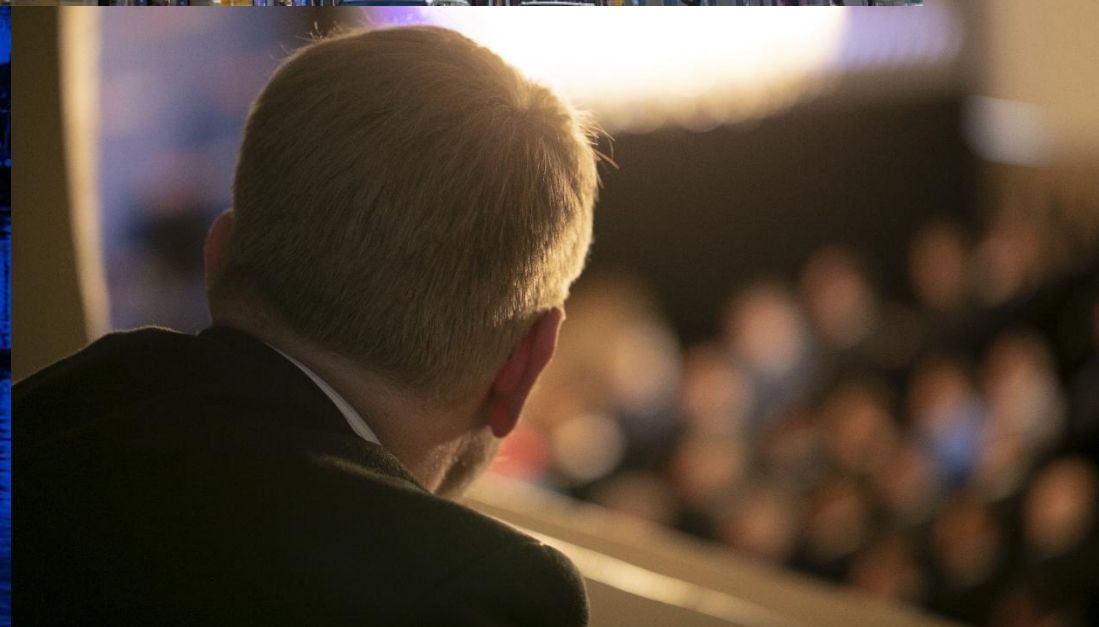
#ENERGYWEEK

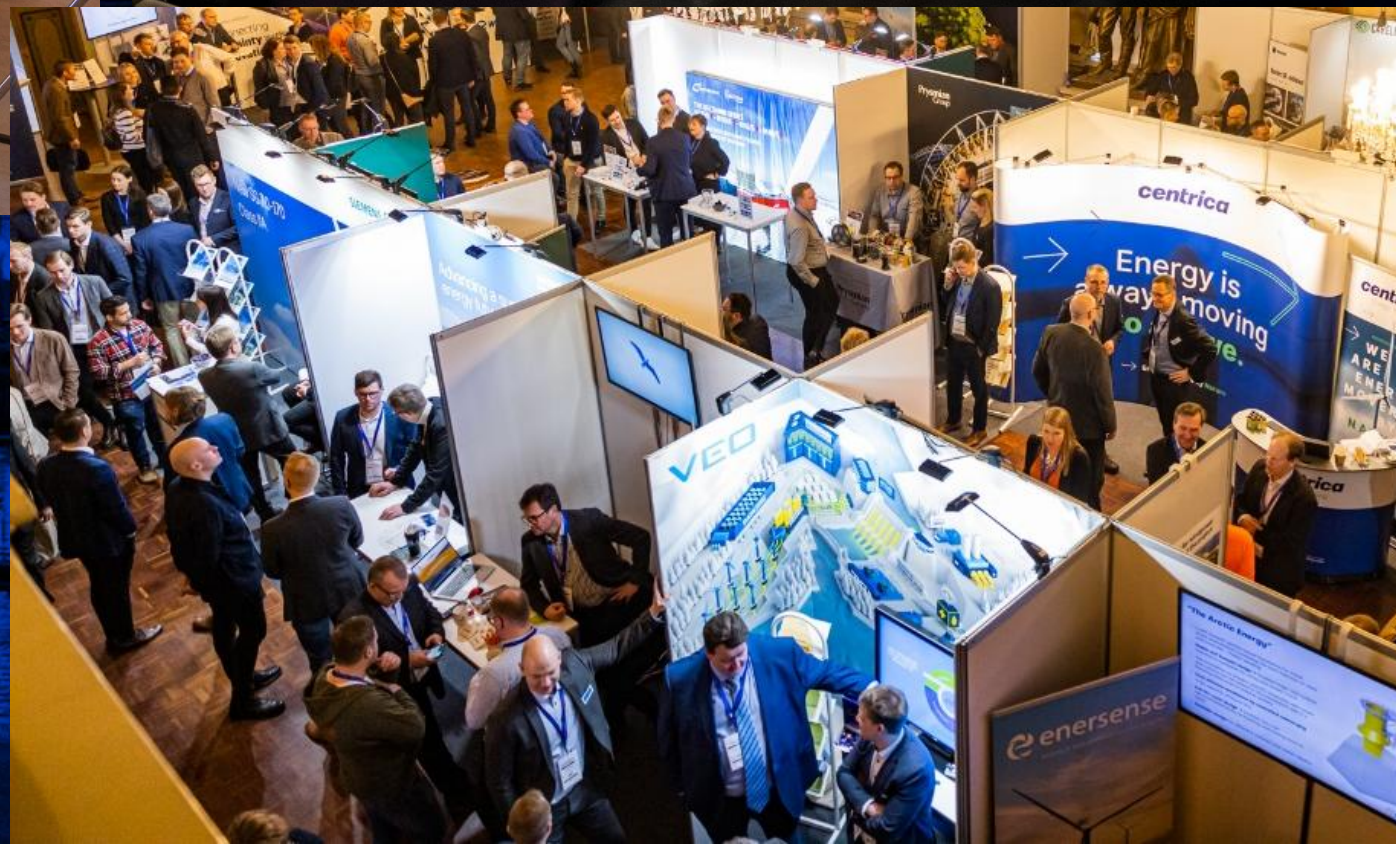
EnergyWeek 2026

- Whole week full of events and program
  - New theme each day. Wind, Renewables, Gas, Storage and environment
- In 2025 we had **over 11000** visitors from over 50countries, **254** speakers, 40 seminars and almost 60 events.
- Next time 15.-18. March 2027
- 812 B2B matchmaking meetings


EnergyWeek


EnergyWeek
VISITOR REGISTRATION
EXHIBITOR'S OFFICE
SPEAKERS




centrica
Energy is
moving
VEO
enersense


Kvarken Ports – Vaasa
A12


EnergyWeek
EnergyWeek
EnergyWeek
EnergyWeek

EnergyWeek Visitors Profile

EnergyWeek Visitors Title

MORE THAN **180**

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

R&D **250** **MILLION** ANNUALY

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

