



## Climate Action: Transformation, in time

Call to Action Announcement: Call for Proposals for 2019 and 2020

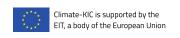
EIT Climate-KIC launched a new Strategy – *Transformation, In Time* - in December 2018. It says that:

'continuing to work through gradual, incremental changes will not be enough [to successfully tackle climate change]. What is needed now is a fundamental transformation of economic, social and financial systems that will trigger exponential change in decarbonisation rates and strengthen climate resilience – what the Intergovernmental Panel on Climate Change call "rapid, far-reaching and unprecedented changes in all aspects of society".

EIT Climate-KIC is a European community with the will and ambition to support Europe's leaders in tackling climate change, to enable Europe to fulfil its commitments in respect of the Paris Agreement, and to inspire global efforts by creating prosperity and wellbeing in the future economy. By focusing our efforts on systems innovation, we can achieve the critical structural and exponential changes that must occur both rapidly and on multiple fronts simultaneously to address climate change'.

By systems innovation we mean integrated and co-ordinated interventions in economic, social and financial systems, and along whole value chains through a portfolio of deliberate and connected innovation experiments (*a portfolio approach*). In a context of deep uncertainty, such an approach is designed to generate viable pathways to change through identification of options for a better future and the scaling of transformative solutions. Accordingly, we are looking to support ambitious, and potentially transformative, innovation experiments that can add something unique to our existing portfolio. In doing so, it will help our community to learn what works in catalysing systems change for climate action.

Please see section 2.5 for important dates and information concerning this upcoming 'call for proposals' process, which is an intake for **proposals commencing in 2019 and in 2020**.





#### 1.0 What's New?

This 'call for proposals' is the first under EIT Climate-KIC's new strategy. As such, it embodies a change from previous EIT Climate-KIC calls. Some key features are listed below.

## 1.1 Systems Innovation, Portfolio Approach

EIT Climate–KIC invites proposals that will make a unique contribution to our portfolio. As described, we are using a portfolio of experiments as a way of catalysing transformative change. We have developed portfolio design principles and the existing portfolio is available for interrogation. Applicants will need to use these tools (see Section 1.2 below) to describe how their proposal is complementary. In Section 2, we have identified high-priority areas on which applicants should focus. These either represent gaps in our existing innovation portfolio (to achieve our impact goals) or ways in which we can connect and build on existing experiments. While we will not rule out accepting applications outside of these areas, such applications would need to describe a compelling impact pathway to achieving EIT Climate–KIC's impact goals.

We invite proposals in the following areas:

- Earlier-stage innovation projects: we will support in the region of 20 projects of up to 6 months, and a maximum €100k of EIT Climate-KIC contribution. These projects should start and end in 2019. They would typically be rapid innovation projects: testing an idea or engaging in prototyping. Successful proposals will explain why they offer a unique contribution to EIT Climate-KIC's portfolio.
- Later-stage innovation projects: we will support in the region of 10 projects of up to 3 years, and a maximum of €1m of EIT Climate-KIC contribution per year. These projects may start in 2019 or 2020. They will be multi-partner, high-ambition¹ innovation projects with a clear strategic argument for how they will create impact and why they offer a unique contribution to EIT Climate-KIC's portfolio. We also expect each innovation project to embed learning dimensions, whether in terms of capability building or creating the appropriate mindsets for systems change. If consortia already have well-elaborated, deep demonstration programmes, such as those outlined in section 3, then applicants should apply in this area.

<sup>&</sup>lt;sup>1</sup> One way to characterise high-ambition would be consistency with a 1.5 °C target, following a P1 scenario as described in the IPCC Special Report on 1.5 °C.



