

European Solutions
to Global Challenges

The Power to Innovate



Passionate



Excellent

Creative

Empowering

Open



Inspiring

Engaging

Dynamic

#EIT Awards



Awards

Welcome to the EIT Awards 2018!

EIT Awards 2018 - The Power to Innovate



European Institute of Innovation and Technology

eit.europa.eu

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We are delighted for you to join us as we celebrate innovation, entrepreneurship and the future of Europe. It is marvellous to see this talented community of innovators, entrepreneurs and creators nominated for the EIT Awards. Not only are their solutions inspirational, it is thanks to their brilliance that we are able to tackle some of society's most pressing challenges, pushing Europe to the forefront of innovation.

The European Institute of Innovation and Technology (EIT) was set up to bring together people that would not usually meet and cooperate with the thinking that this would unleash new ideas and help to break down silos. The diversity of our nominees this year is proof that this concept at the heart of the EIT's unique model is delivering. In this context, we are also proud to introduce a new award category for women innovators.

This year is even more special as we celebrate 10 years of the EIT. Over the past 10 years, the EIT Community and the impact of its work have been growing steadily. With the support of more than 1 000 leading partners, including many of Europe's top businesses, research centres and universities, we have nurtured more than 1 250 start-ups and scale-ups that have raised more than EUR 890 million in external investment and created over 6 100 highly skilled jobs. To date, more than 1 200 talented EIT Alumni have also graduated from the EIT's entrepreneurial programmes at master and doctoral levels.

Additionally, and impressively, the EIT's past Award winners, alumni, start-ups and scale-ups, continue to gather countless international awards, nominations and prizes. Europe's largest innovation community is indeed blooming like never before!

Since its creation 10 years ago, the EIT has come a long way, with clear impact on Europe's innovation landscape. To us, this is only the beginning. By continuing to join forces, create bridges and promote partnerships among the finest minds and forward-thinking organisations, we want to ensure the EIT continues to drive Europe's ability to innovate.

In this brochure, we introduce you to this year's nominees and their remarkable range of innovations, tackling the greatest challenges of our society: from circular economy to climate change; from sustainable food production, cancer treatments and e-health solutions, all the way to the Internet of Things. Our EIT Awards 2018 nominees are bringing real European solutions to global problems.

Read and be amazed at the many ways these innovations are already changing the way we live.



Dirk Jan van den Berg
Chairman of the EIT Governing Board



Martin Kern
EIT Interim Director

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This year, we have introduced a new category: the EIT Woman Award, recognising the outstanding achievements of women entrepreneurs and leaders from our Innovation Communities. Meet the nominees on p. 41!



Awards 2018 NOMINEES

The EIT recognises the exceptional achievements of members of its Innovation Communities through **four categories** in the annual EIT Awards:



RECOGNISES TOP GRADUATES FROM EIT-LABELLED EDUCATION PROGRAMMES



SUCCESSFUL ENTREPRENEURIAL START-UPS

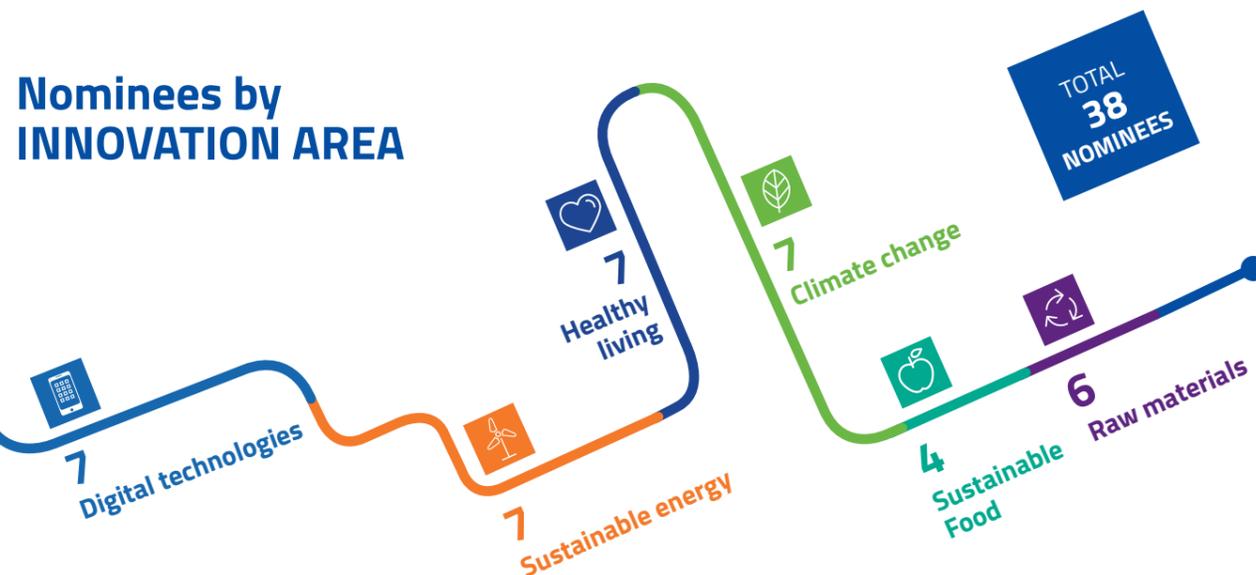


RECOGNISES TEAMS WITH HIGH IMPACT PRODUCTS AND SERVICES



RECOGNISES OUTSTANDING WOMEN INNOVATORS AND ENTREPRENEURS

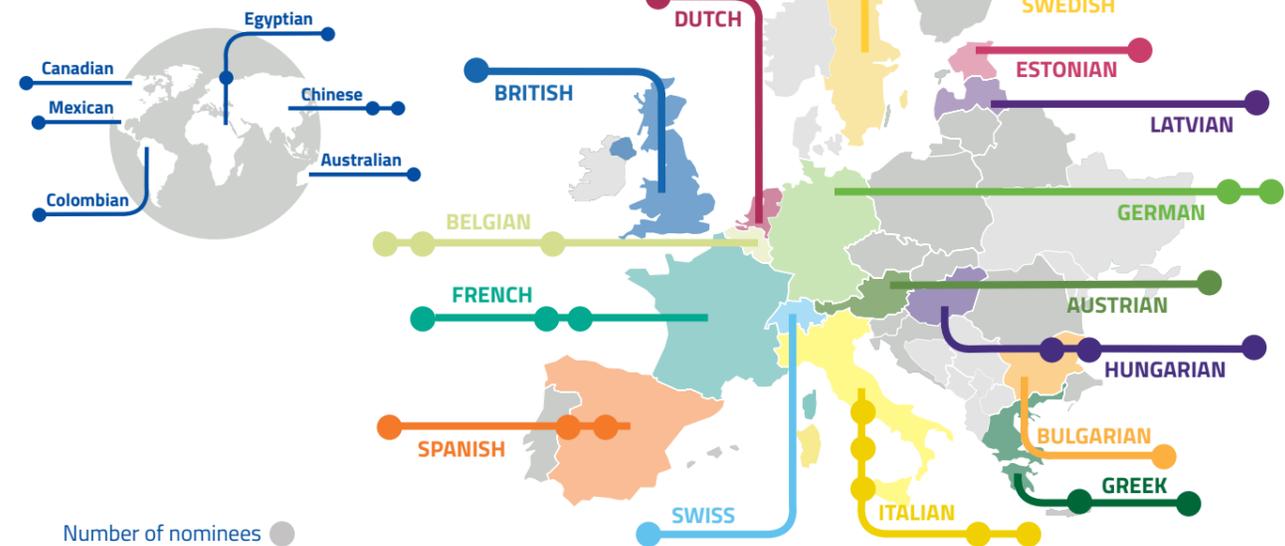
Nominees by INNOVATION AREA



Nominees by GENDER



Nominees by NATIONALITY



What are the prizes for the EIT Awards 2018?





The **EIT CHANGE Award** recognises graduates of EIT education programmes who spur innovation and entrepreneurship, inspiring change for a sustainable future.

Towards sustainable and regenerative agriculture

Keywords: organic seed treatment, sustainable agriculture

I feel a deep urge to create and scale solutions that will sustain the richness of our agricultural ecosystems.

Opinions made with emotions

Keywords: text sentiment analysis, online text, meaning

Besides my start-up project, Slangsh, I'm working on a data science project to prevent rhino poaching in South Africa.

seedforward.de @seedforward_de Seed Forward Seed Forward



Jacob P. Bussmann,
CEO of SeedForward
Main product: FREYA

Aim: To favour a global transition to sustainable agriculture through education and organic plant-strengthening products

EIT Community connection: EIT Climate-KIC



slangsh.com @slangsh



Mahmoud Khodier,
CEO of Slangsh and PDENG trainee in Data Science
Main product: Slangsh

Aim: To give people and businesses the power to get deep, highly accurate, and easy to explore opinions and emotions

EIT Community connection: EIT Digital



The project

1 The idea

SeedForward advocates a global transition towards sustainable and regenerative agriculture. To this end, we developed FREYA, an organic seed coating substituting existing chemical treatments. We also carry out research and provide consultancy services.

2 Inspiration

I come from a family of farmers and have always been interested in land-use management. I was also confronted early on with the many agricultural challenges faced by developing countries.

3 Unique selling points

Our holistic approach includes all stakeholders in the reflection process: not only farmers, but also consumers and decision-makers. By doing so, we ensure that everyone benefits.

4 EIT Community support

EIT Climate-KIC gave me access to a wide community of extremely talented entrepreneurs. Thanks to them, I learned a lot about product development and the concept of customer validation.

5 The future

Together with my co-founder, I want to create a family business which will remain faithful to our values of sustainable development. We hope our solutions will spread across Europe and Africa within the next decade.

The nominee

6 The beginning

I studied forest sciences and urban environmental management, which fostered my desire to work towards resource efficiency. The other trigger was meeting my co-founder and inspiring mentors through EIT Climate-KIC.

7 Joining the EIT Community

I knew the EIT Community would allow me to meet like-minded entrepreneurs, which would benefit my personal development. I did not hesitate to join once I had the opportunity.

8 Entrepreneurial spirit

I have always liked the process of coming up with an idea and then turning it into reality so that it becomes more than just a thought on paper. I also have the constant need to feel that I am doing something useful. No wonder I became an entrepreneur!

9 An ideal world

I wish people were more aware of the far-ranging impact that more sustainable land-use might have on every human being. We owe it to the generations to come.



Supported by EIT Climate-KIC

The project

1 The idea

My idea is to build a platform that enables people to share and explore opinions with emotions. The platform also enables decision makers to analyse emotional feedback of a specific target group of people.

2 Inspiration

Massive amounts of text are generated by people online. However, it is very hard for software to capture the true meaning of all this text, leaving enormous untapped potential.

3 Unique selling points

Unlike current solutions that are based on star ratings, Slangsh is the first in the market that allows people to explore opinions (with emotions) about topics and trends in different languages and countries. Slangsh also provides policy makers with a communication channel to get feedback from people in a fast, simple, easy, fun and anonymous way!

4 EIT Community support

EIT Digital not only granted me a scholarship, they also exempted me from a six-month external internship so I could focus on Slangsh. On top of that, through the EIT ecosystem, I got in touch with a lot of valuable contacts for my project.

5 The future

The way I see it, in 10-years' time, Slangsh will be a leading company in multilingual text analytics in general and, more specifically, text sentiment analysis. The goal is to give people the best experience to browse online reviews and to give businesses the power to understand people and offer them the best experience.

The nominee

6 The beginning

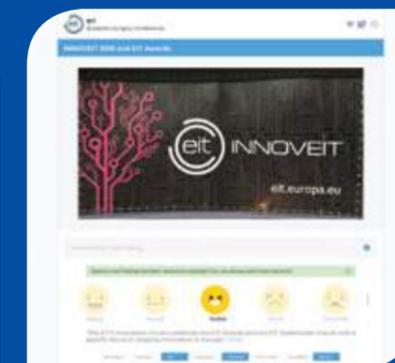
I became interested in data science and mobile social applications when I realised that the amount of data digitally generated by people, such as text, is absolutely enormous. I was and am convinced we can gain a lot of insights and benefits from this data, and I wanted to find a way to use the insights from the data for social good.

7 Joining the EIT Community

Joining the EIT Community was an easy decision for me: it fit all my interests, and I knew it would help me to achieve my goals. In addition to the educational aspect, the EIT Community provided me with an ecosystem allowing me to gain entrepreneurial, technical and research experience, as well as attend conferences and events and meet people and partners from all cultures and backgrounds.

8 Entrepreneurial spirit

I have a big passion for innovation and entrepreneurship and believe I have an entrepreneurial spirit: Slangsh is my third business idea. I am always thinking about and working on new business ideas. My big dream is to be a successful entrepreneur and write a success story that has a positive, social impact on people and businesses worldwide.



9 An ideal world

If I could change something, I would like to use technology and innovation to enable people all over the world to support each other: rich people helping poor people, well-educated people teaching uneducated people.

Supported by EIT Digital

Improving hospital hygiene in new markets

Keywords: hand hygiene, market needs analysis, new market entry

saninudge.com @saninudge Sani nudge Nóra Félegyházi



Nóra Félegyházi, Student / Business Developer at Sani nudge
Main product: Sani nudge

Aim: Adjusting an electronic hand hygiene monitoring system developed in Denmark to adapt it to the German market

EIT Community connection: EIT Health

I would love for my work to improve the hand hygiene of healthcare workers in European hospitals and thereby increase patient safety.

