



# EEN Thematic Group Sustainability Sub -Group: Sustainable Green Innovation POD Focussed Catalogue on Green Technologies 2023

Compiled by:

Reyes Sansegundo, Fundación para el Conocimiento madri+d &

Nivedita Mahida-Königsdörfer, Bavarian Research Alliance GmbH

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# Sustainable Green Innovation (SGI) PoD focussed Catalogue 2023-Topics

- (1) Climate Change (adaptation & mitigation)
- (2) Water Management (saving, replenishing, efficiency)
- (3) Construction & Buildings (green / clean technologies related to construction/ renovation of buildings)

# Profiles: Climate Change Technologies

Note: Access to the Profiles on the EEN Website: Enter the PoD Reference in the ,Search' function to access the full description.

[Partnering opportunities | Enterprise Europe Network \(europa.eu\)](#)

# Single cloud monitoring software to maximise performance of multiple renewable energy sites

## **Summary** (EEN POD TOFR20220711007)

A French SME has fully developed a cloud-based software dedicated to monitoring renewable energy production facilities (photovoltaic sites or wind parks) or buildings. The scalable software provides the user with special features for viewing, analysing or reporting data and is compatible with any type of hardware.

## **Advantages**

- Flexibility and customisable visualisation of the data
- Weekly releases integrating customers' suggestions

## **Partners Sought**

Commercial agreement with technical assistance with Operations and Maintenance companies (O&M), Engineering Procurement Construction (EPC) companies: Link to POD Profile [here](#).

## **Technology Readiness Level Achieved: TRL9**

**Contact:** Carole Taffut, EEN France – [carole.taffut@bretagne.cci.fr](mailto:carole.taffut@bretagne.cci.fr)



Single cloud monitoring software

# High-capacity generator set powered by renewable H2 for datacentres

## **Summary** (EEN POD TOFR20220719024)

A French company developed a generator set 350kW to produce decarbonated electricity for data centers as an on-grid backup solution in case of power outage. The genset meets energy challenges by providing independence / reliability in addition to security.

## **Advantages**

- 24-hour availability
- Modular build-up, scalable
- Zero carbon emissions

## **Partners Sought**

Commercial agreement with technical assistance are sought with datacenter constructors, Telecom operators, Banks. Link to PoD Profile [here](#).

Technology Readiness Level Achieved: TRL 8

**Contact:** Carole Taffut, EEN France - [carole.taffut@bretagne.cci.fr](mailto:carole.taffut@bretagne.cci.fr)



# Mobile power pack or stationary genset 5kW powered by renewable H2

## Summary (POD Ref. [TOFR20220831010](#))

A French SME developed small-power systems, comprising a fuel cell, an hydrogen tank and a power pack, in order to produce decarbonated electricity. These comprehensive solutions are up to the challenges faced by seaports in reducing CO2 emissions.

## Advantages

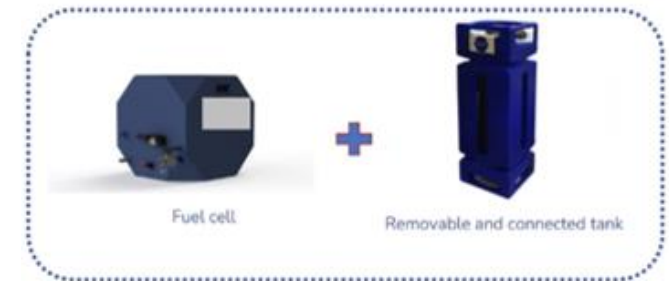
- Emitting only water (zero carbon emissions)
- Independent modules (solar farm, pulsed air, hot water)

## Additional Information+ Partners Sought

- Commercial agreement with technical assistance is sought with Seaport supporting decarbonisation of logistics and handling.

Technology Readiness Level Achieved ([TRL 1-8](#)) TRL 9

EEN Contact : Carole TAFFUT – [carole.taffut@bretagne.cci.fr](mailto:carole.taffut@bretagne.cci.fr)



The power pack is equivalent to 100 kg of Li-ion batteries but with a recharge in 3 minutes



# Large tanks of type 1 are searched for hydrogen storage in marine conditions



## **Summary (POD Ref. [BRFR20230223002](#))**

A French company is developing a new concept of energy production needing its storage via hydrogen. The gaseous hydrogen should be kept into big tanks, with a capacity of 1000 liters minimum at pressure of 50 bars and 100 bars. The tanks will be operated in marine conditions (saline atmosphere).

## **Advantages**

- Tank of type 1 (or 2)
- Pressure resistance of 50 bars and 100 bars
- Capacity: 1000 liters minimum

## **Additional Information+ Partners Sought**

Commercial agreement is sought.