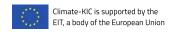
- Learning hub: going forward, we will expect each innovation project to embed learning dimensions, whether in terms of capability building or creating the appropriate mindsets for systems change. In addition, we will support up to 6 initiatives that explicitly use learning and education to support social and behavioural change. These can be for initiatives of up to 18 months, with a maximum EIT Climate-KIC contribution of €250k. In all cases, applicants should co-create proposals with the EIT Climate-KIC team and explore whether our existing learning formats and platforms can help to accelerate delivery and increase scale.
- **The Journey 2020**: we are accepting expressions of interest for Partner locations for the Journey 2020 summer school, one of our signature Education programmes.
- For the Regional Innovation Scheme (RIS), we will specifically support earlier-stage and laterstage innovation projects led by organisations in RIS-eligible countries. These projects may start in 2019 or 2020.
- For *Orchestrated Ecosystems*, we will support between 4-5 projects of up to 3 years, and a maximum EIT Climate-KIC contribution of €300k per year. Such projects are designed to create the economic, social, and financial conditions for transformative change in places across Europe and beyond and accelerate peer-to-peer learning between places on how to create platforms for systems innovation. These projects may start in 2019 or 2020 and should be oriented to achieving our impact goals.

We strongly encourage applicants to attend relevant partner days and speak to members of the EIT Climate-KIC team well in advance of the submission deadline. This will help to ensure proposals are aligned with our Strategy and help to avoid duplication or wasted effort.

The EIT Climate-KIC team will also be developing a series of additional demand-led 'deep demonstration' initiatives as part of our portfolio, as identified in our Strategy. While these do not form part of this 'call for proposals', we will actively be seeking expressions of interest, and there will be opportunities for EIT Climate-KIC Partners and other organisations to engage through the course of the year. Further details are provided in section 3.

#### 1.2 New Tools

We are releasing a new portfolio visualisation tool, which will allow proponents to visualise and assess the whole Climate-KIC community portfolio, including project summaries, areas of focus, strengths and core competencies. The platform will also offer a new way of understanding the





innovation potential of our community, particularly opportunities that can arise through smarter matchmaking and connecting our members in new and different ways. Using these tools will increase an applicant's ability to find collaborators and to judge whether a proposal will offer a unique contribution to our portfolio:

- An interactive tool for exploring our existing portfolio of innovation projects, as well as a more traditional database. Start-ups, a key feature of our solutions landscapes, will also be added to the tool in the coming months.
- A way to facilitate introductions to others across EIT Climate-KIC's network who are interested in similar topics.
- An explanation of our portfolio approach and the design principles for constructing an innovation portfolio (found in Annex 1 here).

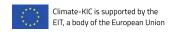
The tool will be made available, via the <u>Climate-KIC website</u>, from 28<sup>th</sup> February 2019.

The timeline for the release of such tools is included in Section 2.5

## 1.3 Designing a strong proposal

Over the last nine years, EIT Climate-KIC has learned about what tends to enhance the transformative impact of innovation projects:

- Design projects with and on behalf of demand-owners (e.g. cities, regions, countries, businesses or citizens groups). We have learned that the most impactful innovation projects are those that are both designed with demand-owners and involve them throughout. In this regard, EIT Climate-KIC does not intend to support more traditional supply-driven, research-oriented projects led by universities/teams of researchers where demand-side partners are not engaged. There are other H2020 instruments to support pure research projects. Nonetheless, we are interested in engaging research in a portfolio logic, where this helps to unlock innovative solutions.
- Build-in cycles of learning and reflection. EIT Climate-KIC, as part of our portfolio approach,
  will be placing much greater emphasis on harvesting, circulating and accelerating learning
  about the way innovation can achieve transformation to a net-zero emissions, resilient
  society. The insights from each individual project will contribute to and benefit from
  accelerating learning across the entire portfolio of experiments and be used to enhance the
  project's potential impact.





• Consider the financial resources available from EIT Climate-KIC as a co-investment alongside others. Funding from EIT Climate-KIC often makes up over half of total project costs, but we want to leverage EIT Climate-KIC funding to enhance impact and return on value. Accordingly, we will favour supporting initiatives where EIT Climate-KIC's funding contribution is a much lower percentage of overall eligible project costs. We have learned that projects that successfully blend and combine different sources of financial support and have a clear plan for financial sustainability tend to be more impactful.

