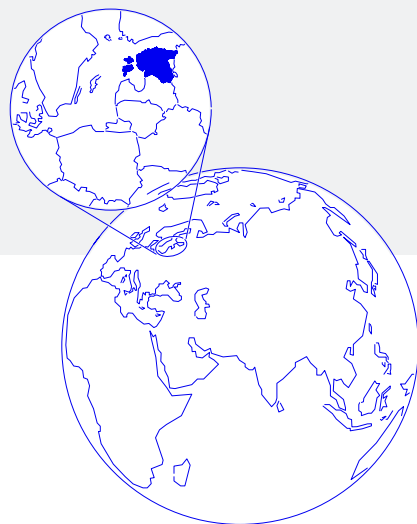




trade
estonia

Estonian energy sector delegation visit to South-Korea

1st-5th April 2024



REPUBLIC OF ESTONIA
MINISTRY OF FOREIGN AFFAIRS



ESTONIAN
CHAMBER OF COMMERCE
AND INDUSTRY



Why Estonia?

Estonia offers highly skilled professionals providing flexible and fast solutions at reasonable prices. We follow Nordic business ethics.

Estonia is a smart choice. Here the time-to-quality ratio is right, we use innovative technologies, clean raw materials and invest in sustainability.



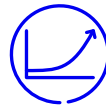
innovative



flexible



fast



low risk &
transparency

#1

in world for smart grids
and electric vehicles

100%

of electricity to be
generated by
renewables by 2030

#3

globally for science
education

Advantages

1. World-class education in science, maths and IT.
2. Fast growing sustainable energy sector including wind, biomass and waste-to-energy.
3. World-class IT skills including CleanTech software, smart grid and electric vehicle networks.
4. Long standing expertise in oil shale technology.
5. Commitment to development of sustainable energy and circular economy.

Energy sector in Estonia

Estonia has a diversified energy sector which comprises long-standing expertise in oil shale, a sizeable renewables sector and growing CleanTech capability. World-class expertise within a highly digital, pro-business environment will see Estonia play a leading role in the energy revolution.

As befits the world's most digitally enabled nation, Estonia is at the forefront of applying technology to transform the energy sector — focusing on advancing green technologies and achieving thus climate neutrality goals.

ElectroAir

Ground power units for aviation. You are well connected!

About company

ElectroAir is an award-winning specialized manufacturer, developer and designer of industry standard ground power units for aviation with over 500+ happy clients from airports to ground handlers, airlines, maintenance and repair organizations in over 100+ countries.

Offering a complete solution that includes stand-alone, mobile, diesel-engine driven and under ramp GPUs,

as well as PIT systems, cable extenders, control and testing equipment, charger-dischargers and load banks for both civil and military customers.

We keep developing. For the future, by partnering up with us, you can be sure that your needs are covered with state-of-the-art technology and industry know-how.



What we offer?

We offer a complete one-stop solution that includes stand-alone, mobile, hybrid, battery powered, diesel-engine driven, and under-ramp GPUs (frequency converters, rectifiers and combined units) as well as PIT systems, cable extenders, control and testing equipment, charger-dischargers and load banks.

Whatever your needs, we can provide a complete solution for you that will minimise the cost of ownership and consumption of resources on the

maintenance of all types of aircraft and helicopters.

We also manufacture electric vehicle chargers. A completely eco-friendly charging station for electric vehicles charger, is an elegant solution for the airports, urban and out of city areas alike. It supports a wide range of standards and protocols and is equipped with various types of plugs, making it multi-functional and capable of any customer need adaptation.