**Technology Readiness Level Achieved** ([TRL 1-8](#)) TRL9 is expected

**EEN Contact** : Cendrine CARMAGNAC – [c.carmagnac@solutions-eco.fr](mailto:c.carmagnac@solutions-eco.fr)



# The Energy Transition Compass – a tool for industries that makes emissions and costs reduction possible

**Summary** ( EEN POD Reference TOIT20230713003)

An Italian innovative SME has developed a tool that allows industries in the manufacturing sector to quickly measure their emissions and to identify and define emissions reduction interventions. The tool aims at powering the green transition of SMEs.

## **Advantages**

With minimum effort:

- Discover emissions and costs reduction opportunities
- Obtain tech specs of identified interventions
- Communicate the reduction commitment through a dedicated report

## **Partners Sought**

Companies in the industry sector, willing to put into practice their sustainability claims, start or complete their energy transition journey. POD link in EEN [here](#).

Technology Readiness Level Achieved: 8

**Contact:** Muriel Geroli, EEN Emilia-Romagna, [muriel.geroli@fast.mi.it](mailto:muriel.geroli@fast.mi.it)



Energy transition, tailored to SMEs



Reducing costs and emissions is possible





# Valkama: Zero emissions from boating

## Summary (POD Reference BOFI20230814006)

The Finnish company has developed an electric aluminum boat, enabling sustainable emission-free, silent and enjoyable boating. The company has also developed a unique charging and storage station with innovative anchoring system and solar paneling to provide renewable energy charging for the boat.

## Advantages

- Zero exhaust emissions from boating
- Boats run silently and pollution-free
- Using the solar charging and storage station, the carbon footprint in boating becomes zero

## Partners Sought

[www.valkama.com](http://www.valkama.com) Interested in business offer.

**Technology Readiness Level Achieved** (TRL 1-8) Already on the market

**Contact Person:** Mari Kivinen, [mari.kivinen@turkubusinessregion.com](mailto:mari.kivinen@turkubusinessregion.com)



# Brightplus: Deep tech chemistry solutions to meet sustainability goals



## Summary (POD Ref. TOFI20220406029)

A Finnish biosourced materials company creates reusable, recyclable and biodegradable material solutions with deep tech chemistry. Their offering ranges from liquid coating to plastic replacement materials. Brightplus supports manufacturers to achieve their sustainability goals and reduce the circularity gap and meet the EU Green Deal 2030 targets.

## Advantages

- Thermolustre glass coating for cosmetics, tableware and art glass: no harmful chemicals, conflict minerals, or rare earth elements.
- Co-innovates new materials, and transforms industrial sidestreams to renewable products
- New materials for 3D-printing from renewable materials

## Additional Information+ Partners Sought

<https://brightplus.com> Interested in a Business offer/Business request

**Technology Readiness Level Achieved:** Already on the market

**EEEN Contact Person:** Teija Pakanen [Teija.Pakanen@businessfinland.fi](mailto:Teija.Pakanen@businessfinland.fi)



# Greek SME offers innovative greenhouse solar panel & seeks partners for commercial agreement with technical assistance



**Summary** (EEN POD [link](#) TOGR20230803004)

The Greek SME has developed a technology that reduces the energy burden required by greenhouses. It provides clean energy and prevents CO2 emissions in agriculture.

## **Advantages**

- This innovative greenhouse solar panel offers:
- Any glass size required by the user,
- Shift of UV light to visible light for positive effect on crop growth,
- Glass transparency that matches the crop light requirements.

## **Additional Information+ Partners Sought**

Greenhouse and Agri-PV end-users, companies with PV installation and universities working on nanomaterials development for energy applications.

**Technology Readiness Level Achieved** ([TRL 8](#))

**EEN Contact Person** : Dr. Areti Mourka, [mourka@praxinetwork.gr](mailto:mourka@praxinetwork.gr)



# Greek spin-off offers feedstock-flexible small-scale waste-to-energy cogeneration technology

**Summary** ([TOGR20230821006](#))

A Greek spin-off has developed a waste-to-energy technology that enables agrofood manufacturers to use their raw residual biomass for on-site small-scale energy production.

**Advantages** (max 200 characters)

- easy to set up and use (just 'plug in and play')
- versatile regarding quality and type of waste used
- modular and possibility to customise
- low maintenance and surveillance costs.

**Partners Sought**

Agrifood SMEs with high combined heat and power needs

**Technology Readiness Level Achieved:** TRL 7

**EEN Contact Person:** Monika Nagy [nagy@sbe.org.gr](mailto:nagy@sbe.org.gr)



FOOD SMES WITH HIGH CHP NEEDS



# Compact hybrid micro power plants for year-round sustainable energy generation based on wind and solar

## **Summary (PoD Reference: [TOCH20230201011](#))**

The plug & play micro power plants generate green electricity locally from the combination of high-performance wind dual turbines and solar panels mounted on a flexible wooden structure, which can be easily installed on roof tops of homes and commercial buildings and allow the generation of clean green energy in summer and winter, day and night, also in bad weather conditions. The Swiss company is looking for commercial agreements with technical expertise.

