

EIT Regional Innovation Scheme Activity Report **2019 - 2020**

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Introduction

Innovation has a prominent role in Europe's efforts to tackle major societal and environmental challenges. The European Institute of Innovation and Technology (EIT) is working towards this objective through its operational arm, the Innovation Communities, by accelerating innovation and supporting the creation of conditions where innovation is more likely to thrive and generate breakthroughs.

This report provides an insight into the achievements of the EIT Innovation Communities strengthening the innovation ecosystem in countries within Europe with more modest innovation capacity. It outlines the main on-the-ground activities, deployed services and cooperation mechanisms with local players that took place as part of the EIT Regional Innovation Scheme. In addition, it highlights success stories from start-ups and innovators that have benefitted from the collaboration with the EIT Innovation Communities and created an impact with their innovative solutions.

In the last years, the EIT and its Innovation Communities have reinforced their presence and the collaboration mechanisms in the supported countries of the EIT Regional Innovation Scheme. Since then, great improvement has been shown, visible in the increasing number of applicants, participants and organisations around the Knowledge Triangle Integration (higher education institutions, research and business) that took part in its activities. This report gives a snapshot of the progress of the EIT Regional Innovation Scheme and its achievements since its induction in 2014.

The report also gives an overview of the main programmes and services provided by the EIT Innovation Communities in 2019 and 2020, such as business support services to increase the number and business maturity of start-ups coming from these regions, as well as education and innovation activities that have helped create the next generation of innovators. Additionally, the report includes testimonials and success stories from supported entrepreneurs and their innovations.



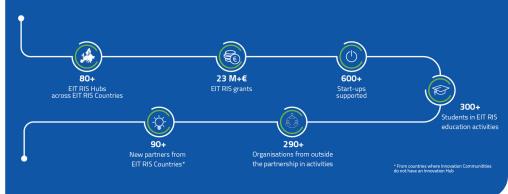
Making Innovation Happen

The EIT is an EU body that enhances Europe's ability to innovate. The EIT nurtures entrepreneurial talent and supports new ideas by fully integrating the entire innovation value chain: from student to entrepreneur, from idea to product, from lab to the customer, including scaling up successful start-ups.

Eight EIT Innovation Communities (EIT Climate-KIC, EIT Digital, EIT Food, EIT Health, EIT InnoEnergy, EIT Manufacturing, EIT RawMaterials, EIT Urban Mobility) foster a sustainable European economic growth and global competitiveness, while addressing major challenges faced by the European society. The EIT creates an ecosystem, by promoting synergies and cooperation among leading companies, universities and research centres across Europe.

Read more about the EIT Community across Europe!





EIT Regional Innovation Scheme

Across Europe, countries are showing a varied innovation performance. This has resulted in the classification of European countries in two main groups: innovation leaders and strong innovators versus moderate and modest innovators (according to the European Innovation Scoreboard).

The disparities in innovation performance also present themselves in the participation levels within the activities of the EIT Innovation Communities activities—there are fewer players involved from countries of modest and moderate innovation performance. As a response to this challenge, the EIT introduced its Regional Innovation Scheme (EIT RIS).

Through the EIT RIS, Innovation Communities disseminate the knowledge emerging from their broad networks of partners, as well as promote a broader participation in their activities across Europe. The EIT RIS is designed for EU Member States and Horizon 2020 Associated countries that are moderate and modest innovators. Moreover, it addresses the countries where Innovation Communities have fewer or no partners, and have limited or no participation in the activities of the EIT Community.

Currently, the countries taking part in the EIT RIS are:

- EU Member States: Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.
- H2020 Associated Countries in Europe: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Turkey and Ukraine.

Strategically, the Scheme is an additional offer to the EIT RIS countries with limited or no participation, notably those countries that do not host EIT Innovation Communities' co-location centres, to facilitate their engagement with the EIT Innovation Communities. As such, the EIT RIS is not the sole method of participating in the activities of the EIT Innovation Communities. The Scheme's aim is to raise the capacity of innovation players and facilitate their access to services and programmes offered by the EIT Innovation Communities.

Read more about the EIT RIS!

EIT Hubs

The EIT Innovation Communities engage local organisations to serve as EIT Hubs in the EIT RIS countries and regions. These local organisations are selected through an open competitive selection process, and then operate as EIT Hubs, representing the respective Innovation Community and mobilising local organizations to take part in joint activities. The primary role of the EIT Hub is to ensure the visibility of the EIT Community and raise awareness of the EIT Community activities and cooperation opportunities for local players representing education, business and research areas. The organisations serving as EIT Hubs have a strong footing in local ecosystems and help promote EIT Innovation Communities' good practices and implementation of the Knowledge Triangle Integration. In addition, EIT Hubs also liaise with the relevant national, regional and local authorities and facilitate the sharing of EIT Innovation Community expertise with them.

The EIT Innovation Communities have designated more than 80 EIT Hubs in Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, South Italy, Slovakia, Slovenia, Serbia and Turkey. Nonetheless, several EIT RIS activities, such as the participation in business creation and education programmes, are also open to EIT RIS countries and regions where EIT Hubs have not yet been designated. Each EIT Innovation Community adapts its own way of working with the EIT Hub, based on individual strategic considerations.

EIT REGIONAL INNOVATION SCHEME HUBS

- EIT Climate-KIC
 EIT Digital
 EIT Food
 EIT Health
 EIT InnoEnergy
 EIT RawMaterials
 EIT Manufacturing
- EIT Urban Mobility



How does the EIT contribute to the innovation capacity of EIT RIS countries?