Saving energy and money through decentralised storage systems

Keywords: self-learning algorithms, energy-saving storage device

thermovault.com Siacovel



Sandro Iacovella, CTO & Founder of ThermoVault
Main product: Decentralised energy storage system

Aim: To enable a clean and affordable power system by unlocking the largest decentralised storage system in the world

EIT Community connection: EIT InnoEnergy PhD School, EIT InnoEnergy Community Advisory group

To me, Leonardo Da Vinci remains the most creative, out-of-the-box thinking innovator. His inventions continue to influence our world to this day.

The project

- The idea**
Sani nudge is a wireless solution from Denmark designed to notify healthcare workers if their hand hygiene compliance becomes low. The system relies on smart connected sensors on the user's badge, the dispenser and above the patient's bed. By researching the German market needs related to hand hygiene monitoring in hospitals, I identified that the company faced a high barrier for market entry as there was not enough attention paid to the World Health Organization's 5 moments for hand hygiene. These are specific moments in which hand washing is strongly advised. I addressed the issue by placing emphasis on the system's 'nudging' feature that reminds healthcare workers to disinfect their hands.
- Inspiration**
I wanted to know if the Sani nudge system had potential in Germany, and if so, how to drive its profitability within this market. Based on my research and recommendations, the Sani nudge management team decided to take on the German market.
- Unique selling points**
The Sani nudge system gives immediate feedback to healthcare workers, thus improving hand hygiene compliance.

- EIT Community support**
Through classes and workshops, EIT Health provided me with the necessary background knowledge to conceive and develop the idea. In addition, they assigned me two thesis supervisors. These experts guided me throughout this project.
- The future**
I would like the Sani nudge system to be considered as basic equipment in the majority of European hospitals to improve hand hygiene of healthcare workers and increase patient safety.



The nominee

- The beginning**
I have family connections leading back to Ignaz Semmelweis, the first innovator in the field of hand hygiene, which triggered my interest. A friend of mine also conducted a project with Sani nudge in 2017 that made me enthusiastic about the company's innovation and potential.
- Joining the EIT Community**
The healthcare world is in constant need of innovation and improvement regarding its products and services to secure high-quality medicine for future generations. I want to be among the creators of these innovations and this is why I applied to the EIT Health programme.
- Entrepreneurial spirit**
I have always wanted to be an entrepreneur. I consider myself a creative person and love to solve real-life challenges, as I did extensively during my research.
- An ideal world**
I firmly believe that everyone should have access to high-quality healthcare. Good health is a key factor to happiness, and I am convinced that everyone should be cared for with professionalism.



Supported by EIT Health

The project

- The idea**
ThermoVault has developed a software and hardware connected platform to be used as an add-on to current water and space heaters in households, transforming existing appliances into an energy-saving, cost-effective and fully automated energy storage device.
- Inspiration**
ThermoVault is the result of a combination of ideas from my PhD programme at KU Leuven and EIT InnoEnergy and my involvement in the EIT InnoEnergy alumni ecosystem.
- Unique selling points**
The originality of our all-in software and hardware platform is that it uses self-learning algorithms, thus requiring no expert knowledge, and that it is compatible with any individual space or water heater. In addition to its cost-competitiveness, our platform guarantees local comfort requirements due to a novel wiring approach into the thermostat.
- EIT Community support**
The EIT Community has been and continues to be very important in order to successfully bridge the gap between research and the founding of a start-up. The mobility opportunity provided by the EIT Community was essential to achieve the large-scale pilot and create

the globally connected team I am part of, in which all members are entrepreneurial EIT InnoEnergy alumni.

- The future**
After a successful deployment in California, ThermoVault recently exceeded 1 megawatt (MW) of decentralised storage in Belgium, in only nine months of operation. We strive to help electricity consumers become green, active and profitable stakeholders of the energy transition, and that together we can operate the largest, most cost-effective decentralised storage system.



ThermoVault

The nominee

- The beginning**
My interest in engineering was sparked at an early age by my father and grandfather. I was then guided into the energy field by the urgent need for our electricity system to meet climate targets. By starting my PhD with a large-scale demand response project in Belgium, where we controlled the appliances of 240 households, I had the opportunity to have a direct impact while receiving valuable input from the local community.
- Joining the EIT Community**
We are currently facing a global issue in our transition towards a low-carbon society. I believe that a community of open and passionate people is essential

to solve this challenge. As a member of the EIT InnoEnergy Community advisory group, I hope to contribute to the development of new ideas and to support entrepreneurship in Europe.

- Entrepreneurial spirit**
After my engineering studies, I completed a master's degree in management, which helped me keep in mind the valorisation phase when developing ThermoVault. My doctoral thesis further broadened my view on the complex interplay of energy grids, markets and different actors.
- An ideal world**
I dream of a worldwide collaboration beyond borders and regulations.

Supported by EIT InnoEnergy Knowledge Innovation Community

Transforming the electricity market through blockchain

Keywords: prosumers, blockchain for electricity market

flexidao.com
SAccornero



Simone Accornero, CEO & co-founder of FlexiDAO
Main product: FlexiDAO

Aim: Harnessing the power of blockchain to revolutionise how energy generation and consumption data is exchanged, controlled and secured to enable energy retailers to offer digitised, smart, green energy services

EIT Community connection: EIT InnoEnergy



The project

- 1 The idea**
FlexiDAO is software that automates energy data processing and exchanges, while combining for the first time traceability and transparency enabled by blockchain with GDPR compliant data privacy. Thanks to our software, retailers can offer generation and consumption units ('prosumers') of all sizes, new value-added energy services, such as obtaining real-time green certificates, buying electricity as a community when prices are cheaper or getting paid to help keep the grid in balance.
- 2 Inspiration**
I am convinced that if we want the energy transition to succeed, the energy sector needs to find ways to include the final consumer and democratise the access of small prosumers into electricity markets. We need to create incentives and break technological barriers to enable consumers to shift from passive to active participants of the energy sector.
- 3 Unique selling points**
There are nearly no back-end or overhead costs, our solution is seamlessly scalable. We provide encryption which enables simultaneous traceability and data privacy, and we reward our end-users.

- 4 EIT Community support**
EIT InnoEnergy showed me how my work and research as an engineer will have a real impact on the surrounding environment. But more importantly, EIT InnoEnergy has given me the opportunity to find brilliant minds like Greg who has been my classmate, friend, teammate, flatmate and finally FlexiDAO co-founder and this is the greatest contribution so far.
- 5 The future**
With FlexiDAO, I want to build, sustain and control the largest network of distributed, interconnected, flexible generation and consumption units to transform the energy sector into a carbon-free, prosumer-centred and democratic market.

The nominee

- 6 The beginning**
During my master's degree, I developed a strong knowledge about smart grids, electricity markets and consumer engagement. At the same time, I became aware of the immensity of the challenge that lies ahead of us: achieving a carbon-free energy sector.
- 7 Joining the EIT Community**
I applied for the MSc Energy for Smart Cities at EIT InnoEnergy because I always

“My biggest challenge consists of combining a game-changing solution and vision with current market needs in order to be profitable as a start-up.”

Creating a smarter society through the Internet of Things

Keywords: internet of things, big data, smart cities

matchx.io
@matchx_IOT



Sheen Xi Hu, co-founder and CEO of MatchX.io
Main product: MatchX

Aim: Empowering the future of the Internet of Things (IoT)

EIT Community connection: EIT Digital Master School, EIT Digital Accelerator



The project

- 1 The idea**
MatchX is a specialised provider of LPWAN (Low Power Wide Area Network) solutions that allow the seamless end-to-end connection of devices. MatchX solutions can be used in smart cities, for instance, as well as in farming and logistics. The goal is to gather data from these devices and sensors to build a market where people can share, analyse and trade these data using blockchain.
- 2 Inspiration**
Just as Facebook connects people, we want to connect things: there are seven billion people in the world, but billions more things. By connecting them, we can increase the efficiency of city management, logistics, agriculture, etc.
- 3 Unique selling points**
We have some very specific knowledge in what will be a huge market. For example, we have implemented Listen-Before-Talk, a technology that enables more sensors to connect and talk to gateways. Not many companies can do this. Furthermore, MatchX is the only company that provides a complete LORAWAN (Long Range Wide Area Network) solution, including hardware, software, cloud and blockchain.

- 4 EIT Community support**
I am really grateful for the lessons I have learned at the EIT Digital Master School. This includes not only technical skills, but also entrepreneurial ones, such as how to start a company or how to develop innovative products in a team. Furthermore, I had the chance to test out these skills with real venture capitalists, such as Google.
- 5 The future**
Decentralised IoT networks are the future. Of the 300 countries in the world, we now reach about 40, so there is room to grow. This year, MatchX expects to grow from 11 to 40 employees; in three-years' time, I predict that our team will grow to 100 employees.

The nominee

- 6 The beginning**
After completing my bachelor's degree in telecommunications and engineering in China, I became very interested in IoT and worked at IoT company, Relayr. With MatchX, we began developing and manufacturing software and hardware in February 2017.
- 7 Joining the EIT Community**
Joining the EIT Digital Accelerator will be very beneficial: in the EIT Digital Network, there are a lot of companies that could use our technology. EIT Digital can help us to become a European unicorn.
- 8 Entrepreneurial spirit**
I love to create things myself and find solutions – not problems!
- 9 An ideal world**
In my ideal world, not only all humans but also all devices and machines are connected.



Supported by eit InnoEnergy Knowledge Innovation Community

Supported by eit Digital

Achieving industrial ecology

Keywords: transition towards a circular economy, developing industrial ecology

BE CIRCLE provides an innovative way to challenge the status quo and facilitate a profitable switch to the circular economy.



Delphine Antoniucci,
Project Engineer at ENGIE
Main product: BE CIRCLE

Aim: To support industrial ecosystems in their transition towards a circular economy

be-circle.com



The project

1 Overview

BE CIRCLE is a consulting service designed to help build synergies within industrial ecosystems, based on public and private data exploitation through a dedicated web platform. The solution combines data visualisation and systems modelling, enabling users to create both strategic mapping and advanced simulations. Ultimately, this allows for the identification of hidden potential and value creation.

2 EIT Climate-KIC support

EIT Climate-KIC's support was critical throughout the initial market research with industrial leaders and then contributed significantly to the design phase of the project. EIT Climate-KIC also funded the demonstration of the platform to take it to market!

3 Ground-breaking innovation

BE CIRCLE is a 'multi-flows, multi-networks and multi-sectors' solution that is easy to implement and use. Thanks to open data exploitation within an internal database, our web-based tool does not need empirical data to run and deliver interesting outputs.

4 Societal impact

Developing and scaling industrial ecology to existing and new industrial areas triggers only positive outcomes: increased energy efficiency, reduction of pollution with its unavoidable health issues, increased competitiveness for businesses, you name them.

5 Achievements so far

BE CIRCLE is currently in the testing phase with business and production managers across Europe. Our digital service was crucial in the transformation of the French industrial park, INSPIRA, to an Eco-Industrial Park by providing specific results in the early stages.

KEY FACTS

Project started: February 2017
Innovation Community: EIT Climate-KIC
Theme: Sustainable Production Systems
Funding generated: EUR 1.7 million
Partners: Engie Lab, arx IT, École Polytechnique, Provdavis Hochschule, Infraserb Höchst, CNR, Inspira



The **EIT Innovators Award** recognises teams from our Innovation Communities that develop high-impact products and services for a sustainable future.

Ultracapacitors to save energy

Keywords: energy storage, ultracapacitors

Skeletontech.com @skel_tech skeletontech skeleton-technologies-ltd



Egert Valmra,
Programme Director at Skeleton Technologies
Main product: UCGEN3

Aim: To change the energy storage industry and help companies that might not be able to hybridise or electrify their business through a cost-effective energy saving solution



Cybersecurity for a more sustainable society

Keywords: cybersecurity, cyberattacks, detection, digitalisation

We want to make modern society more resilient to technological failures and enable widespread adoption of digitalisation.



György Dán,
Innovation Activity Leader at SOC4CI
Main product: Rapid Detection Service

Aim: To provide IT security by detecting technological failures before they happen, and to make modern society more resilient to cyberattacks



The project

1 Overview
UCGEN3 addresses the need for a lightweight, cost-effective and powerful energy storage system based on a new generation of ultracapacitors. The main industries requiring such solutions are transportation, heavy industrial equipment and power grids.

graphene, with pores of only a few nanometres. Unlike competitors, Skeleton Technologies is the only company to use a non-organic precursor to ultracapacitors.

This next generation ultracapacitor will meet the need for higher efficiency and a lower cost of ownership.

4 Societal impact

Skeleton Technologies' ultracapacitor-based energy storage solutions unlock energy saving applications in automotive, heavy transportation, grid and renewables, as well as industrial equipment. Thereby, we pave the way for a fully electric society where renewable energy production methods meet 100% of energy demand and where transportation of people and goods is a zero emissions industry.

During the innovation project, the aim was to develop the performance and reduce the price levels of ultracapacitor technology to reach a point sufficient to meet widespread client demand in the near future.

2 EIT InnoEnergy support
After benefiting from EIT InnoEnergy's generous investment of 4.1 million euro, Skeleton has managed to leverage this to raise about 20 million euro more.