## 2.0 Focus of the Call for Proposals

We are looking to support projects and programmes that help to unlock systems change as part of our portfolio approach. In doing so, they will act on levers of change to help advance progress to one or more of our impact goals and a wider net-zero emission, climate resilience transition over the next 15 years.

Our existing portfolio is currently weighted to technology-led and information-led levers of change. As a result, we encourage applicants to help us balance the portfolio with interventions on other levers, and build projects and programmes that:

- Engage citizens and consider innovation in efforts to change behaviours
- Focus on innovation in policy, regulation, and finance
- Embed innovative methodologies for peer-to-peer learning and learning diffusion
- Place inclusion, well-being, justice and poverty alleviation as key factors to address through innovation
- Engage 'unusual actors' or voices who are not traditionally considered as innovation actors we have a specific interest and deliberate intention to co-create and build new groupings
  that take us beyond those who are 'already converted'
- Deliberately cross disciplinary boundaries and intentionally involve non-typical collaborations. Examples might include marrying arts, culture and faith communities with science and technology
- Engage start-ups who are, have been or are interested in applying to be part of EIT Climate-KIC's Entrepreneurship programme. Start-ups are a key part of our portfolio and represent an important source of solutions for achieving impact.



### 2.1 Cities<sup>2</sup>

EIT Climate KIC's Strategy identifies 'visionary city authorities, who view climate action as central to well-being and competitiveness' as being critical demand-side actors and problem owners. This approach is supported by the recent IPCC Special Report, which lists challenges that will be faced by cities in tackling both mitigation and adaptation:

- Global building stock in 2050 will need to have 80-90% lower emissions against a 2010 baseline
- Developed countries will need to adopt a much higher retrofit rate, with new buildings being net-zero emissions from 2020
- Electricity supply will need to be nearly 100% net-zero emissions renewables by 2050

Change of this scale and urgency will require new ways to engage **all** citizens, encouraging radically different behaviours and rapid prototyping, innovating and scaling through innovative urban design, policy and investment. To do this we need to identify and support inspirational and committed leaders (political, community, city officials, investors, faith leaders). For this call, we are deliberately focusing our attention on consortia led or sponsored by cities (e.g. City authorities or regional bodies) or prominent city stakeholders (e.g. regulatory bodies, city co-operatives, regional agencies, financial ecosystems).

Many cities need to work on systemic challenges, and we want to encourage the best approaches to those challenges in a collaboration across disciplines. Several categories present challenges that require deep experimentation to gain insights and rapid knowledge sharing between city communities and represent gaps in our existing portfolio. We invite cities to come forward with consortia that apply an innovation logic to systems change in the following areas:

#### 1. Building retrofit initiatives

Specifically, cities committed to actions that unlock substantial pipelines of aggressive building performance improvements, which can be implemented with blended finance and procurement innovations (see 4. below). EIT Climate-KIC's focus will be on innovations applied to residential portfolios of significant scale that demonstrate the demand-building potential of city-driven aggregation strategies and deep connection to place-based citizen engagement and participation.

#### 2. Urban mobility services and systems

<sup>&</sup>lt;sup>2</sup> We are using 'cities' as a short hand that can also refer to 'city-regions' or 'regions' in the countries that have different ways of governing and managing urban areas.



Focus on active mobility and the built environment, with cities committed to policies and projects that advance and accelerate the systems co-benefits of large-scale installation of clean mobility infrastructure. This includes walking, running and cycling infrastructure, nature-based solutions and innovative, integrated public transport systems, with specific focus on the elimination of individually-owned internal-combustion engine (ICE) vehicles. Wherever possible, it is our intent to co-ordinate and collaborate with EIT Urban Mobility.

#### 3. Green infrastructure deployment

Cities with ambitious strategies that are looking to rapidly accelerate policies, programmes, and projects to implement city-region and urban-rural system of systems approaches. These could be to reduce consumption and maximise reuse, or reduce urban heat island, urban flood, air pollution and associated impacts through use of nature-based interventions, organic materials, natural systems design principles and bio-mimicry.

