











Transforming innovation into climate action



Climate-KIC is supported by the EIT, a body of the European Union

Green City Solutions is a start-up, supported by Climate-KIC. Its CityTree moss-culture technology scrubs pollution from city street air where air flow is poor and pollution is heavy. The vertical flat-panelled device combines moss and wireless technology, controlling humidity around the moss, which then acts as a filter, taking pollution particles out of the air. The mobile installation, which doubles as street furniture, is now in cities including Oslo, Paris, Brussels and Hong Kong. With the help of Climate-KIC, the company has teamed up with Italian city Modena to pilot six CityTrees.

Working together to build a movement for climate action



A letter from Kirsten Dunlop, chief executive, Climate-KIC

The window for action to avert climate crisis is narrow. Climate change is a wicked problem: difficult to define, difficult or impossible for us to solve, difficult to wrangle because every dimension is interconnected. It's a problem that runs counter to almost everything that human beings are wired to respond to effectively.

Keeping global temperature rise below 2°C necessitates unprecedented change – new social dynamics, new ways of doing business and operating markets, capital flows, policymaking, new economic models, and new ways of living.

Climate change demands knowing how to deal with complexity, uncertainty and rapid change in biological, social and technological worlds. It necessitates genuinely interdisciplinary working, unknotting intractable root causes.

Redefining innovation for climate action

Innovation can unleash the swift and effective change needed to address climate change. Catalysing collective knowledge and expertise, building a shared vision and taking a systemic approach across technology, infrastructure, economic models, capital flows and policy, can locate the necessary levers to turn innovation into climate action.

Prosperity, inclusivity, climate-resilience

Climate-KIC, Europe's largest public-private partnership, focused on climate innovation, is working to make this change happen. Our partnership comprises over 270 world-class organisations from across business, academia, the public sector and NGOs, united in their aims to deploy innovation where it is most needed for deep decarbonisation – the elimination of fossil fuels and negative carbon – and effective adaptation. Together we are working to create a prosperous, inclusive, climate-resilient society founded on a circular, zero-carbon economy.

A systemic approach

Climate-KIC offers strategic entrepreneurship to facilitate systemic innovation in whole value chains, regardless of whether these cross sectors or borders. We help partners to influence key drivers of change, notably behaviour, governance, policy, finance, technology, market structures and information, by offering grants, convening coalitions of stakeholders, educating key target groups, creating platforms for knowledge exchange and pro-engaging with policymakers and business leaders.

As a complement to traditional funnel models bringing invention to market, we are working to match entrepreneurship with demand-led innovation focused on underpinning assumptions and the critical mass necessary for change.

A movement of change agents

Generating ideas and experiments in a context of learning, connection with others and creative self-reflection is the keystone, not just for dealing with a changing world, but for solving a changing climate. Climate-KIC strives to ignite and inspire its community of alumni, partners and professionals to convert ideas, activities, experiments and reflections into action. We invite you to work with us to convert those actions into a movement.

What is Climate-KIC?

Climate-KIC is a European knowledge and innovation community, working to accelerate the transition to a zero-carbon economy. Supported by the European Institute of Innovation and Technology, we identify and support innovation that helps society mitigate and adapt to climate change. We believe that a decarbonised, sustainable economy is not only necessary to prevent catastrophic climate change, but presents a wealth of opportunities for business and society.

A knowlege and innovation community

We are a Knowledge and Innovation Community: we bring together partners in the worlds of business, academia, and the public and non-profit sectors to create networks of expertise, through which innovative products, services and systems can be developed, brought to market and scaled up for impact.

A convenor and connector

Through our convening power, Climate-KIC brings together the most effective groups to create the innovation that can lead to systemic change.

By connecting those with vision, with ideas, with low-carbon products and services, and with finance, we are generating the critical mass needed if we are to see the permanent, systemic changes necessary to tackle climate change.

A developer of people

Climate-KIC runs a range of inspirational education programmes across Europe and online, for students, postgraduates and professionals. These programmes develop people's skills and capacities, empowering them with up-to-date knowledge and best practice. In this way, we are fostering a new generation of entrepreneurs and climate leaders to realise a zero-carbon economy.