## **Advantages**

- With only 4 square meter footprint, they provide the highest power per m2
- Wind and sun together can generate energy 365 days/nights a year.
- Vertical Axis Wind Turbines do not have to adjust to the wind direction and have higher efficiency in turbulent winds.

## **Partners Sought**

The specific area of activity of the partner:

- A) Wind technology development expertise
- B) Distributor of renewable energy products
- C) Investor in green technology start-ups/scale-ups
- D) Regional producer of vertical axis wind turbines

## **Technology Readiness Level (TRL): 8**

**Contact:** Ernst-Jan van Hattum, [ernst-jan.vanhattum@innosuisse.ch](mailto:ernst-jan.vanhattum@innosuisse.ch)



# Compact, lightweight & low-cost hydrogen fuel cell

## **Summary ( PoD Reference [TOCH20221102013](#))**

Swiss SME offers an innovative fuel cell technology, based on redesigned microstructure delivering a power density of 1.5-2 times that of leading competitors' FCs as well lower costs. Application: Commercial vehicles on land/water that require extended use, range and heavy payloads like trucks etc.

## **Advantages**

The uniquely simplified and re-designed fuel cell stack at the microstructure level, makes it significantly more:

- compact
- lightweight
- efficient
- smaller cell pitch

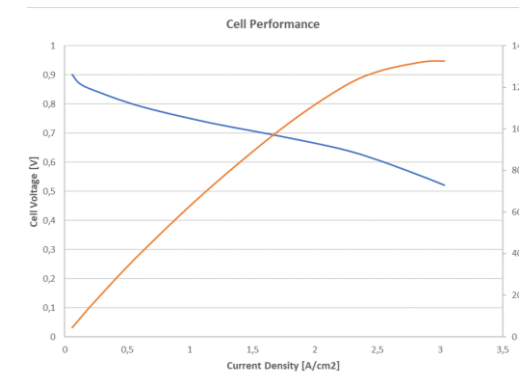
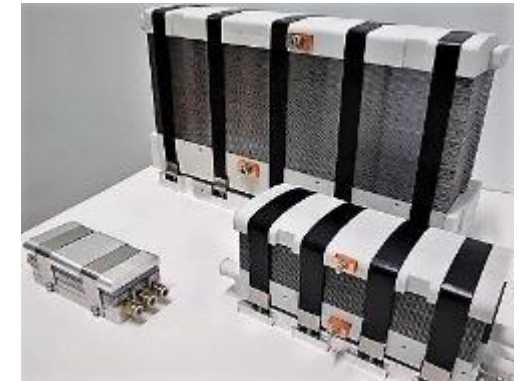
## **Partners Sought**

The Swiss company is seeking partners to assist with the deployment of their technology across a variety of applications (system integrators, Tier 1 suppliers, etc.) meaning technical cooperation and/or commercial agreement with assistance. This may also include collaboration agreements regarding the assembly of their fuel cell system (BOP (balance of plant), etc)/manufacturing agreement.

[POD link.](#)

## **Technology Readiness Level (TRL): 8**

**Contact:** Ernst-Jan van Hattum, [ernst-jan.vanhattum@innosuisse.ch](mailto:ernst-jan.vanhattum@innosuisse.ch)



# System for the recovery, purification & recycling of argon purge gas used in high technology manufacture of silicon wafers, 3D printed metal components and heat treatment applications



## **Summary** (POD Reference: [TOGB20230614016](#))

A UK clean-tech company has developed a product that recovers, purifies and recycles argon purge gas used in high technology manufacturing. The product removes all combustible impurities using an innovative chemical looping combustive purification technology. The company are seeking engineering/OEM partners working in 3D metals printing, biogas and heat treatment applications to incorporate the technology into their systems via commercial agreement with technical assistance or joint venture.

## **Advantages**

- The UK company's product has an internal recycle rate of ~98% and a factory recycle rate of ~95% (typically argon gases are not recycled)
- It delivers a gas purity of 99.9998% with a recycled gas flow of 320l/min.
- The system is based around an innovative chemical looping combustive purification technology.
- The UK company's products offer a world first delivering the purity levels that solar and semiconductor customers demand.

## **Additional Information+ Partners Sought**

The UK company are seeking partners selling different 3D metal printers, 3D printer OEMS and engineering partners.

## **Technology Readiness Level Achieved: 8**

**Contact:** Tim Benzie, [tim.benzie@innovateukedge.ukri.org](mailto:tim.benzie@innovateukedge.ukri.org)



# UK SME with specialised Mass Spectrometry and gas analysis equipment for environmental monitoring, process analysis, pure gas monitoring is seeking resellers, distributors and /or agents



## **Summary (PoD Reference [BOGB20230613023](#))**

UK SME with specialised Mass Spectrometry and gas analysis equipment for environmental monitoring, process analysis, pure gas monitoring and a range of other application sectors is seeking resellers, distributors and /or agents.

