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Ecosystem orchestration fostering sustainability transitions in peripheral European Regions

The case of the EIT Regional Innovation Scheme

INTRODUCTION

“There is an increasing need to address a knowledge gap on how governments and societies can respond to dynamically changing needs to ensure sustainability”

Geels et al. (2019)

The European Green Deal aims to make the European Union climate-neutral by 2050. It advocates for a policy approach toward climate neutrality and circular economy to achieve this target. A systemic approach at this scale involves the implementation of not only policies and interventions which are strictly environmental but rather the implementation of broader economic-social-technological transitions. That is why sustainable transitions have been identified as “long-term, multi-dimensional and fundamental transformation of large socio-technical systems towards more sustainable modes of production and consumption” (Markard & al., 2012).

For lagging regions, considered as those whose progress is significantly slower than others, some structural shortcomings are slowing the transition process: 1) a high concentration of lower-skilled labour; 2) limited access to capital; 3) barriers to identifying and exploiting technology due to lower human capital and 4) cultural and institutional barriers. Those conditions hinder their innovative tendency and absorptive capacity to exploit external knowledge and technology.

Additionally, the “low-income” and “low-growth” peripheral European regions are the ones receiving the bulk of funding for regional development connected to those goals, the most vulnerable to climate impact and the ones showing innovation performance below the EU average.

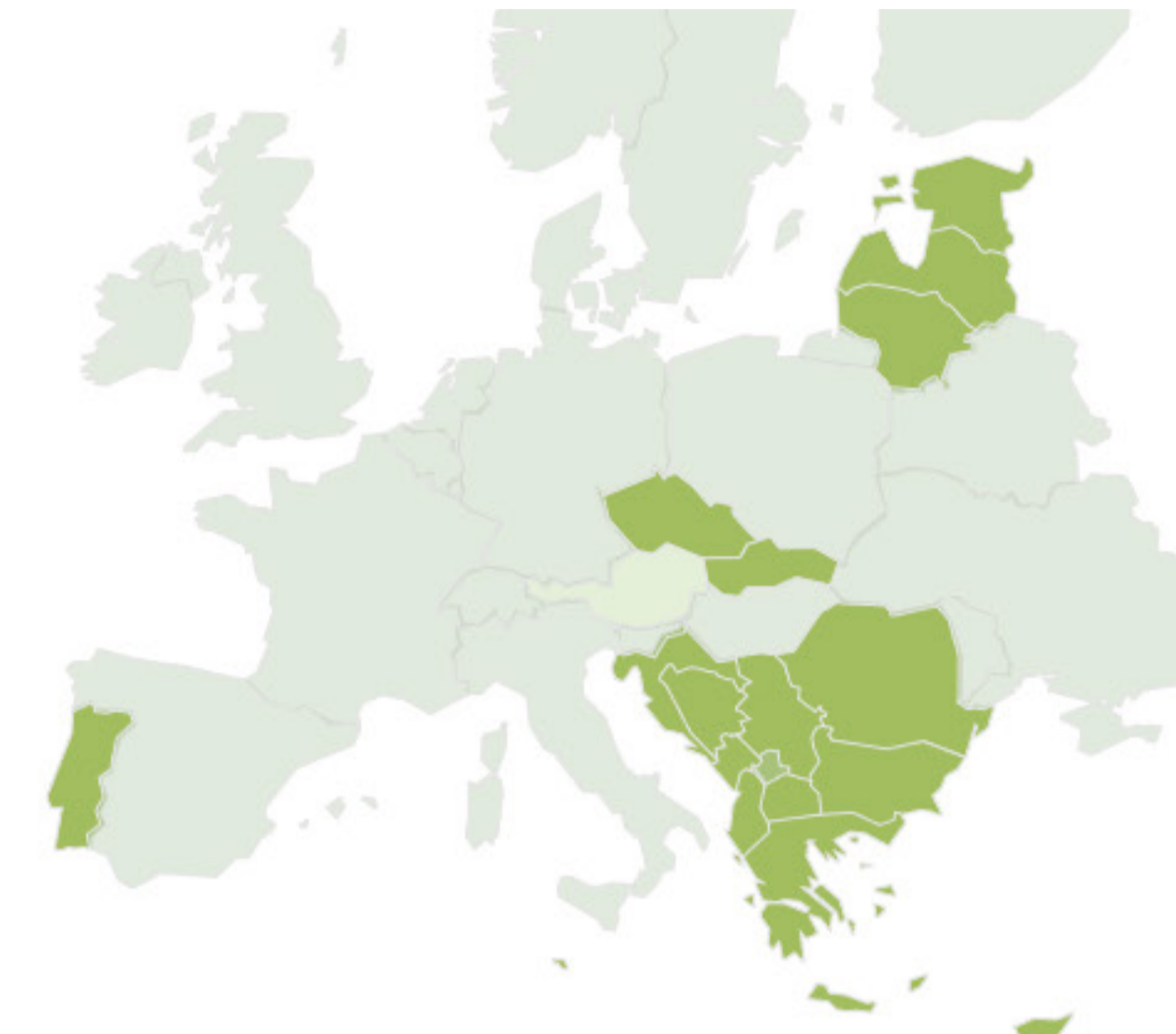
Additionally, innovation policies are usually not achieving the expected results in lagging behind regions, primarily due to:

- Socioeconomic and institutional deficiencies and geographical isolation strengthen disparities among regions. The lack of efficient institutional setting reduces the opportunities for local knowledge spillovers
- Regional innovation is contextually contingent process and the ecosystem activation component is often overlooked
- Most of the times is almost impossible to connect and leverage funding between regional and innovation funds
- The involvement of inventors from knowledge-intensive regions plays a crucial role
- The importance of complementing a RIS3 with other supporting policies that mitigate its shortcomings and emphasis on developing human resources and building an attractive research system
- The importance to go beyond high-tech innovation and economic outcomes and examine other changes such as environmental or cultural ones, that can generate important spillovers for regions and promote green growth and wellbeing

Hence, it is argued that innovation needs to be orchestrated at the regional level. This research presents evidence on the practices and long-term processes supported for orchestrating an innovation ecosystem by applying a regional policy model to foster system innovation toward resilient, low-carbon economies.