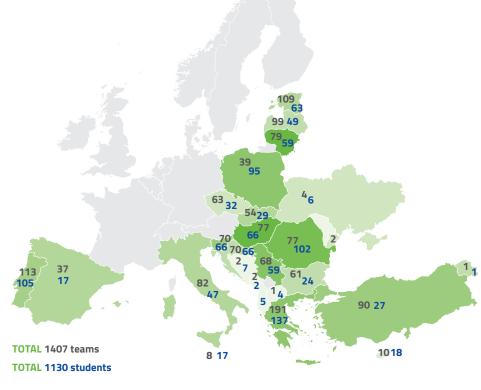
By doing what we know best, integrating the activities of business, research and education. We create a seamless chain of services for an idea to grow into a product, conquer the market and create positive socioeconomic change.

EIT RIS was introduced in 2014 as a voluntary outreach scheme for the EIT Community. The EIT RIS significantly helped change the geographical spread of the EIT Innovation Communities' networks. Averaging to 4% of the total EIT funding across the years 2016-2019, the EIT RIS achieved its set expectations to increase the EIT Innovation Communities' presence in the EIT RIS countries and increase the number of partners and other beneficiaries from these countries. Since the introduction of the EIT Regional Innovation Scheme in 2014, the number of partners from the EIT RIS countries with limited or no EIT Innovation Communities' participation has increased by 613% (from over 40 to over 300) covering more than 70% of all the EIT RIS countries (in total, the EIT Innovation Communities have partners from 22 EIT RIS countries). The EIT funding received by the partner organisations from the EIT RIS countries has three-folded.

Historically, EIT RIS countries have performed more poorly in terms of the total number of supported start-ups. One of the key reasons that was mentioned by the EIT Innovation Communities was lower business maturity and business skills of the start-up teams coming from the EIT RIS countries. Therefore, as part of the EIT RIS capacity building approach, several EIT Innovation Communities had set up early-stage business creation/education programmes aimed at early-stage start-up teams, oftentimes teams that did not have their companies incorporated yet. Through years 2016-2019, more than 1500 early-stage start-up teams have been coached by the EIT Innovation Communities.

The EIT RIS also facilitated the access to business creation services. 23% of all the EIT Innovation Communities' supported start-ups come from EIT RIS countries with limited or no participation in the EIT Inovation Communities. Percentagewise, the ratio of start-ups from the EIT RIS countries has increased as well: in 2017 out of all the EIT Innovation Communities' supported start-ups, 21% were from the EIT RIS countries, in 2018 the ratio increased to 23% and in 2019 to 24%. However, the start-ups from the EIT RIS countries so far managed to secure a small fraction of the investment compared to the rest of the start-ups. During the years 2017-2019, the percentage of the investment attracted by the EIT RIS countries' start-ups did not reach 2% from the total amount. EIT business creation services should have a better integration with the access to finance.

In terms of the EIT RIS country participation in the EIT Label programmes, out of 81 universities, only 13 are from the EIT RIS countries, and only 18% of the EIT Label Graduates are from the EIT RIS countries.



EIT RIS in Action

Now let us take a look at the main milestones achieved by the EIT Innovation Communities in EIT RIS countries and regions, with a special focus on business creation, education and innovation.

Business creation activities

In order to nurture entrepreneurs and start-ups, and launch innovative ideas into the market, the EIT Innovation Communities offer business creation and acceleration services to early stage start-ups and aspiring teams in the EIT RIS countries. They help bolster the business maturity of new entrepreneurs and showcase local innovations.

In 2019, more than **700** start-up teams took part in the business creation and support programmes. In 2020, the COVID-19 pandemic forced programmes to go online, the EIT Innovation Communities proved to be quick to adapt and engaged more than **680** start-up teams in various programmes.

EIT Climate-KIC RIS Accelerator has been operating since 2016. The accelerator supports cleantech entrepreneurs from the EIT RIS countries and regions, and provides education, training, networking opportunities and grants to businesses at the forefront of climate change adaptation and mitigation.

Supported through the EIT Climate-KIC RIS Accelerator in 2019 and 2020, the Croatian start-up **Miret** received EUR 50.000 investment to their ecological sneakers made 97% from different biomaterials. In 2019, Miret grew its team, was a finalist at the national start-up competition ZABA Start and it was announced as Best Pitch at the G2.5 Conference in Croatia. In 2020, they started to ship their eco sneakers to customers.



Ascalia uses Artificial Intelligence (AI) and Internet of Things (IoT) to reduce the environmental impact of factories and infrastructures. The start-up offers an all-inone analytical platform for IoT systems used in smart cities solutions and industry. The platform analyses the collected data using AI, resulting in detailed analytics and optimizations of processes, which helps reduce energy and raw material usage, as well as overall the environmental impact of manufacturing.

The start-up gained a major premium client (lverpan Ltd.) and won the *Start.up! Germany 2019 Road Show* competition.

EIT Climate-KIC together with the EIT Hubs and local counterparts organised **Climathon Challenges.** More than 830 participants

In addition to benefitting from mentoring and workshops, being part of the EIT Climate-KIC Accelerator greatly expanded our visibility and network. This led us to new prospects, clients and investors. Because of the exposure that Ascalia has received during the six-month program, we successfully closed a pre-seed investment round of EUR 165.000."

Marin Bek, Co-founder of Ascalia.

contributed with more than 70 solutions to tackle environmental challenges. For instance, the Climathon in Greece focused on technology and mobility, circular economy and climatechange challenges for small islands. Whereas at the Latvian Climathon the participants worked on tools to recognize, assess and respond to climate risks and sustainable tourism solutions.