5 Achievements so far

We have developed ultracapacitors with up to four times the power density and 60% higher energy density of competing ultracapacitors. We have also achieved a 32% decrease in fuel consumption for urban delivery trucks and a 34% decrease for port cranes by exploiting and re-using braking energy.



KEY FACTS
Project started: 2015
Innovation Community: EIT InnoEnergy
Theme: Energy storage
Funding generated: EUR 6.8 million
Partners: Visedo (now Danfoss), CO-NOT

The project

1 Overview
The Security Operations Centre for Critical Infrastructure (SOC4CI) provides a customised detection and response service against Advanced Persistent Threats (APT). Thanks to SOC4CI, utilities such as electricity, water, transportation segments and financial service providers can make the most of their security investment, while offering real-time situational awareness.

anomaly detection. The service is unique because it combines the expertise of qualified security agents with state-of-the-art machine learning algorithms and cloud-based data processing. In this way, it provides best-in-class incident detection performance as well as actionable information upon detected incidents to customers. Unlike platform-specific services, it can be integrated with companies' managed security service providers.

In terms of detection performance, SOC4CI provides best-in-class technology without false alarms, thereby reducing personnel costs for customers. Compared to competing solutions, SOC4CI allows better detection through correlation of information from multiple sources and platforms and removes the burden of recruiting cybersecurity experts.

2 EIT Digital's support
With an action line focused on Digital Infrastructure, EIT Digital's support made access to trial customers and partners possible. We also benefited from EIT Digital's know-how in scouting for expanded sensing capabilities.



3 Ground-breaking innovation
SOC4CI integrates a wide range of public and private security information sources and uses real-time situational awareness for event interaction and

KEY FACTS
Project started: 2017
Innovation Community: EIT Digital
Theme: Digital Infrastructure
Funding generated: EUR 2 million
Partners: Bittium SafeMove, Bittium Wireless, the Budapest University of Technology and Economics, F-Secure, KTH Royal Institute of Technology

4 Societal impact

As modern society increasingly relies on a well-functioning and secure IT infrastructure, an interruption of services can lead to chaos. Companies, whether they are small, medium or large, can also suffer extensive damage when confronted with a cyber-attack. SOC4CI has therefore developed the Rapid Detection Service (RDS), enabling enhanced resilience to technological failures with the final aim of facilitating widespread adoption of digitalisation. This, in turn, makes society more sustainable.

5 Achievements so far

The RDS system has been launched commercially and can already boast around 20 customers in Europe, some of whom are operators of significant critical infrastructure.

Predicting Alzheimer's disease

Keywords: alzheimer's disease prediction, cognitive test

altoida.com



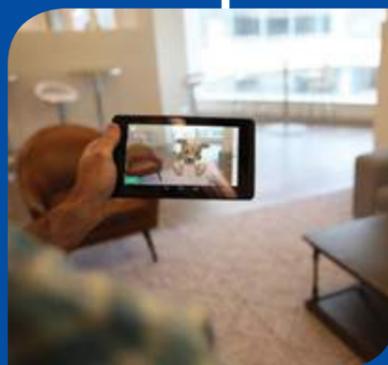
Ioannis Tarnanas,
President & CSO of Altoida
Main product: Alzheimer's Disease Prediction Service

Aim: To make brain health measurable and actionable and detect Alzheimer's disease at an early stage



The project

- 1 Overview**
With a 10-minute iPad-based test, we can determine if a person will develop Alzheimer's disease within six years, with an accuracy of more than 90%. The Alzheimer's Disease Prediction Service (ADPS) will be one of the first validated solutions to enter the EU market able to predict the risk of Alzheimer's for people over 50.
- 2 EIT Health support**
EIT Health heightened our visibility across Europe through its extensive network and accelerated the acceptance of ADPS on the European market. It was also a catalyst for collaboration with healthcare professionals, industry and academia.
- 3 Ground-breaking innovation**
Based on easily collectable digital behavioural markers, the platform enables healthcare professionals to screen and monitor healthy, at-risk and mild cognitive impairment and early form of Alzheimer's disease.



KEY FACTS
Project started: 2016
Innovation Community: EIT Health
Theme: Digital Health
Funding generated: EUR 30 million grants, EUR 1.2 million venture
Partners: Global Brain Health Institute at Trinity College Dublin, GMV Innovating Solutions, Institut d'Investigacions Biomèdiques August Pi i Sunyer

4 Societal impact

Our goal is to fight and ultimately cure Alzheimer's disease, which remains one of the greatest challenges to society and a major burden to healthcare systems worldwide. Our technology will simplify the tracking of Alzheimer's progression and result in a more precise and personalised prognosis and treatment.

5 Achievements so far

So far, we have conducted longitudinal EU-funded studies at 22 sites with 4 500 candidates, published more than 12 articles in major journals and initiated collaboration with the Global Brain Health Institute. In addition, 240 independent publications support our methods, and we are endorsed by Alzheimer's Europe, Europe's association of patients with Alzheimer's. Finally, Altoida was recognised as one of the Rice Alliance 10 Most Promising Life Science Companies at the 2017 Texas Life Science.

Improving trust in the fish supply chain

Keywords: fish fraud detection, fish quality-control short weighting, species substitution, over treating, antibiotic residue detection

tellspec.com

@TellSpec

TellSpec

Isabel Hoffman



Isabel Hoffmann,
CEO of Tellspec LTD
Main product: Tellspec Food Scanners

Aim: To provide the food supply chain with rapid, portable and affordable fish analysers that can detect fish quality as well as different types of fish fraud



The project

- 1 Overview**
Fish fraud, the practice of misleading consumers about the fish they consume in order to increase profits, has a negative impact on marine conservation efforts, consumer trust and human health. Tellspec and its partners are rebuilding trust in the fish supply chain by developing rapid, portable and affordable monitoring tools to verify the authenticity of the label of whitefish, test for the quality and freshness of raw white fish, the use of excess water in frozen fish, and the presence of antibiotic residues.
- 2 EIT Food support**
EIT Food supported our innovation project called "Improving trust on fish chain: rapid, portable monitoring tools for a better control of whitefish". The EIT Community has enabled us to find unique partnerships with research institutes, universities and industries.

measurements of several fish can also provide more useful data than fewer samples being analysed with high precision. They can also provide the information needed for critical situations regarding health and safety issues.

4 Societal impact

This project contributes to the strengthening of the current national fish regulatory programmes by the development of effective, science-based methods for fish authenticity, quality and fraud.

It also contributes to sustainability in fisheries by curtailing illegal fishing and fish distribution practices and by reducing the unfair competition that fraudulent fish have in the market.



- 3 Ground-breaking innovation**
Currently, food testing is expensive, time consuming and not readily available. The rapid portable sensors developed in this project can allow fish screening in the field, at any point of the supply chain, to gain a quick overview without spending much time and wasting money. They can be used to identify fish samples that would require further analysis. On-site

5 Achievements so far

We have already gained support and high interest from fish wholesalers and retailers. Several international IoT platforms are also interested in integrating our application in their products.

KEY FACTS
Project started: 2017
Innovation Community: EIT Food
Theme: Food Safety
Funding generated: EUR 410 000
Partners: Fundación Azti, Queen's University Belfast, Microbion S.A, Tellspec Ltd and Waitrose

Inclusive electric mobility

Keywords: electric vehicles, car sharing, social equality

inclusiveev.eu @Inclusiv_EV



Keith Budden,
Head of Business Development at Cenex
Main product: InclusivEV

Aim: To demonstrate the potential of electric vehicles for car sharing in low-income urban neighbourhoods



The project

1 Overview

InclusivEV is a pan-European, EIT Climate-KIC funded project. The project demonstrates the potential for zero emission, fully electric vehicles to be used for car sharing schemes in low income, edge-of-city neighbourhoods. The schemes will provide affordable and flexible mobility, encouraging social equality and improving access to key services.

2 EIT Climate-KIC support

EIT Climate-KIC's support was vital for a number of reasons: for the financial backing of the Pathfinder, Accelerator and Demonstrator projects, for the introduction to mobility partners in Italy and Spain, for guidance on system-change methodology, and for access to the Innovation Community's network for dissemination and replication, especially the C40 cities.

3 Ground-breaking innovation

Low-income households can benefit from cheaper, cleaner mobility if a suitable business model can be developed to share the inherent benefits of electric vehicles. InclusivEV brings the mobility, financial and environmental benefits of electric vehicles to disadvantaged neighbourhoods and generates additional value by integrating them into the energy system via smart and bi-directional charging and discharging.

4 Societal impact

The potential advantages for society are many: improved access to all kinds of services, stronger social networks, financial benefits, less pollution and thus cleaner air, economic opportunities, among other things.

5 Achievements so far

Right now, InclusivEV is only in its first phase, installing infrastructure and deploying electric vehicles. However, the project is already generating significant interest from around Europe and the USA. Moreover, the business model has been widely shared and replication actions are commencing in UK cities, which are using the InclusivEV model as part of their car club procurement process. The project has already helped unlock new private investment from Europcar into disadvantaged areas.



KEY FACTS

Project started: September 2017
Innovation Community: EIT Climate-KIC
Theme: Innovation
Funding generated: EUR 1.7m EIT funding, 2m co-funding
Partners: Cenex, ECar, ITE, AESS, Universitat de Valencia

Supported by EIT Climate-KIC

Enabling cities to be more liveable

Keywords: data, city infrastructures, integration, no lock-in

cedus.eu @cityenabler cityenabler



Lanfranco Marasso,
Smart City Programme Director at Engineering Ingegneria Informatica Spa
Main product: The City Enabler of CEDUS for Digital Urban Services

Aim: To speed-up the digital transformation of urban services in European cities and worldwide



The project

1 Overview

Our cities are complex systems composed of a number of public and private city providers and hosting infrastructures (virtual and physical) that are often fragmented: think about how many portals or mobile apps we are using daily.

The City Enabler changes this perspective dramatically, looking at the city as a whole, helping everyone acting within the city - providing data, services, infrastructures - to be an active part of the game.

The City Enabler is a software platform developed following European Open Standards, it is powered by FIWARE and looks at data as the power and the energy to develop new and more efficient urban services. It can be used by Public Administration as well as companies.

2 EIT Digital support

EIT Digital is supporting City Enabler within the framework of the Digital Cities theme.

3 Ground-breaking innovation

The City Enabler is a so-called "Internet of Everything Platform", easily connecting data, services and processes coming from different city providers. Adopting open technology behind the scenes, we enable the city to harmonise existing

data, services or infrastructures simply by acting on the specific data useful for the new services. The City Enabler is fully domain and technology independent: the adopter can decide how, where, what and when to use the City Enabler, based on the existing infrastructure, and help the city in planning the future development strategy. The City Enabler is non-intrusive and not exclusive; on the other hand, it is able to be inclusive within the urban digital ecosystem, encouraging the adoption of innovation in the city.



KEY FACTS

Project started: 2016
Innovation Community: EIT Digital
Theme: Digital Cities
Funding generated: EUR 1 428 380
Partners: Engineering, Atos, FBK, Cefriel, ISMB, Image et réseaux

4 Societal impact

Our business model is clear and plain: we provide the platform to the customer (a city or a private company) and support it in the processes of integrating, harmonising and customising the available data, services and infrastructures.

Once the City Enabler is up and running, it is ready for any new further service or domain, being a local market open at global level, where providers can compete and promote their solutions avoiding any vendor lock-in. This impact on the city is fully compliant with the modern principles of OASC (Open & Agile Smart Cities) counting more than 120 cities all around the world.

5 Achievements so far

The City Enabler counts more than 20 instances all around the world, in different domains and contexts: from Helsinki (eHealth) to Montevideo (air quality control), from Genoa (natural disaster prevention) to Malaga (smart parking). The City Enabler allows us to develop different applications, easily replicable, portable and scalable in a very short time.

Supported by EIT Digital

Functional aquafeeds from insects

Keywords: organic waste streams, aquafeeds, insects

Potential benefits extend beyond the current target aquaculture market: poultry, swine, pet food...

Strengthening Europe's market in strategic metals

Keywords: nickel, cobalt, copper, precious metals, circular economy

This programme strengthens an entire European supply chain from mines to end products.



Matt McLaren,
CEO & co-founder of Entomics
Main product: METAMORPHOSIS

Aim: Turning organic waste streams into sustainable next-generation aquafeeds



Olivier Sutterlin,
Reach and Environment Public Affairs
Representative at Eramet
Main product: Strategic metals such as nickel, cobalt and derivatives

Aim: To develop a new production process to transform metallic concentrate into pure nickel, cobalt, copper, and other valuable and strategic metals



The project

Societal impact

- 1 Overview**
METAMORPHOSIS focuses on enhancing the properties of insectmeal as a valuable, next generation aquaculture feed ingredient, to help decrease the European protein deficit in a sustainable manner. It leverages the unique ability of insects to transform organic wastes into sustainable nutrients rich in proteins and fats, to provide quality fish feed at a favourable price.
- 2 EIT Food support**
EIT Food's support was crucial in enabling unique innovation partnerships, with research organisations and industry players working as equal partners.
- 3 Ground-breaking innovation**
METAMORPHOSIS represents a novel and holistic microbial fermentation methodology to maximise the value of insect biomass and produce high-value, sustainable aquafeeds in Europe. Moreover, our platform allows for consistent improvement and adaptation to fit particular species' nutritional and health needs.

