



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 EIT 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 EIT 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, EIT 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

EIT Climate-KIC, Europe's largest public-private partnership, focused on climate innovation, is working to make this change happen. Our partnership comprises over 300 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

EIT 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. EIT 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 EIT Climate-KIC?

EIT 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 (EIT), 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 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, EIT 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](#)

EIT 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

313

partners

>17,000

participants across our education activities from 2010 to 2018

45

Climate Launchpad is active in 45 countries and attracted over 1,000 climate business ideas in 2017

4,500

Over 4,500 citizens from 104 cities worldwide took part in Climathon 2017

13

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

2,515

Alumni driving change since 2010

Transforming ideas into climate-positive businesses

>1,000

climate-positive companies supported

367

Together with our start-ups and partners, we have successfully launched 367 innovative products and services to market

>€550m

external funding attracted by our start-ups since 2010

>2,000

Over 2,000 full-time jobs were created in 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 EIT Climate-KIC pursues transformative and systemic interventions. We support innovation and programmes that aim to overcome this 'lock-in' effect, that tackle



“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**





"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**



problems at their 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 EIT 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. EIT 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 EIT 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

EIT 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.

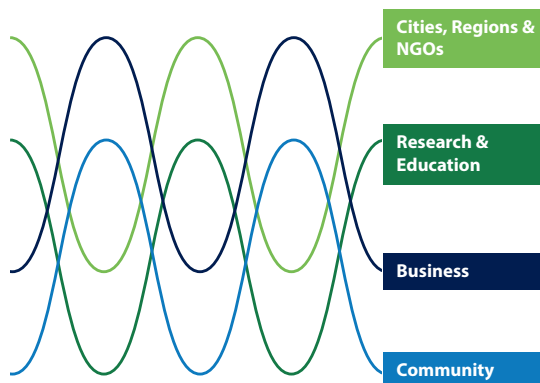
Reducing risk

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. EIT 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 community, business, research & education, as well as cities, regions & NGOs is known as the "knowledge helix". This is the basis of the European knowledge economy and the knowledge flows of EIT 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 know-how and our ecosystem at a European scale and taking action against climate change."

Pierre Noug  , Pr  sident,
ECOSYS Group



The power of partnership

EIT 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. EIT 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.

313

Climate-KIC has 313 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





Our partners

(as of May 2018)

Cities, Regions and NGOs

2° Investing Initiative
 Agenzia Regionale per la
 Prevenzione l'Ambiente e
 l'Energia dell' Emilia-Romagna
 Asociación Valenciana de
 Empresas del Sector de la
 Energía
 Birmingham City Council
 Birmingham Science Park Aston
 Ltd
 C40 Cities Climate Leadership UK
 Carbon Disclosure Project (CDP)
 CDP Worldwide
 Centre for Excellence for
 Low Carbon and Fuel Cell
 Technologies
 City of Budapest
 City of Castellon
 City of Copenhagen
 City of Gothenburg
 City of Helsinki
 City of Malmö
 Cleantech Region
 Climate Policy Initiative, Inc.
 Climate-KIC Alumni Association
 Comune di Bologna
 Cyprus Energy Agency
 EKO-BIEGLY
 Fondazione per l'Innovazione
 Urbana
 Forum Virium Helsinki
 Foundation Institute for
 Sustainable Development
 Free Enterprise Association
 Fundacion Centro De Innovación
 En Infraestructuras
 Inteligentes
 Global Fund for Cities
 Development
 Greater London Authority
 HarvestaGG Green Goods B.V.
 Helsinki Uusimaa Regional
 Council
 Hub Innovazione Trentino (HIT)
 IFKA Public Benefit Nonprofit
 Ltd. for the Development of the
 Industry
 Instituto Tecnológico de la
 Energía
 Instituto Valenciano de
 Competitividad Empresarial
 Instituto Valenciano de la
 Edificación
 Las Naves
 London Legacy Development
 Corporation
 London Waste and Recycling
 Board
 Lower-Silesia Regional
 Development Agency

