

EIT Awards 2015 Nominees



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Welcome to the EIT Awards 2015!

The EIT's vision is to lead European efforts in powering innovation and entrepreneurship. Central to this aim is nurturing people-driven innovation and putting students, researchers and entrepreneurs at the heart of its efforts, as well as boosting innovation by integrating the three sides of the 'knowledge triangle' (business, education and research.

In order to support its aims, the EIT organises annual awards to recognise and reward the successful start-ups, innovative projects and young entrepreneurial talent that Europe has to offer. The EIT Awards highlight successful entrepreneurial startups that come out of the EIT's Knowledge and Innovation Communities (KICs), and showcase the talent that emerges from the EIT-labelled educational programmes. For both the nominees and the winners, the awards are a great opportunity to share their ideas with the world and connect with the innovation community.

Every year, the KICs (currently Climate-KIC, EIT ICT Labs and KIC InnoEnergy) select up to two nominees for each award category. The talent of 2015's nominees is undeniable, with their ideas, start-ups and projects covering everything from portable fridges (page 06) and solar lights (page 07) for developing countries to smartphone apps that will protect sensitive data (page 14) or allow you to share a football match with friends that are thousands of miles away (page 22). If you've ever lamented the loss of your local high street shops thanks to the rise in internet shopping, then you'll be pleased to hear about how the DA4RBI project is helping physical shops to fight back (page 16).

Or how about the unique concept of Unprinting? Reduse are proving how paper can be reused in a matter of moments, simply by using lasers to remove printer ink (page 23).

These are just some of the outstanding ideas that are nominated for an EIT Award this year, proving that the future of European innovation and entrepreneurship is in safe hands. To find out more about the nominees and their projects, simply turn over the page...



EIT CHANGE Award

Launched in 2013, the EIT CHANGE Award celebrates graduates from EIT labelled education programmes that spur innovation and entrepreneurship, and bring about change in the thematic areas addressed by the EIT and its KICs.



Awards CHANGE





Awards

CHANGE

Arno Zimmermann

Head of Business at Coolar (main product: Coolar Fridge)

- Key words: Sustainable, anywhere, fridge
- Project aim: To help medical providers, food vendors and households store medicine and food autonomously from the electricity grid, with much lower CO₂ emissions and higher durability
- EIT Community connection: EIT Climate-KIC Journey (2012), EIT labelled Master degree (2013), Climate-KIC Greenhouse (2014), EIT labelled PhD degree (since 2014)





Coolar challenges and improves conventional cooling technology, and simultaneously pursues social, developmental and environment goals – quite exceptional for a fridge

About...the project

- The idea: We at Coolar have built and tested a prototype for a new and green type of refrigerator. The innovation lies within the radically different cooling technology and the fact that the system is powered by heat rather than electricity.
 Furthermore, Coolar does not contain any environmentally harmful substances – it simply uses purified water as a cooling liquid. Overall the Coolar system saves up to 85% running costs and 94% CO₂ emissions compared to conventional devices.
- **Inspiration for change:** Cooling is part of everyday life in industrialised countries. In developing regions however, many communities cannot afford reliable cooling due to instable or no power networks, which has consequences for a healthy and balanced diet, and the storage of drugs or vaccines. Improving reliable cooling in these regions would greatly improve everyday lives, while fostering clean development pathways at the same time. Furthermore cooling is something that poses a crucial environmental challenge in developing and industrialised regions alike.
- EIT Community support: It was exactly what attracted me to the EIT programmes: newest insights and inspiring talks, better understanding of the start-up process, and many new friends and role models from all around Europe.

Contact

www.coolar.co

About...you

- How it began: Studying and working in business and chemical engineering made me realise the impact our current lifestyle has on the environment and climate, so I decided to specialise in energy and chemicals. There, much needs to be re-invented to shape a low carbon future, which will than have a gigantic impact not only on climate change, but also on business and societies alike.
- Being a nominee: I want to raise awareness for a sustainable lifestyle, find potential collaboration partners and meet the inspiring people and partners of the EIT in Budapest!
- An ideal world: Allocate everyone a fair share of resources and emission rights. Then climate change, resource wars, poverty or even mass emigration would not be such a problem anymore. How would we implement that? Let's discuss!

- Innovation: Innovation is bringing something existing to a new market or something new to an existing market.
- Would like to meet: Jules Verne!
 What would his visionary books be like if they were written today?









Govinda Upadhyay

Co-founder of LEDsafari (main product: LEDsafari lamp)

- Key words: Low cost, do-it-yourself, solar LED lamp
- **Project aim:** To empower people in developing countries to make their own solar rechargeable lamps, using locally available material to promote sustainability and health, develop skills and gain jobs
- EIT Community connection: KIC InnoEnergy SELECT Master programme – graduated in 2012

About...the project

- The idea: We have designed an innovative solar lamp, made up of only five carefully chosen electrical components, which can be selfassembled by anyone. It is the cheapest solar lamp available (\$5.00), which has the potential to replace kerosene lamps (\$ 2.00 per week for fuel). It can be assembled without prior technical knowledge, using locally available material, and is easy to repair at village level after some basic training.
- Inspiration for change: Over 1.6 billion people worldwide have no access to electricity and rely on kerosene lamps for lighting, a harmful and expensive solution, which emits high quantities of CO₂. Existing solar lights are too often hard to repair at village level, are expensive and are difficult to handle for people who are not familiar with new technology. This represents a big barrier for people to switch to a modern and safe energy form such as solar light.
- **EIT Community support:** This company is a direct result of the Master thesis I completed as part of the KIC InnoEnergy SELECT Master programme. Taking part in the programme was a great experience; I learnt about new trends in sustainable energy and also how to see technologies from a social, as well as business, perspective.

About...you

- How it began: I have always been interested in sustainable technologies, which have a huge impact on the society. While travelling in Indian rural areas, I observed that a lot of social problems could be solved if we can involve local people in the development process. This gave me the idea of a bottom-up approach to technology development.
- An ideal world: I would like to bring high quality education to everyone on this planet irrespective of their economic situation. I strongly believe that by sharing and providing knowledge we can overcome extreme poverty significantly faster.
- Moving forward: In the future I want to be working for LEDsafari and have products in clean water, energy efficient housing, solar home systems, refrigeration and other essential technologies that people need for their livelihoods.