EIT Digital's ARISE Venture Program is a twostage programme which supports innovators from EIT RIS countries in the development and finalisation of their minimum viable product (MVP) in the areas of Digital Industry, Digital Tech, Digital Wellbeing, Digital Finance or Digital Cities. The programme is delivered in close partnership with local accelerators: Startup Wise Guys, ABC Accelerator, Found. ation, Building Global Innovators (BGI) and Kraków Technology Park. In 2019 and 2020, **60** teams graduated from the programme. The top companies were invited to present their innovations at the EIT Digital Conference and Partner Event in 2019 and in the the Virtual Tech Market Place in 2020.

The Estonian team Recovery Companion who completed the programme in 2019, developed a social platform for cancer patients to promote their mental wellbeing during the treatment. The startup recieved several awards. The team won LAPhack Health hackathon, recieved a Grand Prix in *STARTERtallinn* and an award of EUR 10.000 at a competition programme *Prototron*.



A start-up team **Hotspoter** from Serbia won the Final Prize of EUR 10.000 at the EIT Digital ARISE Venture Programme in 2019. Hotspoter developed a Location Intelligence platform, which helps determine the best locations to deliver a client's product or service to customers in a specific area.

The team worked with a partner Eurobank AD Serbia to optimize their ATM locations in Belgrade. The start-up was also selected to present their product in the *Web Summit 2019* in Lisbon, Portugal.







The eHealth start-up **Amygdala** from Bosnia and Herzegovina took part at the EIT Digital ARISE Venture Programme in 2020. After completion of the programme, the start-up enrolled at the H+ Innovation Programme implemented by the InsurTech Hub Munich (ITHM) and the Medical Valley Digital Health Application Center. The start-up combines medical science, data science and behavioural science to create health programmes designed to each person.

Find out more about the ARISE Venture Program here!



EIT Food's pre-accelerator programme **Seedbed Incubator** is designed for early-stage start-ups with an innovative idea in the agri-food sector. In 2019, the four-month programme provided the participants with training, mentorship from leading agri-food sector experts, and funding for further development. From 2019, the Serbian start-up **Feluice** was named the winner of the final competition. The team has developed juices that increase iron levels in the blood to help pregnant women and women in general to defeat Anaemia. As part of the programme, the team tested the market directly with more than 100 potential customers.





EIT Food RIS Innovation Grants are awarded to innovative products and services with added value for the food industry, such as production optimization solutions, new packaging and food additives to product lines. Since 2019, more than **50** ideas have been supported. In 2020, the bootcamps, mentoring and networking sessions and the Grand Final were held online by the EIT Food Hubs.

Find out more about the RIS Innovation Grants here! One of the winners of the EIT Food Innovation Grants was **Polyfly**. The Spanish start-up addresses a serious problem in agriculture: the pollination of the crops. Insect pollination allows cultivation of over 75% of the food crops, however the biodiversity loss, diseases, climate change and other factors have led to a "pollinators crisis". To address this challenge, Polyfly has developed a new class of natural managed pollinators, in the form of a *"release*

Thank you again for the support you gave to Polyfly, and the work EIT Food does in general for agri-tech start-ups. It is really important for entrepreneurs carrying innovative projects to be able to count on platforms that offer quality services and activities all around the EU."

Marc Vaez Olivera, Founder and CEO of Polyfly.

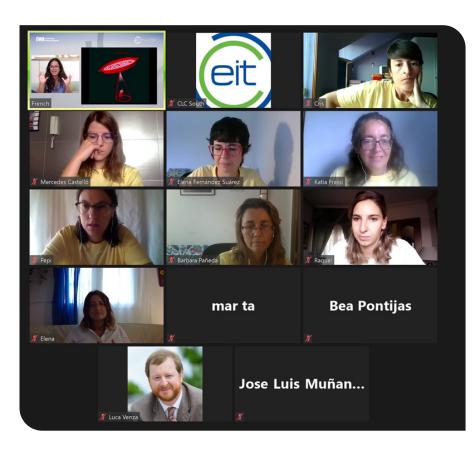
box". A cleverly designed cardboard box with insects inside and ready to be deployed once the insects are ready and the box is opened. Upon winning the prize, the start-up has been able to enter the market and start selling their product at scale. The funding helped them secure new costumers and redesign the release boxes of their hoverflies making it much easier for customers to use it.





EWA – Empowering Women in Agrifood initiative started to take shape in 2020. EWA aims to reinforce female leadership and support women or start-ups in initial phases from the agrifood sector. The programme included mentoring, tailor-made online and in person training and financial support and access to prizes. The participants also had the opportunity to join a networking community with other female entrepreneurs and have access to contacts of investment communities, technology and corporates. EWA ran in Czechia, Portugal, Romania, Spain and Turkey. The initiative included online webinars, masterclasses and pitching events to enable the participants to accelerate their business aptitude.

Find out more about the EWA here!



EIT Health offers a business creation programmes to start-ups and entrepreneurs at early stages of development to help them create transformative products and services. Through the healthcare organisations network, EIT Health links entrepreneurial businesses with the knowledge and resources to scale up and scale out. The InnoStars Awards competition, the EIT Health Venture Lab and the European Headstart are some of the examples.

The InnoStars Awards competition engages micro and small enterprises, spin-offs and start-ups having a prototype or a minimal viable product. Participants receive EUR 25.000 in "smart money" for training costs, four months of mentoring and also training at two European Bootcamps. Participants also take part in three interviews with potential customers, investors or partners in order to validate the need for their innovation and make valuable connections. In addition, start-ups have access to the support and potential investor connections available from EIT Health's Investor Network and EIT Health's Living Labs and Test Beds network. Since 2019, **30** teams took part in the competition.

> Find out more about the InnoStars Awards here!



Polish start-up **UVera** won the 2019 EIT Health InnoStars Awards competition. The start-up is based on international cooperation between Polish and Spanish scientists and developed an ecologically friendly and natural UV filter, produced by bacteria, safe for human use and the environment. It is an alternative to the synthetic chemical UV filters, which cause destruction of coral reefs and marine ecosystems. The start-up has received a further support by the Polish seed fund StarFinder.