## **Advantages**

The UK SME presents the following advantages:

- ISO 9001 accreditation
- With regards to GDPR compliance the SME is registered with the UK Information Commissioner's Office.
- An R&D team who are able to adapt quickly and flexibly to prove solution as and when needed
- The flexibility to adapt to different types of projects in different sectors
- The ability to ship globally
- Capability to support customers all over the world

## **Partners Sought**

Looking for commercial agreements. Main markets: Germany, Sweden, Denmark, Finland, Norway, France and the USA. Open to other markets. Technology already on the market

**Contact:** Felipe Escandón – [felipe.escandon@innovateukedge.ukri.org](mailto:felipe.escandon@innovateukedge.ukri.org)

European Spectrometry Services Limited - [www.essco.com](http://www.essco.com)





# Profiles: Water Management

Note: Access to the Profiles on the EEN Website: Enter the PoD Reference in the ,Search' function to access the full description.

[Partnering opportunities | Enterprise Europe Network \(europa.eu\)](#)

# Advanced technology for pretreatment of municipal wastewater sludge to improve biogas generation and decrease of dry sludge

## Summary (EEN POD Reference TOCH20230125018)

A Swiss SME active in environmental technologies offers a solution for sludge pretreatment in municipal wastewater plants. The solution (technology and machinery) can pre-treat sludge before the digester and by this significantly increase biogas generation (up to 50%) and decrease dry sludge disposal at the end of the process (up to 20%). The dry sludge could be used as fertilizer. The company searches for license, joint venture, commercial or technological cooperation agreements.

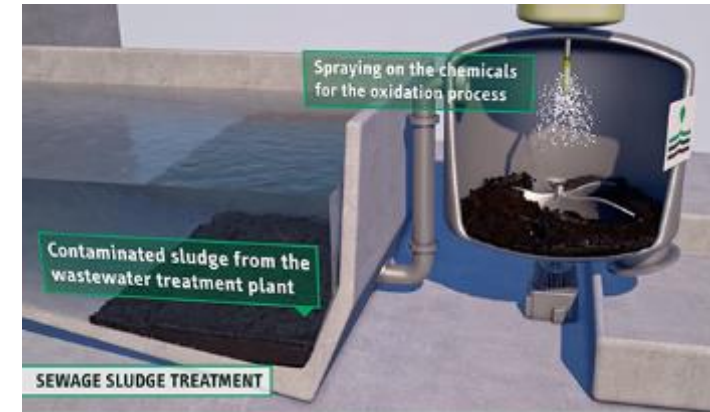
## Advantages

- Easy installment in any size wastewater facility
- Increase in biogas generation up to 50%; Decrease in dry sludge disposal up to 20%
- Fast return on investment (ROI in less than one year)

## Partners Sought

The Swiss company is looking for companies active in wastewater sector, wastewater plants operators and designers (engineering offices), environmental engineering offices, recycling companies, waste management companies and companies in the field of biogas generation from waste and wastewater. The Swiss company provides the technology (patents, design of machines and know-how) and machine manufacturing (if it is required) to the partner, who is responsible for marketing, sales and project execution, local permitting and administration. [EEN POD link](#), Technology Readiness Level Achieved (TRL): 7

**Contact:** Kathrin Rüegg, Innosuisse, EEN Switzerland, [kathrin.rueegg@innosuisse.ch](mailto:kathrin.rueegg@innosuisse.ch)



## Autonomous water quality solutions (TO/BO)

### **Summary** (POD Ref. [TOFR20230904016](#))

A French SME designs and manufactures advanced technological solutions to help **water network operators**. The **micro turbine** is directly set-up on pipes and able to generate enough electricity to power network devices from very low velocity water flow. The solution provides unequalled real-time diagnostic tools for water analysis.

### **Advantages**

- « SMART PICOGEN » platform: in-line plug-and-play technological platform (energy production and storage, sensing, control, and communication devices)
- Hoard the electricity harvested with the turbine in waterproof long lifespan battery pods, with non-conventional cells chemistries & less ecological impact)

### **Additional Information+ Partners Sought**

Looking for clients or distributors + open to technological partnerships for the integration of new devices on its platform

### **Technology Readiness Level Achieved** (7-8 industrialisation phase)

**Contact:** Maud Schneider – [mschneider@arae.fr](mailto:mschneider@arae.fr)



# RAINWATER REUSE BY FIELDFACTORS

## ***Summary (POD Ref. [RDRNL20221006007](#))***

Dutch start-up has developed a modular technology to balance flooding and water scarcity in dense urban areas using landscape integrated and nature-based water treatment and storage. Our company is demonstrating the capacity of nature-based solutions to supplant the municipal water supply in meeting high-volume non-potable water needs for green, livable cities.