About...inspiration

- **Innovation:** Innovation is a smart way to solve a certain problem.
- Would like to meet: Elon Musk. I have always been inspired by his world-changing ideas and out-ofthe-box thinking.





The idea of demystifying technologies so they can be understood and developed locally in developing countries is what makes LEDsafari unique

Contact www.ledsafari.com







www.climate-kic.org



Jelmer van Veen

Agricultural Engineer at AQGRI+ Station

- Key words: Wastewater as a resource
- Project aim: To recover resources and reuse them
- EIT Community connection: Climate-KIC's summer school (The Journey) and Climate-KIC Master programme





What makes the AQGRI+ Station unique is that we use already proven technology in a different way, which no one has tried so far

About...the project

- The idea: The AQGRI+ station treats domestic wastewater in a natural way and produces high quality compost, fish (as a by-product) and nutrient-rich irrigation water.
- Inspiration for change: A vast amount of resources are wasted on a daily basis, while the need for such resources is ever-increasing. We want to change the way that water is used in agriculture nowadays, to avoid seeing farmers dig deeper and deeper wells while polluted rivers flow alongside their fields. We want to make a business out of adapting to climate change.
- EIT Community support: An entrepreneurial spirit was instilled in me during Climate-KIC's The Journey and several Spark lectures and networking events that I participated in. The skills that I acquired were mostly the guts to try and the perseverance to keep on trying. I also learned the importance of a good and genuine vision. Entrepreneurship is engaging in uncharted territory, so you need to have a good idea of your direction and purpose. Those were very valuable lessons.

About...you

 How it began: When people talk about sustainability, the thing they often talk about is environmental or social sustainability and too often it gets forgotten that without a sound economic foundation every project is doomed to fail. When no money is made, the environment and the people also lose. I became, and am still, very passionate about the power of harnessing economic forces for a good cause. Directing growth to ensure impact. The most impact is not to be expected from large-scale, donor-driven projects with big budgets but without the power to generate more, but from small ones with the power to sustain themselves and grow.

- Being a nominee: I decided to run for this award because it means more exposure for my start-up and because it's a great honour.
- An ideal world: If I could change one thing about the world right now... that's a hard one. I'm going to go with free education for all.
- Moving forward: Next for us is building our first AQGRI+ station in Vietnam!

About...inspiration

- Innovation: Innovation means not only conceiving something that no one has thought of before, but doing it.
- Would like to meet: I would like to meet Derren Brown [a British illusionist who specialises in psychological manipulation] to learn all his mind skills. I'm a big fan!

Contact

www.aqgriplus.org



www.eitictlabs.eu





About...the project

- The idea: The idea is to create several trusted, geo-located communities, where people can share goods and services via an online platform that manages both virtual and real interactions. Ideally the application will have three main sections: 'gift', where people can give away or request something physical (e.g. baby clothes); 'borrow/ lend', where people can borrow or lend something physical; (e.g. a drill) and 'time', where people can request help with, or offer to help with, a service (e.g. buying groceries).
- Inspiration for change: Together with other partners, Telecom Italia manages a 'living lab' – a reallife community of 150 families where they test ideas. As part of my internship at the company, I analysed the community and found that some members were actively seeking help for their needs. This led me to develop the idea of a service that could connect neighbours and help them exchange goods and services.
- EIT Community support: During my studies at the EIT ICT Labs Master School, I learned how to understand customer needs in order to shape a service in the real/digital context. Along with colleagues and friends, I studied and applied methods and techniques to real cases in real companies, while also participating in internal teamwork and project management courses.

Steven Tait

Innovator at Telecom Italia (main product: Favour-Exchange)

- Key words: Sharing, neighbours, community
- **Project aim:** To bring back 'social inclusion' by exchanging favours while avoiding consumption of finite resources, pollution and waste production
- EIT Community connection: EIT ICT Labs Master School graduate with a MSc in Service Design and Engineering

About...you

- How it began: I have always been passionate about economics and technology. Nevertheless, in the last few years thanks to the entrepreneurial education path I followed, and different books and articles I have read, I have become increasingly interested in how technology is quickly changing our economy and the way we do business.
- An ideal world: If I could wave a magic wand, I would like every country to invest 2% of their GDP (around the average military expenditure) in open and collaborative research to solve problems that mean a lot to mankind, such as the shortage of drinking water and poor sanitation.
- Moving forward: I would like to be in a position that allows me to stay close to innovation activities in the field of ICT, allowing me to contribute to a better future.

About...inspiration

- Innovation: Innovation is a step forward – or better a 'giant leap' -towards a better future by increasing efficiency in processes and value proposition in products.
- Would like to meet: Several people come to my mind, but if I have to choose one I would go for someone that can drive significant change. Since I love my country, that person would be the Prime Minister (Matteo Renzi).





Favour-Exchange is a geo-located service that connects people with a pre-existing relationship, allowing them to get help with different needs, as well as help others

Contact Favour Exchange







www.eitictlabs.eu



Zhenyu Lin

Founder and CEO of Sensory Media (main product: SoundGlow)

- Key words: Affective interaction, Internet of Things, big data analysis
- **Project aim:** To enable computers to understand emotion, allowing for more intuitive and emotional interactions between humans and computers, as well as creating impressive multi-sensory experiences
- EIT Community connection: EIT ICT Labs Masters School graduated in 2014



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Technology of the Internet of Things, affective computing and big data analysis are involved in developing the innovative interaction mechanism of SoundGlow

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About...the project

- The idea: Sensory Media is developing and selling an intelligent LED lighting system, SoundGlow, which synchronizes with music emotionally, offering a one-stop solution for customers to create impressive ambient atmospheres with much lower control costs.
- Inspiration for change: Multi-sensory experiences are already being developed as a response to increasing competition within the entertainment and dining industries. However, the approach they are using is costly and I wanted to make the creation of such experiences much more intelligent and affordable for customers.
- EIT Community support: I took part in the EIT ICT Labs Masters programme from 2012-2014 and had a really positive experience. I got to work with students from different backgrounds, which greatly enhanced my teamwork capability and crossculture communication skills. I learned essential business knowledge and got a lot of real experience of developing an idea into a product or service. The entrepreneurship atmosphere within the community is quite inspiring!