A movement builder

We support innovation, whatever its source: from large corporations, research institutes and public bodies, through to start-ups and individual entrepreneurs. Through initiatives like our 24-hour hackathon Climathon, or our cleantech ideas platform Climate Launchpad, we encourage fresh new thinking from beyond the mainstream.

> Our Accelerator programme gives structure and assistance to start-ups. We drive innovation in established organisations through our range of innovation programmes, specifically for our partners.

Building a movement of climate action

Through unrivalled knowledge and expertise in our sector, our network of partnerships, and dedicated programmes, we are building momentum and making impact, enabling Europe to lead a global movement of climate action, catalysing the zero-carbon economy.

Turning knowledge into climate movements

278 partners

>9,000

graduates from education programmes with climate-relevant and entrepreneurship skills

35

Climate Launchpad is active in 35 countries and attracted over 1,000 climate business ideas in 2017

2,000

Over 2,000 citizens from 59 cities worldwide took part in Climathon 2016

13

13 entrepreneurs backed by Climate-KIC in Forbes 30-under-30 Europe list in 2017

>1,900 Alumni driving change since 2010

Transforming ideas into climate-positive businesses

>900 climate-positive companies incubated since 2010

233

Together with our start-ups and partners, we have successfully launched 233 innovative products to market since 2010

>€400m

capital raised in external investment by our start-ups since 2010

>2,240 We have supported the creation of over 2240 jobs through our start-up community since 2010



Building prosperity at 1.5°C

In the 2015 Paris Agreement, the international community recognised the need to keep the rise in average global temperatures well below 2°C of pre-industrial levels, and preferably no greater than 1.5°C. But even if the global temperature increase is kept within 1.5°C, we will still see profound effects on our climate, with destructive impacts including rising sea levels and more frequent extreme weather events. As well as the need to mitigate the emissions that cause climate change, society will need to adapt to a changing world.

The need for systemic change

The fossil fuel-based economy is deeply rooted, which makes the mitigation of and adaptation to climate change more challenging. We need climate innovation that is not only effective and affordable, but that can be adopted at a scale that allows it to overcome the lock-in effect of our entrenched current economic model. This is why Climate-KIC pursues transformative and systemic interventions. We support innovation and programmes that aim to overcome this 'lock-in' effect, that tackle problems at their

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"Reaching a tipping point in environmental action requires critical shifts in innovation that enable investors to vote with their money, reward leadership and bring us to a low-carbon economy faster."

Paul Dickinson, Executive chair at CDP



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"As we all seek ways to understand the impact for current and future climate the need to catalyse innovation and bring key stakeholders together has never been greater. For us, Climate-KIC brings key resources and knowledge to the table with both independence and global reach."

Dickie Whitaker, chief executive, Oasis Loss Modelling Framework



root, and drive the move to a zero-carbon economy that continues generating prosperity and jobs.

The need for climate innovation

Rapid innovation in low-carbon and resilience goods, services and approaches is critical for getting from where we are now to an economy that operates within planetary boundaries. Few people grasp how radically – or how quickly – we will need to ramp up de-carbonisation to meet the Paris climate goals. Part of Climate-KIC's innovation challenge is to understand and influence the conditions that make this kind of rapid, mission-oriented innovation possible, with the active support of all relevant stakeholders, and how to deliver it along with wider societal benefits.

The opportunities

The potential commercial opportunities and rewards for the organisations and individuals who deliver successful climate innovation are enormous. The global market for low-carbon technology and products is already estimated at €5.5 trillion per year, and will only expand. The adaptation market, until now a missed growth opportunity, is already worth €279 billion globally and in the next few years it is predicted to boom, growing 11 per cent annually by 2020.

The transition to a zero-carbon economy will have a wide range of co-benefits, positive knock-on effects across public health and wellbeing, food and water security – creating a better quality of life for everyone. Europe is already well-placed to take the lead in delivering this transition and to take advantage of these opportunities. Climate-KIC is making sure that Europe remains at the forefront of climate innovation, by supporting new technology, new businesses and new jobs.

€5.5 trillion

The estimated value of the global market for low-carbon technology and products.



Lilium, supported by Climate-KIC's Accelerator programme, is the world's first electric jet that takes off and lands vertically. In September 2017, Lilium raised \$90 million in investment.