Municipality of Aarhus
 Municipality of Trondheim
 Municipality of Vejle
 Oeconomica Timisiensis
 Foundation
 Red Cross Red Crescent Climate
 Centre
 Resurgence Urban Resilience
 Trust
 SEED Foundation
 StartLife
 Stichting Historie der Techniek
 Stichting Technotrend
 Stiftung Global Infrastructure
 Basel
 The Ecological Sequestration
 Trust
 The Energy Saving Trust
 Foundation
 The Gold Standard Foundation
 The HUB Zürich Association
 The Province of South-Holland
 The Province of Utrecht
 The Valenciaport Foundation
 for Research, Promotion and
 Commercial Studies of the
 Valencia Region
 Timis Chamber of Commerce,
 Industry and Agriculture
 (CCIAT)
 UK Green Building Council
 Limited
 World Business Council for
 Sustainable Development
 WWF Austria
 WWF Switzerland

Business

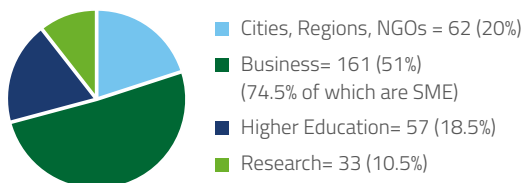
2degrees Limited
 A2A Calore e Servizi
 A2ASmartcity
 Acclimatise
 Achmea Holding B.V.
 Advanced Climate Systems B.V.
 Agolin S.A.
 AgriCircle AG
 Agro Transfert
 AGROMET
 AgroPithiviers
 Agvesto
 Air Liquide

ALGOE
 Amplify Nature
 Antaco UK Ltd
 Aqdot Ltd
 aQysta B.V.
 ARIA Technologies SA
 Arx-IT Consulting
 Asociación de Investigación de
 las Industrias Cerámicas
 Association pour le
 développement et la
 Promotion de la Recherche et
 de l'Innovation à AgroParistech
 Bayer AG
 Baysan Quality Pro S.L.
 Betterpoints Limited
 Beyond Ratings
 BIK Bouw
 Black Bear Carbon
 Brainbows
 Budapest Sewage Works Private
 Limited
 Building Global Innovators – IUL
 MIT Portugal Accelerator (BGI)
 Carbon Trust Advisory Ltd
 Carbone 4
 CCPB Srl
 Center odličnosti nizkoogljične
 tehnologije (CO NOT)
 Chamber of Commerce and
 Industry of Serbia
 ChillServices
 Chrysalis Leap
 Clarmondial
 Cleantech Bulgaria Ltd.
 Cleantech Forest
 Climate Bonds Initiative
 Climate Change Organisation
 (The Climate Group)
 Climate Media Factory
 Compagnie Nationale du Rhône
 Compañía Española de Servicios
 Públicos Auxiliares S.A.
 Computer Solutions S.P.A.
 Conigital Group
 Cool Farm Alliance
 Cornelissen Consulting Services
 Covestro Deutschland AG
 Cowi A/S
 CRESS Carbon Reducing Energy
 Storage Systems Limited
 CybeleTech
 Danone

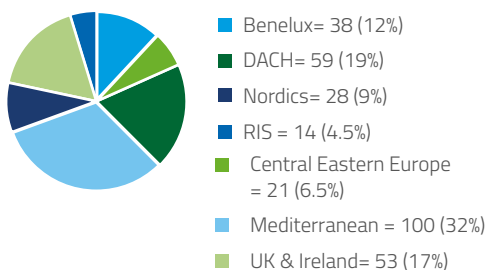
Dedagroup Public Services
 Dry Gro
 E.ON SE
 Eaternity AG
 Ebusplan GmbH
 E-Car Club
 Eco Environnement Ingenieie
 Ecomatters B.V.
 EcoSCADA
 Ecospeed AG
 EDINN GLOBAL S.L.
 ElectricFeel AG
 Encraft
 Energy and Sustainable
 Development Agency of
 Modena
 ENGIE S.A.
 Exceedance
 Ferrovia
 Furbish AB
 Future Water
 FutureWater S.L.
 GECOSistema
 Genillard & Co. GmbH
 Green City Solutions
 greenApes Private Limited
 Company
 GreenCycle
 greenTEG AG
 HaskoningDHV Nederland B V
 I CARE & CONSULT
 I4CE – Institute for Climate
 Economics
 InfluenceMap
 ISS Ethix
 Itecon Ingenieria Y Construcción
 S.I.
 Johanneberg Science Park AB
 Kapitech
 KLM
 Knight Frank LLP
 LCA Works Limited
 Materne SAS
 Meteorological Environmental
 Earth Observation
 MIDEME S.L.U.
 Naked Energy
 National Energy Conservation
 Agency
 National Energy Foundation
 NEGOS Negotiation Consulting
 Plc.
 NIER Ingegneria