#### 4. Procurement innovations

Harnessing the potential of performance-based public procurement aligned with the net-zero emissions transitional pathway could unlock significant changes to the way cities invest. The way in which procurement processes are framed; the tender process; the collaboration between public authorities; the ability to step off the procurement 'conveyer belt'; and early conversations with suppliers are critically important in shaping local, national, European and international markets. The potential of public procurement to drive change is well-documented at national level (e.g., through the US and Dutch SBIR programmes and the UK's SBRI initiative), but sub-nationally there has been less success. This element of city work will focus on innovation in procurement and procurement regulation, focusing on replicable models and scaling approaches at the city scale including pricing of externalities (such as carbon emissions, air pollution, fossil-fuel subsidies) and challenging the value of human activities.

#### 5. Circular city initiatives

Our focus will be on programmatic actions, e.g., a series of innovations and actions, not pilot or single-point interventions. Our current case study portfolio is diverse and the circular cities collaboration underway offers the potential to bring some consistency, logic, and collaboration to the experiments needed to support systems change.

Please note, while we have highlighted five priority areas for cities, we do not welcome siloed projects that address the five areas independently. We would particularly welcome city-led or city-sponsored proposals that address multiple priority areas in an integrated way.



## 2.2 Circularity

We have a vision of creating circular and regenerative economies and societies – places that operate using minimal resource inputs, share and recirculate resources, while ensuring prosperity and inclusion of citizens. We believe systems innovation can help such a transition. In this call, we want to work on both creating such places (cities, regions, countries etc.), partnering in deep demonstrations through clusters of circular and regenerative economy experiments concentrated in time and space.

Currently, such places rely on global value chains, so we also want to catalyse innovate across whole value chains to create the kind of zero-net or low emissions resources and products that people will need in the transition. To realise this, we want to complement our current portfolio with experiments that:

- Forge collaborations between circular economy communities of practice, especially between
  and within industry players and industrial clusters, and along the global value chains (GVCs)
  for high emitting materials and products: cement, metals, plastics used in the construction,
  automotive, packaging and consumer electronics value chains. Wherever possible, it is our
  intent to collaborate and co-ordinate with EIT Raw Materials.
- 2. **Rethink what we understand as 'waste':** Innovations in the way society/actors (e.g. citizens, businesses, policy makers) understand 'waste', transforming perceptions and norms around the value of waste (e.g. to challenge why we lose so much value), and promoting behaviours that embrace circularity (e.g. repair, refurbishment, remanufacture, sharing).
- 3. **Explore structural changes required to switch to circular and regenerative societies and economies,** such as experiments that challenge currently held notions on ownership, consumerism, citizen engagement, investment strategies, prosperity and sustainability.
- 4. **Use upstream design** as a starting point to: a) redesign products, b) redesign the economic systems around these products, c) create new appealing narratives for circular lifestyles, d) trigger citizens engagement to create a movement towards change to reflect the urgency of needed action.

#### 2.3 Land-use

Land use and related activities (food production, biomass value chains...) can and need to contribute increasingly to climate change adaptation and mitigation. Our vision is to develop an interconnected portfolio of solutions able to induce the systemic transitions required in agri-food systems, forestry, and landscapes. We have learnt that, while technical solutions are needed, their implementation at



scale is essential to our systemic approach. For such scaling, value-chain approaches are essential, where reducing risks and costs can generate value. Local context is similarly important to mobilise actors and funding, to develop innovation competencies, mobilise stakeholders and tailor solutions to the local specificities. The initiatives we wish to support – covering **agri-food**, **forestry and integrated landscapes** – should integrate or centre on scaling approaches, which should be well described in proposals.