Breaking down the barriers to successful innovation

Climate-KIC is uniquely placed to overcome the challenges of bringing climate innovation to market. We combine our convening power, collective knowledge and expertise, education and funding to address specific innovation needs, and contribute to the broader goal of creating a movement of informed, engaged and passionate climate innovation experts and professionals.

Connecting expertise with resources and know-how

Climate innovation is a knowledge-intensive business, but the people who need the expertise often don't know where to find it. Similarly, those with the knowledge and the resources to make an impact don't always know where or when it would be best used. It is only by joining up these strands that we can achieve the systemic changes.

Overcoming information silos

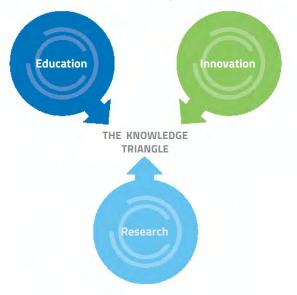
One of the greatest barriers to innovation are gaps in knowledge and information across academia, business, the public and non-profit sector. We work to address this, for example, by demystifying climate risk information and making it accessible, so that decision makers at every level can make informed choices.

Reducing risk

One of the major hurdles to organisations of any kind and size investing in climate innovation is the risk of pursuing an untried product or service. Climate-KIC works to reduce these risks, for example by creating a safe environment to test a product's viability or through neutral brokerage. The benefits of this approach go beyond the specific project: once an innovation is shown to be viable and marketable, it encourages others to enter the market, creating a virtuous cycle.

Nurturing the most innovative ideas

We inspire and uncover the most innovative ideas to help society to mitigate and adapt to climate change. We do this through our innovation programmes, cleantech idea competitions, entrepreneurship development schemes and demand-led open innovation calls. These seek out the products, services and applications with the most potential in high-priority areas.



The cross-fertilisation of ideas and perspectives achieved by the interaction of research, innovation and education is known as the "knowledge triangle". This is the basis of the European knowledge economy and the knowledge flows of Climate-KIC.



"Thanks to its top level European network and innovation framework support, Climate-KIC enables us to accelerate eight French start-ups per year, giving us the means and credibility to bring our vision, our knowhow and our ecosystem at a European scale and taking action against climate change."

Pierre Nougué, Président, ECOSYS Group



The power of partnership

Climate-KIC convenes Europe's most influential network for transformative climate innovation. We are a partnership-based organisation – our partners are the backbone of our whole climate innovation ecosystem. Climate-KIC catalyses and supports climate innovation, but it is our partners who make that innovation happen.

Our network of partners includes some of the brightest minds, the most dynamic companies, the most creative thinkers and the most forward-thinking cities and public authorities in the movement to tackle climate change. Our expanding network is at the heart of our value as an agent and broker of climate innovation; it enables us to accelerate transition and create the critical mass of players needed to scale up solutions to climate change.

278

Climate-KIC has 278 global partners, giving us an unrivalled breadth of knowledge and expertise.

"Climate-KIC helped us understand the value proposition behind knowledge. We now have a strong entrepreneurial team, which has helped us become a profitable research group. Most of all, Climate-KIC empowered us by making vital connections, pushing us to have the highest impact – to reverse emissions."

Dr. Saskia Visser, Programme Lead Sustainable Land Use, Environmental Sciences Group, Wageningen University and Research



We are Climate-KIC

Our partners (as of December 2017)

Cities, Regions and NGOs

Asociación Valenciana de Empresas del Sector de la Energía Birmingham City Council Birmingham Science Park – Aston Ltd Carbon Disclosure Project (CDP) CDP Worldwide Centre for Excellence for Low Carbon and Fuel Cell Technologies City of BudapestCity of Copenhagen City of Gothenburg City of Helsinki City of Malmö Cleantech Region Climate Policy Initiative, Inc. Comune di Bologna **EKO-BIEGLY** Euro-Mediterranean Centre on Climate Change Foundation Foundation Institute for Sustainable Development Free Enterprise Association Global Fund for Cities Development HaskoningDHV Nederland B V Helsinki Uusimaa Regional Council ICLEI IFKA Instituto Tecnológico de la Energía Instituto Valenciano de Competitividad Empresarial Instituto Valenciano de la Edificación L'Agenzia Regionale Prevenzione e Ambiente e l'energia dell' Emilia-Romagna Las Naves London Legacy Development Corporation Lower-Silesia Regional Development Agency Municipality of Aarhus Municipality of Trondheim Municipality of Vejle SEED Foundation Startl ife The Castellón City Council