InnoStars Awards was a great international journey of incubation and acceleration for our start-up. We had the chance to meet fabulous mentors and great advisors, who were helping us in the creation of the pitch, with media content as well as in preparing for meetings with investors."

Magda Jander, representative of UVera.





A Lithuanian start-up **Ligence** won the EIT Health InnoStars Awards 2020. Previously, the team had participated in the EIT Jumpstarter 2019 and secured the 2nd place. The startup has developed a solution to automate heart ultrasound examination using deep learning. In a nutshell, the solution applies AI to perform an automatic segmentation of the heart's anatomical features and functional assessment which is then summarised in a comprehensive report available for a doctor. This solution provides an accurate diagnosis of cardiovascular diseases and, at the same time, promises to be more cost-efficient.

The **European Health Catapult** is a training and competition platform aimed at start-ups active in the fields of biotech, medtech or digital health and working with innovative business concepts. The competition gives participants access to an international network of investors.

Find out more about the European Heath Catapult here! Thanks to the received funding, our company can solve the problems of assessing the heart damage of COVID-19 patients more quickly and allocate more human resources to this project. The funding will allow the costs associated with the development of R&D to be paid for. Winning the InnoStars Awards in 2020 is a great opportunity and we had a chance to meet and work with mentors and advisors thanks to EIT Health InnoStars."

Justin Balčiūnas, Operations Manager at Ligence.

In 2019 and 2020, **12** teams received support through this programme.

Health Venture Lab is another business creation programme focused on healthcare early-stage start-ups. In 2019, the programme was run together with the EIT Health's partners GE Healthcare, University of Debrecen, IESE Business School, Medical University of Lodz and Semmelweis University, and was closed with a pitch competition. More than 24 teams have been supported throughout 2019/2020.

The European Headstart Funding Programme supports early start-ups that have a welldeveloped prototype and are ready to launch a product. One success case is the Greek start-up MyHabeats, which created a smartphone application designed especially for post obesity surgery patients. The programme and the Headstart grant, amounting to EUR 50.000, was crucial to support their product development, place the product in the marketplace (App store and Google play) and secure further customers. The company has expanded the product through renowned medical conferences, have gained access to the United Kingdom health market where the solution is used by the Imperial College London and Kings College.

EIT InnoEnergy **Primer and PowerUp! Challenge** programmes enable participants from EIT RIS countries to succeed in their innovations and business ideas.

The competition **PowerUp! Challenge** was

launched in 2015, but today it is considered the biggest competition for start-ups in cleantech, energy, mobility and smart technology in the Central and Eastern Europe. The programme accepts teams at all stages of development. In the past two years, the competition involved nearly **200** teams.

In 2019, the grand prize went to the Slovak company **Danubia NanoTech**. In the same year, they received an EU Seal of Excellence and were supported from EIC SME Instrument, Phase 1. The agreement with seed investors led them to establish **Espio**, a company focused on developing graphene temperature sensors. The technology is applied in electric vehicle batteries, extending the battery lifetime.





Indeed, I would definitely recommend this programme. I am saying this not only as lucky winner of last-year edition but also as a beneficiary of its boot-camp. The participation definitely also brings a good portion of visibility which indeed helps to move things faster."

Patrik Krizansky, CEO of Espio, when questioned about the participation in the programme.



We are thrilled to have taken part in this competition and to have won support from EIT InnoEnergy, that not only provides financial investment, but also supports us with business development through its network. We are very excited to collaborate with EIT InnoEnergy on our solution and bring more eco-friendly packaging to market to protect the environment."

Anna-Liisa Palatu, Co-Founder of Woola

In 2020, both Country Finals and the Grand Final of the competition were held online. The winner of the PowerUp! 2020 was the Estonian start-up **Woola**. The company creates packaging material from sheep wool residues. This helps decrease production, consumption and landfill waste of environmentally harmful materials. The product is shockproof, heatproof, and compostable within six months. In addition to the start-up competition, EIT InnoEnergy also runs the pre-acceleration programme for early-stage start-ups from all backgrounds called **Primer**. The programme runs in all the EIT InnoEnergy Hubs.

Other EIT InnoEnergy investment instruments for entrepreneurship support are the **Highway** and **Boostway**, which are also accessible to the start-ups from the EIT RIS countries. In 2019 and 2020, **13** start-ups from EIT RIS countries signed Business Creation Services Agreements.



"Bean to cup. Waste to energy." is the motto of **Ecobean**. The Polish start-up is supported by the EIT InnoEnergy and turns waste from daily cups of coffee into clean energy products. The solution is an ecological and an environmental alternative for coal briquettes made from wood, since the used coffee grounds are recycled to make coffee briquettes for stoves, fireplaces and barbeques.

The start-up offers a unique service for coffee serving points and subscription to the Corporate Social Responsibility (CSR) partner programme. This service relies on coffee waste pick up from coffee shops or offices, which includes special bins and bags.

In 2019, the start-up participated in the EIT Innoenergy's conference The Business Booster and became finalists at the at the Polish Country Finals of the PowerUp! Challenge. They have received funding from Highway, a university grant, and CSR, a Coca-Cola grant.

The start-up won numerous awards in the past years. Ecobean was a finalist at the *Global Startup Awards 2019* and won first place at the Academic Startup Ligue. The start-up was also named the Best Polish Social Impact start-up and Best Polish Newcomer at the Central European Startup Awards in 2018 and 2019, respectively. In 2020, EcoBean won the Portuguese Prio Jump Start 2020 Challenge. In 2019, a Latvian drone start-up **Aerones** raised EUR 2.1 million from the EIT InnoEnergy investment platform. The investment was used to create a new robotics solution. The start-up develops high-power drones that can assist in the maintenance of wind turbines, cleaning of tall buildings and the drones can also be used in firefighting. In 2020, the start-up secured a seed investment of USD 1.6 million which allows the team to develop a groundbased robotics system for the wind turbine maintenance and inspection.