By developing a sustainable protein resource from waste-fed insects, METAMORPHOSIS aims to ease the strain on the world's natural resources which are under increasing pressure from an exponentially growing world population. From a European perspective, METAMORPHOSIS will help reduce our dependence on nutritional imports and contribute to the sustainability of the food sector. Moreover, it will generate up to 40 jobs on a short-term basis, with additional jobs to be created throughout the predominantly European supply chain. Finally, it will help lower operational costs for aquaculture and save supermarkets considerable amounts in food waste disposal.

5 Achievements so far

So far, METAMORPHOSIS has succeeded in maximising the insect meal nutritional profile through a cost-effective method. Juvenile *Salmo salar* feeding trials in Iceland are ongoing, as are early commercialisation discussions.



KEY FACTS
Project started: September 2017
Innovation Community: EIT Food
Theme: Food waste
Funding generated: EUR 300 000
Partners: CSIC, Entomics and Matis

The project

- 1 Overview**
To strengthen their position in the strategic metals market, ERAMET and Boliden launched a strategic programme called NewEco. NewEco also improved ERAMET and Boliden's business model by adapting existing refining processes and developing a circular economy scheme. Instead of shipping concentrate (called 'matte') from New Caledonia, ERAMET imports it from BOLIDEN's smelter located in southern Finland. ERAMET processes the matte to extract nickel, cobalt and iron, and sends the resulting precious metals back to BOLIDEN.
- 2 EIT RawMaterials support**
ERAMET's shift in its production process was supported by the Innovation Hub CLC Central, part of EIT RawMaterials.



- 3 Ground-breaking innovation**
ERAMET adapted its plant's (located in northern France) hydrometallurgical process to meet the requirements of BOLIDEN's matte, which is different to the matte imported from New Caledonia. The production loop has been significantly shortened due to the shorter distance covered by the materials and the industrial symbiosis between ERAMET and BOLIDEN. The competitiveness of both partners has increased dramatically as a result.

Societal impact

NewEco keeps the production of important volumes of strategic and critical metals within European borders. These metals are used in a variety of final products for ICT, renewable energy supply, sustainable mobility (automotive, aeronautic), food processing, equipment and machinery.

5 Achievements so far

The processes developed during this project have been implemented in both ERAMET and BOLIDEN's plants. ERAMET's installations should reach 80% of ramp-up by the end of 2018.

KEY FACTS
Project started: 2016
Innovation Community: EIT RawMaterials
Theme: Resource efficiency in mineral and metallurgical processes and circular economy
Partners: AALTO University (Finland) and University of Liège (Belgium)

At-home supercharger for gaseous fuel-powered cars

Keywords: at-home supercharger, Compressed Natural Gas (CNG) home fueling appliance, Natural and renewable Gas powered Vehicles (NGVs)

“We re-invented the at-home fueling concept where we enable gas companies to deliver clean and inexpensive fuel to your doorstep at a competitive price.”

Impact of pollution on asthma and rhinitis

Keywords: air pollution, asthma, allergic rhinitis, sleep

“It is through the understanding of our modern environment that we’ll finally be able to create a healthier place to live in.”

hygengroup.com

@HYGENRS

HYGEN

Hygen



Robert Strods,
COO of HYGEN

Main product: Compressed Natural Gas Home Refuelling Station

Aim: To bring inexpensive fuel to people’s homes through an at-home supercharger for natural and renewable gas powered cars

HYGEN

The project

4 Societal impact

1 Overview

The Compressed Natural Gas Home Refuelling Station (CNGHRS) brings clean and inexpensive fuel to your doorstep, refuelling your car via a reliable at-home compressed natural gas fuelling appliance. By introducing the at-home supercharger for Natural and renewable Gas-powered Vehicles (NGVs), the existing gas distribution grid is transformed into a decentralised fuelling infrastructure for cars.

2 EIT InnoEnergy support

EIT InnoEnergy granted us the necessary financial support and delivered the first pilot customer essential for testing our solution.

3 Ground-breaking innovation

HYGEN is the first company to extend the service life of this kind of solution by a factor of 4 to 5. Moreover, by using off-the-shelf components, we have reduced the price considerably. This results in a six-fold decrease in total cost of ownership and allows NGVs to be refuelled at-home in 3 minutes for 200 kilometers twice a day.

5 Achievements so far

Our product has been certified for the European market and we have entered into a pilot and market partnership with Volkswagen Group, the world’s largest NGVs’ manufacturer, Gas Technology Institute, the world’s leading research and testing organisation for products in the natural gas sector, as well as with Gas Natural Fenosa, a large gas company in Europe with international presence.

KEY FACTS

Project started: 2015

Innovation Community: EIT InnoEnergy

Theme: Clean coal and gas technologies

Funding generated: EUR 3.2 million

Partners: Volkswagen Group, Gas Technology Institute, Gas Natural Fenosa/NATURGY



Stéphane Zeng,
Project Manager at BULL SAS
Main product: POLLAR project

Aim: To identify the links between pollutions, pollens and respiratory diseases affecting millions of people worldwide



The project

1 Overview

The interaction between air pollution, sleep and allergies is not sufficiently understood. Allergic Rhinitis (AR), one of the most common diseases in the world, affects between 25 to 30% of the European population (of all ages) and impairs social life, as well as school and work performance.

Thanks to its integrated software platform solution, POLLAR aims to understand the effects of air pollution in AR and its effect on sleep, work and asthma. POLLAR also aims to assess societal consequences in collaboration with citizens, corporate citizens and professionals, as well as propose preventive strategies and develop participative policies.

2 EIT Health support

Not only did EIT Health support us financially, but they also helped with the organisation and structure of the project, giving us advice regarding administration, communication and project management. Access to EIT Health’s network of experts and relevant partners has enabled us to extend the reach of the project and gain recognition worldwide.

3 Ground-breaking innovation

The POLLAR project combines emerging technologies with machine learning

capability. For example, POLLAR has developed the mobile application, Allergy Diary, to keep patients medically informed. The app will soon be linked to the Personal Pollution Sampler, a connected device to analyse local air quality.

4 Societal impact

As AR affects more than 150 million people in Europe, POLLAR can help these people to control their allergies and indirectly enable them to maintain their ability to work at full capacity. Through its achievements, POLLAR contributes to the reduction of health and social inequalities within and between countries.



5

Achievements so far

We managed to develop data sets regarding pollution and specific pollen counts in France. Our research was scientifically published, and our work has granted us access to the EU Summit 2018 Air Pollution and Health Tools.

KEY FACTS

Project started: 2018

Innovation Community: EIT Health

Theme: Health & environment

Funding generated: EUR 1 950 171

Partners: BULL, Sorbonne Université, Université Grenoble Alpes, ISGlobal, Kyomed, Neogia, AQUAS, Stimco, Universitat Barcelona

Residue-based construction materials produced on-site

Keywords: construction materials, modular and mobile upscaling units

RECOVER's goal is to allow for the market uptake of our final products, within three years of the end of the project.

recover.technology RECOVER PROJECT



Yiannis Pontikes,
Coordinator at RECOVER Consortium
Main product: modular and mobile upscaling units to produce construction materials in standard six-metre containers on-site

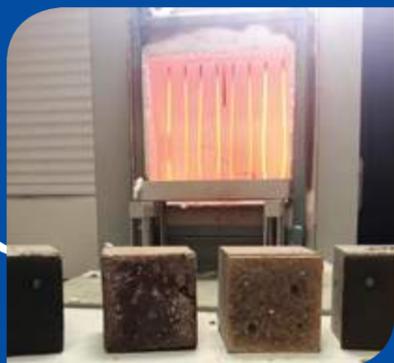
Aim: To build and install modular and mobile upscaling units on industrial sites to facilitate the production of construction materials from metallurgical residues



The project

1 Overview
RECOVER Consortium works on the upscaling of processes for the development of sustainable construction materials from metallurgical residues such as bauxite residue and copper slag. Modular and mobile upscaling units, incorporating all equipment necessary in standard six-metre containers, are being built and will be installed on various industrial sites to produce construction materials including thermal insulating building blocks, fire resistant tiles, and cement-like binders, on site.

2 EIT RawMaterials support
RECOVER Consortium has benefited from the support of EIT RawMaterials and has been able to grow thanks to the funds and network generated by the EIT Community.



3 Ground-breaking innovation
By using secondary resources to produce high value-added construction materials with unique properties. RECOVER aims to introduce sustainable construction materials, which can themselves be recycled and reused. The mobile and modular upscaling unit can serve as an upscaling hub for the valorisation of several waste streams, urban or industrial, even in remote or unindustrialised regions, by using local resources.

4 Societal impact
RECOVER contributes to the saving of primary resources and the reduction of CO₂ emissions in the cement industry, while promoting recycling, sustainability, circular economy and the zero-waste concept. It increases awareness of the challenges linked to residues and cementitious materials, promotes science education of the public, and creates jobs in the green, sustainable construction materials sector.

Achievements so far

We have successfully produced prototypes from metallurgical by-products, while the assembly of a modular, mobile upscaling unit is expected by mid 2019.

KEY FACTS
Project started: 2017
Innovation Community: EIT RawMaterials
Theme: Upscaling
Funding generated: EUR 2.2 million
Partners: KU Leuven, Aughinish, Boliden, Metallo, CRM, NTUA, ZAG, ResourceFull

The **EIT Venture Award** recognises successful start-ups and scale-ups that have been supported by the EIT's Innovation Communities through dedicated business creation and acceleration programmes.

Saving lives with an app

Keywords: atrial fibrillation, heart rhythm, remote monitoring, stroke prevention

fibrichck.com @fibrichck FibriCheck qompium



Bieke Van Gorp, Chief Business Development Officer and Co-founder at Qompium NV
Main product: FibriCheck

Aim: To bring certified digital health solutions to everyday practice by offering user-friendly, high-quality and proven mobile applications at a low cost

EIT Community connection: EIT Health, participation in EIT Health Head Start and EIT Health Scale-Up

Act instead of overanalysing.

Telemonitoring to prevent fatal heart-related problems

Keywords: online telemonitoring, heart-related conditions, heart attack, stroke

checkpointcardio.com checkpointcardio



Ivailo Dachovm, Managing Partner of Checkpointcardio LTD
Main product: Online telemonitoring platform and device

Aim: To provide patients with a 24/7 real-time medical service in their homes

EIT Community connection: EIT Digital Accelerator

My most satisfying aspect of my business? The lives we save every day. This already amounts to thousands in total.

The project

- 1 The idea**
Atrial fibrillation (AFib) is a silent killer, affecting 10 million people in Europe alone. The population at risk is growing at an alarming rate; AFib is the cause of over 20% of all strokes and can lead to heart failure, kidney problems and coronary heart disease. Although difficult to detect, FibriCheck overcomes current technology challenges by requiring only a mobile device that enables users to detect AFib and take preventive action.
- 2 Inspiration**
During a promising master's thesis at the University of Hasselt (Belgium), under the supervision of Professor Lars Grieten, our current CEO, algorithms were developed to detect and assess AFib using only a smartphone. The idea of using mobile devices as potential screening tools was initiated by cardiologists. Lars's personal motivation was high as his father suffered a stroke due to undetected AFib.
- 3 Unique selling points**
FibriCheck, 100% software-only and device-independent, is today the world's only medically certified app capable of detecting AFib and other heart rhythm disorders, thereby preventing strokes. Compared to hardware tools, our trusted solution achieves the same diagnostic accuracy as a single lead electrocardiogram device (ECG) and

- 4 EIT Community support**
We received extensive support from EIT Health, not only for funding, but also for networking. We are also part of EIT Digital as FibriCheck is on the crossroads between both EIT Communities.
- 5 Teamwork**
We truly believe in the strength of our team and give each member the chance to contribute to our success. Our internal organisation is based on open communication as we believe that the best ideas can come from anywhere.
- 6 Venture development**
As we have already successfully launched our business in Belgium, our current focus is to internationalise FibriCheck across Europe. Later, we want to enter the United States market and finalise the development of a FibriWatch.

The nominee

- 7 The beginning**
Implementation of our innovative way of saving lives did not come without a struggle, because the medical world is a very closed one. However, seeing the growing medical support that we are receiving today, I am very proud to have fought for this.

- 8 Entrepreneurial flair**
I am a driven, passionate and innovative woman, bringing a female touch to our group while being ready to quickly adapt and take pieces of relevant information to build relationships between things or people.
- 9 Learning from experience**
In general, I would advise others to think outside the box, to believe in the small things that step-by-step can lead to a great outcome, and to just act instead of overanalysing.
- 10 Ideal advisor**
Steve Jobs, for his innovative insight and disruptive approach.



Supported by eit Health

The project

- 1 The idea**
In today's world, more than 50% of sudden deaths are caused by heart-related conditions. Checkpointcardio offers a solution that monitors parameters such as heart rate, respiration and body temperature, and transfers these data 24/7 to an experienced medical team in a telemedical centre. The device is also capable of making emergency calls.
- 2 Inspiration**
I saw a number of friends and relatives succumb to completely preventable deaths caused by a heart attack or a stroke, and I decided to take action to avoid such tragedies in the future.
- 3 Unique selling points**
Being the first player on this market, we have the first-mover advantage. We are the first to have opened a telemedical service centre and our product is available at a very affordable price.
- 4 EIT Community support**
The EIT Digital Accelerator gave us the opportunity to connect with potential customers through networking events.