The Ecological Sequestration Trust The Energy Saving Trust Foundation The Gold Standard Foundation The HUB Zürich Association The Province of Utrecht The Province of Zuid Holland The Valenciaport Foundation for Research, Promotion and Commercial Studies of the Valencia Region Timis Chamber of Commerce, Industry and Agriculture (CCIAT) Urban Centre of Bologna World Business Council for Sustainable Development Stichting Red Cross Red Crescent Climate Centre on Climate Change and Disaster Preparedness (RCCC) Stichting Cues WWF Switzerland

Business

Achmea Schadeverzekeringen N.V. Agolin S.A. AgriCircle AG AGROMET Air Liquide Airbus Defence & Space Antaco UK Ltd Aadot Ltd aQysta B.V. ARIA Technologies SA Arx-IT Consulting Asociación de Investigación de las Industrias Cerámicas Association pour la Promotion de la Recherche sur l'Economie du Climat Bayer AG **Betterpoints Limited** Beyond Ratings **BIK Bouw** Black Bear Carbon Brainbows Budapest Sewage Works Private Limited Building Global Innovators - IUL MIT

Portugal Accelerator Carbon Trust Advisory Ltd Carbone 4 Carthago Consultancy B.V. Center odličnosti nizkoogljične tehnologije Chrysalis Leap Clarmondial SA Cleantech Bulgaria Cleantech Forest Climate Bonds Initiative The Climate Group Climate Media Factory UG Climate Neutral Investments Ltd Climpact METNEXT SA Cool Farm Alliance Covestro Deutschland AG Cowi A/S CybeleTech CRESS Carbon Reducing Energy Storage Systems Limited Danone Dedagroup Public Services Devtaar B.V. Dry Gro E.ON SE (European HQ) Eaternity AG Ebusplan GmbH E-Car Club Ecole des Ingenieurs De La Ville De Paris Ecomatters B.V. EcoSCADA Ecospeed AG Edinn Global S.I. ElectricFeel Mobility Systems GmbH Encraft FNGIF S.A. Esri Schweiz AG Exceedance FERROVIAL Future Water Green City Solutions greenApes Private Limited Company GreenCvcle greenTEG AG Itecon Ingenieria Y Construccion S.I. Klm Knight Frank LLP LCA Works Limited Meteorological Environmental Earth Observation MIDEME S.L.U. Modena Energy and Sustainable Development Agency

12

Climate-KIC partners by category



- Cities, Regions, NGOs = 52 (22%)
- Business = 119 (50%) (79% of which are SME)
 - Higher Education & Research = 68 (28%)

Climate-KIC partners by geography



- Benelux = 30 (12%)
- Central Eastern Europe = 22 (9%)
- DACH = 48 (20%)
- Mediterranean = 74 (31%)
- Nordics = 22 (9%)
- UK & Ireland = 43 (19%)

Naked Energy National Energy Foundation Ne Nomisma Energia NEGOS Negotiation Consulting Plc. Novihum NTU International NUMTECH Nunhems Netherlands B.V. Oasis Palm Tree Ltd OfficeVitae **ONF** International Organica Technologies Private Company Limited by Shares Origen Power Ltd PANNON Pro Innovation Services Ltd. Paragon Europe Porta Capena Proambiente S.C.R.L. Qarnot Computing Quantis Reliable Environmental Solutions Rezatec Limited Rockwool International A/S SCOR Select Innovation Limited Sky Energy BV South Pole Carbon Asset Management Ltd. Stichting Deltares Stichting Historie der Techniek Stichting Wetsus Centre of Excellence for Sustainable Water Technology Stowarzyszenie Centrum Rozwiazan Systemowych Suez Groupe SAS Sustainable Nation Ireland Synoptic Technologies Limited TEP Energy GmbH Teralytics Tourisme, Transports, Territoires Environnement Conseil

Trivector Traffic AB Unternehmer TUM GmbH UnternehmerTUM Projekt GmbH Veolia Environnement virtualcitySystems GmbH Wageningen Research Warsaw Institute for Economic Studies