In November 2020, the EIT Jumpstarter competition was carried out in the online format to adapt to COVID-19 and the Grand Final was held virtually and open to the public.

During the virtual event, the best **36** competition's start-ups showed their business ideas to the potential investors and jury of experts. The best projects were awarded cash prizes in the total amount of EUR 162.000: **Fetalix** from Portugal (EIT Health), **Coffeco** from Greece (EIT Food), **Recatalyst** from Slovenia (EIT RawMaterials), **Drone Plan** from Latvia (EIT InnoEnergy), **ArcLub One** from Slovenia (EIT Manufacturing) and **Horizer** from Bosnia and Herzegovina (EIT Urban Mobility).

Starting from 2020, the business creation programme **EIT Jumpstarter** has been extended by combining six thematic sectors, and thereby is jointly run by six EIT Innovation Communities: EIT Health, EIT Food, EIT Raw Materials, EIT InnoEnergy, EIT Manufacturing and EIT Urban Mobility. Participants are selected based on the strength of their entrepreneurial idea, the impact to the sector and the growth potential. During the programme, start-up teams learn how to validate and develop a business concept and to pitch their idea to the future investors. Since 2019, **178** teams have been trained.

EIT Jumpstarter is a highly acclaimed start-up creation programme. It won the *Best Association*

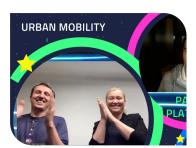
Training Initiative award at The European Association Awards in 2019 and the *Young Empowerment Award* 2020 at the Emerging Europe Awards.

In 2019, **ILoF** (Portugal/UK) won the first place in the Health category of the EIT Jumpstarter with a product that screens patients for Alzheimer's clinical trials, while **2BNanoFood** (Portugal) won the 1st place in the Food category and is developing biodegradable solutions for the food industry and **UP Catalyst** (Estonia) received the first place in the Raw Material category with its innovative solution for producing synthetic graphene.

6







EIT RawMaterials, together with its EIT Hubs, engages entrepreneurs from EIT RIS countries to take part in targeted trainings and workshops. For EIT RawMaterials, the great challenge is to promote entrepreneurship in the raw materials sectors in the EIT RIS countries. This is challenging since the breadth as well as business and innovation potential of the sector is not yet well known. In 2019, its Hub in Greece organized its first short entrepreneurship course for graduates and young professionals in the raw materials sector. The EIT RawMaterials Hub Adria held a business idea development workshop for potential start-ups in raw materials. The Hub also ran the Adria Raw Materials Incubator to support busines idea holders and enhance knowledge about the raw materials sectors. The Baltic Hub ran a preincubation programme and a PhD summer school, whereas the Kosice Hub in Slovakia organised a business idea competition.



The Latvian start-up **3DStrong**, supported by EIT RawMaterials, is a manufacturer of additive materials for 3D printing. Their additives make use of carbon nanotubes that provide increased durability, electrical conductivity, mechanical strength and flexibility for 3D printing materials and products. In 2020, among 140 Carbon Nanotube start-ups analysed by StartUs Insights Platform, the company was considered among the Top 5 start-ups impacting engineering in the field.



Trigger.Systems is a Portuguese start-up supported by EIT Climate-KIC, EIT Food and EIT InnoEnergy. It has created a platform that allows to control remotely several systems such as irrigation, pumps and lakes, thereby improving the energy and water saving, and contributing to the costs reduction. With Trigger.Systems solutions it is possible to carry out irrigation without going to the field. In 2019, the co-founder Sara Gonçalves won the EIT Woman Award 2019 which is awarded to the outstanding women innovators across the EIT Community.

In 2020, the start-up signed a collaboration protocol with the bank Grupo Crédito Agrícola which offers preferential conditions to the bank's customers when purchasing Trigger. Systems solutions for agricultural and green spaces irrigation.









Education activities

The EIT Innovation Communities offered a number of education activities to participants from the EIT RIS countries in 2019 and 2020, attracting over 1000 students. Below are some examples of the programmes.

Pioneers into Practice is EIT Climate-KIC's professional education, capacity-building and mobility programme focused on the climate change and systems innovation.

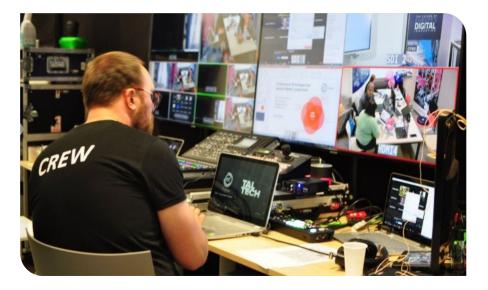
In Greece for instance, participants worked on the challenges of dealing with microplastic and air pollution in ports, whereas in Cyprus participants worked on challenges related to the decarbonisation of the marine, maritime and shipping industry, as well as on the sustainable mobility solutions for the municipality of Strovolos.

The **Journey** is a major climate innovation summer school programme of EIT Climate-

KIC, and is hosted by the EIT Innovation Community's partners across Europe. In 2019, the Journey was hosted in a number of EIT RIS countries. For instance, in Portugal participants worked with the Carbon Neutrality Roadmap 2050 experts to draft their own roadmaps to reach carbon neutrality in the areas of transport and mobility, energy demand, energy supply, agriculture, education and circular economy. In addition, the participants visited Alfama, a historical district in Lisbon, and put their minds at work to produce innovative solutions to tackle its main challenges.