Climate-KIC Community – May 2018

Climate-KIC Community Members by Category



Climate-KIC Community Members by Geography



Nomisma Energia
Novihum
NTU International
NUMTECH
Nunhems
Oasis Hub Ltd
Oasis Palm Tree Ltd
Office D'ingenierie Sanitaire
OfficeVitaie
ONF International
Open Foret
Organica Technologies Private
Company Limited by Shares
Origen Power Ltd
Paced Limited
PANNON Pro Innovation
Services Ltd.
Paragon Europe
Proambiente S.C.R.L.
Project X
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.
South Pole Holding
Stichting CropEye
Stichting Wetsus Centre of
Excellence for Sustainable
Water Technology
Stowarzyszenie Centrum
Rozwiazan Systemowych
Suez Groupe SAS
Sustainable Nation Ireland
Sustainable Towns
Sustainable Venture
Development Partners Ltd
SustAnalyze
Synoptic Technologies Limited
TEP Energy GmbH
Teralytics

The Co-Firm GmbH
Tourisme, Transports, Territoires
Environnement Conseil
Trentino Sviluppo
Trivector Traffic AB
UnternehmerTUM GmbH
Veolia Eau
Veolia Environnement
Veolia Innove
virtualcitySystems GmbH
Wageningen Research
Warsaw Institute for Economic
Studies

Higher Education & Research

Aalto University
Aarhus University
Aberystwyth University
Agenzia Nazionale per le
Nuove Tecnologie, l'Energia
e lo Sviluppo Economico
Sostenibile
Agoranov
AgroParisTech
AIT Austrian Institute of
Technology GmbH
Alma Mater Studiorum -
Università di Bologna
Asociación de investigación de la
industria del juguete, conexas
y afines
ASTER - Regional Technology
Development Agency
Brandenburg University
of Technology Cottbus-
Senftenberg
Budapest University of
Technology and Economics
Buildings Performance Institute
Europe A.S.B.L.

Carbon Delta AG
Cetaqua, Water Research Centre
Chalmers Tekniska Hogskola
Aktiebolag
CIRAD – Centre International de
Recherche Agronomique pour
le Développement
Climate Research Foundation
CNR-IBIMET
Commissariat a l'Energie
Atomique et aux Energies
Alternatives
Cyprus University of Technology
(CUT)
Ecole des Ingenieurs De La Ville
De Paris
Ecole Polytechnique
Edinburgh Centre for Carbon
Innovation (ECCI), Edinburgh
University
Eidgenössische Technische
Hochschule Zürich/Swiss
Federal Institute of Technology
Euro-Mediterranean Centre on
Climate Change Foundation
Fondazione Alma Mater
Fondazione Bologna University
Business School
Fondazione Bruno Kessler
Fondazione Edmund Mach
Forschungszentrum Jülich GmbH
Hamburg University
Helmoltz German Research
Centre for Geosciences
Helsinki University
Imperial College of Science,
Technology and Medicine
Institut de Recherche pour le
Développement
Institute of Geological Sciences,
Polish Academy of Sciences
International Institute
for Environment and
Development
l'Institut national de la recherche
agronomique
Laborelec
Leibniz-Zentrum für
Agrarlandschaftsforschung
(ZALF)
Lund University
Mines ParisTech
Montanuniversitaet Leoben
National Institute of Chemistry
Netherlands Organisation for
Applied Scientific Research
(TNO)
Norwegian University of Science
and Technology
Poliedra – Service and
consultancy centre at
Politecnico di Milano on
environmental and territorial
planning
Politecnico di Milano