## ***Advantages***

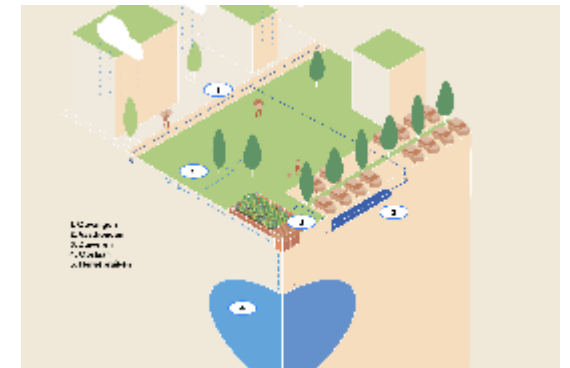
- Delivering modular solutions for capturing and treating urban stormwater to provide long term storage and high volume supply for diverse applications.
- BlueBloqs technology harnesses the potential of managed aquifer recharge to valorize thousands of cubic meters per year of rainwater in in urban areas.

## ***Additional Information+ Partners Sought***

1. research institutes and academic partners to work with in-house R&D team to elaborate product components and for evaluating water quantity and quality performance; 2. municipal and water company partners for demonstration projects leading to uptake of the technology in new locations. Research foci: engineered biofiltration, aquifer storage and recovery, groundwater management, urban irrigation alternative supply

***Technology Readiness Level Achieved:*** TRL 8

***Contact:*** Brigitte Duffhues, [b.duffhues@wateralliance.nl](mailto:b.duffhues@wateralliance.nl)



# D2D Potable Drinking water out of rainwater

## **Summary** (PoD Ref. [BONL20230629011](#))

The Drop2Drink unit harnesses rainwater, a local and renewable resource, to create safe, chemical-free drinking water. Its innovation lies in its real-time, on-demand filtration process according to western standards and the guarantee that the water is 100% Microbiologically safe. The drop2drink unit is a decentralized filtration system that is primarily placed in homes, small offices and similar buildings, but can be scaled to fit custom sizes.

## **Advantages**

- Provides safe drinking water on demand from rainwater
- Contributes to climate change mitigation through eco-friendly practices
- Tried, tested and applied by De Watergroep, for use in rural homes in Belgium
- The system self-maintains the UF-filter, performs integrity checks, has back-up systems in place and provides real-time monitoring

## **Technology Readiness Level Achieved: TRL 8**

## **Partners Sought**

Seeking partnerships with distributors, municipalities, NGOs, and water management agencies to promote widespread adoption and impact.

**Contact:** Brigitte Duffhues, [b.duffhues@wateralliance.nl](mailto:b.duffhues@wateralliance.nl)



# Spanish company seeks distributors for its hydrolysis water cleaning and disinfection system



## **Summary (POD Reference [BOES20230831009](#))**

A Spanish SME, with a huge experience in the manufacture, import, marketing and distribution of products specialized in disinfection and dosing for swimming pools, spas and water treatments is looking for distributors for their technology system based on hydrolysis.

## **Advantages**

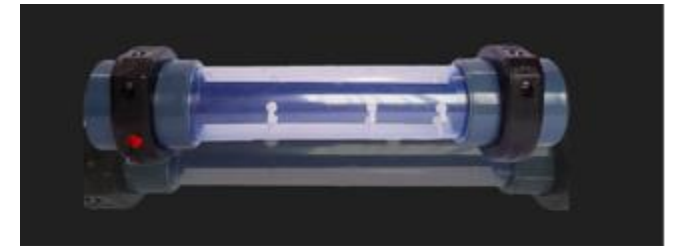
- No chemical residues
- The system reduces the need for disinfection chemicals by 80%
- Elimination of chloramines from the water
- Elimination of risks associated with overdosing
- Savings of up to 40% in pump electricity consumption

## **Technology Readiness Level Achieved (TRL 9)**

## **Partners Sought**

The company is mainly looking for investors and distributors

**EEN Contact Person:** *Elena Gorostiza* ([elena.gorostiza@madrimasd.org](mailto:elena.gorostiza@madrimasd.org))



# Water and Wastewater Engineering Platform

## **Summary** (PoD Ref. [TODE20220429008](#))

The German company has developed an online platform that helps plant constructors, plant operators, engineering firms, etc. to minimize their engineering costs while optimizing planning quality and project duration. With this innovative engineering software, technical standards are digitized and high-quality planning documents are created for tenders or plant construction, which are used consistently throughout the entire course of the project for different user groups.

## **Advantages**

- Significant cost reduction
- Shorter project duration
- Simplified operation of the plants thanks to high degree of standardization
- Higher operational reliability
- Clearly defined specifications
- Shortened engineering time
- Guaranteed consistency of the customer standard
- Digitized water know-how for non-water plant constructors

## **Additional Information+ Partners Sought**

The company is looking for partners in the field of water or wastewater treatment such as engineering offices, general contractors, plant operators, machine builders and component manufacturers.