- 5 Teamwork**
Our team consists of veterans from the medical, IT, machine learning and hardware fields. Each member is a leader in their respective domain, with years of experience and significant achievements.
- 6 Venture development**
Having passed the start-up phase, we are now deployed and ready to scale.

The nominee

- 7 The beginning**
It was our medical director who convinced me to tackle the problems in this field. He needed help with the development of an online follow-up system for his patients, as many of their complications were going unnoticed.
- 8 Entrepreneurial flair**
I am convinced that an entrepreneur has to be devoted to his project.
- 9 Learning from experience**
In my experience, an entrepreneur must have clear goals and always strive to launch a finished product onto the market.

- 10 Ideal advisor**
My ideal advisor would be Mahatma Gandhi or Mother Teresa. I highly value their humanistic views, which are less common nowadays.



Supported by eit Digital



Micro Hydro to deliver local power, without impact

Keywords: decentralized hydropower, Micro Hydro Power Plant

turbulent.be

@TurbulentHydro

TurbulentHydro

Turbulent Hydro



Jasper Verreydt,
CEO of TURBULENT BVBA
Main product: Micro Hydro Power Plant

Aim: To design the best turbines for low head hydro power generation

EIT Community connection: EIT InnoEnergy's Highway



The project



programme, reached our first customers and wrote a fully developed business plan for a funding round.

5 Teamwork
TURBULENT was founded by Geert and I. We are completely opposite in personality but very much aligned in vision. We were joined by an experienced R&D developer and a young technical development team to turn theory into practice. Now, TURBULENT is filling in all the knowledge gaps to scale the technology to have a large, positive impact around the world.

6 Venture development
We have a working pilot in a real commercial setting, a series of potential customers and a full plan for the future. The next steps include getting our technology industrialised and being able to deliver products with proven and consistent quality, timing and support.

- 1 The idea**
TURBULENT provides a reliable, cost-efficient, micro hydro power plant uniquely designed to use a very low head stream. The power plant generates renewable energy ranging from 15kW to 100kW close to the end user with very little need for civil works. Fish and small debris can pass through the turbine, keeping maintenance low and efficiency high.
- 2 Inspiration**
My co-founder, Geert Slachmuylders, was the inventor of the technology. He discovered a potentially simple solution for a world problem by looking at biomimicry (the imitation and use of natural principles in human applications).
- 3 Unique selling points**
Our solution stands out because of its small size and its combination of low head efficiency with fish friendliness and plug and play (easier to obtain permits). The limited need for civil works, ease of installation (days instead of months), debris and sedimentation handling and low price, are also great advantages.
- 4 EIT Community support**
EIT InnoEnergy granted us our first capital to move from a theory to a proof of concept. Through coaching and reviews, the business side also developed. We planned a pilot

It was incredible to see our pilot working! The proof that, after three years of development and experimenting, we were able to deliver what we promised.

Maintaining competitive advantage while contributing to circular economy

Keywords: circular economy, blockchain, smart questioning

circularise.com

@circularise

Circularise

Circularise



Jordi de Vos, Founder of Circularise
Main product: Circularise protocol

Aim: An open, distributed and secure communications protocol for a circular economy

EIT Community connection: EIT RawMaterials (2 boosters, and currently project partner)



The project

day. We also benefited from EIT Digital's support even though we were not fully part of this Innovation Community.

5 Teamwork
Our team grew very rapidly, jumping from 2 to 14 partners in half a year and will double in size again in the coming months. The team is so dedicated to making Circularise a success that my own efforts pale in comparison.

6 Venture development
The next step will be to close our EUR 4 million series A funding round and prepare for a cryptocurrency pre-sale event planned for September.



- 1 The idea**
Our open-source distributed communications protocol allows stakeholders to communicate data in a secure way. The system uses an algorithm called "smart questioning" that enables stakeholders to ask questions about a product and receive trusted answers confidentially. Circularise allows every stakeholder to maintain their competitive advantage while contributing to the circular economy.
- 2 Inspiration**
When Mesbah Sabur, co-founder of Circularise, explained to me the concept of a circular economy, I saw a path to sustainability that was not dependent on the goodness of organisations but instead had drivers that made sense.
- 3 Unique selling points**
Our smart questioning technology is our asset. Whereas competitors propose solutions based on an idealistic world where everyone would be completely transparent and share everything, we assume the opposite and therefore differ from them.
- 4 EIT Community support**
EIT RawMaterials helped a lot, and not just with funding. Through them, we met our first pilot customers and were able to validate many of our assumptions. They continue to be a valuable partner to this

The nominee

7 The beginning
I met my co-founder in my student organisation, 'Academics For Companies', and started discussing all his ideas and how to make them work. Our idea received amazing feedback and we wanted to try it in real life to see if we could solve the problems we saw in the market.

8 Entrepreneurial flair
In my view, an entrepreneur should possess endurance, be able to handle stress, and be capable of communicating clearly.

9 Learning from experience
Get your mindset right and find joy in your work before committing completely. It will be a lot harder than expected. Joy is my greatest motivation in countering setbacks and keeping going. Also, find a co-founder who is on the same page as you.

10 Ideal advisor
Thomas Edison, because he had an amazing ability to find innovations and apply them to world-conquering products.

Supported by eit InnoEnergy Knowledge Innovation Community

No one will get it right the first time, but only real entrepreneurs keep trying every day. Even if you have success, learn to fail – a lot.

The nominee

7 The beginning
I wanted to be an entrepreneur before the idea of Circularise. I actually started another venture together with Mesbah (among others) before, but it did not work out and we learned a lot from our mistakes.

8 Entrepreneurial flair
The key is to be aware of what you are doing and how others perceive it, to keep improving.

9 Learning from experience
Do not let anxiety get the best of you, never settle for something that you do not support or give up on your dreams.

10 Ideal advisor
I admire Satoshi Nakamoto and Vitalik Buterin for their thought leadership in distributed ledger technology.

Supported by eit RawMaterials

Putting air quality data into action

Keywords: clean air, air quality sensors, air pollution

hawadawa.com

@hawadawalabs

Hawa Dawa Labs

Hawa Dawa



Karim Tarraf, CEO and co-founder of Hawa Dawa
Main product: Hawa Dawa

Aim: To provide highly granular city wide intelligence on pollutants to enable the sources of emissions to be directly addressed and the impact of mitigating measures to be assessed

EIT Community connection: EIT Climate-KIC Accelerator programme

The project

1 The idea

We offer cities and corporations an entirely new commodity - fine-grained, reliable and real-time air quality data - to create new and improved services and products and add environmental intelligence into their value creation process. We do this by combining a proprietary network of high quality measurement nodes, earth observation and complex machine learning algorithms into one holistic and integrated solution.

2 Inspiration

I grew up in Cairo, a city with all the traits of an emerging economy when it comes to air quality and health. This was the original stimulus. I wanted to capture air quality data in a comprehensive way to enable cities to take effective measures and reduce people's exposure and curb air pollution.



3 Unique selling points

From the selection of over 200 hardware components within its measuring node to the last lines of code in its straightforward API, the Hawa Dawa system offers a coherent technology; making our overall approach difficult to replicate. The combined knowledge of our various disciplines means the company is one of the first providers on the market offering a solution compatible with the EC Air Quality Directive 2008/50/EC for air quality monitoring. The hardware has been tested in the field and is already deployed in two countries across more than five cities within the first 12 months.

4 EIT Community support

The Accelerator provided the space to test our hardware and software models. This was an invaluable opportunity where we met world-class mentors while still being at a formative stage.

5 Teamwork

Hawa Dawa's team comprises traffic engineering experts, epidemiologists, neuroscientists, statisticians, software engineers, eco-climatologists, environmental governance experts and business professionals. Each member has a strong sense of accountability, recognising the importance of their individual contribution to the overall value chain, whilst the set up of our team means a constant and lively exchange on the most current and challenging issues at hand.

Do not compromise on people. Your team is one of your most valuable assets.

Facilitating circular economy in manufacturing

Keywords: circular economy, resource efficiency, manufacturing

rethink-resource.com

@rethinkcircular

RethinkResource

Rethink Resource



Linda Grieder, Founder and CEO of RethinkResource GmbH
Main product: Circado

Aim: Facilitating the implementation of circular economy concepts in the manufacturing industry

EIT Community connection: EIT Food

The project

1 The idea

RethinkResource facilitates the implementation of circular economy concepts for the manufacturing industry. It does so by offering consultancy and by developing Circado, the first cross-industrial trading platform for industrial side-streams. In opening up the market for side-streams, we're allowing for the upcycling of products on an industrial scale.

2 Inspiration

A sustainable and resource-efficient future for our economy.

3 Unique selling points

Our solution is cross industrial, allowing the production industry to apply circular economy models on a large scale. By creating a new and transparent way of trading side-streams, we're connecting different companies and industries that have never connected before.

4 EIT Community support

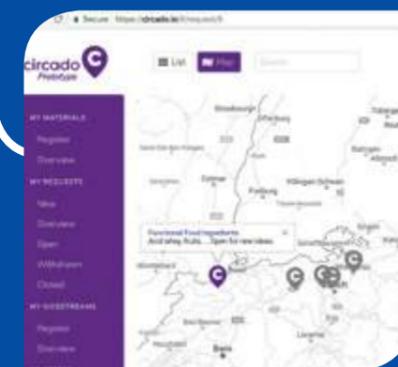
We are part of EIT Food's Rising Food Stars, which gives us the opportunity to take part in EIT Food projects and access a huge network of valuable partners and even possible customers. This is a great help to RethinkResource.

5 Teamwork

Our interdisciplinary team stands out because we all love what we do and share the same vision, which provides great motivation. As we all have a different field of expertise, we complete each other very well. The perfect base for strong teamwork!

6 Venture development

For 1.5 years now, our consulting business has been running very well. As for Circado, we've launched the prototype version that is open for anyone to test; about 50 companies have signed up so far. Next step will be launching the beta version and acquiring more users.



My best memory? Signing a contract with the first paying customer!



The nominee

7 The beginning

I love the idea of entrepreneurship, and for many years I've dreamed of starting my own company. As I'm well connected to the manufacturing industry, and sustainability has always been a topic that's near my heart, it seemed evident to bring these elements together in my project.

8 Entrepreneurial flair

As an entrepreneur, endurance, motivation and inspiration are key values for me. You also need to have a clear vision and a certain amount of leadership skills. At the same time, you need to be a team player.

9 Learning from experience

Do something you really love, and believe in what you do, no matter what!

10 Ideal advisor

Ellen MacArthur, as she shares our vision, has a lot of experience and an extensive network.

Rising from the ashes

Keywords: flame retardant, plastic and rubber filler, waste ashes

cosmosfenix.com

f Cosmosfenix

in Luca Ruggenti



Luca Ruggenti,
CEO at Velaworks s.r.o.
Main product: COSMOS Fenix®

Aim: To transform hazardous waste ashes into a reusable filler and flame retardant in plastic and rubber products

EIT Community connection: EIT RawMaterials (winner of the Business Idea Competition in 2016)

Think about this: the plastic bin that contains your waste is made out of that waste.



The project



industry players, which gave us more visibility and allowed us to start fruitful collaborations and reach the market in less than two years.

5 Teamwork
Andrea (Business Development), Mauro (Technical Activities) and I (CEO) mix our competences and keep a lean approach while collaborating with external stakeholders such as universities, research centres and industries.

6 Venture development
Our next step is to finalise the regulatory issues and required certifications in plastic manufacturing to set up our first industrial plant.

- 1 The idea**
COSMOS Fenix® transforms hazardous fly ashes coming from Municipal Solid Waste Incinerators into valuable secondary raw materials that can be used as a flame retardant filler in plastic and rubber products. This environmentally friendly project reduces the problematic amount of fly ashes disposed in landfill while offering to manufacturers a viable solution to replace critical and toxic materials such as Antimony, classified by the EU as a "serious health hazard".
- 2 Inspiration**
I was inspired by the outcome of a study conducted by a research team at the University in Brescia, which helped me come up with a marketable solution to avoid the use of critical and toxic materials in Europe.
- 3 Unique selling points**
COSMOS Fenix® is the only technology that provides a low-cost, non-critical and non-toxic flame retardant for the plastics industry. The treatment process is less energy intensive, environmentally safer and cheaper than alternative solutions.
- 4 EIT Community support**
EIT RawMaterials supported us in the development of a business plan for our project. The Community also put us in contact with research institutions and

The nominee

- 7 The beginning**
The COSMOS project started in 2012 in cooperation with the University of Brescia. Today, COSMOS Fenix® is the core business of VELAWORKS.
- 8 Entrepreneurial flair**
Entrepreneurs should be brave enough to dare to take on new challenges while being humble enough to share the success with their team and partners.
- 9 Learning from experience**
In VELAWORKS we have a saying, "We have never lost: we have either won or we have learned something". Over the years we have had great moments and bad moments in which the EIT Community provided support, experience and network.
- 10 Ideal advisor**
During World War II a group of people realized the importance of getting to know each other in order to prevent conflicts and established AFS Intercultural programmes. One of them was Ernest Hemingway, a guy we'd love to have on board today as a symbol of looking at the future even in horrible moments.