As for **agri-food**, we want to complement our current portfolio with experiments that:

- 1. Develop holistic de-risking mechanisms that connect financial de-risking (e.g. insurance) with adaptive, resilient and sustainable agricultural practices.
- 2. Manage soils for sustainability, including the reduction of non-CO<sub>2</sub> greenhouse gas emissions and the enhancement of soil carbon sequestration.
- 3. Develop alternative food chains (with a focus on proteins) able to substitute climate-damaging food, or feed (e.g. conducive to deforestation)
- 4. Enhance resilience, including through combatting desertification and promoting effective water management, while protecting and strengthening rural livelihoods/economies.
- 5. Increase the efficiency of food production and consumption with a particular focus on circular economy and holistic waste reduction approaches.
- 6. New activities associated with innovations in food policy and consumer behaviour, with a focus on partnership with EIT Food.

Note that we will also continue to develop the AgriSource platform as a tool to mobilise actors and support solutions in the climate-smart agriculture domain.

As for **forestry**, we want to complement and enlarge our current portfolio with experiments that:

- Contribute to the development of a sound and holistic fossil-carbon substitution framework
  that integrates and compares end to end scenarios from forest management, wood
  transformation and development of new value chains, and reinforcing circular economy
  approaches
- Reinforce the sink function of European forests by developing and testing new business models that can enable the mobilization of new resources for their sustainable management. (e.g. through carbon finance or payment for ecosystem services). This also means addressing all forest adaptation to climate change-related risks
- 3. Generate more value from forests and harvested products by pioneering new solutions that create new jobs in the forestry sector through the development of markets for bio-based products particularly through Increasing the traceability and transparency of forest-related value chains.



As for **integrated landscapes**, to complement and enlarge our current portfolio, the priorities for experiments should focus on:

- 1. Developing and piloting instruments that combine and integrate value chains with territorial approaches to progress on the blended approaches required in landscape programme financing
- 2. Supporting better connections between cities and their surrounding rural territories to facilitate local sourcing of food and biomass, urban farming, and to enhance the ecosystem services provided by rural areas.

## 2.4 Financial and Economic Systems

Finance is a key lever of change in many of the areas detailed above, and we welcome proposals that direct attention to innovation that works at the interface of real economy practices, processes, assumptions and structures, and the financial system.

Additionally, part of our mission is to also transform the global financial and economic systems to accelerate net-zero emissions at the speed and scale we now need. Our priorities for 2019, 2020 and beyond involve catalysing systemic change by shifting the emphasis from metrics and disclosure, to process and values. Our vision is to:

- align the financial and economic systems with underlying natural and social systems,
- **connect** decision makers to this alignment and to the impacts and consequences of their decisions, and;
- unlock the potential to mobilise billions of people and trillions in finance by reshaping social norms to embrace uncertainty, responsibility and regeneration for a net-zero, resilient future.

To realise this, we want to complement our current portfolio with experiments that catalyse transformation of financial and economic systems:

- **Systems risk:** innovation that develops the capability for a contextual understanding of systemic risk to enable risk-informed decision-making to build resilience.
- Systems values: innovations that help challenge the fundamental economic and financial paradigm and systematically change the way we value human activities and make resource conversion decisions.



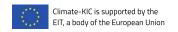
• **Systems finance:** innovations that build the capability – human and policy – to deploy significant blended finance and risk capital (from insurance and pensions funds) into place-based deep demonstrations.

#### 2.5 Timeline

<u>Important</u>: The intake of proposals under this upcoming call process pertains to projects funded by either SGA 2019 <u>or</u> SGA 2020. Projects to be funded under SGA 2020 will be included in the EIT Climate-KIC submission to the EIT in September 2019.

- February 13, 2019: Call to Action Announcement and Proposal Guidelines Released\*
- March 04, 2019: Additional information on EIT Climate-KIC's existing portfolio released
- March 04, 2019: Grant Management System (Plaza) opens for submissions
- April 30, 2019 1800 (CEST): Deadline for submitting Proposals/Expressions of Interest (as detailed by the rules)
- June 14, 2019: Applicants notified of Decisions

\*The proposal guidelines contain detailed information on each programme, eligibility requirements, and the assessment process, including revised guidelines in line with the new policy 'Managing Performance, Risk and Fairness in Implementing the EIT Grant' agreed between EIT Climate-KIC and the community in 2018. This document will also provide applicants with information on how to submit proposals.