## **Technology Readiness Level Achieved**

Technology is already on the market (TRL 8)

**Contact:** Simon Horoz ([horoz@img-rlp.de](mailto:horoz@img-rlp.de))

More performance  
through digital  
support in your  
engineering



# Mobile, container-based solution for the efficient removal of microplastic particles from wastewater

## **Summary (PoD. Ref. [BODE20220426028](#))**

The German company has developed a mobile, container-based solution for the efficient removal of microplastic particles from wastewater - entirely without filtration technology. The innovative technology is installed in standard shipping containers. The mobile solutions are highly flexible and can therefore be easily retrofitted at any wastewater treatment plant. In this way, both existing and newly constructed water and wastewater treatment plants can be optimised and modernised worldwide.

## **Advantages**

- Removal of microplastics without filters,
- Environmentally friendly process
- Mobile solution on container basis can be used worldwide
- Scalable to the amount of water and the exact degree of pollution
- Low operating costs make for an economical solution
- Increases environmental performance within environmental management systems
- High operational reliability through fully automated, monitored and documented processes

## **Additional Information+ Partners Sought**

The company is looking for distribution partners within the framework of a distribution service agreement

## **Technology Readiness Level Achieved**

Technology ist already on the market (TRL 8)

**Contact:** *Simon Horoz (horoz@img-rlp.de)*





# Energy-efficient wastewater treatment with novel membrane filter and unique flushing technology

**Summary** (POD Reference: TODE20230613001)

A German SME offers an innovative membrane technology for municipal and industrial wastewater treatment. The novel filter and flushing solution reduce the energy demand of the plants significantly up to 90%. It works with less space and less pre-treatment requirements.

## **Advantages**

- The new product has been optimized in all relevant aspects of MBR.
- Short payback period
- Less equipment required, smaller footprint, simplified design

## **Additional Information+ Partners Sought**

Partners are sought to integrate the technology in wastewater treatment projects and applications.

<https://een.ec.europa.eu/b2b/profile/b9e7795f-db62-4d46-91b9-0188b39544ed>

**Technology Readiness Level Achieved TRL8**

**Contact Person: Sabrina Wodrich, [sw@zenit.de](mailto:sw@zenit.de)**

# Commercial grey water recycling technology

**Summary** (POD Reference [TODE20230302006](#))

A German company offers a commercial greywater recycling system that pays off within a few years. The system is based on a membrane bioreactor principle. It is almost maintenance-free and very cost efficient. Applications are in commercial buildings, hotels, apartment complexes and public utilities.

## **Advantages**

- It is the only system worldwide that is NSF 350 type C commercial certified
- The remote control technology with cloud platform is unique
- Low chemical consumption

## **Additional Information+ Partners Sought**

Partners are sought to install the technology with the assistance of the German company or integrate the system in their portfolios and project offers.

**Technology Readiness Level Achieved TRL8**

**EEN Contact Person: Sabrina Wodrich, [sw@zenit.de](mailto:sw@zenit.de)**

# Turning biogas waste into energy and drinking water

## **Summary** (POD Reference [TODE20221205024](#))

A German company transforms manure and digestate in a climate neutral way into drinking water and energy without any CO2 emissions via a two-stage osmosis treatment filtration technology. They offer solutions for small and large farms as well as for operators of biogas plants.

## **Advantages**

- No polymers or flocculation aids required
- No polymers or flocculation aids required
- Climate neutral process

## **Additional Information+ Partners Sought**

Partners sought are agricultural companies, farms, manufacturers of agricultural machinery, biogas plant operators or plant construction to implement the technology at their sites or manufacture the equipment and develop the market in their regions

## **Technology Readiness Level Achieved 8**

**EEN Contact Person: Sabrina Wodrich, [sw@zenit.de](mailto:sw@zenit.de)**

# Profiles: Buildings & Construction

Note: Access to the Profiles on the EEN Website: Enter the PoD Reference in the ,Search' function to access the full description.

[Partnering opportunities | Enterprise Europe Network \(europa.eu\)](#)

# Large capacity generator set (350 kW) for the energy transition of marinas



## **Summary** (EEN POD TOFR20230424019)

A French SME developed a generator set providing very large amounts of decarbonated electricity for ports and inland waterway ships docked. This new generator set meets energy challenges to solve complex challenges facing the new regulation "Low Sulphur".

## **Advantages**

- Zero carbon emissions during the use
- Reduces sulfur oxide (SOx) emissions in Ports
- Noiseless solution

## **Partners Sought**

Commercial agreement with technical assistance is sought with Port economic player engaged in clean energy transition. See link to POD in EEN [here](#).

Technology Readiness Level Achieved: TRL 8

**Contact:** Carole Taffut, EEN France – [carole.taffut@bretagne.cci.fr](mailto:carole.taffut@bretagne.cci.fr)

# Dynamic outdoor lighting solutions for cities & municipalities to reduce energy costs & light pollution

## Summary ( EEN Reference [TOAT20230802006](#))

Austrian company developed a motion detector based on radar technology with a huge detection area. Many advantages in comparison to passive infrared (PIR) sensors. Sought: Sales partners that are well connected to cities and municipalities to develop the trend of smart lighting/switching off lighting.

