INNOWISE SCALE.

Solution providers Cohort 2022

Programme portfolio

eit Community Water Scarcity

Funded by the European Union

ablute

ablute.pt | Portugal | 5 staff

The most water-efficient toilet that helps you save 5L of water in each discharge.

Building Industry | Manufacturing | Pharma | Water Authorities

Infrastructure | Municipalities | Utilities

THE PROBLEM AND THE SOLUTION

South Europe is going through a major drought, revealing that Water Scarcity is closer than ever. Even though 17% of the European Population will be facing water shortage by 2050 (according to WWF), we are still wasting massive amounts of water in toilets. As a matter of fact, they are responsible for 30% of the water consumed at your house. In commercial spaces, the water used by toilets reaches 70%.

On average, a traditional toilet consumes 6L of water per flush. Ablute_ endorses an Electronic Washing Device that allows it to only resort to 0.5 L of water, reducing its consumption by 92%.

Ablute_ was built to be appealing to different types of customers, differentiating itself by space efficiency, design, performing an autonomous wash and by having a medical device embedded that allows you to check your health.

Without effort, you can save water.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Lowest consumption of water (0,5 L per discharge);
- Autonomous wash after each use;
- Smallest toilet without losing ergonomics (space efficiency);
- Differentiated design;
- Allows the performance of health checkups.

HIGHLIGHTS

- Nominated for the EarthShot prize: Revive our Oceans
- Finalist of EIT Health – Wild Card: early detection of cancer
- Company recognized as an entity practicing R&D activities by SIFIDE

eit Community Water Scarcity

Funded by the European Union

ÆGIR

aegir-ingenierie.fr | France | 5 staff

Kræken is the first BIM plug-in for 3D flow simulation to make risk assessment and create mitigation strategy at large and small scale for industrials and utility companies.

ÆGIR

Building Industry | Municipalities | Utilities | Water Authorities | Infrastructure

THE PROBLEM AND THE SOLUTION

ÆGIR provides large wastewater infrastructure managers and industries a tool to precisely describe the way hydraulic infrastructures are working and how they are functioning. Data are analyzed by algorithm to find concrete solutions, provide data collection and sensor management, reduce environmental impacts and optimize processes.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Optimization of hydraulic structure
- Reduction of water and environmental footprint
- Malfunction detection and design optimization for future installation

HIGHLIGHTS

- Water and Heath prize by Suez in 2019
- Labeled Efficient Solution by Solar Impulse in 2020
- Seal of excellence by European Commission in 2020

eit Community Water Scarcity

Funded by the European Union

AERO-H2O

sites.google.com/view/aero-h2o/home | Spain | 3 staff

Aero-H2O is a water solutions company that produces water from air humidity for use in drinking, washing and cooking.

Aero-H2O

Community | Individual | Small Family

THE PROBLEM AND THE SOLUTION

Our solution is the production of water from air humidity to reduce cost and energy usage water production on high elevations, desert locations and areas with difficult access to drinking water. Aero-H2O is a technology that uses economical & ecological materials to build a device that can generate water from the air. Given the right temperature, & renewable energy sources, H2O vapor can be economically and ecologically condensed into liquid water. We use a small sand tornado to extract water.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

The key differentiation is that we don't need pipes to deliver water to the end user. We don't need ground water nor sea water to deliver water to the end user.

HIGHLIGHTS

We use air humidity to produce water in any location on earth whenever it is possible.

eit Community Water Scarcity

Funded by the European Union

AgroBiogel GmbH

agrobiogel.com | Austria | 13 staff

AgroBiogel GmbH is a company producing wood based water superabsorbent and agrochemical storage and slow release products for agriculture application.

Agriculture

THE PROBLEM AND THE SOLUTION

AgroBiogel increases soil water holding capacity, organic matter/humus and fertility & increases soil productivity. Agrobiogel enables crops & plants survive droughts, while it helps save up to 40% irrigation water & energy.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- First long lasting bio-based hydrogel (from 100% wood)
- Active for at least 5 years depending on soil
- Converts non fertile soils, incl. sand, into productive soils
- Helps reduce water, fertilizer, irrigation & labor costs
- Approved for conventional & organic farming without restrictions

HIGHLIGHTS

- 1st place Riz up Genius award
- 1st place Falling Walls start up award
- 1st place Sparkassa start up award in Tirol
- 1st place Phoenix start up award

eit Community Water Scarcity

Funded by the European Union

AGUA DE SOL

agua-de-sol.com | France | 7 staff

SunAir Fountain is an economical and environmentally friendly alternative to bottled water for consumers buying plastic bottled water, and a new source of fresh water for people suffering from water scarcity.

Food & Beverage

THE PROBLEM AND THE SOLUTION

- 2.3 billion people have limited or no access to fresh water – (UN);
- 3 billion have access to tap water but choose not to drink it, they drink plastic bottled water – (World Bank).