Higher Education & Research

Aalto University Aarhus University Aberystwyth University AgroParisTech Alma Mater Studiorum – Università di Bologna Asociación de investigación de la industria del juguete, conexas y afines ASTER - Regional Technology Development Agency Birmingham City University Brandenburg University of Technology Cottbus-Senftenberg Budapest University of Technology and Economics Carbon Delta AG Chalmers Tekniska Hogskola Aktiebolag Climate Research Foundation Climate-KIC Alumni Association **CNR-IBIMET** Commissariat a l'Energie Atomique et aux **Energies Alternatives** Cornelissen Consulting Services Cyprus University of Technology Ecole Polytechnique Edinburgh Centre for Carbon Innovation Ediburgh University

Eidgenössische Technische Hochschule Zürich Flemish Institute for Technological Research (VITO N.V.) Fondazione Edmund Mach Forschungszentrum Jülich GmbH Hamburg University Helmoltz German Research Centre for Geosciences Helsinki University Imperial College of Science, Technology and Medicine Institute Of Geological Sciences, Polish Academy Of Sciences Instituto Valenciano de Investigationes Adrarias/Valencian Institute of Agricultural Research l'Institut national de la recherché agronomique Laborelec Lund University Mines ParisTech Netherlands Organisation for Applied Scientific Research Norwegian University of Science and Technology Potsdam Institute for Climate Impact Research Provadis School of International Management and Technology A.G. Riga Technical University **RWTH Aachen University** Technical University of Denmark Technische Universität Berlin Technische Universität München Technische Universiteit Delft The University of Birmingham The University of Kassel The University of Reading Trinity College Dublin Universidade NOVA de Lisboa, Faculty of Science and Technology Universitat Politècnica de València Université de Versailles Saint-Quentin-en-Yvelines Universite Pierre et Marie Curie – Paris 6 Universiteit Utrecht University of Copenhagen University of Debrecen, Centre for Agricultural and Applied Economic Sciences University of Oxford University of Valencia University Paris-Saclay Wageningen University Wrocław University of Environmental and Life Sciences Wrocławskie Centrum Badan Wuppertal Institute of Climate, Environment and Energy Zurich University of Applied Sciences

> Find out how to become a partner www.climatekic.org/about/ our-community/

Turning talented people into climate leaders

Education, and learning to learn, is critical to building the emerging and future capacities needed for a changing world, and a changing climate. Through our education activities and programmes, we are building a movement of change agents.

Our education, training and leadership programmes address the skills gaps holding back climate innovation, and contribute to the creation of a critical mass of change agents and climate leaders. We develop programmes with, and for, graduate students, urban decision makers, business leaders and other stakeholders.

These programmes create professional mobility in and among climate-related sectors, and a fluid workforce is an endless source of networking and connections. This community has become a powerful movement for change, taking knowledge, skills, best practice and behavioural change with them in their careers.

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Find out more about our graduate education and professional development schemes at learning.climate-kic.org

The Journey Summer School "Climate-KIC was instrumental in helping me find my calling. It gave me the courage to focus all my energy into what I truly believed. Being a Master Label student and Journey summer school participant helped me develop the personal and professional skills necessary to work for a clean-tech start-up in markets in Denmark, Kenya and India."

Lise Bomholt Højgaard, Project Manager, MASH Biotech



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Pioneers – Professional development for low-carbon innovation "The Climate-KIC Pioneers professional mobility programme offered me the chance to work with the Loughborough University, co-lecturing on energy and globalisation, and co-creating a prospective Impact Journey. The cherry on top was the acceptance to Loughborough's competitive PhD programme. Pioneers bridges the wide gap between practice and theory, from a trans-disciplinary approach."

Steyn Hoogakker, Pioneers alumnus, action researcher, visual storyteller and founder of the Impact Journey

Innovation priorities

We prioritise our innovation activities around four areas: Urban Transitions, Sustainable Production Systems, Sustainable Land Use, Decision Metrics and Finance. These correspond to industry sectors where focused climate innovation can have the most impact. We identify challenges across sectors and develop innovation with the most potential for environmental gain and continued prosperity.



Urban Transitions

Around 70 per cent of GHG globally are produced in cities, but they are also at the heart of the solution. We actively accelerate the transformation of buildings, infrastructure, and transport systems to be low carbon and resilient.



Sustainable Production Systems

The industrial sector is responsible for a third of total global GHG emissions. We lay the foundations for carbon-neutral manufacturing systems and material flows in urban areas and industrial regions, through circular economy principles and creating added value among stakeholders.