About...you

 How it began: I've been fascinated by interactive design and music for a long time, and have always wanted to create innovative products that influence people's lives. I saw great potential in making computers

Contact www.sensorymedia.co understand emotion and building products based on that.

- Being a nominee: Innovation and entrepreneurship have been the core ideals I have learned from the EIT and have been key to helping me establish Sensory Media and drive my company forward. Through the EIT Change Award, I would like to share my experience of the EIT programme, to inspire more people to become entrepreneurs and create innovative products that may change our world.
- Moving forward: I want to create an ecosystem of products that connects information from all the senses. In the near future, Sensory Media will have products that understand the emotion behind the tone of a user's speech or movements and link it with lighting or music. By creating this ecosystem, we want this new interaction method to influence people's way of using computers and building applications.

- Innovation: Innovation is the intersection of creativity, design, technology, business and humanity. It works to convert findings into products and distribute them, therefore positively influencing our society and people's lives.
- Would like to meet: Steve Jobs. He is the perfect example of someone who pushed innovation to the limits of technology.



EIT Awards 2013

Held in Budapest, the EIT Awards 2013 brought together innovators and stakeholders from across Europe to celebrate the entrepreneurs, start-ups and projects emerging from the KICs.

One winner was chosen per KIC for each award category and they included Kate Hofman, Eduardo Appleyard and Dorottya Maksay (CHANGE Awards), and David Tacconi, Dominik Peus and Lionel Chaverot (Venture Awards).

We are living in the most innovative decade of human history

> Naveen Jain Serial entrepreneur











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EIT Innovators Award

New for 2015 is the Innovators Award, which recognises KIC innovation teams that have developed – in an exemplary manner – an innovative product, service or process with a high potential for societal and economic impact.



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www.eitictlabs.eu





Mobile Shield Represented by Bruno Crispo (University of Trento)

- Key words: Security, privacy, smartphones
- **Project aim:** To protect the privacy and security of personal, business and governmental data that may reside on phones
- EIT Community connection: Project team combines EIT ICT Labs partners from the Trento, Berlin, Helsinki and Stockholm Co-location Centres





Our solutions provide innovative and timely solutions to real-world problem affecting both citizens and businesses

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About...the project

- The idea: Mobile Shield consists of several different solutions. Freedome is an app that can protect user data such as location, websites visited and searches. Moshi is a solution for companies that protects the mobile transactions of their customers.
 Simko3 allows a secure and default environment to be created on a phone, where applications and sensitive data can be contained and protected.
- Inspiration for change: Use of smartphones is growing rapidly, as is the ability to perform more and more advanced activities on them. At the same time the number of malware and attacks targeting these platforms is also booming. This has created a business opportunity and user need that we want to address.
- EIT Community support: EIT ICT Lab's unique environment has allowed us to create a project team with highly qualified members in the security field. It has facilitated contact with stakeholders to promote our services and products, and gather feedback.
 We have also been able to approach the EU market, rather than just a single, country-specific one.
- Generating impact: Our solutions are simple to use and are essential to protect personal, business and governmental data kept on mobile phones. Our services and products also have clear and well-defined business models to make them tangible sources of revenue and profit.

Contact Bruno Crispo

About...the team

- Formation: All of the project partners operate in the area of security and privacy, so we had some prior knowledge of each others' skills and expertise. The actual team was formed during events organised by the Privacy, Security and Trust Action Lin (PST AL) to enable and stimulate contacts and networking. These took place at the EIT ICT Labs Co-location Centres in Trento and Berlin.
- Embracing diversity: Most of us are used to working at an international level, so it has been enriching and interesting. We built the project team to make sure we have complementary skills and all the competencies required to succeed in the project.
- Moving forward: The project will continue with the same team in 2015, even though the goal has slightly changed and we will be following the market and increasing threat-levels by focusing on mobile malware detection.

- Innovation: Innovation is transferring research results to market and making a profit out of it.
- Dream team: Martin Cooper, the 'father' of the mobile phone; Steve Jobs, inventor of the iPhone; and German Chancellor Angela Merkel, whose phone was reportedly hacked last year and would therefore be a great potential customer for our services and products.





Off4Firms Represented by Gian Autenrieth (South Pole Group)

- Key words: Climate employee engagement
- **Project aim:** To enable companies to engage their employees in taking climate action at home
- EIT Community connection: Climate-KIC Co-location Centre in Zürich

About...the project

- The idea: Private households are responsible for over 40% of Europe's greenhouse gas emissions and while a range of solutions and schemes are available, people don't adopt them. On the other hand, companies are increasingly developing their corporate social responsibility and sustainability strategies, but struggle to anchor them into their daily operations and encourage all their employees to act on them. This led us to developing a service which brings those two points together. Building on research into environmental decisionmaking and social behavioural studies, Off4Firms assesses different incentives with which companies can stimulate their employees to adopt energy-saving practices and technologies.
- Inspiration for change: We want to help countries reduce their energy demands and CO₂ emissions in order to contribute to solving the global climate change problem. We want to put the private sector in a leading role, leveraging its potential to engage private individuals in clean-tech adoption and behavioural changes.
- EIT Community support: The facilitation of the exchange with other KIC partners was enriching. Both the Co-location Centres and the central office were a great source of support. The funding that Climate-KIC provided as part of this project was also economically crucial, as innovation activities are sometimes not pursued because of the potential costs.

Contact www.off4firms.ethz.ch

About...the team

- Formation: Some of the partners knew each other, but hadn't worked together before. Our competences were quite complementary and we all learned a lot from each other. The chance to have scientific concepts and findings assessed from a business perspective was inspiring.
- Embracing diversity: Working with partners has been enriching. It has required some understanding between partners as time sensitivity, budget restraints, etc. have different meanings or importance in the academic and the business world. The direct and open communication we have within the team has prevented such matters from becoming a problem though.
- Moving forward: We are looking scale up the service and bring it to more companies through marketing and sales activities. One thing we're looking into is the connectivity of the service, meaning its compatibility with industry-leading reporting standards.