AGUA DE SOL has developed the SunAir Fountain, a panel which looks like a solar panel, but is rather a "water panel" that produces fresh water, locally, thanks to a smart physical process using two abundant, renewable and free resources: atmospheric humidity and the solar heat.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- **Sanitary:** fresh water quality, no micro plastic, no harm on health;
- **Social:** better water security (locally produced) + local jobs --> can improve the water situation for many families living in areas affected by water scarcity;
- **Ecological:** no plastic pollution, no CO2, no transport;
- **Practical:** easy to manufacture under license (because "low tech"), fast to install, no maintenance, no consumable, high scalability (from few panels to thousands);
- **Economical:** price per liter is 7 to 12 times less than 5 liters plastic bottles;
- **Impact:** saving 50 billions plastic bottles from being produced (over 10 years) means saving 6.2 million tons of oil, 5.8 million tons of coal, 3 Billion M3 of gas and even more importantly, saving 218 billion liters of ground water, which are much needed for agriculture and food production.

HIGHLIGHTS

- US and French patents
- "FrenchTech" grant
- Adsorbent is approved by EU and US for mineral water

eit Community Water Scarcity

Funded by the European Union

Agualytics

agualytics.com | Spain | 5 staff

Our solutions offers comprehensive, efficient and sustainable management of water in agriculture based on water traceability and technology. From the source to the grower, the entire water cycle.

Agualytics

Agriculture | Food & Beverage | Fruit & Vegetables production | Infrastructure | Municipalities | Utilities | Water Authorities

THE PROBLEM AND THE SOLUTION

A cheaper and high quality water for a sustainable agriculture activity that would feed us, while ensuring that water remains available for agricultural activity.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

We are focusing on data; obtain (IoT), process (Big data), predict (A.I.).

Our solutions are affordable, flexible and versatile and can be easily integrated with any software or hardware.

HIGHLIGHTS

We have digitalized water supply networks that supply more than 5,000 hectares of intensive agriculture for more than 3,000 end users in the southeast of Spain.

Agualytics was recognised in:

- Cajamar Innova's incubation program for high-tech water companies
- Finalist in the second DINAPSIS Open Challenge Region of Murcia
- Selected within the Minerva Programme promoted by Vodafone and the Andalusian Regional Government

Algaementum

algaementum.bio | Portugal | 2 staff

Algaementum specialises in producing micro-algae based products & services within the circular bio-economy, resulting in clear water saving advances.

Agriculture

Dairy

Fruit & Vegetables production

Pig Farming

THE PROBLEM AND THE SOLUTION

Challenge: Excess water use in agriculture through random irrigation & animal effluent run-off.
Solution: Algaementum provides an algae-based soil amendment, increasing soil-organic-carbon & plant immunity, resulting in less water needs.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Decentralised, onsite treatment of agri-waste-waters through our algae-platform, results in clear water & fertiliser cost reductions to the farmer.
By intercepting animal-effluent-runoff, we recover & retain valuable nutrients on the farm keeping these out of local rivers. This directly complements EU Farm-2- Fork & related environmental objectives.

HIGHLIGHTS

Awarded 2x Pilots during EIT InnoEnergy backed CleanTech Camp '20 involving Biogenic Carbon Capture & Utilisation (BioCCU) with CRH; & Bio-methane production involving our algae biotech platform with ENAGAS, Spain.

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Funded by the European Union

AONCHIP

aonchip.com | Spain | 6 staff

Aonchip uses IOT (internet of things) technologies to measure and remote control environmental parameters affected by the climatic change like Water.

Agriculture | Infrastructure | Skying | Water Authorities
Food & Beverage | Mining | Utilities | Wine Industry
Fruit & Vegetables production | Municipalities

THE PROBLEM AND THE SOLUTION

Our solution is hardware standard LPWAN (Low power wide area networks) like LoRaWAN standard solutions to measure and irrigate control crops. These hardware solutions can be integrated in any platform to digitalize crops, landscape irrigation in the cities.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Standard IOT hardware solutions that monitor and control remotely the environmental variables like water in the field.

HIGHLIGHTS

- Participating in three technical clusters
- Grants: Diva partner program, Agrotwin project with University of Almeria (Greenhouse digital Twin), Fertitwin project with IRTA
- Accelerated company as 5G IOT company by Wayra (Telefonica accelerator)

AQUADAT

aquaradar.net | Spain | 5+3 staff

Actionable water data

AQUADAT Smart Water Management

Agriculture	Food processing	Manufacturing	Pig Farming
Cement	Fruit & Vegetables production	Mining	Textiles
Dairy		Municipalities	Utilities
Food & Beverage	Infrastructure	Pharma	Water Authorities

THE PROBLEM AND THE SOLUTION

To address global and interrelated water challenges (water stress + water quality + climate crisis), it is first necessary to assess water in real or near-real time. Then, based on actionable data, optimal solutions are proposed.

Our value toolbox consists of a team with water expertise, diverse technologies, data and passion to achieve the desired impact.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Technological agnostics: Remote sensing, Drones, Probes, Geophysics, Data science
- Water & Tech innovation seasoned team
- R&D + Value-added alliance network

HIGHLIGHTS

2017 — Water Innovation Prize — **Finalist**

2019 — GALII MAST — **Regional winner EU Finalist**

2020 — SEAL OF EXCELLENCE: EU quality label for first-class innovation ideas worthy of investment — **Awarded**

2020 — BIND4.0 STARTUP! Basque Industry 4.0 Accelerator Program — **Accelerated**

2021 — INNOVATIVE SME, Valid until Aug 4th 2024 — **Awarded**

Aqua-Q AB

aqua-q.se | Sweden | 5 staff

Aqua-Q AB offers technologies for the safe reuse of treated waste water for different purposes. The core product philosophy is to increase 'customer confidence in water quality' by reducing contamination risks.