Sustainable Land Use

Agriculture, forestry and other land uses account for 24 per cent of greenhouse gases emissions, second only after energy production. We pave the way for efficient, low carbon agriculture, advancing the bio-economy, and building resilience into food and forest value chains.



Decision Metrics and Finance

There is no lack of finance but a lack of bankable green assets. We develop the metrics and financial mechanisms that matter to redirect and mobilise the finance needed to quickly scale up climate action.



Find out more about our areas of work www.climate-kic.org/themes

We are Climate-KIC

End-to-end innovation

We support organisations of all sizes through every stage of innovation, from initial concepts, through testing and demonstration to scale-up. We do this through forming strategic partnerships, introducing and facilitating consortia, neutral brokerage and innovation grant management.

Our innovation framework (see right) shows our process for finding, supporting, developing, launching and scaling-up climate innovation. It works as well for start-ups, SMEs and individuals, as it does for multi-national corporations or large city-regions.

An early prototype of Volocopten. The Climate-KIC supported start-up has now produced a fully electric model achieving airspeed of 100km per hour. In August 2017, Volocopter secured \$30m (€25m) investment. 18 Here, we set out the various stages of innovation, and the goals, core activities and schemes associated with each.



IDEATION

Successful innovation starts with a good idea

In ideation stage activity, we identify the ideas with the most potential, scoping out the feasibility of early-stage innovation propositions. We create the conditions to fuel inspiration, with schemes such as open ideas competitions or city hackathons. We offer support in putting together a network of partners, gaining access to pre-existing networks, and exploring parameters in a safe, de-risked environment.

Relevant activities:

- Climathon
- Climate Launchpad
- Pathfinder (for Partners)
- Greenhouse (for students)



ACCELERATION AND DEMONSTRATION

If ideation is the inspiration, then perspiration – the hard work of refining and developing a climate product or service – is what comes next

Showing the viability and functionality of a business model is an important step in making innovation happen. This might involve costing analysis, production engineering or securing a first customer. By enabling a consortia of expert stakeholders, we ensure innovators deploy their full range of technical and business competencies.

Relevant activities:

- Start-up Accelerator
- Partner Accelerator
- Demonstrator (for partners)



SCALING

To have significant impact, climate innovation must be widely adopted.

Sometimes even proven innovations struggle to reach scale in the marketplace as a result of missing competencies, poor understanding of market, or regulatory barriers. We pool collective knowledge and expertise to address such specific gaps and overcome the barriers to scaling.

Relevant activities:

Scaler (for partners)



IMPACT

We capture the knowledge, insights and lessons from each of our innovation projects. This ensures we can continue to drive systemic innovation at scale.

EDUCATION AND PROFESSIONAL DEVELOPMENT

The learning captured at every stage of our innovation framework is formalised into education and capacity building programmes that help share the know-how skills, among both students and professionals, reinforcing the knowledge and values needed for behaviour change at scale. This is what we call learning for innovation and innovation for learning.

Relevant activities:

- The Journey
- Master Label
- Pioneers
- Certified Professionals

Innovation impact

The case studies of Blue Green Solutions, Winners, BE Circle and Climetrics (see pages 20–23) share the innovation journey we have guided many of our partners along.

Blue Green Solutions (BGS):

Nature-based solutions for urban adaptation and resilience

THE PROBLEM

The mass of concrete, asphalt, glass, steel and other impervious materials that forms our cityscape disrupts natural responses to weather and natural cycles, exacerbating temperature increases and creating urban heat islands. The water cycle is affected, as drainage and flooding become problematic and groundwater reserves aren't replenished. Pollution and greenhouse gas emissions grow, and energy demand increases.

THE SOLUTION

Blue Green solutions (BGS) is a unique methodology and toolkit that allows developers and planners to adopt 'nature-based solutions' as part of a systematic approach to these problems: for example, by integrating green space, trees and natural drainage into the urban environment. Blue Green Solutions encourages developers to adopt nature-based solutions by focusing on the co-benefits for a wider group of stakeholders.