About...inspiration

- Innovation: Innovation is what enables people to improve their every activity. It isn't limited to technology – it can be found wherever an open human mind challenges the status quo!
- Dream team: Richard Feynman (theoretical physicist), Alexander von Humboldt (explorer of Latin America) and Jonathan Ive (Senior Vice President of Design at Apple).

in <u>Gian Autenrieth</u>





We impact the corporate social responsibility (CSR) market by demonstrating that employees can be given an active role and thus expand the scope of a company's CSR activities



www.eitictlabs.eu



DA4RBI Represented by Markus Löchtefeld (DFKI)

- Key words: Indoor analytics, customer insights, retail experience
- **Project aim:** To enable retailers to scrutinise the full potential of their store through analysing their customers' behaviour and enriching their retail experience
- EIT Community connection: Project selected through EIT ICT Labs' Call for innovation activities





The unique feature of our platform is that it is going one step further than existing analytics systems by predicting future customer locations and current buying decisions

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About...the project

- The idea: With the DA4RBI project we have created a platform that, based on an unobtrusive customer tracking system, allows us to analyse customer behaviour inside a physical store.
- Inspiration for change: We want to help keep physical stores competitive, and safeguard all connected jobs, and our inspiration for achieving this comes from current online retailers. For them it is easy to follow their customers' journeys through their store and recommend products accordingly. So therefore we decided to take a technique from the digital world into the physical.
- EIT Community support: We had access to brilliant and well-connected partners for our project, who followed the open innovation culture of EIT ICT Labs. Furthermore, the business development team provided us with a supportive environment and opened unique opportunities to connect with experts and customers.
- Generating impact: For the economic side, we see a huge potential to increase the revenue of retailers, especially in grocery retailing. The societal impact we want to achieve focuses on keeping the current model of physical, offline retailing alive.

About...the team

 Formation: The core team of DFKI, University of Helsinki and U-Hopper met at the EIT ICT labs partner event in 2013, while talking with Fabio Belloni of Quuppa about their high



accuracy indoor positioning system, and soon realised our common interests and problems.

- Embracing diversity: The diversity of the group was extremely helpful, as the different backgrounds, insights and knowledge helped us to avoid many mistakes, and we were able to face the different national problems of retailers more easily.
- Moving forward: We expect DA4RBI technology to be responsible for a significant amount of the retail and logistics software market. Especially as we have the market-leading platform involved (SAP Retail, who we met through the EIT ICT Labs network), but also because we believe in the opportunities that smaller business owners can expect from the Retailer-In platform of U-Hopper, which is connected to much smaller initial investment costs compared to SAP's solutions.

- Innovation: For me, innovation is the transformation of new ideas that focus on relevant and current realworld problems into readily available processes and services for market.
- Dream team: Elon Musk (brilliant technological vision, while trying to advance mankind), Marie Skłodowska-Curie (devoted scientist and inspirational figure) and Leonardo da Vinci (imaginative and a skilled artist).





EOLOS FLS200 **Represented by Rajai Aghabi** (EOLOS Floating Lidar Solutions)

- Key words: Affordable wind energy
- **Project aim:** To develop a cost-effective, accurate and reliable offshore wind measuring system
- EIT Community connection: KIC InnoEnergy Iberia Barcelona

About...the project

- The idea: With our experience in offshore wind, we detected that there was a need to develop a more costeffective way to measure the wind speed potential at an offshore site. This is when we started looking for support and funding schemes which could allow us to build up a productoriented innovation project. And we found KIC InnoEnergy.
- Inspiration for change: We want to foster the development of renewable energies. Renewables are a clean and natural source of energy, which will help Europe (and the rest of the world) reduce its dependency on fossil fuels and therefore build a 'greener' future.
- **EIT Community support: KIC** τ. InnoEnergy has supported us at every stage of the project. Its wide network has provided access to specialised and sector-oriented knowledge, which has helped us to define the product requirements targeted to the real needs of the market. The KIC's business-oriented approach has also helped us to focus on delivering timely results and to cross-check the results obtained from our research with the market, in order to detect the technical, economical and addedvalue approach of what we are doing.
- Generating impact: Wind energy is currently one of the sources of renewable energy with the highest potential - offshore wind in particular, given its scalability. EOLOS helps to encourage its use by reducing the cost of developing offshore wind projects.

About...the team

- Formation: After having the idea of creating a project to develop a floating lidar system [a remote sensing technology that uses a laser and reflected light to measure distances], we gathered the most suitable and fit-for-purpose team, which covered the main technical and business areas we needed for the project. For this we looked to KIC InnoEnergy's network.
- **Embracing diversity:** Working with many partners is not easy as there are always different opinions, timings, and ways of working. This made managing things difficult, but a common goal, and a clear work plan and distribution of tasks quickly put everyone to work, with very satisfying final results.
- Looking back: Since the project began we've got to know each other better and work has become more effective. While there have been ups and downs, the prototype is now finalised.
- Moving forward: After a final validation period of six months, our prototype will be ready to be commercialised. Looking further, we want to see EOLOS fully active in the offshore wind market and our product being used as the reference for offshore wind measurements.

About...inspiration

- Innovation: Innovation is turning knowledge into creativity
- . Dream team: My dream team is the team I currently have!





We're very resultsorientated: we currently have our first unit installed and being validated in ljmuiden, the Netherlands

Contact

www.climate-kic.org





BiogasETC

Represented by Sander de Vries (Utrecht Sustainability Institute)

- Key words: Reducing energy wastage
- **Project aim:** To produce biogas in a more efficient and profitable way, realising a de-central supply of renewable energy all over Europe
- EIT Community connection: Project developed with Climate-KIC partners from the Dutch, French and British Co-location Centres





What makes BiogasETC unique is the fact that an active SME (CCS) plays a pivotal role in this Climate-KIC project, supported by Imperial College London, Fraunhofer IWES, TNO and GDF SUEZ

About...the project

- The idea: The project is about building and running a pilot plant for small-scale biogas upgrading, and developing a European market strategy for it.
- Inspiration for change: The fact that many anaerobic digesters are not running efficiently since they produce both heat and electricity, while often not having a demand for the heat anywhere nearby.
- EIT Community support: Climate-KIC has been very helpful in maximising the chances of a successful market launch through its innovation know-how, link with education through the Education pillar, and strong community network, which has made it easy to approach people from different institutes. The geographical proximity of the Climate-KIC staff in the Co-location Centres and the Regional Innovation Centres has also been ideal, as has the fact that they are always very helpful, friendly and easy to approach!
- Generating impact: We want to make biogas production from manure much more efficient and profitable, contributing to a decentral supply of sustainable energy.

