

A large-scale solar farm is shown in a lush green field under a cloudy sky. The solar panels are arranged in long, parallel rows, tilted at an angle. The foreground is filled with tall grass and some trees on the left side.

**SUSTAINABLE SOLUTIONS FOR
RENEWABLE ENERGY SECTOR**

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arbonaut

MANAGING NATURAL RESOURCES

Arbonaut Ltd. is one of the leading experts worldwide in remote-sensing based forest inventory and information systems for managing natural resources.

Arbonaut also specializes in the development of Open Source GIS solutions, and has a successful track record of helping private and public customers to collect, refine, integrate and use location-related information in their tools and processes.

Arbonaut acts globally to support and consult developing countries' environmental administration to enhance local information gathering, analysis and sharing, to ensure sustainable natural resource management.

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ENVIRONMENTAL SOLUTIONS

Biodo Ltd is environmental consultancy company. Founded by Tuomas Korhonen in 2014. Our main business is to develop solutions to different kind of environmental problems, such as soil contamination (e.g. oil, toxic etc.), noise pollution, unsafe drinking water and environmental sustainability from project planning through completion.

Biodo Ltd has gained peer recognition for our experience in environmental issues and commitment to quality. Our vision is that customer have to just present the problem to us and we will solve it. We are dedicated to find most cost-effective solutions to meet our customers needs without compromising on quality.

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MAXIMIZED PROFIT WITH ANIMAL BONES

Coctio is the leading global provider of advanced turnkey bone broth, soup and sauce production solutions and services that transform animal bone residues into several commercial products of high value and income. We are also specialised in providing industrial dryer systems to dry bones to meat protein and bone powder.

With Coctio's method, we serve the whole food industry, including pet food manufacturers, to grow in emerging clean label food and beverage markets with high-quality bone broth innovations naturally and sustainably.

The company is the creation of Kai Iiskola, who has more than 35 years of experience in the international food industry business and over 25 years specifically in bone broth and sauce production.

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TRANSFORMING WASTE TO BIOGAS

Doranova Ltd offers sustainable and advanced solutions for contaminated sites remediation and production of renewable energy. We help our clients in transforming what has previously been considered as environmental problems, to rational, profitable and sustainable business. Our experts design and deliver solutions for renewable energy and waste management from biogas plants to landfill gas recovery.

In addition to technical design and project execution we serve our clientele with feasibility analyses, permit procedures, environmental impact assessments, due diligence procedures and business planning. We care for the operational reliability of the plants and processes we deliver, throughout their lifecycles.

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SMART WAY TO SAVE WATER

Innotek Oy is the owner and developer of the Smart Water® solution as part of our rewarded Energo® cleantech program for reducing water consumption in both public and private sector.

The Energo® program is extremely cost effective – even though the changes are radical. The Smart Water® solution stops waste while introducing the most modern water fittings. Water consumption is reduced by as much as 40-80% per water fixture and 25-35% overall.

We have accumulated expertise and experience from thousands of housing companies and other properties for more than 20 years.

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BIOGAS TECHNOLOGY AND EXPERTISE

Envor Protech Oy is the leading Finnish company in the field of biogas technology. We have over 20 years of experience and globally several successful references in industrial scale anaerobic digestion processes.

Our EPAD (Envor Protech Advanced Digestion) process is proven, reliable and cost effective technology for producing energy and nutrients from organic waste.

The process can be tailored to suit wide variety of organic waste fractions ie biowaste, wastewater treatment sludge, agricultural waste as well as several industrial sludges and materials for example lignocellulose materials from pulp and paper sludge.

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EFFECTIVE UNDERGROUND WASTE COLLECTION AND RECYCLING

MOLOK Oy manufactures Molok® semi-underground Deep Collection® waste containers. 150 000 Molok waste containers can be found in 40+ countries around the world.

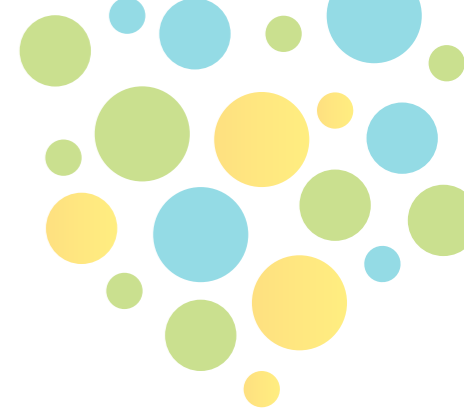
The MOLOK company is based on the innovative idea of Molok Deep Collection® system. Benefits of the system include: huge underground collecting capacity, vertical design compacts waste, long emptying intervals, high collecting efficiency and low emissions. The ground's cool temperature makes the system nearly odorless even in warm countries, resulting in a healthy and comfortable living environment.

MOLOK serves waste management companies, construction and landscaping companies, municipalities, housing associations, hotels, restaurants, camping sites etc.

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WATER SAFETY AND GREEN DESIGN

Savo-Karjalan Vesi- ja Ympäristösuunnittelu (SKVY) Ltd. is a company expertised in water supply and sewerage, municipal engineering and environmental services. Examples of the services include e.g. risk analyses of waterworks, design of drainage water and sewage systems, as well as remediation of contaminated soils.

SKVY Ltd. offers you comprehensive engineering and construction services from Finland to global markets. Our experts have profound knowledge on engineering, natural sciences and geoinformatics, among others.