THE IMPACT

Blue Green has delivered its first commercial successes, including a new campus at the University of Zagreb. The scheme uses a variety of species of trees in its design, each tailored to a specific use. New ways of collecting and storing energy, including solar collectors and photovoltaics, were installed on the campus to make use of ground source storage and screened subsurfaces for heating and cooling. As a result, the campus has made energy

reductions of 92 per cent on cooling and 68 per cent on heat, compared to conventional heating and cooling systems.

CLIMATE-KIC'S ROLE

The 'Blue Green Dream' was developed under Climate-KIC's incubation services between 2012 and 2015, giving the team from Imperial College London access to funding, masterclasses and business coaching. Access to our partner network was also crucial in developing 13 demonstration sites across Europe. Blue Green founder, academic-turned-entrepreneur Professor Maksimović credits Climate-KIC with helping turn his research into practical, real-world impact. Blue Green Dream has since become Blue Green Solutions, now a Climate-KIC Scaler project, and a spin-out consultancy firm, Blue Green Global.

92%

92 per cent energy reduction on cooling and 68 per cent on heat, compared to conventional heating and cooling systems.



40,000

Winners has enabled 40,000 farmers across Tanzania to access credit and insurance against

WINnERS:

Resilient supply chains and market access for rural smallholders

THE PROBLEM

Food production is increasingly at risk from climate impacts. For food businesses, working with a greater diversity of producers can help lessen this risk. At the same time, smallholder farmers, without credit and insurance, suffer when harvests fail. Combining production inputs to boost yields, with credit and insurance can help provide security for smallholders and offer food buyers a way to engage with potential new suppliers.

THE SOLUTION

Winners is a form of crop loss micro insurance that makes it commercially viable for food buyers or banks involved in food supply chains to engage with rural smallholders who lack access to the market. The micro insurance contract design insulates small holders from potential losses arising from extreme weather or crop failure.

THE IMPACT

WINnERS is helping tens of thousands of smallholder farmers in East Africa to adapt to climate change. The scheme has already rolled out in Tanzania, and through 2017 and beyond WINnERS will become a multi-country initiative covering countries including Zambia, Uganda, Côte d'Ivoire and Rwanda.

Winners is enabling The World Food Programme to buy at least \$120 million of agricultural products each year from smallholder farmers. WINnERS insurance has reached 40,000 farmers in Tanzania.

CLIMATE-KIC'S ROLE

Climate-KIC contributed crucial funding and incubation support - including structured targets, prototype finalisation, pilot design and oversight, through to implementation, impact studies and sourcing sites. We convened climate scientists, insurance industry experts and global food buyers, helping apply and commercialise research from Imperial College London, to both build the product and create guidance for national regulatory frameworks in insurance and agriculture.



14%

We estimate that if all synergies that have been made possible through the platform are adopted, greenhouse gas emissions could be reduced by up to 14 per cent.

BE CIRCLE: Digital tools for the circular economy

THE PROBLEM

Eco-industrial parks (EIPs), which use the outputs of one industrial process as the inputs for another, have existed since the 1970s but they have not always been as successful or efficient as they could be. Numerous hurdles need to be overcome, including stakeholder engagement and buy-in, data collection and an understanding of local context.

THE SOLUTION

At the INSPIRA industrial park in France, a consortium of stakeholders launched a project, to identify synergies among the different industries on-site and identify success factors for becoming an EIP. The project saw the need for a digital platform, both to optimise relationships between facilities already on the site and new industries moving there in the future.

A wider market assessment was performed in France and Germany, to see how the digital platform could be used in other European industrial parks. The results showed that an improved digital interface and business model are crucial for rolling out to other industrial parks..

THE IMPACT

The web-based tool is now being tested by business and production managers across Europe to plan, find input synergies and evaluate locations and costs. This digital service was crucial in INSPIRA's journey to becoming an EIP: it provided early, tangible results and kept stakeholders onside.

Be Circle shows that if all synergies made possible through the platform are adopted, greenhouse gas emissions could be reduced by up to 14 per cent.

CLIMATE-KIC'S ROLE

To give momentum to the initial work of the Inspira industrial park stakeholders, Climate-KIC brought together key players ENGIE, France, the Centre de Recherche en Gestion of the Ecole Polytechnique, France and the Provadis School of International Management and Technology, Germany. Climate-KIC supported the market research market research and interviews with industrial leaders across France and Germany helped prove the concept of this digital platform. Climate-KIC has also funded demonstration of the platform to take it to market.