Potsdam Institute for Climate
Impact Research
Provadis School of International
Management and Technology
A.G.
Riga Technical University
RISE Research Institutes of
Sweden AB
RWTH Aachen University
Sorbonne Université
Stavanger Municipality
Stichting Cues
Stichting Deltares
Technical University of Denmark
Technical University of Madrid
Technische Universität Berlin
Technische Universität München
Technische Universiteit Delft
Technostarters Delft Vastgoed
B.V.
The University of Birmingham
The University of Kassel
The University of Reading
Trinity College Dublin
Universidade NOVA de Lisboa,
Faculty of Science and
Technology
Università Politecnica delle
Marche
Universitat Politècnica de
València
Université de Versailles Saint-
Quentin-en-Yvelines
Universiteit Utrecht
University of Copenhagen
University of Debrecen, Centre
for Agricultural and Applied
Economic Sciences
University of Oxford
University of Trento
University of Valencia
University Paris-Saclay
Uniwersytet Warszawski
Valencian Institute of
Agricultural Research
VITO N.V.
Wageningen University
Wroclaw University of
Environmental and Life
Sciences
Wuppertal Institute of Climate,
Environment and Energy
YES!Delft B.V.
Zurich University of Applied
Sciences



Find out how to become
a partner
[www.climate-kic.org/
our-community/](http://www.climate-kic.org/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.



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





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

Making an impact

EIT Climate-KIC works on transformative, systemic innovation that involves many connected projects developing in parallel to trigger a shift in the system. We aim to take good ideas, products or services from niche to mainstream to reach a tipping point and create maximum impact.



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.

Goal 1

Promote retrofit and decentralised energy

Goal 2

Create green, resilient cities

Goal 3

Accelerate clean urban mobility



Sustainable Land Use

Agriculture, forestry and other land uses account for 24 per cent of greenhouse gas 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.

Goal 4

Make agriculture climate-smart

Goal 5

Transform food systems

Goal 6

Nurture forests in integrated landscapes

We prioritise our innovation activities around four areas: Urban Transitions, Sustainable Land Use, Sustainable Production Systems, Decision Metrics and Finance. These correspond to industry sectors where focused climate innovation can have the most impact. We are working towards goals to produce the outcomes and impacts needed by 2030, helping us keep on track to avoid dangerous climate change.



Sustainable Production Systems

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

Goal 7

Recast materials production

Goal 8

Reduce industry emissions

Goal 9

Reboot regional economies



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.

Goal 10

Mainstream climate in financial markets

Goal 11

Democratise climate risk information

Goal 12

Foster bankable green assets in cities




Find out more about our areas of work
www.climate-kic.org/making-an-impact/

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.

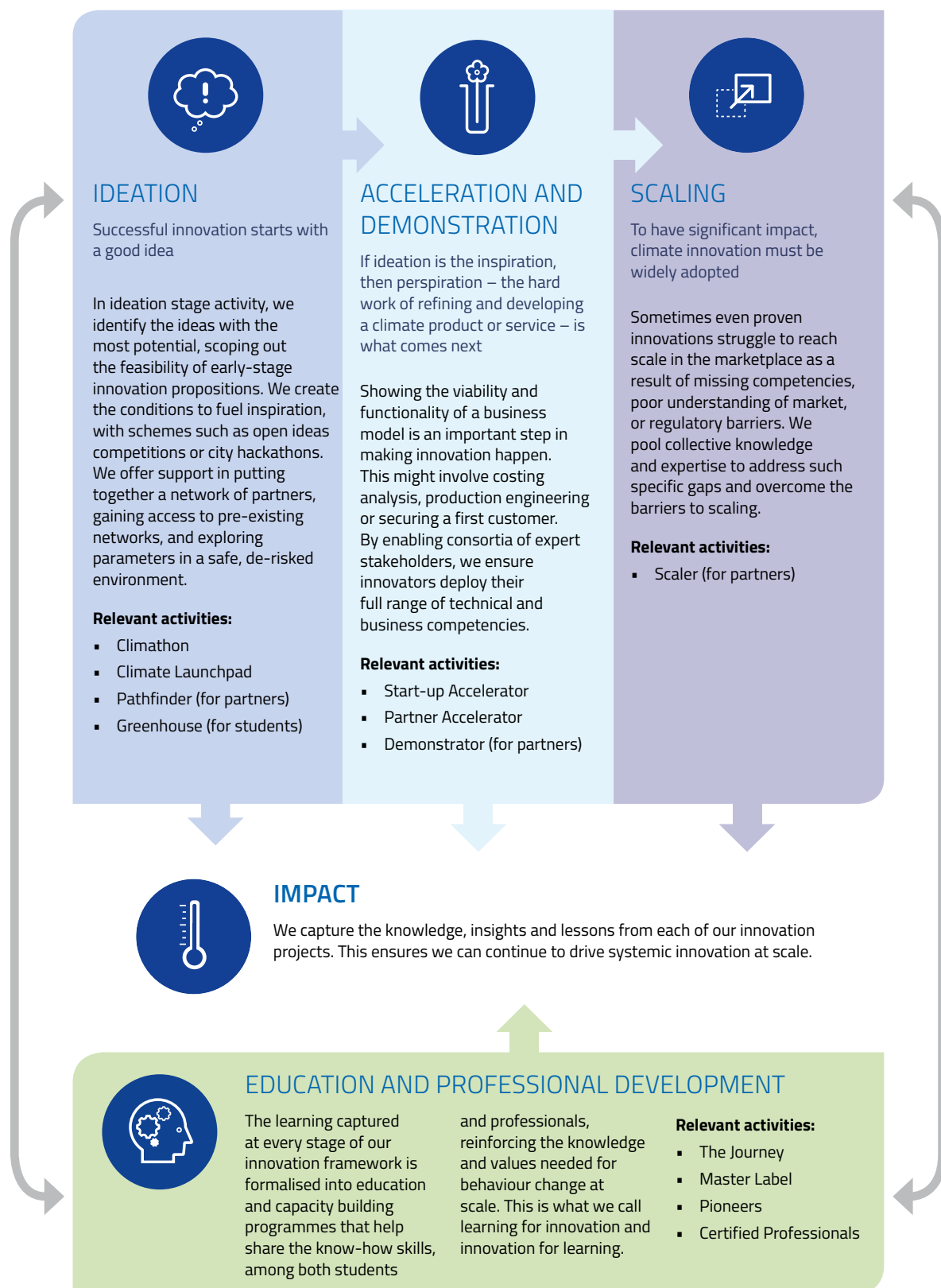
Our innovation framework (see right) shows our process for finding, supporting, developing, launching and scaling-up climate innovation. It