AQUA-Q
Online Water Control & Ozone Application

Agriculture	Fruit & Vegetables production	Municipalities	Textiles
Dairy		Pharma	Utilities
Food processing	Manufacturing	Pig Farming	Water Authorities

THE PROBLEM AND THE SOLUTION

Safe reuse of water is essential to mitigate climate change and water shortage.

Our solution combines an early warning system and on-line real-time sampling for water contamination - AQUATRACK® - with an authomatic self contanied modular system for on-line removal of contaminants like pharmaceutical residues, bacteria and micro pollutants.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

AQUATRACK® Early Warning System is the first water monitoring system that utilises 'dynamic sampling' to enable customers to assess microbiological contamination on a 'real time' basis.

- Early optical detection of contamination in real time
- Sampling at the time of contamination
- Online removal of contamination by novel ozone polishing

HIGHLIGHTS

- IWA gold award 2018 at Tokyo for market changing approach
- National Energy gold award 2017 at Teheran
- WssTP SME innovation award 2016 at Brussels

eit Community Water Scarcity

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Aquaponics Iberia

aquaponicsiberia.com/project/ambersea | Portugal | 5 staff

Circular Seawater Integrated Multi-Trophic Aquaculture with positive Water and Carbon footprints.

AMBERSEA by aquaponics iberia

Algaculture	Circular IMTA	Natural Fertilizer	Solar Cooling
Aquaculture	Desalination	Pharma, cosmetics & nutraceuticals	Solar Power
Carbon Capture	Finfish Farming		Water Recovery
Certified Seafood	HVAC	Seaweed	Water Treatment

THE PROBLEM AND THE SOLUTION

AMBERSEA combines Seawater Aquaponics and Air- Dehumidification technology to harvest the evaporated water from Multi-Trophic-Aquaculture, transforming farming, World's Biggest Water Consumer, into a Fresh Water Producing Industry.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

AMBERSEA uses Seawater and Solar Power to produce 4 goods in a symbiotic way:

- Delicious and high-priced finfish Greater Amberjack
- Vertical growth of superfood macroalgae Ulva and Nori
- Freshwater for irrigation or drinking water quality
- Cooling Energy

CO_2 liberated from the fish farm is captured by seaweed and Zero waste is produced.

HIGHLIGHTS

- Recognized by the Portuguese Innovation Agency as an R&D company in Water/Environment and Agri-food.
- Payback period of 2 years and annual average ROI of 50%.
- Aquaponics Iberia was already funded in the past by EIT Climate-KIC.

eit Community Water Scarcity

Funded by the European Union

Biowave Technologies

biowave-tech.com | Ireland | 4 staff

Biowave Technologies develop microwave technology for the pre- treatment of energy-dense, difficult to treat organic waste, unlocking the renewable biogas potential.

Agriculture	Food processing	Infrastructure	Utilities
Dairy	Fruit & Vegetables production	Manufacturing	Water Authorities
Food & Beverage		Municipalities	Wine Industry

THE PROBLEM AND THE SOLUTION

We take waste materials from food and beverage processing industries and use microwave treatment to realise their full energy potential and turn the waste into a resource. Biowave treatment eliminates disposal costs and associated CO_2 emissions.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Biowave is a flexible, modular solution that can be scaled to suit the size of the waste treatment plant. We treat liquids in a continuous flow process. Microwaves achieve uniform and energy efficient heating across the material.

HIGHLIGHTS

- Full pilot scale demo unit in operation
- Awarded Disruptive Technology Innovation Fund from Enterprise Ireland in 2020 to develop Biowave for dairy industry
- Collaborating with Gas Reseau de France (GRDF) to demonstrate Biowave for wastewater treatment

eit Community Water Scarcity

Funded by the European Union

Blue future Org

thebluefuture.org | Spain | 5 staff

Water tanks with microalgae disolved are mixed with the irrigation system to fertilize crops.

Agriculture | Pig Farming

THE PROBLEM AND THE SOLUTION

The best way to prevent water scarcity is that every agriculture unit re-fertilize their own land. The nature will do the process.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

IRRIGATION tanks that contain water with microalgae pulverized over the crops help regenerate the soil, keeping humidity, helping microbiota to grow and re fertilizing the ground to prevent drying and enriching the composition of the soil.

BIOREMEDIATOR of wasted waters from animal farms, underground contaminated aquifers, etc using the microalgae tanks as ecodigestors.

CENTRALISED NODES corresponding to the irrigation communities to coordinate needs and prevent water waste.

HIGHLIGHTS

- Innovation Award Seagriculture 2021
- Winner Intensive Technology Companies EATIC 2022
- Use case model International Forum Blockchain for Humanity OECD 2020

eit Community Water Scarcity

Funded by the European Union

Blue Gold

blue-gold.it | Italy | 5 staff

Blue Gold is an Italian applied engineering company established in 2009. Certified as an innovative SME, it offers actionable insides to preserve and optimize water use and to reduce energy consumption in distribution networks.