## Advantages

- Reliable, radar-based motion detection
- Compatible with all modern LED street lights
- Easy installation and retrofitting
- Freely configurable lighting profiles
- Highly energy efficient
- Environmentally responsible

## Partners Sought

Lighting manufacturers in the area of street lighting that wish either to use the sensor in combination with their own light management system or to employ the whole system offered by the SME.

**Contact:** *Emma Somerville*, [emma.somerville@sfg.at](mailto:emma.somerville@sfg.at)



# Green and low-carbon cement plant to build in Europe



## Summary (POD Reference [TOFR20220523014](#))

A French company has developed a clinker-free cement, allowing a low-carbon production. The cements are made of blast furnace swags and activated via a specific process allowing a revolutionary production with a reduce emission of CO<sub>2</sub> up to 6. The French company proposes a JV agreement to cement-manufacturer to build new plants in their country.

## Advantages

- CO<sub>2</sub> pollutant emission reduced by 4, up to 6
- No cooking nor burning.
- Preservation of raw material
- Reduced electricity's consumption in the process
- Reuse of wastes produced by steel industry

## Additional Information+ Partners Sought

Looking for an independent cement-manufacturer. Having a cement-mill would be a plus. New manufacturing plant will be built through a joint venture.

## Technology Readiness Level Achieved : TRL9

EEN Contact: Cendrine CARMAGNAC – [c.carmagnac@solutions-eco.fr](mailto:c.carmagnac@solutions-eco.fr)



# Off-grid Autonomous charging station to recharge bicycles / motorcycles / cars

## **Summary** (POD Ref. [TOFR20220401016](#))

A French SME offers new generation of mobile power station running with batteries powered by photovoltaic panels and hydrogen fuel cell which can be set up in less than a day in isolated areas (mountain, countryside) to daily recharge small vehicle or replace generator set during exhibiting events.

## **Advantages**

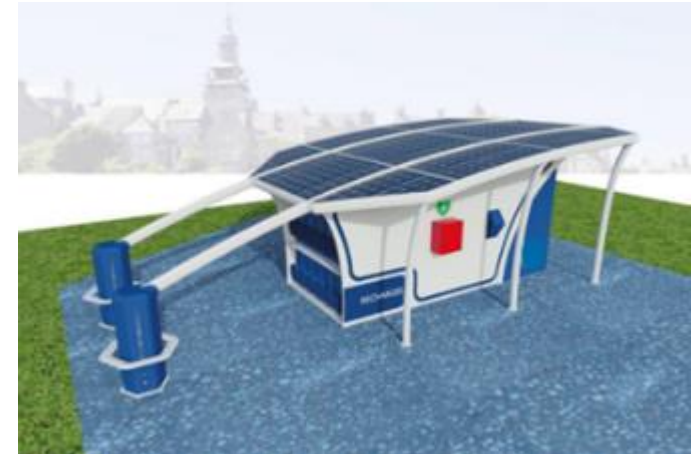
- Autonomous & versatile
- Green electric power station
- Remote maintenance of station via the platform

## **Additional Information + Partners Sought**

Commercial agreement with technical assistance sought with private or public organisation (municipality, event organiser, tourism office...) with needs of station temporarily (rent) or permanently (purchase)

**Technology Readiness Level Achieved** ([TRL 1-8](#)) TRL 8

**Contact** : Carole TAFFUT – [carole.taffut@bretagne.cci.fr](mailto:carole.taffut@bretagne.cci.fr)





# Spanish company specialized in process engineering, plant design & system development for treatment of minerals



## **Summary (PoD Ref. [TOES20230207036](#))**

A Spanish company specialized in process engineering, plant design and system development for the efficient treatment of minerals and other raw materials for different industries offers its expertise to determine the most efficient industrial process.

### **Advantages**

- Capable of defining the precise solution for any project requirement, regardless the sector of activity, the production process or the market quality demand for the final products.
- expertise in project development for the processing industries to determine the most suitable process applicable at industrial scale.

### **Partners Sought.**

All types of partners, from small companies to large multinationals, both on the Iberian Peninsula and internationally.

### **Technology Readiness Level Achieved** (TRL 8)

**EEN Contact Person: Reyes Sansegundo Romero**

**([reyes.sansegundo@madrimasd.org](mailto:reyes.sansegundo@madrimasd.org))**



# Cloud-based building energy management systems offered by Greek SME to distributors



## **Summary (PoD Reference [TOGR20230119023](#))**

Greek start-up has developed a unique energy management systems tool for buildings that provides comprehensive control of heating, cooling, ventilation and lighting systems for higher energy savings.

## **Advantages**

- multi-zonal control of heating, cooling, ventilation and lighting systems generating low energy consumption
- savings of about 40%
- can be installed in a variety of public and private buildings.

## **Partners Sought**

Distribution partner that would like to enter in the energy efficiency and electricity market.