Supported by eit RawMaterials

Turning food waste into insect-based fish feeds

Keywords: insect-based fish feeds, food waste

entomics.com

@entomics

f Entomics

in Entomics



Matt McLaren,
CEO of Entomics Biosystems
Main product: Metamorphosis

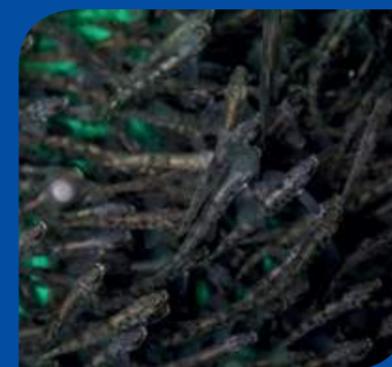
Aim: To unlock the biological value of insect-derived feeds for farmed salmon

EIT Community connection: EIT Food through the RisingFoodStars programme

Thanks to the knowledge, resources and networks we can access via the EIT, our startup is able to achieve maximum impact.



The project



- 1 The idea**
Entomics Biosystems Ltd is a biotechnology company that focuses on added-value technological solutions for the growing insect industry. The company has developed Metamorphosis, a process that turns food waste into high quality insect-based animal feeds to improve the health and general well-being of farmed salmon.
- 2 Inspiration**
We were inspired by the Black Soldier Fly that processes food waste into useful products that can go back into the animal feed supply chain.
- 3 Unique selling points**
We focus on creating additional biological value while keeping the ecological and sustainable values of our solution and remaining profitable.
- 4 EIT Community support**
We joined EIT Food through the RisingFoodStars programme. Thanks to this programme, we are currently part of a research consortium with MATIS (Iceland) and IATA (Spain), investigating different aspects of feeds for salmon. This has given us access to added expertise as well as to world-leading research resources and facilities.

The nominee

- 5 Teamwork**
We are four Cambridge students – Matt McLaren (Business Administration), Joe Halstead (Plant Sciences), Miha Pipan (Biochemistry) and Fotis Fotiadis (Engineering) – who met during the 'Sustainable Futures' competition run by the university. Since then, we have added to our team brilliant PhD-level microbiologists and chemical engineers, and we are looking to continue hiring.
- 6 Venture development**
Our venture is now in the scale-up phase. We have won several prizes, such as the CUTEC Sustainable Futures Competition, and we are now looking to validate our technology commercially. In the meantime we want to continue generating positive feed trial data to progress commercial licensing conversations with our first potential customers.

- 7 The beginning**
I was passionate about food waste, which led to my interest in the field of insect bioconversion. After meeting my co-founders at the University of Cambridge, I realised we had a unique opportunity to develop innovative processes and products. A start-up seemed like the best way to take our ideas forward and achieve maximum impact.
- 8 Entrepreneurial flair**
To succeed as an entrepreneur, I think one should be passionate, dedicated, resilient and humble.
- 9 Learning from experience**
While launching a start-up is always difficult and slightly scary, the EIT Community is the perfect ecosystem to gain experience through innovative technologies and unparalleled access to knowledge, resources and networks.
- 10 Ideal advisor**
My ideal advisor would be a mixture between David Attenborough and Bill Gates. The first one has dedicated his life to conservation and environmental sustainability, while the other has been instrumental in supporting game-changing innovations through his foundation.

Supported by eit Food

Ground-breaking foldable containers

Keywords: transport logistics, foldable shipping containers, empty container repositioning

The key is in hard work and resilience. There will be hurdles, but don't give up!

Algae contribute to sustainable innovative technologies

Keywords: nanoporous silica from algae, diatoms

My great passion is bringing new sustainable technologies onto the market to ensure we can continue to thrive on this planet in the future.

navlandis.com

@navlandis

Navlandis

Navlandis



Miguel Navalón Simón, CEO of Navlandis
Main product: Zbox

Aim: To improve efficiency and sustainability of transport logistics through Zbox, a foldable shipping container that takes up five times less space

EIT Community connection: EIT Climate-KIC Accelerator programme



swedishalgaefactory.com

@SwedishAlgae

Sofie Allert



Sofie Allert, CEO of Swedish Algae Factory
Main product: Nanoporous algae silica

Aim: Contributing to a circular bio-based economy by selling nanoporous silica from algae

EIT Community connection: EIT InnoEnergy



The project

- The idea**
We devised a system to fold containers, allowing them to be stacked up and decreasing occupied space by a factor of 5. This process has a positive economic and environmental impact, as global empty container traffic accounts for 25% of total container circulation.
- Inspiration**
The idea was triggered when I was in the Port of Valencia: all I could see was the huge number of empty containers.
- Unique selling points**
Zbox is an innovative patented technology: it is easy to fold since it requires no manual effort, manufacturing cost is low and it is cheap to maintain.



- EIT Community support**
Navlandis participated in the EIT Climate-KIC Launchpad in 2014 and then joined the EIT Climate-KIC Accelerator programme Spain 2015. These first steps allowed us to assess the business feasibility of our project and gain credibility, leading us to realise the enormous potential of our solution.
- Teamwork**
Our team consists of people with a great deal of technical experience in the container shipping market, and management experts with a commercial background. This creates a well-balanced group with both engineering and business development skills.
- Venture development**
Navlandis raised EUR 300k to complete the technological development and to manufacture the first prototypes. Recently, it raised EUR 600k to develop the proof of concept, starting the commercial plan. For that, we have reached an agreement with a manufacturer to begin production of the first Zbox units and we are awaiting the sector-requested certifications. We are very close to reaching the agreement with a shipping line to start the proof of concept.

The nominee

- The beginning**
As a civil engineer with an MBA, I always wanted a job that combines technical and management skills. This is exactly what Navlandis has given me: genuine technical development through the conceptualisation of a foldable container, alongside the commercial challenge of introducing Zbox into the intermodal logistics chain.
- Entrepreneurial flair**
While keeping faith in your product, you must also be flexible enough to meet the requirements of the market.
- Learning from experience**
Participating in activities organised within the EIT Community is a good way to start your business analysis and transform your idea into a start-up. This helped me to present the Zbox in the port of Valencia to more than 150 transport and investment stakeholders.
- Ideal advisor**
I would bring Malcolm McLean back to life. He developed the modern intermodal shipping container and thereby revolutionised transport and trade on a global scale.

Supported by eit Climate-KIC

The project

- The idea**
We extract the nanoporous silica shell material from an algae group called diatoms. This material not only blocks UV light and traps visible light but also absorbs and releases chemical substances efficiently. The extracted material can enhance the efficiency of solar panels, be used as a UV filter and as an ingredient in skincare products and cosmetics.
- Inspiration**
Our team was fascinated by the impressive properties of diatom shells and wanted these properties to be utilized in society. In the production process of this shell material we also have the ability to clean water, absorb carbon dioxide and produce a valuable nutrient and oil-rich organic biomass, which feels amazing.

Unique selling points
Conventional materials used for light trapping, UV light blocking and uptake and release of chemical substances are more expensive/unstable/toxic and/or less effective than our algae-based material.

EIT Community support
We receive support from EIT InnoEnergy, which has helped us grow and gain more visibility and credibility among the important actors of our field.

- Teamwork**
Our team combines several years of experience in algae research, experience from large-scale algae cultivation, process and biotechnical engineering skills, experience in business development and start-ups, as well as experience in sales at larger chemical companies.
- Venture development**
We have started to sell material produced from our pilot facility in the cosmetic industry and are now planning for our first full-scale facility that will enable us to start to sell material to larger customers in, for example, the solar energy and UV light blocking industry.



The nominee

- The beginning**
I did my bachelor thesis on algae while studying Biotechnology at Chalmers University and was amazed by all the unexplored potential of algae biomass. This eventually led me towards diatoms and their amazing shell material.
- Entrepreneurial flair**
An entrepreneur must be passionate, curious, driven, daring, and should be able to see problems as opportunities.
- Learning from experience**
For me, learning means growing from problems. When you are developing something new and innovative, you will inevitably encounter problems. By overcoming these problems, you learn and become more competitive.
- Ideal advisor**
Elon Musk. He sees what needs to be done and just does it. He dares to be the first, because he realises that someone needs to be. I really like that attitude.

Supported by eit InnoEnergy Knowledge Innovation Community

First mobile device for severe lung disease patients

Keywords: mobile device for lung disease patients, chronic obstructive pulmonary disease

ras-q.com Enmode



Prof. Tim Kaufmann,
co-founder and CEO of Enmodes GmbH
Main product: RAS-Q®

Aim: To continuously push the limits of superior lung and heart assist technology

EIT Community connection: EIT Health Innovation by Ideas 2017, EIT Health Catapult



Continued EIT Health support will allow us to intensify the efforts to generate an integrative therapeutic approach instead of focusing on merely device refinement.

The project

- 1 The idea**
RAS-Q® technology will offer a new therapeutic approach to patients suffering from severe lung diseases. The device is based on conventional lung support technology. Through extremely low flow resistance, lung support is provided without the need for a blood pump, allowing patients to be mobile.
- 2 Inspiration**
Current oxygenators are composed of rigid, tightly packed fibre bundles through which blood must be pumped. This type of treatment forces patients to carry additional equipment, making them immobile. Inspired by nature and the lung's flexibility, we improved the system to make extra material obsolete.
- 3 Unique selling points**
Through our compact design, we offer patients with chronic obstructive pulmonary diseases higher mobility



- 4 EIT Community support**
While guaranteeing optimal follow-up and treatment. Since we received the EIT Health grant in 2017, our company has switched focus primarily to the development of RAS-Q®. This grant, combined with winning the EIT Health Catapult 2017, which was accompanied by new network opportunities, gave us the growth and financial security to recruit five key staff members in 2017 and two more in 2018.
- 5 Teamwork**
Enmodes has a team of highly skilled engineers with a strong background in medical technology. The management team is composed of Prof. Kaufmann, Prof. Steinseifer, Dr Sonntag and Sascha Kuns. Dr Borchardt and Philine Ritter are responsible for blood gas exchangers and the RAS-Q® technology, Richard Fischer for the production line of blood gas exchangers, Dr Böhning and Sascha Groß-Hardt for the engineering service and blood pump design and optimisation, and Dr Brucker-Voigt for quality management and regulatory and clinical affairs.

- 6 Venture development**
We are now financially secure for the next two to three years and are setting up a clean room (free from dust and other contaminants) and a professional production line. Future steps include: obtaining regulatory approval in Europe, Asia and the USA; venture expansion to

Asia and the USA; and market entry with the RAS-Q® technology.

The nominee

- 7 The beginning**
I obtained a PhD at the Helmholtz Institute Aachen, Department of Cardiovascular Engineering, and I founded Enmodes as a service company for medical device companies. We pivoted to the development of the RAS-Q® technology in 2015.
- 8 Entrepreneurial flair**
I believe three characteristics are indispensable as an entrepreneur: enthusiasm for what you do, pride in your product or service, and a strong focus on your objectives.
- 9 Learning from experience**
Besides the mere support, we also benefited from the EIT Health networking structure. EIT Health and the EIT Health Catapult opened many doors for us. It was a huge boost for pivoting to RAS-Q® and expanding our network, our reach and our investor relationships.
- 10 Ideal advisor**
My ideal advisor would be Kurt Dasse, expert in mechanical circulatory support, respiratory assist and inhaled nitric oxide delivery systems.

Supported by Health

The **EIT Woman Award** recognises the outstanding achievements of women entrepreneurs and leaders from our Innovation Communities.

Triggering students' interest in raw materials and a sustainable society

Keywords: science education, creative thinking, responsible citizenship

This project has the potential to change societal perceptions of raw materials from 'indifference' to 'involvement and responsibility.'

Bringing women and girls to the front of the tech scene

Keywords: women's empowerment in tech, education

I truly believe that diversity and inclusion in the tech industry starts with education.



Armida Torreggiani,
Researcher at Consiglio Nazionale delle Ricerche of Italy (CNR)
Main product: Raw Matters Ambassadors at Schools Project

Aim: To create a strong network offering youngsters a common learning environment

EIT Community connection: EIT Cross-KIC Human Capital Project, EIT RawMaterials FosteRM@Schools, E-Mining@Schools projects

rmschools.isof.cnr.it

RM@Schools



The project

1 The idea
The RM@Schools project is an innovative programme to make science education and careers in raw materials (RMs) attractive to youngsters. It trains many students from 10 to 18 years old to increase their understanding of how RMs are needed in modern society. The trained students become Young RM Ambassadors in turn and spread their knowledge to a wider public.

2 Inspiration
I believe it is of vital importance to give children attention when they ask questions and to inspire the next generations. Initiatives to help young people better understand science can improve our daily lives. In fact, science teaches not only the technological skills necessary for professional life, but also a way of facing problems, collaborating with others and making informed choices.

3 Unique selling points
The RM@Schools methodology is transdisciplinary, easily replicable, suitable to different contexts, adaptable to local needs, flexible in its educational approach and able to reach a large audience. Moreover, its message works at different levels and gives value to all disciplines, thus strengthening connections between science, creativity, and responsible citizenship.

4 EIT Community support
All activities of the RM@Schools project were funded by EIT RawMaterials in 2016 and the RawMaterials Academy in 2017. In 2018, the project was funded again by EIT RawMaterials until 2020 with an enlarged Consortium. It has supported me financially and by solving some technical issues and offering me opportunities to make the project known among EIT RawMaterials partners and other EIT Innovation Communities.

The nominee

5 The beginning
In 2003, two colleagues and I set up an educational project, Research Language, aimed at young students (10-19 years). I became the project coordinator in 2010 and in 2015 the programme became a national project. In 2016, thanks to the support of EIT RawMaterials, I set up the Raw MatTERS Ambassadors at Schools (RM@Schools) project, which now involves a strategic partnership among schools, universities, research centres and industries from 13 European states.