BlueGold®

- Agriculture
- Cement
- Food & Beverage
- Food processing
- Fruit & Vegetables production
- Mining
- Municipalities
- Pharma
- Pig Farming
- Textiles
- Utilities
- Water Authorities

THE PROBLEM AND THE SOLUTION

Blue Gold designs, manufactures, develops and delivers a fully integrated solution for the management of water infrastructures, monitoring consumptions, locating leakages and reducing energy consumptions of pump stations, volume of water lost, building the digital transformation journey in the water's industry.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Blue Gold's solution, engineered for scalable installations, acquires continuously flow rate and pressure in the meter box, providing best-in-class capillarity of measuring points at a fraction of the cost of the competition.

HIGHLIGHTS

- 12+ Awards and recognitions by national and local authorities (Regione and UnionCamere Lombardia) +1000 Logger's installations in water distribution networks
- 1.4 Mln+ Measures analyzed daily by our AI algorithms

Funded by the European Union

DEMAND SIDE INSTRUMENTS

dsinstruments.fr | France & Réunion | 37 staff

Demand Side Instruments (DSI) is developing a unique end- to-end solution for farmers to better manage resource usage in agricultural fields.

Demand Side INSTRUMENTS

Agriculture | Food processing | Fruit & Vegetables production | Infrastructure

Building Industry | Food & Beverage | Utilities

Water Authorities

THE PROBLEM AND THE SOLUTION

We are preserving today the natural resources of tomorrow. Demand Side Instruments is a creator of IoT solutions. We design agronomic tools and applications that help manage resources and support farmers in their challenges in the face of climatic, socio-cultural and economic changes.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

DSI uses Edge-Computing technologies without the Cloud-Computing to provide real-time field analysis, thanks to unique sensors generating reliable data.

HIGHLIGHTS

- 2013 - Creation of Demand Side Instruments, we quickly obtained Young Innovative Company status
- 2014 - Winner of the Grand Prix of the BPI National Competition thanks to its first connected valve
- 2016 - Winner of the Initiative Green Tech competition sponsored by the Ministry of the Environment, Energy and the Sea

eit Community Water Scarcity

Funded by the European Union

EZPack Water Ltd.

ezpackwater.com | Israel | 5 staff

EZPack® provides propietary off-grid clean water supply solutions for drinking and agriculture.

EZPack®

Agriculture | Fruit & Vegetables production | Mining | Utilities

Food & Beverage | Municipalities | Water Authorities

THE PROBLEM AND THE SOLUTION

By 2025, half of the world's population will be living in stressed areas. Globally, at least 2 billion people use a contaminated water for drinking. Often, water shortage is combined with poor or no electricity grid. EZPack® provides off-grid clean water via:

- EZCond™ propietary Atmospheric water generator system
- EXPuro™ compact robotic RO purification
- Desalination system

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- AWG based on proprietary technology of storing energy in water, that reduces the amount of energy required to operate.
- The smallest and lightest RO system in the category. Fully automated (robotic) RO system.

HIGHLIGHTS

- Winners of Israel Dessert-Tech competition
- EZPuro™ is Efficient Solution by SolarImpluse Foundation
- FAMEA top 30 water innovator

eit Community Water Scarcity

Funded by the European Union

Fuelics

fuelics.com | Greece | 10 staff

Fuelics is a deep tech R&D company based in Athens, that designs, develops and operates edge computing battery operated sensors tailored made for the metropolitan scale network infrastructure of Smart Cities.

fuelics
Fuel Management Platform

Infrastructure | Municipalities | Utilities | Water Authorities

THE PROBLEM AND THE SOLUTION

Fuelics is designing, manufacturing and deploying smart water-meter solutions towards efficient water management, including water waste detection, accurate data used for billing and consumer usage data to determine water consumption patterns, detect anomalies and train AI/ ML models.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Fuelics' IoT platform allows the deployment of tens of thousands of sensors to fully support the needs of a Smart City. Fuelics' IoT platform comprises a web-based customer application, and native mobile applications providing top user experience for the complete lifecycle of a Smart City project. Fuelics has end-to-end ownership of the intellectual property as we design, develop and prototype hardware and software.

HIGHLIGHTS

- First Greek company to design and develop a smart sensor and onboard on a Narrow Band IoT network
- Fuelics introduced the term "battery operated constrain devices with edge computing capabilities"
- Recognized as one of the 5 top Sensor Startups Impacting the Manufacturing Industry

GENAQ

genaq.com | Spain | 15 staff

GENAQ AWG is a water generation system that provides water, even when no water is available. It replicated natural process of rain, by condensing the moisture in the air.