Timur Gaissin

Sales Division Director
+372 5850 6116
tg@electroair.eu
www.electroair.eu

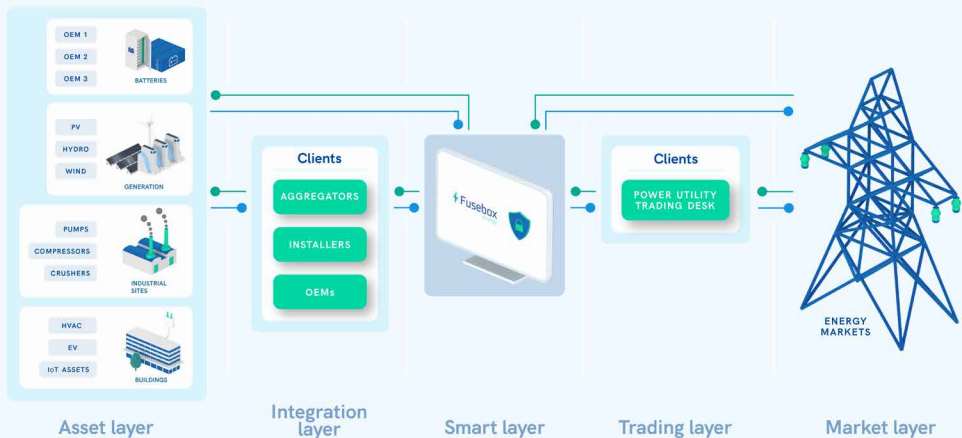


Fusebox

Profitable Energy Asset Management for a Fossil-Free Future

About company

Fusebox connects electricity consumers, producers, storage systems and energy markets with its software enabling aggregators, OEM's and power utilities to enable better integration of renewables, reduce CO2 and earn money back from the balancing markets. Our fully automated technology is used across Europe in companies of different sizes.



What we offer?

Our turnkey Virtual Power Plant (VPP)-as-a-Service software, equipped with Energy Management System (EMS) capabilities, empowers energy companies to gain a competitive advantage. By integrating through both software and hardware, we enable aggregators and power utilities to seamlessly connect and centrally

manage a diverse array of Distributed Energy Resources (DERs). This comprehensive connection facilitates access to energy markets for ancillary services, thereby opening up new revenue streams, decreasing imbalance costs, and driving carbon-intensive fossil fuel peaker plants out of the market.



VPP Model 1

Creating revenue streams through the provision of ancillary services to TSO.



VPP Model 2

Reducing the imbalance in a power utility's production and consumption portfolio.



EMS Model 3

Generating additional income through ancillary services and arbitrage, with revenue sharing for asset owners.



EMS Model 4

Minimizing energy costs.

Tarvo Õng

CEO

+372 521 0939

tarvo@fusebox.energy

www.fusebox.energy

 **Fusebox**
.energy

H2Electro

Producer of high efficiency Solid Oxide electrolyser cells and stacks: the next generation of Power-to-X solutions.

About company

H2Electro is a deep-tech start-up company that is developing and producing next-generation high-temperature electrolyzers (HTEs) for the production of green hydrogen, enabling the replacement of fossil fuels with renewable energy.

Our innovation lies in the use of all-ceramic fuel electrodes instead of the traditional nickel cermets used in most solid oxide electrolysis cells. Fully ceramic fuel electrodes are substantially less sensitive to oxygen and contaminants

like sulphur and carbon. This means that our stacks do not require extensive gas purification which significantly decreases the balance of plant (BOP) costs of the electrolyser system.

H2Electro provides robust electrolysis cells and stacks that utilize all-ceramic fuel electrode. These stacks can be used in electrolysis systems to produce, store, and utilize hydrogen



What we offer?

- SOECs with novel fuel electrodes
- SOEC stacks operating at 800 — 850 °C
- SOE systems
- R&D projects to reduce carbon footprint
- Investment opportunity to innovative technology with high growth potential



SOLID OXIDE ELECTROLYSIS CELL



SOLID OXIDE ELECTROLYSIS CELL
STACK

Henrik Hal

CEO

+372 5919 9966

henrik@h2electro.com

www.h2electro.com



Insta Globe Engineering

Electrical commissioning and installation services

About company

Insta Globe Engineering provides electrical and automation installations, as well as commissioning

services. We have extensive experience working on power plants, boiler houses, industrial projects and

industrial projects like oil rigs, tankers and investigation vessels. Teams of Insta Globe Engineering

consists of more than 90 experienced and disciplined professionals, offering their customers high

quality services. Moreover these teams are very mobile, fast staffed and work globally.

Our competencies

- Building electrification
- Electrical measurements
- Process instrumentation
- Process commissioning works
- Qualified workforce rental
- Electrical equipment installation
- Electrical installations for automation



Key projects 2023



Northvolt Battery Factory in Skelleftea

Revolt battery recycling factory

Location: Skelleftea/Sweden

Building electrification (lighting, power boxes etc.) Cable pulling and connections for chemical process instrumentation, valves and motors. Cable ladder, device and cabinet grounding. Cabinet power, control and pneumatics connections



Recycling / Fermentation Factories

Location: Germany, Belgium, Denmark, Latvia

Scope of work:

- Device installation for building electrification (lighting, power boxes, safety switches, cabinets, VFDs etc.) Cable ladder, device and cabinet grounding
- Cable pulling and connections for process instrumentation, valves and motors
- Cabinet and VFD connection



Cell Factory Metsä Kemi

Location: Kemi/Finland

Project areas: Recovery Boiler and Turbine, Sulfur Acid plant, Fiber line, Evaporation, Pulp Drying, Wood handling.