6 Joining the EIT Community
The EIT Community and EIT RawMaterials strongly believe that science education is an essential

component of a learning continuum for all, from schools to responsible citizens. They were therefore the right partners with whom to develop my idea.

7 Entrepreneurial spirit
I have always wanted to be a change maker and I believe everyone can be one if they have a goal to reach and are not afraid to share their capabilities and talent with others and to face issues.

8 An ideal world
I would like schools and universities to train students in a more efficient way, allowing them to have more job prospects and therefore a better life.



Supported by RawMaterials



Dora Palfi,
Co-founder and CEO of imagiLabs
Main product: imagiCase

Aim: To give girls and women the same access to the tech industry as boys and men

EIT Community connection: EIT Digital Master School; co-founder and co-activity leader of women@EIT

imagicase.com

@imagicase

@dorapalfi

Dora Palfi



The project

1 The idea
My company imagiCase is lowering the barrier to entry to programming, in particular for girls. Our first product is a phone case with an embedded LED matrix that can be programmed to display any text, design or color through coding with the imagiCase app.

2 Inspiration
Studying and working in the STEM fields, I have experienced first-hand the lack of women in the sector. I believe one major root cause is that girls are not encouraged at a young age to be creators of technology. This is why I conducted a research project with girls between 9-16 years old to understand what gadgets they wanted to use to learn programming and turned the results into a viable product!

3 Unique selling points
While there have been many initiatives to bring more girls and women into tech, our solution has been developed since the beginning with our end-users, teenage girls, to create something that is truly appealing to them and brings technology into things they already have and use to empower girls to not only be consumers but also creators of technologies.

4 EIT Community support
The EIT Community has been extremely supportive and has provided us with crucial connections. The EIT Digital Innovation Hub in Stockholm has provided us with the necessary space and resources to bring our project to life and is co-organising our MVP launch event with us at the Music Tech Fest in September.

5 The future
As the potential of IT skills grows each day, we want to provide girls and boys with the same tools to learn to programme and code on the go, at home and at school. We intend to contribute to the closing of the gender gap in technology by reaching a million girls in 10 years and easing them into the world of programming.



The nominee

6 The beginning
When I was working on a health monitoring device at a hackathon, I realised that technology allows us to tackle problems in a new, efficient and innovative way. This led me to combine my interests and skills, and, from that point on, I never stopped exploring new opportunities and expanding my knowledge on how to use technology to improve people's lives.

7 Joining the EIT Community
I learned about the EIT Digital Master School as I was looking for a master's degree programme that would combine my interest and background in Neuroscience with Computer Science.

8 Entrepreneurial spirit
Before hearing about the EIT, I never actually aspired to start my own business. But afterwards, I reflected on my own goals and motivations, realising I wanted to apply technology to various fields. Therefore, I studied entrepreneurship, developed my self-confidence and finally opened my own venture.

9 An ideal world
Let's provide quality education and make it accessible to everyone!

Supported by Digital

NextGen Smart Cities and the journey towards female leadership

Keywords: urban planning; female leadership; social entrepreneurship



Estefanía Tapias,
Founder & CEO of WeSpace and post-doctoral researcher at ETH Zurich
Main product: WeSpace - Future Cities

Aim: Rethinking the development of future cities – supporting women in their journey towards leadership

EIT Community connection: EIT Climate-KIC PhD, 1st EIT Alumni Board President

wespace.ch urbanclimate.me @este_tapias Estefanía Tapias

"I believe in equality. When one group is underrepresented, it needs the support of society and leaders to bring balance."

The project

1 The idea

My research group is investigating the city of the future. We are working on a concept of Responsive Cities, i.e. the next generation in urban development based on Smart Cities technology. This places humans at the centre of decision-making and design. My other project is called WeSpace, a co-working and community space intended to inspire women by giving them a place to socialise and network so as to facilitate their journey towards leadership.

2 Inspiration

I have always been interested in community building and this is reflected in both of my projects. I am also committed to women empowerment and I share my experiences as a female leader with other women. I do this so that we keep defending feminine values as an asset rather than a liability, as it is too often considered in the working world.

3 Unique selling points

Together with my research group, I work on scientific methods for the study and development of future cities. For example, through our concept of Responsive Cities, we research the effects of climate change in the city by focusing on citizens. As for WeSpace, it empowers women in their journey towards leadership, regardless of whether they are

involved in corporations, institutions or entrepreneurial ventures.

4 EIT Community support

Receiving the EIT Climate-KIC educational stamp was the best way to start my career. In addition, my experience in setting up initiatives with the EIT Alumni as founding president and the Women@EIT inspired me to set up a similar project in Zurich.

5 The future

In 10 years, I would like to witness the positive impact of my research and social initiatives. The number of women in leadership positions will have grown, but support will remain necessary.

The nominee

6 The beginning

I have been involved in volunteer activities linked to social entrepreneurship and community building for a long time. The path that I took was therefore pretty much a given.

7 Joining the EIT Community

I joined the EIT Climate-KIC education

programme because it is an innovator in the field of climate change. The EIT Community remains as important as ever to me because of the close relationships I have developed over the years.

8 Entrepreneurial spirit

My experiences in the EIT Climate-KIC educational programmes awakened my entrepreneurial mindset and taught me how to combine it with science and innovation.

9 An ideal world

It will not come as a surprise if I say that I would like to see more women in leadership positions.



Supported by eit Climate-KIC

Rebuilding food trust

Keywords: portable rapid sensor for food analysis, food fraud detection, food quality control

"You first need to grow organically with smaller funded projects and deliver perfection in order to find long-term investors."



Isabel Hoffmann,
CEO of Tellspec LTD
Main product: Tellspec Food Scanners

Aim: To detect fish fraud in less than a minute through a portable system able to reliably measure fish composition

EIT Community connection: EIT Food, part of EIT Rising Food Stars

tellspec.com @TellSpec Tellspec Isabel Hoffmann

The project

1 The idea

Tellspec is helping rebuild food trust by providing rapid, non-destructive, portable sensors that can analyse food at any point of the food supply chain. In particular, with the help of the EIT Community, Tellspec has developed a rapid, portable and affordable sensor to test for the quality and decay of raw white fish, and the fraudulent use of excess water in frozen fish.

2 Inspiration

When my daughter got very ill, it took months before she was eventually diagnosed with exposure to aflatoxin, a poisonous kind of fungus. With my strong background in software and preventive medicine, I wanted to come up with a solution to save others from that type of long and difficult experience.

3 Unique selling points

Our solution is fast, easy and affordable: it analyses fish in less than a minute and the device is handheld for maximum portability. It offers a reliable and comprehensive analysis of key food components.

4 EIT Community support

EIT Food supported our innovation project called 'Improving trust on fish chain: Rapid and portable monitoring tools for a better control of whitefish. We are also proud to be part of EIT Rising Food Stars.

5 The future

My aim is to make every phone capable of scanning for food fraud so that we can all make informed decisions about what we eat.

The nominee

6 The beginning

I wanted to help my daughter and those who suffer from undiagnosed food-related illnesses to eat healthy and nutritional food in order to improve their immune systems.

7 Joining the EIT Community

Eric Sieber from Blue Fields Partners convinced me to join the EIT Community.

8 Entrepreneurial spirit

I have always been an entrepreneur, starting from my early childhood when I would sell pasta jewellery to tourists, to setting up eight companies throughout my adult professional life.



9 An ideal world

I wish for a more equal world where everyone would have the same basic rights, such as access to healthy and fresh food.

Supported by eit Food

Making better use of waste water

Keywords: washing machines, water recycling, water quality assessment

“We need more diverse role models in the industry, in terms of gender or background.”

Revolutionary cancer treatment option

Keywords: cancer therapy, innovative cancer treatment, inhibitors

“The best is yet to come. I dream of the moment we are able to cure our first cancer patient.”



Isabella Palmgren,
Co-founder and CEO of Mimbly
Main product: MimBox

Aim: To provide efficient water recycling systems to the general public

EIT Community connection: EIT Climate-KIC Greenhouse programme



Laura Soucek,
Founder and CEO of Peptomyc S.L.
Main product: Peptide-based therapeutics

Aim: Providing cancer patients with more effective and less toxic treatment

EIT Community connection: EIT Health



The project

- 1 The idea**
The MimBox is an add-on solution for washing machines. Its modular technology makes it compatible with all sizes and brands. Using sensors, the MimBox filters and analyses washing machine water to assess its quality. If the water fulfils specific parameters, it will be stored for the next wash. If not, it will be discarded into the sewage system.
- 2 Inspiration**
It all started with a critical question: ‘Do we really need to use potable water for our laundry machines?’
- 3 Unique selling points**
With our solution, it is possible to recycle 70% of water on average. In addition, energy is saved since some water heat is preserved and transferred to the next wash. Last but not least, the water filtration process retains micro fibres released into the laundry. This is crucial as current water treatment plants are not yet able to filter these, harming the environment.
- 4 EIT Community support**
EIT Climate-KIC Accelerator programme is aptly named! It was a real boost for our company. We also greatly benefited from the support of EIT Climate-KIC.

- 5 The future**
In Sweden, the MimBox is currently being used in launderettes where machines each run 1 800 times a year on average. In this case, our solution is connected to two machines at the same time for maximum efficiency. My hope is that our product is present in every household within a decade, so that we can drastically reduce water consumption.

- 8 Entrepreneurial spirit**
During my master’s degree, I learned about many inspiring and successful entrepreneurs, such as Hans Rosling. His story was the main trigger that made me want to start my own project.
- 9 An ideal world**
I wish for a more equal and accepting world for all people, regardless of gender, ethnicity or background.

The nominee

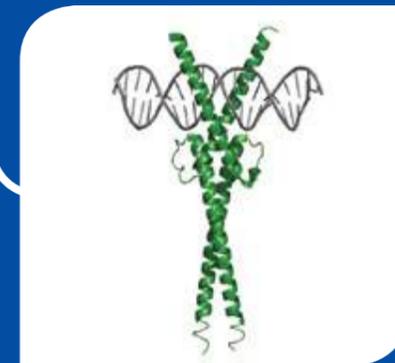
- 6 The beginning**
I studied at Chalmers University of Technology and Chalmers School of Entrepreneurship. It was far from easy at first because, as a woman, your competencies are questioned much more than those of your male colleagues.
- 7 Joining the EIT Community**
I first heard about the EIT Community at Chalmers University, where I met other entrepreneurs involved in EIT Climate-KIC.



The project

- 1 The idea**
The protein Myc is found in most human cancers and plays a significant role in the growth of new tumours. It is difficult to attack with drugs due to its location in the nuclei of the cells and its role in the division of healthy cells. Peptomyc relies on peptides, another fundamental component of the cell, to create therapeutics able to fight these Myc proteins. The aim of our company is to develop our peptide-based solution as a new treatment option for cancer patients.
- 2 Inspiration**
Cancer is a disease that affects us all, either directly or through our loved ones. Unfortunately, current therapies are still too toxic, and many often fail because our bodies become resistant to the treatment.
- 3 Unique selling points**
Unlike other therapies, our treatment focuses on Myc, a protein responsible for tumour growth in almost all types of cancer. The Myc inhibitor we developed is a peptide (a mini-protein) that selectively kills cancer cells without causing side effects in healthy tissues. In preclinical cancer models, our peptide-based solution has proved its immense potential: it is non-toxic, does not cause resistance, improves life-expectancy among patients, and can be used in combination with standard chemotherapy or immunotherapy.

- 4 EIT Community support**
We have received support through three different EIT Health programmes. I have also been offered pitch and media training to be able to present our projects as convincingly as possible. In addition, as an EIT Health Alumnus, I benefit from the connections established within the network.
- 5 The future**
I hope that in 10 years, our product will be a standard in the treatment of brain, lung and breast cancers so that patients are administered a safe and effective cure. Ideally, our company will still be developing new therapies for other types of cancers as well.



The nominee

- 6 The beginning**
Cancer has been my main focus ever since I started university. I have seen too many people decline treatment because they fear the therapy more than the disease. When I read about Myc as a student, I immediately saw the value of an effective Myc inhibitor.
- 7 Joining the EIT Community**
I recognise myself in EIT’s motto ‘making innovation happen’. We wanted to make a change, efficiently and in the smartest way possible. EIT Health provided partner organisations and gave us the opportunity to learn from our peers and predecessors.
- 8 Entrepreneurial spirit**
Although entrepreneurship was not my original plan, I always aimed at being a change-maker. I also realised quickly that the fastest way to turn my research into a clinically viable cure was to create a company and lead it myself. I had to step outside my comfort zone, but it opened a whole new world to me.
- 9 An ideal world**
I would like to see more women in leadership positions. I believe it would reduce the number of ‘testosterone-driven’ decisions taken, often leading to wars and conflicts.

A strong female EIT network

Keywords: diversity, inclusiveness, professionalism

As women are still underrepresented in the world of technology and entrepreneurship, change is not going to happen by itself.

Recovering vital elements bio waste

Keywords: biomaterials, biowaste, recycling

Marie Curie is my greatest inspiration for standing out as a female innovator in a man's world.