**Technology Readiness Level Achieved:** TRL 7

**EEN Contact Person:** Monika Nagy [nagy@sbe.org.gr](mailto:nagy@sbe.org.gr)



# Specialised wooden constructions company from Greece seeks partner for joint ventures



## ***Summary (PoD Reference [BRGR20220927003](#))***

Greek company with solid experience in manufacturing specialised sustainable wooden constructions (prefabricated timber trusses, posi-strut & glulam beams, timber frame houses, sporting halls, timber bridges).

## ***Advantages***

- main advantage of its glue-laminated (glulam) beams is their greater structural performance compared to spruce timber
- prefabrication of its timber trusses is based on the revolutionary technology of metal plate connectors.

## ***Partners Sought***

Experienced manufacturing and/or construction companies that are involved in large-scale building projects.

***Technology Readiness Level Achieved*** : TRL 8

***EEN Contact Person***: Monika Nagy [nagy@sbe.org.gr](mailto:nagy@sbe.org.gr)



# Eco-friendly building materials from Greek SME seeking manufacturers

## Summary ([BRGR20221206004](#))

A Greek start-up is looking for partners to manufacture its eco-conscious surfaces and panels.

### Advantages

- compact, durable and easy to install
- bound with organic and natural raw materials, so as to avoid using harmful chemicals or other synthetic adhesives.

### Partners Sought

The client is interested in collaborating with experienced and equally environmentally-minded partners in order to manufacture his products.

Technology Readiness Level Achieved: TRL 8

EEN Contact Person: Monika Nagy [nagy@sbe.org.gr](mailto:nagy@sbe.org.gr)



# High-early strength and fully recyclable concrete for airports and highways



## **Summary (PoD. Reference: [TOCH20221012007](#))**

A Swiss company has developed a high-early strength concrete of high durability and fully recyclable, suitable for any kind of construction use where quick project execution or concrete repair and rehabilitation is needed. The company is looking for construction companies as well as airports and road authorities that need rapid-hardening concrete all over the world. Commercial agreement with technical assistance and technical cooperation are offered to assure correct application of the concrete.

## **Advantages**

- Adjustable consistency, flexible workability time, easy production and handling
- Rapid hardening time allowing fast repairs and maintenance, low shrinkage concrete, resistant to Alkali-Silica-Reaction, low heat cement
- End-of-life fully recyclable concrete enables a closed loop building material cycle at the end of their service life

## **Partners Sought**

The company is looking for construction companies as well as airports and road authorities that need rapid-hardening concrete all over the world. (Note: EEN POD link is still under validation)

## **Technology Readiness Level Achieved (TRL): 8**

**Contact:** Inès Rossetti, [ines.rossetti@innosuisse.ch](mailto:ines.rossetti@innosuisse.ch)

Innosuisse, EEN Switzerland



# MykoFoam, utilises fungi network technologies to create fire-safe insulation made with cellulosic waste from the paper industry.



## **Summary (PoD Ref. [BRGB20230802020](#))**

**Mykor produces** an acoustic and thermal insulation sheet that stands out for its carbon-negative attributes.

This sheet is exclusively composed of renewable and bio-based materials sourced from industrial waste, demonstrating our unwavering commitment to sustainability. Their technology not only enhances water-proofing and stabilisation, ensuring extended durability, but also retains the sought-after breathable and fire-retardant advantages synonymous with mycelium insulation.

## **Advantages**

- Mykor has a take-back policy welcoming all unused products from over ordering within the returns period.
- The aim is to be waste negative.
- Products are made of completely renewable resources and waste stream.

## **Partners Sought**

Mykor is seeking paper and pulping manufacturers all over Europe who are looking to sell their waste biomass (specifically wood bark and knots).

## **Technology Readiness Level Achieved 8**

**Contact:** Tracey Usher [Tracey.Usher@innovateukedge.ukri.org](mailto:Tracey.Usher@innovateukedge.ukri.org)



# Pirta: Paint that cools



## **Summary** (Pod Ref. [TOGB20230823009](#) ?)

Pirta is an SME based in Harrogate, UK, that has developed a water-based cooling paint that cools physical structures by combining solar reflectance with emissivity properties. Our solution reduces indoor temperatures, energy consumption, CO2 emissions, and over-reliance on air conditioning systems.

## **Advantages**

- Achieves below-ambient temperatures of 5-7°C
- No energy input required
- Superior Solar Reflective Index (SRI): 116.8
- Reduces infrastructure overheating
- Safe to use and Eco-friendly (Low-VOC formulation)

## **Partners Sought**

Partners sought: piloting and demonstration

<https://www.pirta.com/>

**Technology Readiness Level Achieved** (TRL 4-5)

**EEN Contact Person:** Philippa Dean, [philippa.dean@innovateukedge.ukri.org](mailto:philippa.dean@innovateukedge.ukri.org)

# pirta



#EENCanHelp

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