Agriculture | Food processing | Mining | Utilities
Building Industry | Infrastructure | Municipalities | Water Authorities
Food & Beverage | Manufacturing | Pharma

THE PROBLEM AND THE SOLUTION

We design, manufacture and market our Atmospheric Water Generators (AWG), a solution that produces drinking water of the highest quality from air humidity, thanks to a refrigeration circuit, without concerns about safety or logistical issues. All you need is air and access to a power source.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Best quality drinking water
- Innovation
- Sustainable water technology
- No waste produced
- No natural sources exploited
- High efficiency tested even at low humidity levels (20%)
- Guaranteed Water Security

HIGHLIGHTS

- Awarded with Horizon 2020 - SME Instrument – Phase 1 and 2 for Status Project (2019)
- Awarded wit the European Seal of Excellence by the Commission (2019)
- Winners of the Sustainable Innovation of the Year in AIDEX (Brussels) 2021

eit Community Water Scarcity

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Graniot Satellite Technologies

graniot.com | Spain | 3 staff

Graniot is a precision farming platform to improve the decision- making of farmers and technicians in terms of irrigation, fertilization and time efficiency.

Graniot

Agriculture | Satellite Imagery | Fruit & Vegetables production | Variable Dose Rate Maps | Precision Farming | Wine Industry

THE PROBLEM AND THE SOLUTION

Our solution is an easy-to-use platform that integrates high-value data related to the crops of farmers and technicians to make them use better their time, maximizing the prevention and improving the profitability of the field per hectare.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Fastest platform in the market
- Multifunctional web platform
- Wide range of satellite images resolution (10m, 3m & 50cm)

HIGHLIGHTS

- Winners of Farming By Satellite Prize EUSPA
- 1 out of 25 Startups to take a look in 2021 by ElReferente

eit Community Water Scarcity

Funded by the European Union

GRIDDIT

griddit.space | Italy | 4 staff

GRIDDIT Srl is a startup with the aim of developing and marketing of high technological products and services in the field of resource management and natural risks.

Agriculture | Food processing | Infrastructure | Utilities

Food & Beverage | Fruit & Vegetables production | Municipalities | Water Authorities

THE PROBLEM AND THE SOLUTION

Problem: lack of knowledge on water availability and water demand at large scale for crops.

Solution: platform able to guide in the identification of agricultural areas and determine water availability and demand for a specific cultures and climate projection.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Easy-to-use interface for querying tabular and spatial data
- Providing water availability and water scarcity for specific areas, cultures, climate projections
- Infographics and dynamic navigation
- SAAS/PAAS with Subscription Revenue Model

HIGHLIGHTS

October 2021: Incubation by the European Space Agency- Business Incubation Program (ESA-BIC)

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GREEN INDEPENDENCE

greenindependence.eu | Italy | 5 staff

Green Independence is developing the New Artificial Leaf technology (NAL), a multifunction solar panel that embeds a Water Purification System (WPS) and an Electrochemical cell (EC), being able to purify/desalinate water and produce green hydrogen in a decentralized and independent way.

Agriculture	Energy Industry	Infrastructure	Textiles
Building Industry	Food processing	Manufacturing	Utilities
Cement	Hard-to-Abate	Mining	Water Authorities
Dairy	Hydroponic	Pharma	

THE PROBLEM AND THE SOLUTION

Current technologies to purify water (i.e. Reverse Osmosis) are energy intensive (3-7 kWh/m3) and have waste problems (i.e. brine). NAL purifies wastewater or seawater using just the dissipated heat from the PV panel, while producing electricity instead of consuming it. The energy surplus produced by the PV can also be stored producing green hydrogen - from the purified wastewater - directly on the PV.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

NAL's USP is the compounding effect of all its technological advantages. The amount of wastewater processed by NAL is more than the amount needed for hydrogen production so it can be sold separately; the water purification process instead of consuming energy produces an energy surplus, plus, using purified wastewater heavily contribute to reducing green hydrogen production cost.

HIGHLIGHTS

- Selected in Motor Valley Accelerator and UniCredit Start Lab Program
- Nominated "Deep Tech Pioneer" by Hello Tomorrow Conference
- Top 30 startup Clean Energy Accelerator by AWS
- Top 5 startup "Premio Startup per il Clima

eit Community Water Scarcity

Funded by the European Union

INNOSUNS

innosuns.es/es/ | Spain | 5 staff

InnoECA is the first debugging system specialized in water with high organic loads/ suspended solids and/or elements difficult to remove elements such as NH3/P, heavy metals, phenolic compounds, based on electrocoagulation/electrooxidation.

Agriculture	Food processing	Manufacturing	Pig Farming
Aquaculture	Wine Industry	Mining	Slaughterhouses
Canning Industry	Fruit & Vegetables production	Oil industry	Water Authorities
Food & Beverage		Pharma Industry	

THE PROBLEM AND THE SOLUTION

There is a real problem for the removal of high levels of suspended solids and organic matter, as well as complex elements from water. Our system has an impressive efficiency in the removal of these elements, without use of additives, and with moderate water consumption and with minimal space requirements.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Reductions of more than 90% in SS/DQO, over 80% in NH3, and close to 100% in P and heavy metals
- Patented system based on the design of electrodes (Al/Fe)
- High purification capacity with minimum space requirements (1m x 1m x 3.5 m high modules), with capacity between 4-50 m3/h.