## 3.0 Deep Demonstrations

#### N.B. For information only. Not included within this call for proposals.

It is critical to develop place-based demonstrations and practical examples where systems innovation, designed to provide pathways for the transition to a net-zero, resilient economy, is tested at scale. This could be even more effective if this takes place in locations where structural change needs to occur.

There is compelling evidence that rapid decarbonisation can only be achieved through systems change, meaning transformation of whole entities – cities, regions, countries, institutions and businesses – not just the replacement of wasteful elements with more efficient ones. While systems innovation pathways can be compelling in theory, they often are challenged when confronting technical, environmental or socio-economic realities in locations and organisations.

Our approach is to work on clusters of innovation experiments, concentrated in time and place, to overcome some of the more structural challenges of transition. These would act as sub-portfolios in our wider portfolio approach. They will likely involve working on multiple levers of systems change simultaneously and across coupled systems, such as mobility, energy and waste. Such deep demonstrations, or *transition super-labs*, a term coined by the European Commission's High-Level Panel of the European Decarbonisation Pathways Initiative (2018), will seek to leverage the full extent and capability of the EIT Climate-KIC community and attract other relevant organisations and actors to achieve impact. They will also require long-term partnerships with problem owners, such as city authorities, regional bodies, major businesses or national governments.

The EIT Climate-KIC team will embark on a set of conversations with these problem-owners to begin a process of co-creating deep demonstrations. We will seek a broad representation of places in terms of geography, size, and context and would welcome places forming learning alliances together at an early juncture.

We intend to be guided by the following critical markers in developing such deep demonstrations:

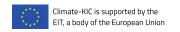
- Problem owners will be representatives of cities, regions, countries, communities or coalitions of businesses/industries.
- They will be able to demonstrate leadership across multiple stakeholder groups and a willingness to experiment with ways of creating change.
- They will have no pre-conceived idea of all the solutions, but a clear articulation of desired outcomes. For example, this could be (i) transition away from polluting industries, (ii)



- ambition to be circular and regenerative, (iii) leadership in resilience to climate change, (iv) emissions neutrality, or (v) leadership in effective behavioural change.
- Each deep demonstration makes a unique contribution to our portfolio, using our portfolio design principles.
- A willingness to work with EIT Climate-KIC as a community of partners and start-ups, for an
  extended length of time as a co-creator in design and experimental implementation.
  Experiments could cover multiple levers of change, including finance, policy, production
  systems, skills, exponential technologies, behaviours and citizen engagement. Exponential
  technologies would include A.I., sensor technology, distributed autonomous systems,
  genetics, bio-mimicry, advanced manufacturing (3D and 4D), nanotechnology and quantum
  computing.
- Openness to share learning with other places, coalitions and networks and to provide support to them as desired.
- A mindset of risk-taking (low probability-high impact) with potential benefits of exponential gains in resilience, liveability, emissions reduction, or improvements in air quality, for example.
- Commitment, courage, curiosity and perseverance, as the kinds of solutions being proposed will not be solved in one-off meetings or through 'point source' innovation.

The development process of the deep demonstrations will be highly iterative with multiple opportunities to engage members of the EIT Climate-KIC community and other innovation actors. Initial concepts for deep demonstrations will be made publicly available on our website (<a href="www.climate-kic.org/calls-for-proposals">www.climate-kic.org/calls-for-proposals</a>) in late March 2019 and communicated to EIT Climate-KIC Partners via e-mail. Opportunities to participate in co-creation, testing and learning will also be published on our website during the remainder of 2019.

Please get in touch with us if you would like to share ideas for deep place-based demonstrations. We welcome expressions of interest, particularly from problem owners, who can contact us by sending a message to <a href="mailto:partners@climate-kic.org">partners@climate-kic.org</a>





EIT Climate-KIC is active in 24 countries with 28 offices across Europe.

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