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SOLAR WATER
SOLUTIONS

MAKE PURE DRINKING WATER WITH ZERO CO2 EMISSIONS

Solar Water Solutions Ltd. is a leading water treatment and desalination system provider, powered by solar. Our mission is to create sustainable, safe and pure drinking water in environments where access to clean water is scarce. Potable drinking water can be produced from seawater, lakes, rivers, creeks, ponds, and boreholes.

The company has delivered decentralized water treatment systems to private customers, commercial customers, and NGO's. Solar Water Solutions operates worldwide and won the Global Water Awards innovation prize in the UAE in 2017. Locally produced quality water with low energy consumption and zero running costs. Just plug and drink.

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INTRODUCING INNOVATIVE FINNISH PV ENERGY COMPANIES

SolarWorks, ESE, Finnwind and Valoe are unique, innovative Finnish companies in the field of PV energy products and development. If you need small or bigger scale PV solutions – from high efficiency module manufacturing to expertise in products, installation, operation and maintenance - we are ready to help you.

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SolarWorks is part of privately owned and part of company called Joensuun Telemaailma Ltd (established in 1977). We integrate latest technology for PV systems to provide long lasting cooperation with PV owner. System start-up measurements and analyzing, operation, support and maintenance are important part of our business with our own PV system visualization solution.

www.solarworks.fi



ESE Ltd (Etelä-Savon Energia Ltd) is energy company from Mikkeli area. Their history starts from early 19th century. ESE Ltd is a shareholder of Finnwind Ltd., specialized in development and manufacturing of module installation mechanics and PV product sales and installation. Also a small wind turbine (own production) and hybrid systems belong to the portfolio. ESE 's latest innovation is Foremica, smart energy management and forecasting system.

www.spector8760.fi
finnwind.fi



Valoe Corporation (Valoe Ltdj) is developer of CBS (Conductive Backsheet) and IBC (Interdigitated Back Contact) photovoltaic cells and modules. Their latest high efficiency N-type monocrystalline, frameless glass-glass IBC module will be presented public soon and full-scale production starts in 2019. Products also include automated module manufacturing machinery for the industry. Valoe has contract for technology transfer with ISC Konstanz about their Zebra IBC.

www.valoe.com



Karelia University of Applied Sciences

Karelia UAS is a multidisciplinary and international applied university offering education leading to bachelor and master degrees, as well as Research, Development and Innovation services for companies. Our focus area of Sustainable Energy and Materials concentrates on renewable natural resources and bio-economy based sustainable energy solutions, the development of products and services connected to them, and increasing wood construction and the use of wood based materials. In addition, energy efficiency and nature conserving innovations are developed, and Karelia has strong competence in nature fiber composites and precision production. Wide learning and service environment Dynamo, including an Energy

Park and laboratories of precision technology and wood construction, support the activities of the sustainable energy and materials.

Karelia's FINPETRA project facilitates a networking opportunity for businesses, research & education, public administration and civil society from Finland and Jordan to come together. Project builds up a strong expert network in the field of low-carbon technologies and innovations. FINPETRA is co-funded by European Regional Development Fund (ERDF) and it operates 2,5 years from August 2017 until December 2019.

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CEMIS

Centre for Measurement and Information Systems

Kajaani University of Applied Sciences

Kajaani University of Applied Sciences (KAMK) is an international learning and development community, which operates in its own compact campus area. KAMK uses internationalisation as a regional development tool. Smarts solutions is a profile, which steers all the activities of KAMK. In addition to using technological solutions, smart solutions means the ability to do the right things right. The five schools of KAMK include Engineering, Information Systems, Business, Health, and Tourism & Sports. Each school has one focus area that supports this profile, and the focus areas enables the schools to increase their national status. Integrating the focus areas creates a readiness for international activities in line with the profile.

KAMK is part of CEMIS - the Centre for Measurement and Information Systems. CEMIS specialises in research and training in the field of measurement and information systems.

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UNIVERSITY OF
EASTERN FINLAND

University of Eastern Finland, School of Forest Sciences

The University of Eastern Finland is one of the largest universities in Finland. Our research is ranked among the best in the world in several fields. As a multidisciplinary university, we train experts for the various sectors of society. We seek solutions to global challenges through multidisciplinary research and education. In collaboration with our partners, we generate new knowledge, expertise and innovations. University of Eastern Finland School of Forest Sciences is internationally renowned unit of higher education and research. Our education has solid foundations in contemporary research and we

train responsible experts for global forestry and environmental issues. Our research themes are forest and peatland ecology; silviculture and forest management; forest planning and inventory; remote sensing and airborne laser scanning applications; forest technology and timber harvesting logistics; wood technology and wood materials science; and bioeconomy and biotechnology.

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Huippu Education

Huippu Education offers expertise in utilising and adapting Finnish-inspired learning concepts worldwide. The Finnish model looks at learning holistically and school education envelops skills around learning and independent thinking. Huippu offers you curriculum enrichment, teacher training, teaching materials & methods and consultation services for all grade levels across the world. Each collaboration is a tailor-made package and Huippu arranges you the access to the best Finnish experts to consult and help you in your education project.

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University of Helsinki, Centre for Continuing Education HY+

University of Helsinki Centre for Continuing Education HY+ is a fully owned subcompany of the University of Helsinki. We have been providing continuing education and development services for organizations and individuals in Finland and abroad for over three decades. We have an evidence-based track record in creating individually designed training programs, and managing various development programs to enhance the capabilities and competences of our partnering organizations.

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NOTES





Leverage from
the EU
2014–2020



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