Scope of work:

- Fire alarm system installation
- Cable and grounding measurements according to local legislation
- RCD tests, IO checks, LAN testing etc.
- Cable ladder/tray installation and grounding
- Building electrification (lighting, power boxes etc.)
- Cable pulling and connections
- Cabinet connections

Ivo Pukk

CEO

+372 5650 0195

ivo.pukk@instaglobe.de

www.instaglobe.de



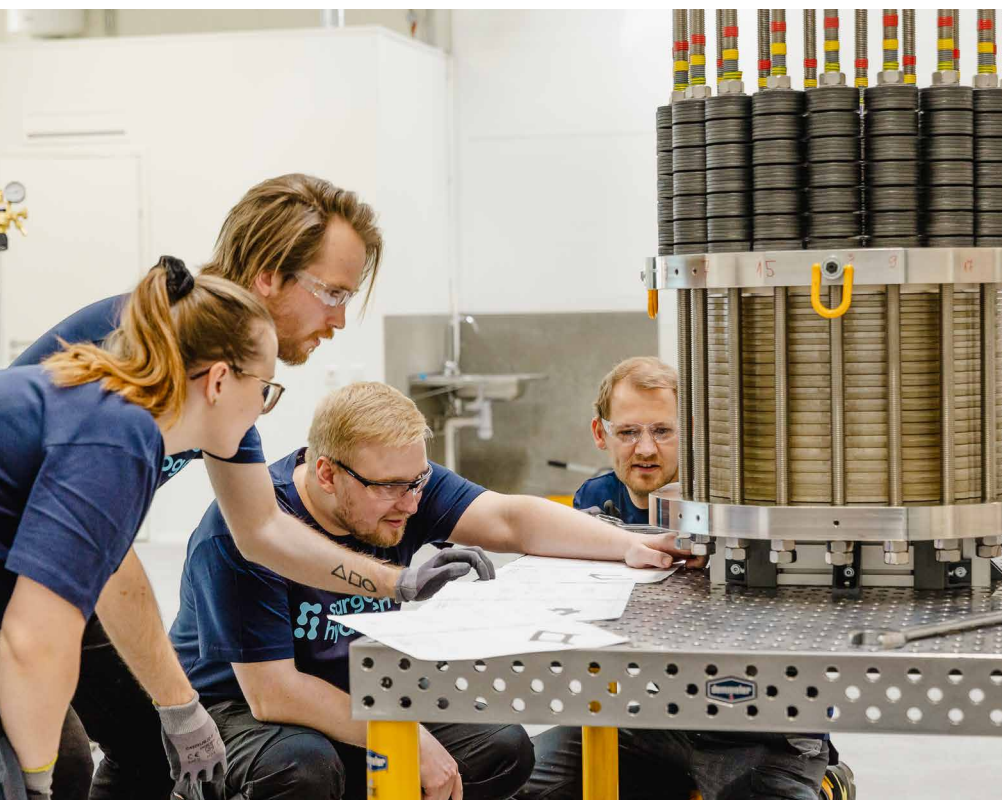
Stargate Hydrogen Solutions

Alkaline electrolyzers for enabling the industry of tomorrow

About company

Stargate Hydrogen has unique electrolysis technology (patents pending) using ceramic-based catalyst materials, which are free of PGM group of materials and therefore inherently more scalable than other technologies. Stargate Hydrogen delivers turn-key solutions for hydrogen projects throughout the world.

We have built up a team of 50+ top professionals with previous experience from companies such as Haldor Topsoe, Hexis, Enapter, Mitsubishi Heavy Industries, Skeleton and many others.



What we offer?

Stargate builds electrolyzers and develops alkaline electrolysis technology.

By significantly reducing the cost of green hydrogen production through our innovative technologies and efficient processes, we play a crucial role in expediting the decarbonization

of the toughest industries where we find the biggest CO₂ emitters, such as steelmaking, fertilizers, and chemicals. Stargate electrolyzers are highly suitable for a wide range of applications.



stellar SERIES

Alkaline electrolyzer
stacks for system integrators



gateway SERIES

Gateway series electrolyzers

Marko Virkebau

CEO

+372 5332 1454

marko@stargatehydrogen.com

www.stargatehydrogen.com

 **stargate
hydrogen**

UP Catalyst

Leading the world to sustainable carbon

About company

Established in 2019 by a group of scientists with expertise in nanotechnology and electrochemistry, UP Catalyst has developed the world's first scalable technology for producing sustainable carbon nanomaterials and graphite. Through their innovative Molten Salt Carbon Capture and Electrochemical Transformation (MSCC-

ET) process, they convert 3.7 tons of CO₂ into 1 ton of carbon material. The process is powered by renewable energy to ensure energy efficiency, consuming 60 times less energy than conventional methods.