works as well for start-ups, SMEs and individuals, as it does for multi-national corporations or large city-regions.

A person wearing a black helmet and flight suit is sitting on a large, multi-rotor drone. The drone has a silver frame, multiple propellers, and a large, dark, spherical payload hanging from the bottom. The scene is set in a grassy field with trees in the background.

An early prototype of Volocopter. The EIT 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.

Here, we set out the various stages of innovation, and the goals, core activities and schemes associated with each.



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.

EIT CLIMATE-KIC'S ROLE

The 'Blue Green Dream' was developed under EIT Climate-KIC's incubation services between 2012 and 2015, giving the team from Imperial College London access to funding, master-classes 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 EIT Climate-KIC with helping turn his research into practical, real-world impact. Blue Green Dream has since become Blue Green Solutions, now a EIT 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 crop loss.

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.

EIT CLIMATE-KIC'S ROLE

EIT 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 inputs for another, have existed since the 1970s. However, 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 the local context.

THE SOLUTION

A consortium of stakeholders including ENGIE, ARX IT, CNR, Ecole Polytechnique, Provadis School of International Management and Technology and the Syndicat Mixte INSPIRA gathered in 2017 to launch the BE CIRCLE project, a web platform to support industrial ecosystems' transition towards circular economy.

The service will help industrial park managers and developers, network operators and industrial actors generate a local industrial fabric and sustainable supply flows, as well as identify partners and solutions to build synergies that match their budgetary and environmental strategy.

THE IMPACT

The web-based tool is currently 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 the French industrial park 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.

EIT CLIMATE-KIC'S ROLE

EIT Climate-KIC supported the market research and interviews with industrial leaders across France and Germany, to help prove the concept of the digital platform. EIT Climate-KIC has also funded demonstration of the platform to take it to market.



5,000

Climetrics rates 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 climate-conscious 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 rates 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.


EIT CLIMATE-KIC'S ROLE

EIT 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

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



GrowUp, supported by EIT Climate-KIC, is London's first commercial scale aquaponic farm, capable of producing 20,000kg of salad and 4,000kg of fish each year. GrowUp farms are designed for year-round sustainable high-density and high-yield commercial food production in low-carbon cities.

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. EIT Climate-KIC is active in 28 countries, 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, common environmental challenges, economic status or level of political engagement. EIT 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 contact us via email at eitris@climate-kic.org

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.