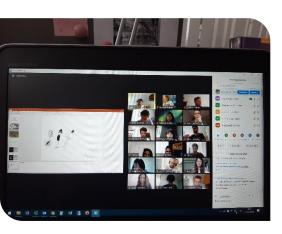
In 2019, EIT Digital organised its **Summer** School in Estonia, Portugal and Slovenia. Each programme lasted two weeks, and students worked together on business modelling and planning projects in collaboration with companies, industry professionals and experts.





The Lisbon Summer School, organised by ISCTE – University Institute of Lisbon, addressed the topic of "Longer Independent Living." The Tallinn Summer School, organised by Tallinn Technical University, focused on the topic of "Integrating personalised mobility solutions for Digital Cities." As for the Ljubljana Summer **School**, the programme was organized by the University of Ljubljana and focused on digital transformation for urban resilience. Each summer school attracted more than **30** participants from Europe.

In August 2020, the summer schools went online. Ljubljana and Tallinn hosted three summer schools. In Tallinn, two programmes were held on topics of "Secure e-Governance" and "Personalised Prevention from Data (and Genes) to Health and Wellbeing." In Ljubljana, the summer school focused once again on the digital transformation and urban resilience.



EIT Food ran its **RIS Fellowships** with the aim to increase knowledge, job-related skills and boost innovativeness of prospective employees of the agri-food industry and entrepreneurs in EIT RIS countries and regions. The programme accepts interns, students and graduates. 2020 saw a mixed format of the programme, where some participants travelled abroad, while others took part in the online format of the internship.

RLGDEHA

The organisation was splendid without any interruptions, while workshops were very interesting. The online collaboration within the group was straightforward, even though we were all in different countries. It was not hard to connect with other participants, as there were many ice-breaking and teambuilding activities. In my opinion, there are no disadvantages, if the summer school is hosted online."

Klemen Kreft, PhD Researcher in Pharmaceutical 3D Printing at the University of Ljubljana and participant in the EIT Digital Summer School in Ljubljana The Turkish **Algdeha** team developed their business idea thanks to the participation in the EIT Food RIS Fellowships and the **EIT Food RIS Solutions**, where the team won first prize for the best innovative solution.

The team developed an innovative way to produce algae at an industrial scale with low costs, by using wave energy, sunlight and heat from environment. This solution aims to replace the use of fish in industries which use it as animal feed. EIT Food provided every single tool for us to find what to do with our idea. We believe that there is a gap between scientists and industries' needs now. We need more people with science background but understands how to apply those ideas into a sustainable business model. [..] EIT RIS Fellowship program helped me to see how things actually work in field. I got to work in one of the biggest research centres in the world. We solved one of the biggest problems in our start-up here in Valencia. I got to connect with many professionals from different fields of business and science and learned from their mistakes. Finally, with the EIT Food RIS Solutions programme, we had the opportunity to take the next step which was to test our idea in front of professionals. We are really happy and proud that we are given this opportunity. We are also so excited to take our idea to next steps and challenge ourselves more."

Mert Furkan Filizoglu, Co-Founder of Algdeha.





EIT Health has a broad education programme offer, such as the EIT Health summer schools which help develop the entrepreneurial mindset.

HelloAl Summer School was organized by the GE Healthcare, KTH and LEITAT. The summer school provides theoretical and practical knowledge about various aspects of healthcare challenges and business opportunities. The course covers topics such as bio-design thinking, team collaboration, clinical need identification, basic theoretical and practical use of artificial intelligence (AI) and entrepreneurship. In 2019, the summer school was organised in Italy and Hungary. In 2020, the organisation brought the first online edition of HelloAIRIS: AI e-learning training.

The **McTivAgeing Summer School** was held in the University of Lisbon, Portugal. The programme provides the participants with the necessary skills to identify, assess, design and implement solutions to promote mobility and active lifestyles among older people. At the same time, the course also provides training in innovation and entrepreneurship. In 2019 and 2020, the Semmelweis University in Hungary held **L-ead: Leveraging e-health workforce by advanced skills Summer School**.

EIT RawMaterials **RawDTrip Summer School** took place in seven Polish cities in 2019. The programme selected **40** bachelor and master students from EIT RIS countries, enrolled in geology, mining, mineral processing, metallurgy, recycling, environmental sciences and material science fields. During the programme participants discussed copper mining technologies, processing, aspects of its waste management and its overall impact on the environment.

The overall positive impact for the members of the ESEE Education group can be described as an increased understanding of the ESEE country-specific education differences and challenges and insight into the whole education processes in the ESEE region. We learn a lot about each other."

Sibila Borojević Šoštarić, Associate Professor at the Faculty of Mining, Geology and Petroleum Engineering of University of Zagreb

EIT RawMaterials' **Dubrovnik International ESEE Mining School** brings together international experts in the field of raw materials in the heart of the Eastern and South-eastern Europe (ESEE) region. Eight key higher education and research institutions from the region implemented the programme with the Faculty of Mining, Geology and Petroleum Engineering (University of Zagreb) leading it. In 2020, the school explored innovations applicable to small mining sites, targeting Master and PhD students, postgraduates, professionals and academic staff. The school was implemented on a hybrid model allowing full participation in Dubrovnik, in Croatia, and remote participation for those who could not travel.

To extract new deposits in Europe, we need well-educated people who understand the industry across the entire value chain of raw materials. Our Partners from the University of Zagreb, together with other institutions, offer a very welldesigned programme with lectures coming from teachers and industry people."