About...the team

 Formation: Some partners were contacted through the KIC channels, others were approached because they were essential to the project;

Contact

http://biogas-etc.eu/

in Sander de Vries

they became Climate-KIC (affiliate) partners later on.The KIC staff helped us by suggesting possible partners to approach that could strengthen the proposal and project.

- Embracing diversity: It's been lively and inspiring to work with such a diverse group of people. Our skills have complemented each other well, which is exactly why the project partners were chosen.
- Looking back It took quite some energy to get the project up and running, and there was a lot of paper work. There were also some setbacks in the construction of the demo plant. However, we have persevered as a team and are now seeing the project start to bear fruit. We've developed a string market strategy and the demo installation is now up and running.
- Moving forward: Next for us is a market launch and then getting ready for the next innovation... who knows what's cooking?

About...inspiration

- Innovation: Innovation is bringing research outcomes to the market, in order to make an impact in the real world.
- Dream team: Jimi Hendrix for inspiration, the Dalai Lama for wisdom and Sir Winston Churchill for leadership.

@sANDERcDEvRIES





PLESMO (main product: Stop&Start) Represented by Xavier Pain (Schneider Electric)

- Key words: Energy efficiency in industry
- **Project aim:** To help industrial plants to save energy by tackling the energy consumption of non-production modes
- EIT Community connection: Supported at KIC InnoEnergy France

About...the project

- The idea: PLESMO stands for 'Plant Low Energy Standby Modes' and offers the Stop&Start range of non-invasive, non-intrusive, easy to use and easy to set up services and products in order to manage and reduce energy consumption.
- Inspiration for change: We want to prove the performance of the concept in the field: real percentage of saving, final customer value, business opportunities and technical feasibility.
- EIT Community support: Through KIC InnoEnergy, we have been able to find the relevant framework for a collaborative project. We have also experienced a great workshop about IP production and freedom to operate and identified the right source of funding for the implementation of the PLESMO project in the field.
- Generating impact: We want to save 10% of industrial energy consumption, which consists of 25% of the total energy consumption in Europe. The European Commission plans to reduce this total consumption by 20% by 2020 and 30% by 2030. Therefore, we aim to contribute to 10% of the general effort.

About...the team

 Formation: The PLESMO project has a cross-cultural, collaborative team consisting of INSA (academic), Fenwick (customer) and Schneider Electric (industry leader). The idea

Contact in <u>Xavier Pain</u> originated in Schneider Electric's innovation team and with assistance from KIC InnoEnergy France, the team came together.

- Embracing diversity: Such a diverse team requires the right leadership, with a clear vision, a flexible attitude and a high level of trust. You learn how to focus on priorities, remain on track and not be indiscriminate.
- Looking back: Launching a new startup has been the main change since we started this project!
- Moving forward: Next we plan to transfer the Stop&Start range to the Global Solution Business Unit of Schneider Electric to more effectively manage the process and address market needs. With the support of KIC InnoEnergy France's business creation services, we have also launched a start-up, Gulplug, to provide a wireless and self-powered energy sensor.

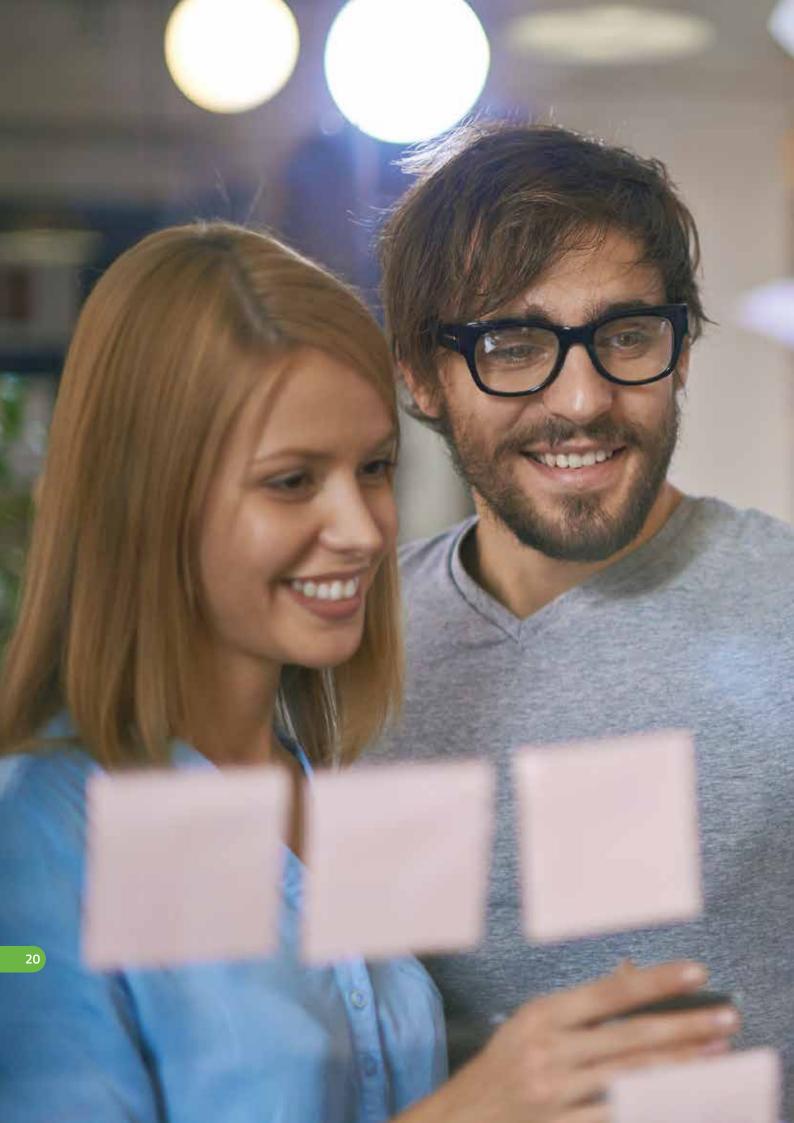
About...inspiration

- Innovation: Something that is new and progressive on the market with a real customer value and a profitable source of revenue for it supplier.
- Dream team: Michel Platini, because football is my favourite sport and he has shown how to succeed both on and off the pitch; Steve Jobs, because he was the source of inspiration for Gulplug's magnetic plug (through Apple's MagSafe); and Patrick Burensteinas – if you don't know him, you should!