Climetrics will rate over 5,000 equity funds worldwide representing €2.5 trillion in assets.

Climetrics:

Enabling investors to act on climate risk in investment funds

THE PROBLEM

The equity fund market – worth more than €3 trillion in Europe – could be a significant lever for mitigating climate change. But, despite fast-growing demand for climateconscious investing, there has been no rating system to allow investors to compare the climate risk in investments, such as entrenched investment in fossil fuels or lack of climate change strategy.

THE SOLUTION

Climetrics, launched in June 2017, is a unique fund-rating scheme providing the world's first independent climate impact analysis of investment funds using a holistic, rules-based and transparent approach.

It uses the most up-to-date information to allow investors to integrate climate risk factors into fund selection and monitoring in a transparent, effective and cost-efficient way.

By using Climetrics' data, asset managers can use climate risk information to create new low-carbon funds and shift money towards lower-carbon assets.

THE IMPACT

Climetrics will rate more than 5,000 equity funds worldwide representing over €2.5 trillion in assets – a significant lever of change in redirecting investment towards low – carbon assets.

CLIMATE-KIC'S ROLE

Climate-KIC recognised Climetrics' potential, the financial expertise, strength and climate mission of its consortium comprising core partners CDP and Institutional Shareholder Services. Our workshops and masterclasses helped develop the business model, while our support and network helped Climetrics to reach new audiences in the policy arena.



Find out more about our innovation and entrepreneurship programmes – www.climate-kic.org/ programmes

- Climathon
- Climate Launchpad
- Pathfinder
- Accelerator
- Demonstrator
- Scaler
- Transitions hub





Where we work

We are committed to making Europe the leader in the global transition to a zero-carbon economy, so we work throughout the continent with offices at local, national and regional levels. Climate-KIC is active in 25 countries, with 27 offices across Europe. These centres create local ecosystems, to find and develop the best climate innovation.

By necessity, many of our projects and programmes span national borders. For these we work in what we call Geographies – groups of countries that are connected by location, language, economic status or level of political engagement. Climate-KIC's Geographies are:

- Nordic (Denmark, Sweden, Norway and Finland)
- UK & Ireland
- Benelux (the Netherlands, Luxembourg, Belgium)
- DACH (Germany, Austria and Switzerland)
- Mediterranean (France, Italy, Spain)
- Central Eastern Europe (Hungary and Poland)

In countries that are not covered by our Geographies, Regional Innovation Schemes (RIS) have been established by our main funder, the European Institute of Innovation & Technology (EIT). For more information about our close collaboration with the RISs, please visit www.climate-kic.org/ris.

Beyond Europe

Climate-KIC Australia, launched in 2016, replicates the European network model and operates independently. This demonstrates that Europe continues to be a model for climate innovation.





Join the movement for change

We are an expanding network, with increasing influence and a strong track record of bringing successful climate innovation to market. While we currently receive our core funding from the European Institute for Innovation and Technology, we are keen to expand the impact of our work and increase momentum behind our movement for change. We aim to do this by working with the businesses, academic institutions and the public and non-profit sector and identify funding opportunities which will help us deliver on our mission. Find out how you can join the movement for change.

BECOME A PARTNER

Join our pan-European knowledge and innovation community of leaders from business, academia, the public and non-profit sectors. Find out how you can collaborate with us in designing and developing innovation, or delivering local innovation schemes supported by EIT funding. www.climate-kic.org/about/ our-community

JOIN OUR PROGRAMMES

Whether you're a student or professional looking to develop your skills; a climate entrepreneur, a business or city leader, or you want to apply your research as climate more about sponsorship opportunities. innovation, we have a programme to support you on your journey.

Alternatively, if your organisation would like to support delivery of our programmes, contact us to find out www.climate-kic.org/programmes

GROW OUR IMPACT TOGETHER

We are keen to increase our impact and identify ways to work together. We offer research and innovation consortia expertise and support (such as H2020 calls), work with trusts and foundations, and help organisations, including city

municipalities and corporates, to provide a range of services that address real world challenges and innovation needs. www.climate-kic.org/about/ our-community

HOW WE ARE FUNDED

Climate-KIC currently receives its core funding from the European Institute of Innovation & Technology (EIT), but we are increasingly diversifying our income streams.









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