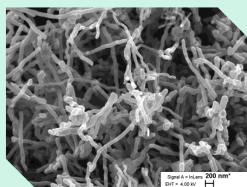


What we offer?

We offer a secure supply chain of sustainable raw materials for energy storage applications. Backed by testing data showing 94% capacity retention after 4000 cycles and improved charge rates, our products guarantee superior

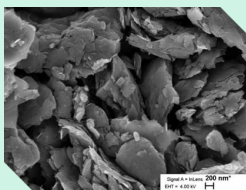
performance. Feel confident in offering the greenest batteries on the market, as UP Catalyst graphite or CNTs enable up to 100% sustainability in your battery anode.

PRODUCT LINE UP



Multi-walled carbon nanotubes

Conductive additives for enhancing battery performance from CO₂ emissions



Graphite

Sustainable anode material from CO₂ emissions

Einar Karu

CTO

+372 5331 7779

einar@upcatalyst.com

www.upcatalyst.com

UP CATALYST

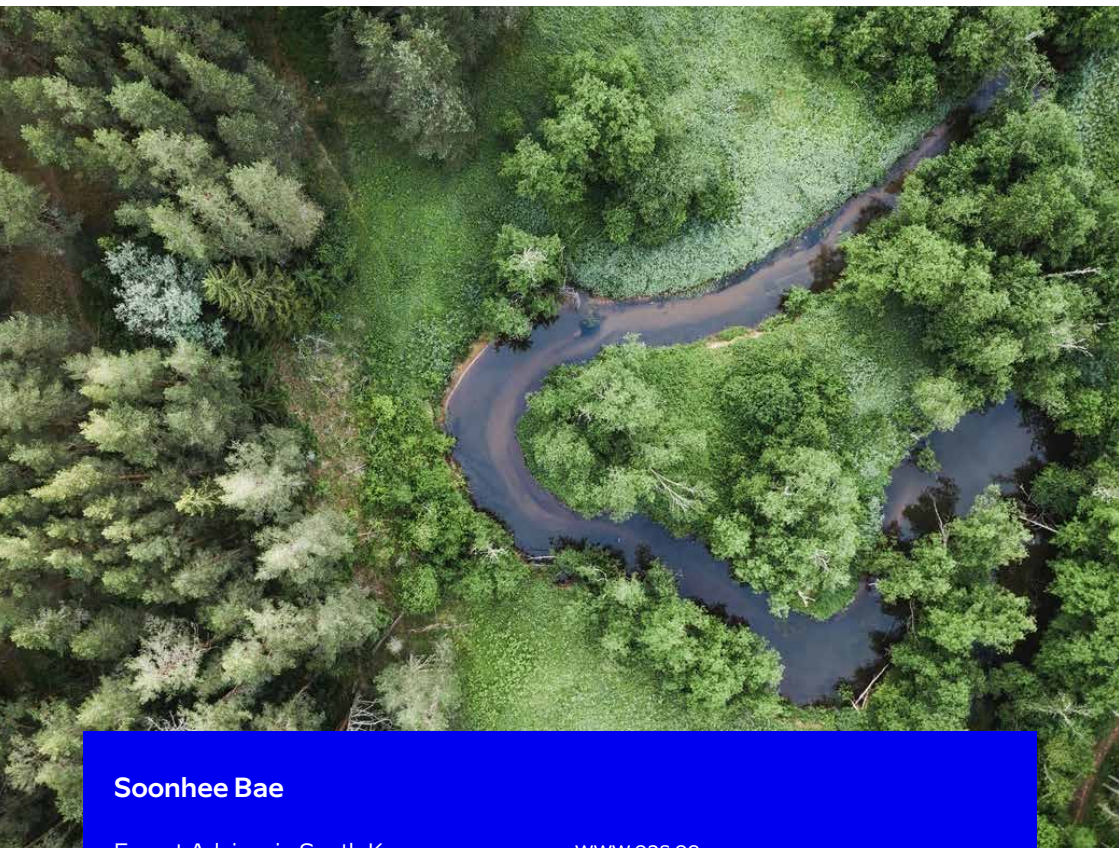
Estonian Business and Innovation Agency

Your source of smart products and services.

Innovative technologies, skilled professionals and Nordic business ethics make Estonia a smart choice. We help you to connect with the leading Estonian companies.

Trade Development Agency is a part of Estonian Business and Innovation Agency, a government agency supporting

Estonian companies with export strategies and plans, helping to find suitable business partners all across the world, also assisting international companies in finding business opportunities in Estonia.



Soonhee Bae

Export Advisor in South Korea
+82 10 3251 3861
soonhee.bae@eas.ee

www.eas.ee
www.tradewithestonia.com