The cross-cultural, cross-companies, cross-human, multi-generational experience is what makes PLESMO unique!



EIT Venture Award

The EIT Venture Award was first awarded in 2012, and its purpose is to put successful entrepreneurial start-ups in the spotlight that have been supported by the KICs via a dedicated business creation or business development process.





www.eitictlabs.eu



TOK.tv Emanuela Zaccone (Co-founder)

- Key words: Second screen, sport, emotions
- Venture aim: To never let those who are passionate about sport watch a game on TV alone again
- **EIT Community connection:** Part of the Smart Spaces Action Line at EIT ICT Labs





We think that our platform, with its innovative business model, is going to change the way in which we consume TV

About...the project

- The idea: TOK.tv has built the first voice social platform designed to help football clubs offer their fans a unique engagement experience. Our platform lets users talk to their friends while watching a game, read the latest news, send stadium sounds and take social selfies together. Teams on the other side can engage their fans in a brand new way and monetise their engagement.
- Inspiration for change: People love watching football games on TV with friends, but what if these friends are far away from each other? We recreate the experience of watching a game together on the same couch.
- EIT Community support: We are part of the Smart Spaces Action Line.
 EIT ICT Labs is supporting TOK.tv to identify potential customers for our market in Europe in the sport and TV field. We are also looking for additional funding and to establish an office in Trento, Italy.

About...you

Contact

www.tok.tv

 How it began: When I started my PhD thesis in 2007, I decided to focus on social media marketing and audiovisual products. I was told that this 'social stuff' would never be that relevant, but I saw that things were evolving and TV shows were leading a huge change in the way they approached and involved audiences. Social TV was born and it was love at first sight. Some years later, I received an email from Fabrizio Capobianco (now CEO of TOK.tv). He had read my thesis and was thinking about social TV and a second screen too. We had a long Skype talk and that was the moment in which my passion turned into a start-up.

- Venture evolution: When we became involved with EIT ICT Labs, we were in our seed funding stage. Now we've raised € 1 million and have Juventus and Real Madrid as partners.
- Looking forward: We are going to launch other apps with major football teams in the next months.

- Innovation: Innovation is about life improvement and continuous learning. Searching for something new and ground-breaking, and aiming to improve the world around us. Rejecting the fear of failing, and having the willingness to reinvent and create.
- World-changing inventions: The internet, without any doubt. It is a sum of all our greatest inventions and it enhances them – there would be no code without writing, for example. Today the internet gives us the chance to connect with each other, collaborate across the world and stay updated. It is our future and it is up to us to make it even better.











Reduse (main product: Unprinter) Hidde-Jan Lemstra (CEO)

- Key words: Remove print from paper
- Venture aim: To have an Unprinter for every printer
- EIT Community connection: Climate-KIC Accelerator, UK

About...the project

- The idea: We remove toner print from paper, using laser ablation. Printed paper in, empty paper out, as simple as that. Our technology works on all paper, on all colour, with no special equipment required.
- Inspiration for change: We want people to always consider the option of reusing material. Paper is a prime example where we have gone from disposal to recycling, but there is no technical reason why paper cannot be reused. Through Unprinter we now enable the reuse of paper (and are the first to do so!).
- EIT Community support: Climate-KIC UK welcomed us onto their Accelerator programme. This was pivotal in our development; it allowed us to really understand customer demands, and make an important hire for our team (Chief Technology Officer Tony Dunn). The network opportunities and brand of the programme have also been extremely valuable. We have been able to accelerate our development and, due to the support from Climate-KIC, have just closed a significant equity seed funding round.

About...you

How it began: Our Chief Scientist and co-founder David Leal wanted to put his engineering skills to use for society. He decided to join Professor Julian Allwood at the

University of Cambridge to explore the options of reusing paper. I was extremely impressed with the technology and worked hard to convince David to take it forward, eventually becoming CEO and cofounder of Reduse.

- Venture evolution: We were prestart, in stealth mode. We had done desk work on our development, but realised we needed proper support to develop this further. Climate-KIC UK has enabled a real, measurable acceleration of our progress.
- Being a nominee: We want to use this platform to show our technology and engage people in the change to reusing key materials. With sufficient resources for the Seed Phase, we are now poised for great progress and value creation.
- Looking forward: We have been able to accelerate our development, and due to the support we have received from Climate-KIC, we have just closed a significant equity Seed Funding round. In the future we are planning products related to Unprinting, including consumable and key enablers of paper reuse.

About...inspiration

- Innovation: Innovation is a clever solution to real problems.
- World-changing inventions: Laser. Without laser we wouldn't be **Unprinting!**





We combine an exciting, groundbreaking but intuitive technology with a fantastic, experienced

Contact www.reduse.co.uk



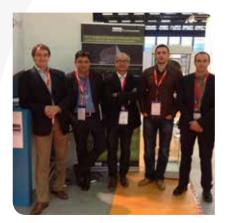






NAWA Technologies (main product: NAWACap) Dr. Pascal Boulanger (CEO)

- Key words: Save energy, preserve environment, empower citizens
- Venture aim: To change electric storage usages with a new generation of ultra-fast batteries
- EIT Community connection: KIC InnoEnergy Highway





What makes us unique is the combination of our team, our technology and the way we want to manufacture it

About...the project

- The idea: Within the CEA Laboratory, where our company began, I contributed to the development of an innovative nanomaterial, whose nanostructuration increases the capability to store more electricity, faster and for longer. We also developed a manufacturing process to produce this material, an electrode and, at the end, a battery with a saferby-design and sustainable approach.
- Inspiration for change: Electricity storage has always been the bottleneck for energy transition to cleaner, renewable energy sources. As they are basically unpredictable, renewable energy sources are easily criticised. We have developed electricity storage technology that could help renewables become more predictable by smoothing their production in the short-term in the same place. Instead of having a few big plants, we envision millions of sources with their own storage.
- EIT Community support: The EIT's KIC InnoEnergy helped us to launch the first tests that demonstrated the basic steps towards industrialisation. Their support plays a great role in the credibility of the project as well and we've been introduced to many people and companies that have been essential for our development.