Krzysztof Kubacki, EIT RawMaterials Innovation Hub Director CLC East

Support to Innovation Activities

Thanks to the increased efforts of the EIT Innovation Communities to facilitate matchmaking and project development activities to support organisations from the EIT RIS countries to take part in innovation activities, an increasing number of entities from the EIT RIS countries are taking part in innovation projects. This helps increase the generation and deployment of innovative solutions in the EIT RIS countries.

For instance, EIT Climate-KIC led the project Build Circular Up – Circular Transformation of the Construction Industry and Climate Innovation in Southern European Waters.

"Build Circular Up" is implemented in Bulgaria, Cyprus and Malta with the participation of the Bulgarian Construction Chamber, the Faculty of the Built Environment in Malta, and the Cypriot Materials and Spatial Planning Department and Recyclers Organization. As one of the outcomes of the project, a self-assessment tool and several guidelines were developed on how to shift towards a circular economy principle in the construction sector. The tool was one of the elements of the roadmap for the Central Europe transition in the construction sector.

In another innovation activity of the EIT Climate-KIC, several ports in Croatia, Portugal and Greece worked together with the EIT Innovation Community on the project "Climate Innovation in Southern European Waters" focused on addressing the challenge of plastic maritime littering in the southern European waters with a vision to achieve plastic-free seas. The studies are focused on the island of Cres and Zlarin in Croatia, the port of Piraeus in Greece and the port of Lisbon in Portugal. So far, the ports were able to identify gaps and best practices to foster cross-case learning and replication, as well as develop a Change Roadmap for the *Vision of Plastic-free Seas 2030.*

To address climate change and support countries, cities and regions to lead a transformative green recovery, EIT Climate-KIC designs and implements large-scale projects across Europe called **Deep Demonstrations**. Notably, EIT Climate-KIC has teamed up with the EIT RawMaterials in working with Slovenia,

> Read more about Deep Demonstrations here!

Bulgaria and Italy, ,three EIT RIS countries, in the Deep Demonstration scheme on the theme of **Circular, Regenerative Economies.** In November 2019, the Slovenian Parliament passed a motion to adopt the EIT Climate-KIC-led proposal "A Deep Demonstration of a Circular, Regenerative and Low-Carbon Economy in Slovenia." The country has defined circular economy as a strategic development priority and eight ministries are involved and committed to tackle material production and waste flows across five key areas: forestry, the built environment, mobility, manufacturing and food systems.

In the case of EIT Food, the University of Warsaw led the **EIT Food RIS Consumer Engagement Labs**, a series of sessions with food producers and consumers to co-create new product concepts to be introduced to the market for senior customers. In 2019, the project was piloted in Poland, Lithuania, Portugal and Spain with senior consumers (aged 65+) and local companies representing retailers, producers and innovative start-ups. The consortia were also joined by scientific institutions and NGOs.

Find out more about the RIS Consumer Engagement Labs here!

Each workshop of the project set a product category to serve as a point of reference and inspiration: in Poland participants focused on fruit and vegetables preserves, in Lithuania on healthy grain-based products, whereas in Southern countries the focus was put on healthy biscuits in the case of Portugal and healthy cooked meat and vegetable creams and spreads in Spwain.

To showcase an example, the co-creation sessions carried out in Lithuania led to a product named Grikola, made of organic buckwheat granola supplemented with freeze-dried carrots and beetroot, and sweetened with date paste and rice syrup. This is a perfect product for elder consumers due to its low glycaemic index ingredients, gluten free and allergen free characteristics and a high amount of fibre and nutrients. The product is also suitable for elderly with difficulty in chewing food with a possibility to be used in several recipes, such as a crust in soups or salads, as flakes or as granola. Following the co-creation process, Grikola was developed and introduced to the market by the Lithuanian consortium in 2020.

Our group was a little bit older than 65, we had many people over 80 years old. It was very interesting to see how people cooperated with one another and how they interacted with representatives of participating companies, because the age difference was pretty significant at times. One could hear language differences between senior citizens and corporate employees. They used the same words, but with a different meaning because of the age difference. Seniors used many expressions common in the times of their childhood."

Dr. Gitana Alencikiene, from Kaunas University of Technology.





In 2020, as part of the project, EIT Food carried out online workshops which involved Estonia, Greece, Hungary, Italy, Latvia, Slovakia, and for the second half of the year also Bulgaria, Croatia, Czechia, Romania and Slovenia. New products are planned to be introduced to the market by June 2021. In order to invigorate local innovators, EIT Health launched a specific **Innovation Call** for EIT RIS countries in 2019 and 2020. The call supported development of local innovative healthcare projects, pushing them to a higher readiness level. The fields of proposed innovations are centred around the use of big data and mobile apps in health care, new solutions and wearable devices for health monitoring.

From the Czechia, project **HepaMATRIX** implemented by DEX Innovation Centre and InoCure s.r.o. delivered a solution for reliable models of liver tissue as ready-to-use artificial matrices. The in vitro production of liver models is used in drug development, toxicological screening, basic research of liver diseases and diagnostics of patients suffering from these diseases.

Project **HEAL4LIV** from Romania developed an innovative robotic system for cancer treatment. The EIT Health Hub INIT & Freshblood HealthTech Association partnered with the Technical University of Cluj-Napoca, the Regional Institute of Gastroenterology Hepatology and SELECT IT SERV SRL to develop a modular robotic system for Hepatocellular Carcinoma (HCC) treatment. The system enables the application of three interventional treatment solutions for an efficient percutaneous treatment.

Find out more about the RIS Innovation Call here! EIT InnoEnergy has designed the programme Starter to bridge the gap between EIT RIS academy teams and industry actors, with a view to create marketable projects. The Starter promotes business-driven innovation and idea-stage start-ups at universities to build university-business collaborations. Starter was tested in 2018 at two universities in Krakow (Jagiellonian University and University of Science and Technology), where 20 teams completed the programme and presented their projects to investors. In 2019, 5 more pilots were organized in higher education institutions in Poland, Slovenia and Hungary, where over 60 participants participated in the training courses.

