

## Press release

### **Nordic Cleantech Open Presents the top 25 best Nordic Cleantech Startups 2016!**

Out of 113 applicants the jury consisting of a international group of VC investors, industrial VC investors and other experts have chosen the very best Nordic Cleantech startup companies.

This was the fifth edition of the Nordic Cleantech Open and for the fifth time the number of applicants was larger than ever. This year there were 113 cleantech companies applying. This, once again, strengthens the competitions role as the largest cleantech startup competition in Northern Europe.

An international jury of more than 50 influential representatives from multinational companies and venture capital have been involved in selecting the top 25. Among the jury members are representatives from Windsail Capital Group (USA), Shanghai Electric (China), Saudi Aramco Energy Ventures (Saudi Arabia), Bilfinger Venture Capital, (Germany), Environmental Technologies Fund (Great Brittain), Veolia (France), Capricorn Cleantech Fund (Belgium), Dow Chemicals (Switzerland), VNT Management (Finland), Industrifonden (Sweden), Grundfos (Denmark) and others.

All the Nordic countries, including Estonia and Iceland are represented on the top 25 list. This, as well as the spread of technologies and solutions the companies represent gives a glimpse of the strength and diversity of the Nordic cleantech startup scene.

“This years top 25 companies are in most cases, compared to previous years winners, even more early stage. The companies also compete with even more innovative, ground-breaking and high potential cases. This is the strength of the competition, to present the newest and most exciting coming out of the Nordic cleantech innovation environments” says Magnus Agerström, Managing Director at Cleantech Scandinavia – organisers of the Nordic Cleantech Open.

The competition combines a large number of really exciting applicants and a jury with both the knowledge to evaluate and the means to accelerate the companies. This selection is just the start, ahead lies a program that will strengthen the successability of the top 25 companies considerably. The main activities of this program will be the events of the Nordic Camp at Trolleholm Castle, 19-20 March.

The final winners of Nordic Cleantech Open will be announced at the finals at the Cleantech Capital Day in Malmö, May 18th.

Here are the selected 25:

**Abalonyx**

**Norway**

**[www.abalonyx.com](http://www.abalonyx.com)**

Abalonyx is a leading producer of Graphene Oxide. Graphene oxide has unique selectivity for certain heavy metals and radionuclides. The company is now building technology related to graphene oxide based water treatment processes, such as an environmentally friendly flocculate to facilitate separation. The pilot customer is a company currently treating water contaminated with radionuclides from North Sea oil- and gas activities.

**Againity**

**Sweden**

**[www.againity.com](http://www.againity.com)**

Againity has developed a cost-effective heat-to-electricity solution for renewable, yet weather independent, electricity production. The heat source can be anything from a garbage or wood chip boiler or incinerated landfill gas, to hot water from solar panels or industrial waste heat. The system is based on a refined technology based on the Organic Rankine Cycle and thanks to innovative components and materials, the system has a long lifetime, low operating costs and a quick payback time.

**Arctus Metals**

**Iceland**

Arctus Metals is developing an environmentally friendly and energy efficient process for production of aluminium. As no carbon anodes are used as in conventional aluminium process there is no emissions of carbon dioxide, instead one ton of oxygen is generated for each ton of aluminium produced. The process also uses 20% less energy and 60% less space. Arctus Metals is in the final stage to reach proof of concept of the new revolutionary and patented aluminium production technology.

**Ascatron**

**Sweden**

**[www.ascatron.com](http://www.ascatron.com)**

Ascatron develop next generation SiC based power semiconductors that radically reduce losses in electrical transformers. These can be up to 20% using conventional silicon devices. To make the most efficient and reliable SiC power devices is Ascatron using a unique material technology based on 3D epitaxy enabling us to increase the doping level to reduce the resistance in the device – 3DSiC®.

**Cewatech**

**Sweden**

**[www.cewatech.se](http://www.cewatech.se)**

Global marine overfishing and declining catches (Nature communic. 2016) increase the urgency of finding sustainable alternatives to fishmeal in fish feed for fish farming. Cewatech has achieved this by cultivating edible micro-fungi on side-streams from industrial production. When fishmeal was replaced by equal quantities of fungal biomass in feed, salmonid fishes grew as well or better. The Cewatech fungal biomass is a sustainable, price-competitive alternative to fishmeal in fish feed.