HIGHLIGHTS

- System evolved from an SME Instrument Phase II award.
- System selected by the Fanbest Project for development as a RAS system (Recirculation Aquaculture System).

eit Community Water Scarcity

Funded by the European Union

Pelagoo

pelagoo.org | Greece | 5 staff

Pelagoo aims to build sustainable and resilient remote island communities through environmental, educational, technological and hospitality innovations.

PELAGOO

Agriculture | Infrastructure | Quality Monitoring | Water Authorities
Food & Beverage | Municipalities | Utilities | Water Dispensers

THE PROBLEM AND THE SOLUTION

Our solution is an automatic plug-and-play real time IoT system for clean water analysis and correction for accessing to safe drinking water. Furthermore, in an effort to minimize plastic bottles usage, we will employ a water vending machine, with reusable glass bottles.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

We believe that the best way to change a situation for the better is to implement your solutions through the community.

HIGHLIGHTS

- Having create a community
- Pilot on the island of Kalamos in Greece
- 30.000€ fund (Lefkada Municipality)

eit Community Water Scarcity

Funded by the European Union

PLANET Mangrove

nogreenwithoutblue.it | Italy | 6 staff

The Mangrove Technology Platform (MTP) developed by PLANET enables saltwater-driven dryland reforestation. It allows for CO_2 sequestration while saving freshwater.

Planet
Nature Inspired Technology

Agroforestry | Desalination | Municipalities | Tree Planting
Carbon Credits | Infrastructure | Pig Farming | Utilities
Carbon Offset | Internet-of-Things | Soil Restoration | Water Authorities
CO_2 Sequestration

THE PROBLEM AND THE SOLUTION

Trees are the best option to capture and store CO_2, yet about 97% of the water available worldwide is saltwater. We need therefore a systemic solution able to scale-up the tree planting activities leveraging the most abundant source of water, i.e. saltwater. For that purpose,the MTP integrates desalination units, water saving planting modules and Internet of Things devices.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- The MTP enables dryland reforestation
- The MTP achieves a near zero brine discharge, producing food-grade salt
- The MTP provides environmental data to kick-start carbon & biodiversity schemes

HIGHLIGHTS

- Seal of Excellence by the EU Commission
- Labeled solution by the Solar Impulse Foundation
- Partner of two on-going Horizon2020 and PRIMA funded projects
- Finalist of the Earthshot Prize

eit Community Water Scarcity

Funded by the European Union

PYDRO

pydro.com | Germany | 8 staff

We offer a fully integrated & self- powered water monitoring solution than can be deployed cost-effectively at scale.

pydro WATER TO DATA

Agriculture | Municipalities | Water Authorities | Infrastructure | Utilities

THE PROBLEM AND THE SOLUTION

Our self-powered smart sensing device for water pipes measures flow, temperature & pressure at high accuracy levels everywhere in the network without an external power supply. It provides data to manage smart water systems, helps reduce leaks, prevent pipe bursts & perform quality checks in real-time and 24/7.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

We are the only company to offer our customers a turnkey-solution with instant real-time data transmission, without the need for additional sensors, batteries, data logger, data transmitter, or an expert that has to make it all work.

HIGHLIGHTS

- Winners of the Water Councils Tech Challenge 2020
- Selected for EIC Accelerator blended funding (2021)
- Founder & CEO named MIT Innovator Under 35 (2022)

Funded by the European Union

Saba Technology SPA

sabatechnology.tech | Italy | 6 staff

Saba Technology aims to create solutions and products that tackle problems related to environmental sustainability, that reduce CO_2 in the atmosphere, and preserve primary resources and especially water.

Agrochemical industry

Fertilizers

Renewable energy operators and providers

Renewable energy sources

THE PROBLEM AND THE SOLUTION

We are an innovative Startup founded in Sicily, in 2019. Water is the essential substance for human and plant life. Through the production of water from moisture we enable communities to farming everywhere, even in arid places. Our solution supports water systems for food and urban uses.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

The solution is unique because there are no agricultural greenhouses assembled with such innovative technologies, starting from the device that produces water from moisture, key differentiation is that our systems are powered by energy from renewable sources.

HIGHLIGHTS

Best project for “conservation and protection of water resources” at conference “Water Use In Middle East, Reality and Future, Annual Conference”, Cairo 2019. Best project for “preserving and providing water resources in hostile territories” at the “Second Gulf- Arab Youth Forum”.

eit Community Water Scarcity

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SanChip

sanchip.net | Italy | 6 staff

SanChip is helping industrial machine owners & operators enabling Predictive Maintenance and Industry 4.0 strategies offering real-time, remote working fluid analysis solutions.

- Agriculture
- Building Industry
- Cement
- Dairy
- Food & Beverage
- Food processing
- Fruit & Vegetables production
- Infrastructure
- Manufacturing
- Municipalities
- Mining
- Pharma
- Textiles
- Utilities
- Water Authorities
- Wine Industry

THE PROBLEM AND THE SOLUTION

SanChip develops IIoT devices based on lab-on-chip technology and AI/ML software capabilities for multi-parametric analysis of fluids, e.g. lubricant and water. Connection to the Cloud allows remote monitoring of assets, production processes and product quality.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Our industrial lab on a chip allows complete physicalchemical characterization of fluids, e.g. lubricants, fuels, water and food products, in just one compact device, being more effective and efficient than our competitors.