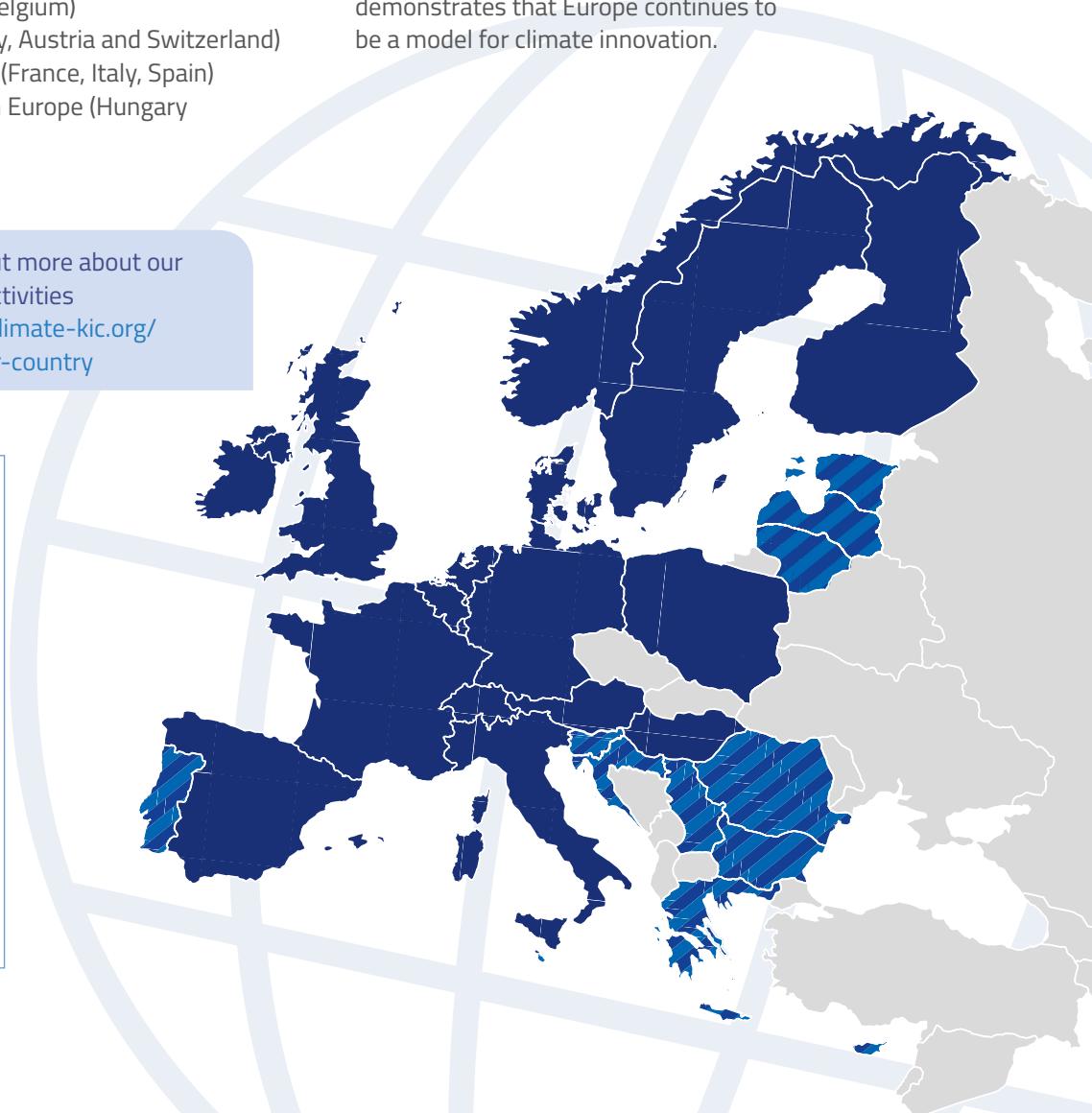
Find out more about our local activities
www.climate-kic.org/in-your-country



EIT Climate-KIC countries



EIT Regional Innovation Scheme countries (EIT RIS)





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.

1

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/partner-opportunities

2

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

innovation, we have a programme to support you on your journey.

www.climate-kic.org

3

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, work with trusts and foundations, and help city municipalities and corporates, with a

range of services that address real world innovation challenges. Alternatively, if your organisation would like to support our programmes, contact us to find out more about sponsorship opportunities.

www.climate-kic.org/grow-our-impact

HOW WE ARE FUNDED

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