**Desert Control**

**Norway**

**[www.desertcontrol.com](http://www.desertcontrol.com)**

Desert Control converts deserts into fertile land in a process that only takes 7 hours. They mix clay and water in a patented mixing process and apply it to the land using traditional irrigation methods. Once an area has been treated, percolation is almost stopped and evaporation is greatly reduced, so only ½ to 1/3 of the irrigation water is needed, compared to untreated areas.

**Energeotek**

**Sweden**

**[www.energeotek.se](http://www.energeotek.se)**

Energeotek presents how the world can have renewable clean baseload energy 24/7/365 virtually anywhere! Energeotek's system solution NxGeo benefits from earth's low temperature ground heat and converts it to clean electricity, heating and cooling. Energeotek now offers initial NxGeo power plant projects and plans to join forces with larger investors, stakeholders and industrial partners to setup NxGeo power clusters. Energeotek offers pure power to the global renewable energy transition process.

**EyeCular Technologies**

**Denmark**

**[www.eyecular.com](http://www.eyecular.com)**

EyeCular Technologies has developed a highly innovative product which is able to build and maintain thermal stratification in hot water tanks. Especially in heat pump applications and solar thermal systems, the energy consumed for heating water can be significantly reduced by enabling thermal stratification. EyeCular's product is inexpensive, more reliable and easier to install than the few existing competitors on the market.

**FaunaPhotonics**

**Denmark**

**[www.faunaphotonics.com](http://www.faunaphotonics.com)**

The use of laser radar systems enables FaunaPhotonics to perform real-time on-going surveys of insects in the field. The laser radar product can monitor approx. 10.000 insects / hour / m3 of air. A transformative new tool that offers tangible benefits to the agricultural sector and insect control programs enabling the capacity to routinely collect, analyse, interpret and share reliable real-time data on insect populations.

**Forsnetics**

**Sweden**

**[www.forsnetics.com](http://www.forsnetics.com)**

Forsnetics has developed magnetic thrust bearings for hydropower. They utilize magnetic fields dynamically to carry the weight of the generators and the water load. This technology reduces the friction losses up to 80%. The increase in efficiency is enough to cover the price of the equipment during its lifetime. However, the main economical driver to install the solution is increased reliability, as the technology eliminates thrust bearing failures.

**Fresh.Land**

**Denmark**

**[www.fresh.land](http://www.fresh.land)**

Fresh.Land digitize the food supply chain. The B2B platform connects farmers and retailers, cutting out the middlemen and reducing CO2 emissions and chemical use. The solution uses technology to make the food supply chain efficient and transparent. With Fresh.Land, farmers, retailers, and logistical partners can interact in one platform. They all get better prices and drastically reduce the searching and transaction costs. Only the middlemen lose out.

**Inifinited Fiber Company**

**Finland**

**[www.inifinitedfiber.com](http://www.inifinitedfiber.com)**

Inifinited Fiber Company enables re-manufacturing of new natural fibres for new clothing from textile waste. There is no other solution on the market for manufacturing new fibres from textile waste. The technology also enables extending the pulp and dissolving mills' value chain by manufacturing a cellulose derivate. This will significantly cut the costs and increase sustainability in viscose manufacturing.

**Innoscentia**

**Sweden**

**[www.innoscentia.com](http://www.innoscentia.com)**

Innoscentia provides a printable gas sensing technology that can visualize and electronically tell the status of the food. The printable sensing ink undergoes a colour change from i.e. green to red once the product is spoiled. The changes in the electrical properties provides the possibility to detect spoiled food wirelessly through the supply chain increasing both food safety and traceability for actors within the food supply chain.

**LunaLEC**

**Sweden**

**[www.lunalec.com](http://www.lunalec.com)**

LunaLEC develops thin and flexible light sources that will require less energy in manufacturing and will be made without metals and thus can be recycled like plastic when disposed. The intended use is not yet general lighting, but rather functional lighting. Typical applications are medtech patches, where light patches are used for treatment of a number of symptoms.

**Minut**

**Sweden**

**[www.minut.com](http://www.minut.com)**

Minut creates connected sensors to understand the environment in a room or area - including mapping PM2.5. This is possible with the use of the company's unique sensor. This sensor will be given to individuals as a way to measure their exposure. Minut is optimistic about how a transparent view of PM2.5 around the world can support efforts to reduce this pollution.

**Ngenic**

**Sweden**

**[www.ngenic.se](http://www.ngenic.se)**

The Ngenic system adapts to the thermodynamic individual household and increases the efficiency of the heating system. At the same time as it achieves a better, more even, indoor climate the system enables a collaborative demand response and easier inclusion of renewable energy sources into the grid. The hardware is compatible with most existing heating systems.