Cloud data storage & analysis allows then to leverage the big data and provide insights to insurance companies, OEMs, utilities, etc.

HIGHLIGHTS

- Completed Techstars-Easter Pacific Shipping accelerator and currently ongoing acceleration with Leonardo SpA
- Winners of two Premio Marzotto special prizes, StartCup Emilia Romagna and Ecapital business plan competition
- Trusted by three multinational companies to develop ad-hoc devices for their specific needs

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SatGeo Ltd.

satgeo.tech | Bulgaria | 3 staff

We find water leaks from pipelines, that usually remain undetected for years and cause huge water losses, using satellite image processing, data analysis and GIS Software.

SatGeo
Safe & Save

Agriculture | Municipalities | Utilities | Water Authorities

THE PROBLEM AND THE SOLUTION

Our solution reduces real water losses by about 1% per year from water mains, increase efficiency of NRW Department Teams by 30%, save treated water resources for domestic water supply, save electricity and reduce CO_2 & gas emissions.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

We find undetected water leaks with extremely high success rate compared to competition. Our solution is time saving, suitable for all kind of distribution networks and covers very large areas for inspection.

HIGHLIGHTS

- Winners of Innovation Starter & Sofia Water, part of Veolia award in 2021
- Winners of ClimAccelerator BlackSea Challenge in 2021
- Saved about 5 million cubic meters of water in three months

eit Community Water Scarcity

Funded by the European Union

SENSFIX

sensfix.com | Poland | 30 staff

Sensfix is a AI-powered SaaS that is attempting to establish a new "water footprint" standard in commercial buildings and industrial facilities.

sensfix

Building Industry | Manufacturing | Municipalities | Water Authorities

Infrastructure | Mining | Utilities

THE PROBLEM AND THE SOLUTION

Sensfix offers a connected maintenance platform for industrial and enterprise facilities leveraging multimodal AI, IoT and mixed reality that eliminates paper and monitors real-time water consumption in operations & maintenance (O&M) of machinery, equipment and infrastructure. Sensfix's platform attempts at making facility managers aware of the water they consume for operations & maintenance of machinery, equipment and devices in their facilities.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Digitized workflows that "self-learn"
- Human like AI with multiple modalities (image, text, audio & video)

HIGHLIGHTS

- Awarded a €2.1 M EU grant
- Signed partnerships with Ericsson, Telefonica Group, UiPath, IP500 wireless alliance
- Winner of the global TiE50 Award 2019

Funded by the European Union

SOFI FILTRATION

sofifiltration.com | Finland | 9 staff

Sofi Filtration provides state-of-the- art filtration technology to water and other liquid filtrations.

Building Industry	Infrastructure	Municipalities	Utilities
Cement	Manufacturing	Pharma	Water Authorities
Food & Beverage	Mining	Textiles	

THE PROBLEM AND THE SOLUTION

Our technology is a mechanically self-cleaning filtration system. The system can be monitored and operated remotely as it has IoT features. The design and materials used are very robust so operating the system requires minimum amount of manual work.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Removal of very fine solid particles down to 0.3 µm Ultrasonic cleaning function with air back-pulse Automatic adaptability towards varying feedwater Scalable technology with small footprint and low costs.

HIGHLIGHTS

- Global patent “APPARATUS AND METHOD FOR REMOVING FINELY DIVIDED SOLIDS FROM A LIQUID FLOW” granted for the water treatment innovation 2014
- Technology developed and first commercial installation in 2014; launch in the USA for oil & gas market in 2016

eit Community Water Scarcity

Funded by the European Union

SolarDew

solardew.com | Netherlands | 4 staff

SolarDew is a Dutch Startup which has developed novel solar desalination products for the production of high quality drinking water for households, communities and small scale industrial, agricultural or horticultural applications.

SOLARDEW®
CLEAN WATER SOLUTIONS

Agriculture | Infrastructure | Utilities

Fruit & Vegetables production | Municipalities | Water Authorities

THE PROBLEM AND THE SOLUTION

In coastal and/or water scarce areas, people in rural communities are left behind because of the lack of cost- effective small-scale drinking water solutions. SolarDew developed a novel solar desalination technology that by directly using solar radiation produces high quality drinking water from seawater, brackish water, or contaminated water in a single step.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

SolarDew's technology is uniquely suited to off grid applications because it is simple, affordable, robust and easy to use and provides people with a sustainable and long term (drinking) water solution.

HIGHLIGHTS

- Winner Get in the Ring – Impact Competition for the Netherlands and finalist for the European competition
- Received INNOWWIDE, Actphast 4.0 and Interreg Water Test Network Grants
- Finalist in Get in the Ring United Water, Energy and Food, Desertech Competition, GIST Calyst Competition (Water)

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SpaceCrop Technologies, Ltd.

spacecroptech.com | Hungary | 6 staff

SpaceCrop is an agricultural software company that forecasts soil water needs in the farms.

We help farmers manage irrigation and increase crop resiliency.