Maria Kanov,
Co-founder at Women@EIT
Main product: Women@EIT

Aim: Our mission is to create a strong network of female innovators and entrepreneurs related to the EIT

EIT Community connection: EIT Digital Master School

eitalumni.eu

womenatEIT

Maria Kanov



The project

1 The idea
We are building a community that connects female EIT students and alumni members by giving them a sense of belonging. To support our goal, we organise events that give attendees the opportunity to learn new skills to advance their careers and get encouraged to start their own business.

2 Inspiration
Throughout my academic life, I have been confronted with the heart-breaking reality of women dropping their computer science studies because of the lack of support for the female cause. Even at the EIT Digital Master School in Stockholm, where the number of girls started to increase, we did not have the opportunity to connect and give each other this well-needed support, so we created one!

3 Unique selling points
Women@EIT is a pan-European, cross-Innovation Community association for students and alumni to foster innovation and entrepreneurship among women. It is also a platform for sharing opportunities, events and ideas that are relevant to this mission and increasing the visibility of the EIT among potential female applicants.

4 EIT Community support
In addition to the financial support, the EIT Digital Community and corresponding



Alumni Association provided us with important connections, while giving us the chance to present and promote our initiative at key events.

5 The future
In 10 years, Women@EIT should be a wide network with many local communities across the different EIT nodes, offering exciting opportunities as well as mentorship programmes to support students and young entrepreneurs.

The nominee

6 The beginning
I thought about starting a female network when I realised that there was a concrete opportunity and true need for it. The Innovation Hub in Stockholm offered use of their facilities, which allowed us to

host a first event to evaluate demand. The positive feedback reinforced our determination to continue with Women@EIT.

7 Joining the EIT Community
I was looking for a master's programme in Human-Computer Interaction and found EIT Digital on the web. The offer was exceptional: studying my dream programme in two different countries, receiving knowledge in innovation and entrepreneurship, getting a double degree, and all that with a scholarship. How could I have said no?

8 Entrepreneurial spirit
I was not initially planning on becoming an entrepreneur, but I changed my mind when I saw people actually getting excited about my concepts. Now I am convinced that whenever a great idea comes to your mind, you should do everything that is possible to bring it to life, or at least try to develop it and see what happens.

9 An ideal world
If I had to choose one thing, I would introduce equal pay. This promotes fairness and the proof that women are valued as much as men in our society and strengthens the self-confidence of women of all ages.

Supported by eit Digital



María Luisa Hernández Latorre,
CEO at Ingelia SL
Main product: Turning Biowaste into Biomaterials

Aim: To provide technology and equipment for the valorisation of organic waste streams

EIT Community connection: EIT InnoEnergy Iberia

ingelia.com

@IngeliaSL

Marisa Hernández Latorre



The project

1 The idea
Because Ingelia wanted to contribute to the circular economy, we developed Hydrothermal Carbonisation (HTC) technology at an industrial scale, enabling society to turn biowaste into biomaterials.

2 Inspiration
The huge market opportunities arising from HTC technology, and the new applications for HTC products that generate a continuous innovation process, inspired us to come up with a solution for biowaste.

3 Unique selling points
Our expertise in industrial plant management and organic waste valorisation has enabled us to become an important player in the sector, while developing a completely environmental and economical technology.

4 EIT Community support
We enjoyed economic and commercial support from EIT InnoEnergy while learning from the Community's quality management advice.

5 The future
I would like to see Ingelia's technology implemented in Europe and abroad. I also hope that more manufacturing equipment and components for new plants and HTC products will be produced by European companies and used in the market for bioindustry's applications.

The nominee

6 The beginning
I have always worked to bring innovative projects to the fore. When I met the founders of Ingelia in 2009, I immediately knew I wanted to work there because of their open-minded personalities and the huge potential of HTC Technology.

7 Joining the EIT Community
I discovered the EIT Community through an interview I saw and I quickly felt engaged. After submitting my company to EIT InnoEnergy Iberia, I was so excited to be selected and able to benefit from the Community's support.

8 Entrepreneurial spirit
Being a change-maker by nature, I deeply believe that innovation can improve our way of doing things and that we should all adopt an innovative spirit in our daily lives.



Supported by eit InnoEnergy Knowledge Innovation Community

Enabling scientific entrepreneurs to soar to new heights

Keywords: ecosystem, transformation, impact on science

Right now, women are far from having a fair representation in the scientific and business worlds, to mention just two.

A healthy society starts with a good breakfast

Keywords: nutrition, consumers, technology platforms

As an entrepreneur, I truly appreciate the freedom I have to develop, create, experiment, reflect on and reconsider my ideas.



Montserrat Vendrell,
General partner at Alta Life Sciences
Main product: Entrepreneurship support in sciences

Aim: To create the right spaces, connections and tools for the healthcare ecosystem to thrive

EIT Community connection: EIT Health Interim Management Team and Design Health Barcelona



Pamela Vazquez,
Chief Food Technology Officer at Flatev AG
Main product: SMARTbreakfast

Aim: To improve what people eat for breakfast and thus their lifestyles

EIT Community connection: EIT Food (project leader of one of the EIT Community's activities)

altals.com

@MontseVendrell

Montserrat Vendrell

flatev.com

@flatevofficial

Flatev

Pamela Vazquez



The project

- 1 The idea**
Pioneering innovation in life sciences by supporting entrepreneurship and the healthcare ecosystem.
- 2 Inspiration**
The passion to start projects from scratch, the obsession to contribute to the biocommunity and the goal to extend my knowledge and experience in order to be a better professional.
- 3 Unique selling points**
As my goal is to create the right spaces, connections and tools for the healthcare ecosystem to thrive, I believe I have directly contributed to the development of my immediate biocommunity. My position allows me to target funds and support game-changing start-ups in Europe.
- 4 EIT Community support**
Through the EIT, we have reached the right partners and funds to take our entrepreneurial support programmes to another level and to position our biocommunity in the European arena.

- 5 The future**
I would like to see my city – Barcelona – as a world hub in health where talent from around the world could intermingle. On a global scale, I hope to see more women play inspiring and influential roles in the field of health, but also in general. Within academia, I would also like students to be taught to address problems through learning skills, technology and social sciences.

- 8 Entrepreneurial spirit**
I do not expect others to solve my problems, so I stand up to situations I do not like and do my best to change them.
- 9 An ideal world**
The world needs more empathy. People need to put themselves in others' shoes, to listen and to compromise.

The nominee

The beginning
During my postdoctoral research in the USA, I realised I wanted to directly affect the impact of science on society.

Joining the EIT Community
When we heard about the EIT, it was still a newly created initiative in Europe, but we recognised its potential and we took the necessary steps to find the right partners in Europe and join the EIT Community.



The project

- 1 The idea**
A good breakfast is the best way to get a first boost of energy for the day, however, people often don't make time for it. The combination of our smart appliance is the optimal solution for preparing tasty, nutritious and healthy meals in a quick and efficient way.
- 2 Inspiration**
We wanted a solution that would help people have a healthy lifestyle. Since many studies show that breakfast can improve performance throughout the day as well as counter obesity, we decided to create a solution to make it easy for people to have a nutritious breakfast.
- 3 Unique selling points**
We are consumer focused and therefore we constantly strive to develop multiple nutritional and convenient breakfast combinations that meet the public's interests, preferences and habits, while providing the necessary nutrients to get through the day.
- 4 EIT Community support**
EIT Food has been a great platform to leverage the potential of our start-up and extend our network. Every day we are inspired by the EIT Community and its capability to unite industries, start-ups and research organisations in successful collaborations.

- 5 The future**
I would really like to see consumers use smart appliances in their kitchens, at the office, in hotels or at home and thus adopt a healthy lifestyle without effort or time. I also wish to see more females in leadership, on boards and in entrepreneurship, daring to climb the social ladder.

The nominee

- 6 The beginning**
Being a very curious person, I have always been interested in new ideas, so I studied engineering. I quickly developed the wish to build a solid career and to lead a team that will have a positive effect on society at economic and societal levels.
- 7 Joining the EIT Community**
I was enthusiastic about joining the EIT Community because it creates a synergy in entrepreneurship by bringing together the knowledge, expertise, skills and capabilities of many stakeholders, as well as by integrating different mindsets, values and personalities for innovative projects and common goals.



What is the EIT?

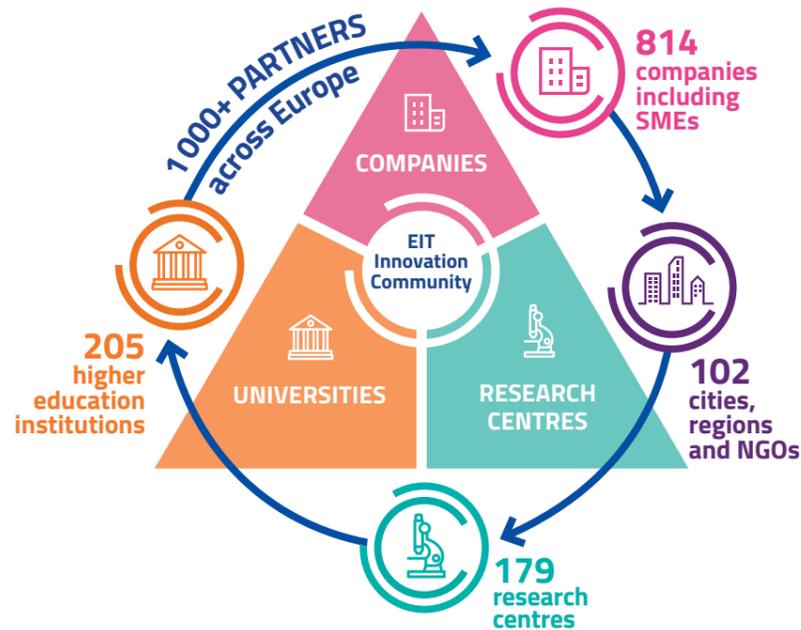
The European Institute of Innovation and Technology (EIT) drives innovation in Europe by supporting entrepreneurs, innovators and students across Europe to turn their best ideas into reality.

How does the EIT work?



- Trains a new generation of entrepreneurs
- Develops innovative products and services
- Supports start-ups & scale-ups

Europe's largest innovation community



The EIT's Innovation Communities create and find innovative solutions to major societal challenges



EIT Climate-KIC
Working to accelerate the transition to a zero-carbon economy

EIT Digital
Driving Europe's digital transformation

EIT Food
Leading a global revolution in food innovation and production

EIT RawMaterials
Turning Europe's dependence on raw materials into a strategic strength

EIT InnoEnergy
Achieving a sustainable energy future for Europe

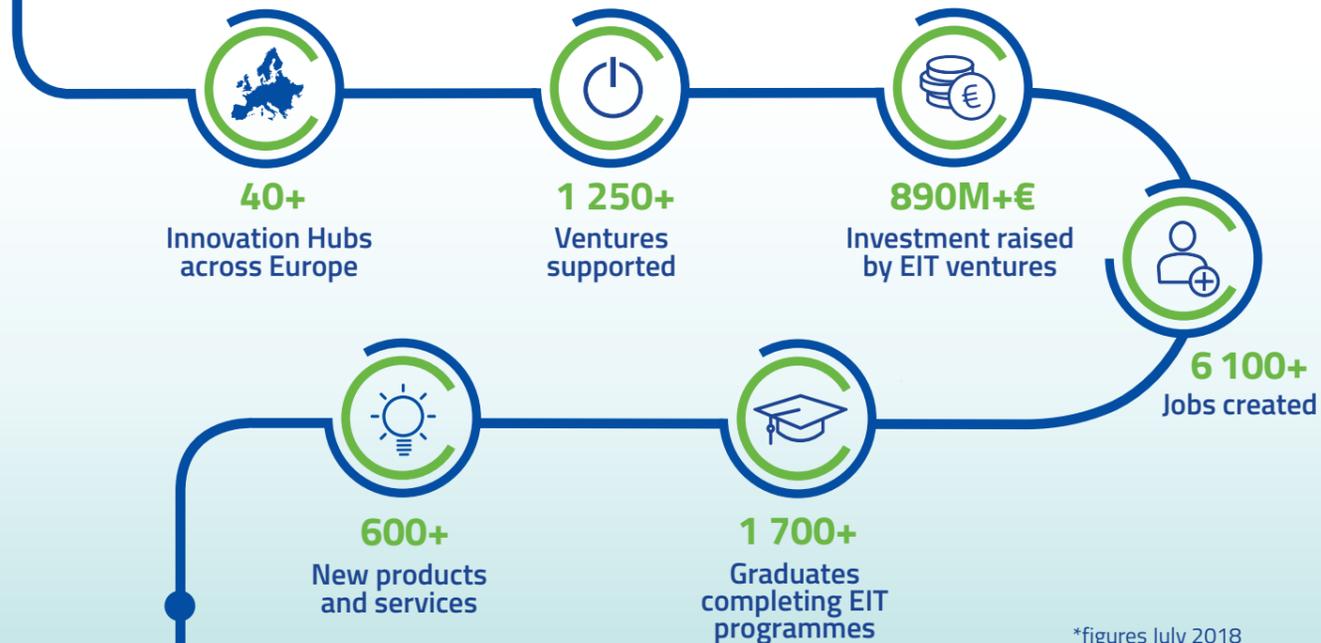
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Giving EU citizens greater opportunities to enjoy a healthy life

The EIT is growing!

EIT Manufacturing
Strengthening and increasing the competitiveness of Europe's manufacturing industry

EIT Urban Mobility
Smart, green and integrated transport

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