About...you

 How it began: I had worked in many fields (nuclear, solar photovoltaics,

Contact

www.nawatechnologies.com

nanotechnology) and all of these pieces organised themselves like a puzzle and the idea became inescapable. Then I decided to strengthen my skills in economics and did an MBA where I met NAWA's cofounder, Ludovic Eveillard. He started as a scientist but switched rapidly to the private sector and now has more than 20 years of experience in business and marketing.

- Venture evolution: We took part in the KIC InnoEnergy Highway development programme, where we received a grant to develop the weakest technical aspects of the project. As a part of this programme, KIC InnoEnergy helped us to find contacts, and increase both our visibility and credibility so that we could attract investment.
- Looking forward: We will never stop innovating. Like the internet we have for data, an internet for electricity is emerging. We envision our technology as pervasive in all future 'connected' objects (e.g. ferries, buses, cars, but also mobiles, wireless energy, etc.).
 NAWA is the 5G of electricity.

About...inspiration

- Innovation: It's a frame of mind: the desire to always improve, change your viewpoint, think differently, but at the same time always deliver.
- World-changing inventions: The wheel: a simple and mathematically perfect object that's so useful.

in <u>NAWA Technologies</u>





Nordic Power Converters Regnar Paaske (Co-founder and CCO)

- Key words: Small, long-lasting power converters
- Venture aim: To become the new standard for electric power converters for LED, chargers and other applications
- EIT Community connection: Supported at Climate-KIC's Nordic Co-location Centre through the Accelerator programme and runner-up in the Climate-KIC Venture Competition 2014

About...the project

- The idea: Nordic Power Converters (NPC) began with a technical breakthrough during the Master's thesis of Mickey Madsen, Cofounder and CEO of NPC, enabling the switching frequency of resonant power converters to increase 1000 times without the circuits failing. In short, NPC has found a way to produce a Formula 1 engine using standard components.
- Inspiration for change: Billions
 of everyday products require
 electrical power converters, but
 the technology has not changed
 significantly for the past 30 years.
 Power converters cause more than
 half of the failures for LED products,
 represent 15-25% of production
 costs and take up most of the space
 inside LED bulbs. They are the
 reason for bulky chargers for laptops
 and other devices.
- EIT Community support: We have worked with Climate-KIC's Nordic Co-location Centre and especially Jakob Steen Jensen, Entrepreneurship Lead. The support we have received has enabled us to meet customers and investors, as well as formulate, test and adapt our business plan.

About...you

 How it began: I met Mickey Madsen at start-up events and instantly had a gut feeling about the large-scale potential of the idea. I recognised that I could contribute valuable experience to the team, so I began to help with business development matters and soon focused fully on NPC.

- Venture evolution: We had just incorporated and joined a soft money supported research project when we applied to take part in the Venture Competition 2014 at Climate-KIC's Nordic Co-location Centre. We also joined an elite hardware accelerator program called Danish Tech Challenge where we received an office, coaching and other support over 4-5 months. This combination of multiple support sources has allowed us to move our start-up from a plan to the first € 1 million customer contract within just over half a year.
- Looking forward: We are launching the first power converter products for the LED lighting market in 2015 Q4, with the next three products following in the first half of 2016. From there, it is only our bandwidth limiting the roll-out of the technology to improve LED products and save resources.

About...inspiration

- Innovation: Innovation is the result of a desire to change and improve products, processes, services and, ultimately, real lives.
- World-changing inventions: Modern communication tools, which enable people to work and live better together.





Our product is less than a fifth in size and weight, lasts two to five times as long, and costs less to produce than current power converters

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Contact

🗓 <u>Regnar Paaske</u> 🄰 @ripaaske

www.kic-innoenergy.com





Sensus Energy (main product: INTELECT) Rolf Huiberts (Co-founder and CEO)

- Key words: Intelligent solar electronics
- Venture aim: To provide technology for the next generation of high performance, aesthetically pleasing, building-integrated solar systems
- EIT Community connection: Supported at KIC InnoEnergy Benelux and winner of the KIC InnoEnergy Business Booster 2014 pitching contest in Barcelona (2014)





We are the only company that offers electronics that harvest energy on a solar cell level; our technology offers the next step in the evolution of future solar-based systems

About...the project

- The idea: Typical solar systems harvest energy at system or panel level. Sensus Energy offers intelligent electronics, which enable energy harvesting at cell level. This approach means that the solar system always operates at maximum performance, even under suboptimal conditions. Strong system simplifications result in significant cost benefits and the modular approach creates many new aesthetically pleasing design opportunities.
- Inspiration for change: Solar systems placed on top of building roofs are aesthetically unattractive and existing attractive alternatives are expensive. We started to look deeper into the technology and discovered why solar systems can't be integrated into construction materials like roof tiles with the currently available technology. This inspired us to develop a solution for this drawback.
- EIT Community support: KIC InnoEnergy Benelux helped us with financial planning and business model development. We also received extensive support on patent strategy, along with financial support – something which is always appreciated in the start-up phase!
- Generating impact: We want to increase the applicability of solar systems in the built environment by offering maximum performance in areas that are partially or temporarily shaded. We also want to make solar systems more affordable.