TOTAL BUSINESS TURNOVER OVER **6.0** BILLION EUR ANNUALLY

EXPORT RATE OVER 80%

1.9 **BILLION** EUR BY 2030

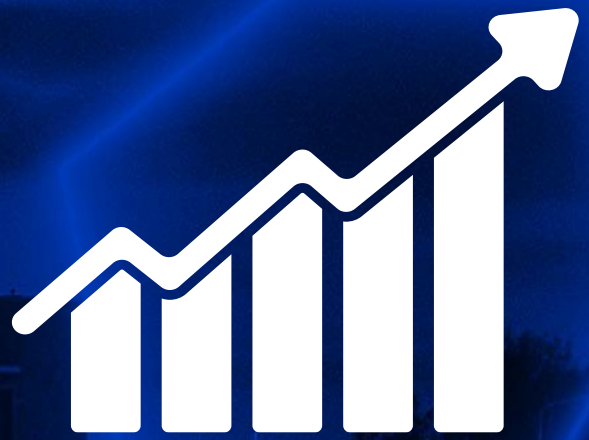
ENERGY TECHNOLOGY INFRASTRUCTURE **INVESTMENTS** BY **LEADING COMPANIES**

A STUNNING **30%**

OF FINLAND'S TOTAL EXPORT IN **ENERGY TECHNOLOGY**

CURRENT NUMBER OF EMPLOYEES: **13,000**

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



GOALS 2030

180 → 200

ENERGY KLUSTER COMPANIES

250 milj.€ → 300 milj.€

AMOUNT OF YEARLY R&D

6 bln.€ → 10 bln.€

COMBINED TURNOWER

1.9 bln.€ → 2.5 bln.€

INVESTMENTS IN ENERGY TECH. INFRASTRUCTURE

13 000→ 20 000

EMPLOYEES

+ 20 %

NEW START-UP COMPANIES

GOLD Cluster Management Excellence PROVEN FOR CLUSTER EXCELLENCE

ENERGYVAASA


Thank You!
ENERGYVAASA