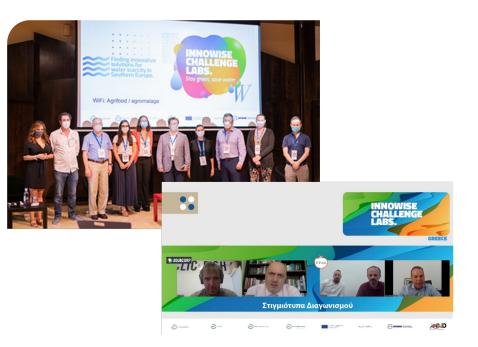
EIT Climate-KIC, EIT Food, EIT Manufacturing and EIT RawMaterials, with the support of ATHENA and BioAzul, led the project Finding innovative solutions for water scarcity in Southern Europe in 2020. Several studies have looked at the impact of the climate change, land use and water usage on Europe's water resources and have pointed out that Southern European countries would face increased water shortages.



Thanks to the Water Academy (in Spain), I have been able to update some data and get to know better how water management works in Spain (...) and the critical status of our water network. I am now certain that we need to change and adapt our food production system, including livestock production (...). These technical seminars should be more visible and frequent, opening a space for debate to find common ground on how to make a better use of the available natural resources."

Miguel Carbayo, Project Manager at FEAGAS

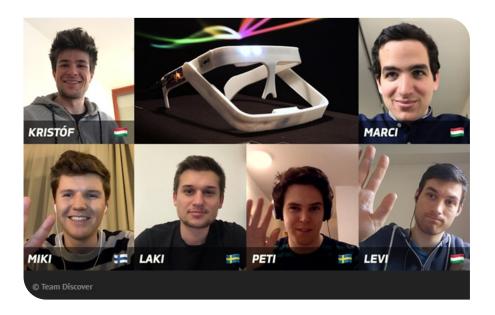
The basis of the project was to build a watersaving economy in South Europe through innovation, education and awareness. The EIT Innovation Communities engaged a group of 16 experts from agriculture specialists, industry leaders, utility managers, research institutions to policy makers. The project also involved 26 start-ups from 8 different countries into the **Innowise Challenge Labs**. The participants benefited from tailored mentoring sessions, capacitation trainings in pitching, Intellectual Property management and exploitation workshops and key insights about the Environmental Technical Verification schemes. The final innovative solutions included projects, such as smart irrigation platforms, efficient and affordable urban farming systems, atmospheric water collection, as well as water pollution monitoring and removal. They competed in 3 regional InnoWise Challenge Lab competitions held online or in a hybrid format to receive a monetary prize.



In addition, each country hosted an online capacity-building training called **Water Academy**. The countries targeted were Italy, Greece and Spain. For instance, the Spain Water Academy touched upon the topics of water scarcity in agriculture, urban areas and industry among water policy experts, researchers, engineers and founders. The project will continue to run this year, going a step further towards the goal of a water saving economy. In 2020 and in the midst of the COVID-19 pandemic, EIT mobilised a EUR 60 million fund to support European ventures and new innovation projects at the forefront of the pandemic by searching for innovative solutions called the **EIT Crisis Response Initiative**.

Discover the EIT Crisis Response Initiative here!

Team Discover – Team Discovery from Hungary created a patient monitoring system and was awarded with the EIT Crisis Response Initiative grant in the amount of EUR 325 000. The team partnered with ELTE-Soft and Mohanet in Hungary and InnoTractor in the Netherlands to develop a prototype capable of measuring patient's vital signs semi-automatically. A big plus of the solution is that its production can be easily scaled and improved by using 3D printing. The patients' data is uploaded to a central server, then presented to the medical staff in the form of a dashboard, where they can receive alerts and analysis. The system would enable the monitoring of a number of patients simultaneously and ensure that deteriorating cases are dealt with immediately. Their innovation would lift weight from the medical institutions and free up more resources, as well as support the current trend of digitalisation in healthcare and wellbeing, allowing an affordable solution to monitor and easily collect data and analysis.



Future Outlook

In the post-2020 period, EIT will continue to support the innovation ecosystems of countries and regions that underperform in terms of innovation by promoting closer interactions among the local innovation actors (clusters, networks, national and regional authorities, Higher Education Institutions, research organisations, vocational education and training institutions).

The EIT's internal evaluation has shed light on the uneven representation of different EIT RIS countries in the EIT Innovation Communities' networks and recommends a better tailored approach to different EIT RIS countries in the future. Furthermore, our evaluation revealed the need and desire of a better integration of the EIT RIS entities and networks into the EIT Innovation Communities' partner networks. The proposed EIT Strategic Innovation Agenda 2021-2027 puts an emphasis on the importance of the EIT Regional Innovation Scheme and improved geographical spread. In the next period, the EIT RIS will be integrated in the EIT Innovation Communities' multi-annual strategies, and thereby will switch its focus and level of ambition from an outreach scheme to a fully integrated approach across the EIT Innovation Communities' thematic areas.

The future EIT RIS will put emphasis on integration and geographical spread, better localisation of activities in the different EIT RIS countries, as well as better local synergies that would enhance the EIT's impact. The EIT Innovation Communities will deliver activities and programmes that develop local talent and enhance local innovation output. EIT Regional Innovation Scheme will be fully integrated in the EIT Innovation Communities' strategies, which will facilitate a stronger participation in their activities and networks across the whole of Europe. Ultimately, by interconnecting networks and innovation ecosystems across Europe, the EIT will be able to enhance the European innovation output through combined efforts, knowledge, talent and other intellectual assets.

Manuscript completed in September 2020

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