## **ReLaDe**

### **Estonia**

ReLaDe is developing a system that uses biological washing enzymes that are coupled with magnetic nanoparticles as the laundry-washing agent. This enables recollection of the washing agent from the washing machine wastewater by a simple device composed of magnets. Binding enzymes to nanoparticles eliminates their downsides as they become reusable and the enzyme stability is increased.

## **Sani Membranes**

### **Denmark**

**[www.sanimembranes.com](http://www.sanimembranes.com)**

Sani Membranes is producing advanced cross flow membrane filter elements. The elements are based on present membrane and fine filters, but designed for improved energy efficiency - saving 30-60% of energy in very energy intense processes. At the same time, the process and sanitary aspects are very much improved. The filters are suitable for process industry, food & beverage, water, water reuse and for wastewater purification.

## **SBT Aqua**

### **Denmark**

**[sbtaqua.com](http://sbtaqua.com)**

SBT Aqua is developing a real-time bacteria sensor that significantly improves quality control of drinking water. The sensor can detect bacteria and non-organic particles in real-time and increases the sampling frequency from weeks to minutes ensuring that contamination events are discovered by the utility and not by ill and dissatisfied citizens.

## **Sensitive**

### **Sweden**

**[www.sensitive.com](http://www.sensitive.com)**

Sensitive have developed Strips, an ultra-thin (less than 3mm thick) magnetic sensor, that can be mounted invisibly in most window & doors. Strips comes with an adhesive layer which makes it easy to set up and has a battery life up to 10 years! Strips is Z-Wave Plus certified, which enables Strips to be connected to any Z-Wave Smart home system.

## **Toroidion**

### **Finland**

**<http://toroidion.com/>**

Toroidion has developed an innovative electric powertrain with a new type of electric motor. The new lightweight direct drive electric motors are significantly safer and more service friendly than current alternatives. The technology is also extremely energy efficient and robust and allows for easy battery upgrades.

**Trifilon**

**Sweden**

**[www.trifilon.com](http://www.trifilon.com)**

Trifilon develops and produces the lightest, most rugged biocomposites for high performance applications. Our optimized biocomposites are purpose engineered for conventional injection moulding and compression moulding equipment. Cut weight, improve sound absorption and minimize your product's environmental impact without changing equipment or tooling.

**TRINE**

**Sweden**

**[www.jointrine.com](http://www.jointrine.com)**

TRINE aims at providing the 1.3 billion people living in energy poverty with access to solar energy. This will be done using local solar entrepreneurs and financed using their crowdfunding platform. Combining crowdfunding with commodity solar PV components and novel financing structures creates an innovative business model with massive potential.

**TychoBio**

**Denmark**

**[www.tycho-bio.com](http://www.tycho-bio.com)**

TychoBio applies powerful tools from Synthetic Biology to optimize and commercialize moss as an efficient production host for small chemical compounds. The method can potentially produce hundreds of different high-value compounds. Initial focus will be on a class of compounds called terpenoids, high-value compounds used in food, cosmetics and the pharmaceutical industry.

**Uniti**

**Sweden**

**[www.iamuniti.com](http://www.iamuniti.com)**

Uniti is an electric city car with two seats in tandem and a 'sci-fi' design. With an uncompromising focus on sustainability, Uniti goes beyond the power source to consider the entire environmental impact of the venture, from materials and engineering logic, to business practices and IPR policy. Openness and transparency are of utmost importance, as is harnessing the collective intelligence and passion of the crowd. Designed for high performance in urban settings, Uniti aims to redefine the user experience of vehicles from 'controlling a bunch of horses under the hood' to 'piloting a street spaceship'. #teamuniti



Press release  
2016-02-15

The Nordic Cleantech Open is a business competition aiming to identify, upgrade and display the top 25 early stage clean tech companies in the Nordic region each year. Partners and sponsors to the competition are; Cleantech Scandinavia, Swedish Energy Agency, Tillväxtverket, Autodesk, WWF, Malmö Cleantech City.

**Web site**

For more information about the competition and the companies visit <http://www.nordiccleantechopen.com>

**Contact**

For more information about application and participation contact  
Magnus Agerström, +46739402070  
[magnus@cleantechscandinavia.com](mailto:magnus@cleantechscandinavia.com)