SPACECROP
WHERE FARMING MAKES IT EASY

Agriculture

Fruit & Vegetables production

THE PROBLEM AND THE SOLUTION

We predict soil water needs in the farms and provide information via user-friendly webpage and mobile applications. Our users can get information on weather forecast, irrigation schedule and crop monitoring. We build farm income level 2x, reduce CO_2 emission by 5 tons per hectare, and save water consumption by 50%.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- User-friendly dashboard and mobile applications
- Advanced machine learning: Precise & Cost-effective
- Environment-friendly & sustainable

HIGHLIGHTS

- 3rd place Winner of EIT Food Innovation Prizes 2020 HU
- EIT Food Seedbed awardee
- EIT Green Manufacturing Accelerator awardee European
- Space Agency BIC awardee
- SpaceHub Network Accelerator awardee
- EIC-EIT Women Awardee
- Scholarship summer school (ESA) IEEE-GRSS HDCRS WG

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UTW - CROPSENSE

cropsense.es | Spain | 9 staff

CropSense is an intelligent decision support system for critical management decisions in herbaceous, horticultural and woody crops based on precision farming.

Agriculture | Fruit & Vegetables production | Manufacturing | Wine Industry

Food & Beverage | Water Authorities

THE PROBLEM AND THE SOLUTION

Our CropSense model is integrated in a platform which thanks to Hybrid Remote Sensing (HRS) technology, provides farmers with customized recommendations on water requirements, saving up to 30% of irrigation water. This solution is tested and proven in the field.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- User-friendly dashboard
- Optimised information through a combination of drones, satellites and IoT
- Low-cost system and IoT
- Calibrated and validated product for each type of crop

HIGHLIGHTS

- NEOTEC grant for R&D development in precision farming (2017)
- Obtaining the Innovative SME seal (2019) for our activities in the field of agrotech
- Access to the Interreg Sudoe programme – NOVExport (2022)

eit Community Water Scarcity

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WAKARU

wakaru.eu | Portugal | 40 staff

Water Wise System is an AI/IoT big data smart water management and analytical solution.

wakaru consulting

Agriculture | Manufacturing | Utilities

Infrastructure | Municipalities | Water Authorities

THE PROBLEM AND THE SOLUTION

40% of world and 20% of EU population will face restrictions on access to potable water by 2050. Our solution helps identify water leaks, losses and quality issues, reduce non-revenue water and fraud. We also optimize customer meters lifecycle management and help to better calibrate pressure. Helps to save more than 20% of water and 10% of energy.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

Agnostic to systems, sensors, data sources and clouds.
Can explore data from multiple SCADAs and field IoTs to build new operational knowledge in real time and predict expected network behaviour.

HIGHLIGHTS

- Winners of the H2O Challenge for most innovative water management solution (Panama Government and Global Water Practice of the World Bank, 2018)
- Suitability for R&D practice recognized (Portuguese Innovation Agency ANI, 2019)
- AQUA+ interoperability award (Portuguese Energy Agency ADENE and Planetiers World Gathering, 2020)
- Circular Economy and Decarbonization award (Cities and Future Territories competition by APDC-Portuguese Communications Association, Galp and NOS, 2021)

Funded by the European Union

Cartometrics

cartometrics.com/watcher | Spain | 5 staff

Watcher, by Cartometrics, aumates and optimizes fraud detection processes in water consumption in single- family homes.

WATCHER by CARTOMETRICS

Municipalities | Utilities | Water Authorities

THE PROBLEM AND THE SOLUTION

Water utility companies lose millions of euros a year due to fraud committed by their customers and need to make large investments to find and detect these cases manually, usually with a low success rate.

At Cartometrics, we have developed a system based on satellite images and powered by machine learning algorithms that can automate and optimize fraud detection, minimizing time and investments required and significantly increasing detection rate.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

- Automation, efficiency and increased detection rate
- Unique ML algorithms
- Geospatial and satellite imagery analysis expertise
- Team's skills mix

HIGHLIGHTS

- Successful pilot with one of the world's largest water utility groups; already working on a second phase.
- Two paying customers currently. Awaiting confirmation for a pilot with a third one.

Funded by the European Union

WaterShed Monitoring

watershedmonitoring.com | France | 3 staff

WaterShed Monitoring helps organizations that withdraw, distribute, treat and discharge water to optimize their operations through the better collection, management, and use of water-related data.

WaterShed Monitoring

Agriculture | Municipalities | Utilities | Water Authorities | Dairy

THE PROBLEM AND THE SOLUTION

WaterShed Monitoring Europe offers a predictive tool capable of estimating the potential occurrence of a cyanobacterial bloom event in the medium term (1-3 days) through its NERTHUS service. The solution integrates AI and deep learning processes applied to the analysis of multispectral satellite images.

KEY DIFFERENTIATION, THE UNIQUE SELLING POINT

WaterShed Monitoring implies a holistic view of the water cycle. Thanks to the unique combination of our expertises in water sciences, IT and data management, we help our clients turn their data into action. Our cloud-based software Enki is a flexible, scalable and secure platform designed for easy storage, integration and exploitation of water-related data. We are a mission-driven team and we care about our partners.

HIGHLIGHTS

- Winners of the Xplore softlanding prize
- Solution listed in the Grand Testeur directory
- CES Las Vegas 2022, 2nd place for the pitch of Digitalization and Innovation

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