Contact www.sensusenergy.com

About...you

- How it began: I have been working in the sustainable energy field for many years and was inspired to start my own company after experiencing the valorisation of fuel cell technology. One of the earliest projects I worked on was related to aesthetically pleasing solar technology, which I realised was a market with enormous business potential. When I met my associate Callie Peters, who held a patent relating to the solar harvester, we decided to join forces and establish Sensus Energy.
- Being a nominee: We are very pleased to get this opportunity to present ourselves during this prestigious event. We feel like we're playing in the Champions League Final!
- Looking forward: We are continuing to work with stakeholders on the development of aesthetically pleasing, building-integrated solar products. Besides this, we are rolling out our technology in appealing off-grid solar applications like solarpowered e-bikes and drones. And we are looking for investors to bring out technology to the next level!

- Innovation: Innovation means to make money out of inventions in the broadest sense.
- World-changing inventions: The invention of the dynamo and the combustion engine. These inventions form the basis of current society.







JUSP Stefano Calderano (CEO)

- Key words: Mobile POS solutions
- Venture aim: To become a leading mobile commerce service provider, helping our customers to maximise revenues, reduce costs and increase their overall customer satisfaction
- EIT Community connection: Coached by the Business Development team at EIT ICT Labs' Trento Co-location Centre

About...the project

- The idea: Jusp is the first provider of an all-in-one chip-and-pin Mobile Point-of-Sale (mPOS) solution for smartphones, tablets and PCs. Jusp allows you to accept any credit, debit and prepaid card by paying a small fee per transaction with no additional monthly charge.
- Inspiration for change: We saw the huge success of Square in the US and we realised that in Europe, where cards work with a different technology than in the US, there was no equivalent solution.
- EIT Community support: We received help in contacting telco partners from EIT ICT Labs' network across Europe and have been able to close distribution agreements with players introduced to us by EIT ICT Labs.
- Generating impact: We are revolutionising the world of money. Our role is fundamental for the diffusion of electronic payment even in areas where cash is still largely used. Mobile POS is an opportunity for those who already have standard POS payment systems to update their traditional concept of sales points, thus allowing their clients to avoid long lines at checkout counters.

About...you

 How it began: After 20 years of experience in the retail banking industry, I invested in Jusp, where I became CEO in September 2012. I have always been fascinated by the Square idea in the US and was excited to join Jusp's founder in this idea.

- Venture evolution: In 2012, we raised € 500 000 from a group of angel investors, in 2013 we raised € 3.7 million equity with two Italian venture capital firms, and in 2014 we received a € 700 000 Regional Government Grant from Sardinia. We are also in another fundraising stage at the moment.
- Looking forward: We believe the mPOS market will become mainstream, not only targeting mobility needs but also substituting current fixed POS. Also, we believe large enterprises can get great benefits from the use of Jusp to increase sales and improve the efficiency of their back offices. With the increasing market demand, Jusp is planning to reach 30 full time employees by the end of 2015 and to open a subsidiary office abroad to support international business expansion.

About...inspiration

- Innovation: Innovation is looking at the same thing as everybody else, but being able to see something different from others.
- World-changing inventions: The iPad redefined the way we do and think about everyday tasks. I constantly live together with my iPad.





Jusp is unique and the best solution available on the market. It is the only smart Pointof-Sale that connects to PCs as well as smartphones and tablets

Contact www.jusp.com





Notes

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About the EIT Community

The European Institute of Innovation and Technology (EIT) is an independent EU body. With our Knowledge and Innovation Communities (KICs), we enhance Europe's ability to innovate by nurturing entrepreneurial talent and supporting new ideas.

Our mission is to:

- Contribute to the competiveness of Europe, its sustainable economic growth and job creation by promoting and strengthening synergies and cooperation among businesses, education institutions and research organisations;
- Create favourable environments for creative thoughts, to enable world-class innovation and entrepreneurship to thrive in Europe.

The EIT is an integral part of **Horizon 2020**, the EU's Framework Programme for Research and Innovation. Horizon 2020 is a key pillar of the **Innovation Union** – a **Europe 2020** flagship initiative that aims to enhance Europe's global competitiveness.

Innovation through integration

To boost Europe's innovation capacity, action is needed to overcome the fragmented European innovation landscape; and this is where the EIT comes in. We have a pioneering role in increasing European sustainable growth and competitiveness by reinforcing Europe's innovation capacity in a dynamic global context.

The EIT brings together the 'knowledge triangle' of business, education and research to form dynamic cross-border partnerships: KICs. The KICs:

- Develop innovative products and services;
- Start new companies;
- Train a new generation of entrepreneurs.

Working closely together in the KICs, leading companies, universities and research centres, create more effective and innovative solutions for Europe.

The EIT's first three KICs were launched in 2010:

- Climate-KIC: addressing climate change challenges;
- EIT ICT Labs: generating world-class ICT;
- KIC InnoEnergy: tackling sustainable energy.

Two new KICs were designated in December 2014 and they will be setting up their activities across Europe in 2015:

- EIT Health: improving quality of life for European citizens and sustainability of health and social care systems.
- EIT Raw Materials: ensuring the accessibility, availability and sustainable use of raw materials for the economy and citizens.

We are growing!

By 2020, we will set up three more new KICs:

- EIT Food: ensuring a climate-resilient and sustainable global food value chain (2016);
- EIT Manufacturing: strengthening and increasing the competitiveness of Europe's manufacturing industry (2016);
- EIT Urban Mobility: providing sustainable solutions for urban mobility (2018).

Get in touch!

Climate-KIC:

www.climate-kic.org



@ClimateKIC

EIT Health:

EIT ICT Labs:

www.eitictlabs.eu F EIT ICT Labs @EITICTLabs Each of the KICs operates in innovations hubs called 'Co-location Centres'. The EIT's KICs have Co-location Centres spread across the EU and work with regional centres to increase the impact of their activities. All Co-location Centres offer entrepreneurial training and support, so get in touch with them to discover the different opportunities they offer!

Climate-KIC
 EIT ICT Labs
 EIT Health

Climate-KIC Regional Centre (RIC)
 EIT ICT Labs Associate Partner
 KIC InnoEnergy
 EIT Raw Materials

EIT Raw Materials: www.eitrawmaterials.eu EIT Raw Materials @EITRawMaterials

KIC InnoEnergy:

www.kic-innoenergy.com
KIC InnoEnergy SE
@KICInnoEnergy

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