RESULTS

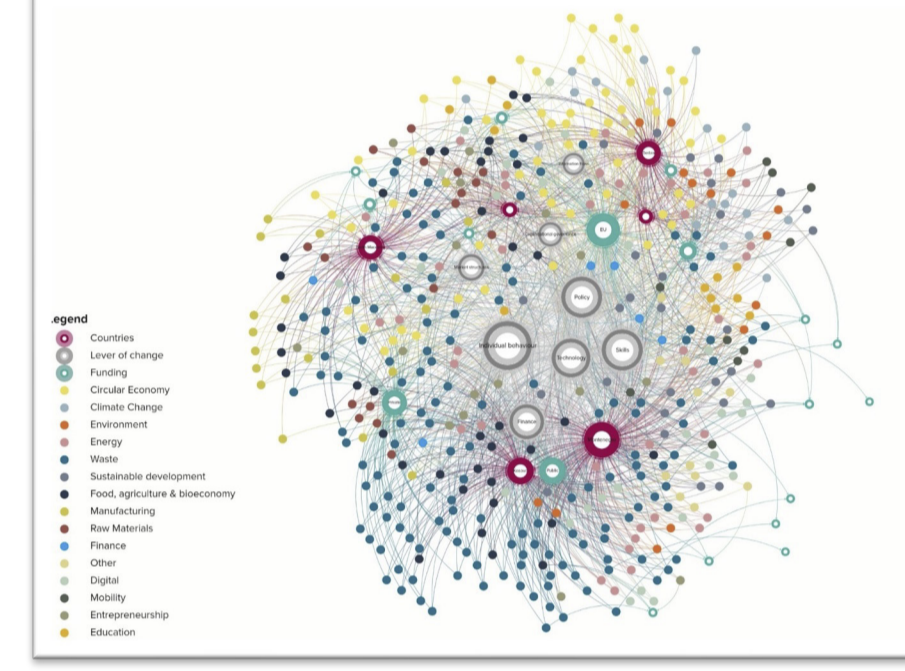
EIT Climate-KIC Regional Innovation Scheme' beneficiary countries



The EIT Regional Innovation Scheme

The overarching objective is to advance the innovation performance of countries with moderate or emerging innovation scores defined by the European Innovation Scoreboard by strengthening the capacity of their innovation enablers and actors and linkages among them (such as business accelerators, incubators, start-ups, scale-ups, businesses including SMEs, agencies, educational and research institutions and their infrastructures, etc.). For its nature, the RIS programme is a bridge between innovation and development policies.

Portfolio visualization – example from Western Balkans



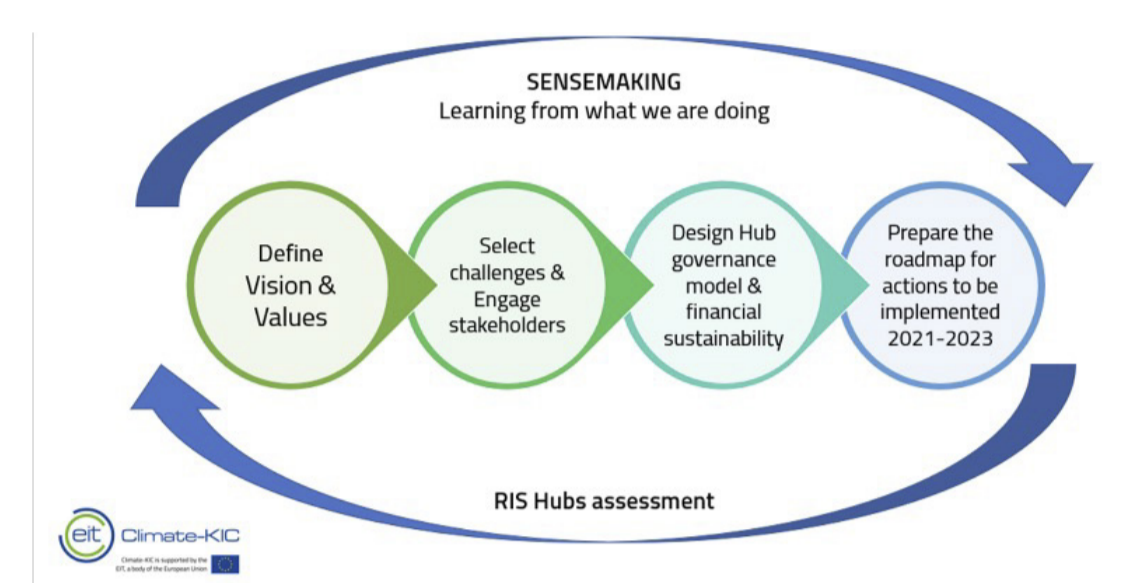
Ecosystem orchestration enabling local Hubs

Country's purpose-driven partnerships, the EIT Climate-KIC HUBs, act as innovation community catalysts. The Hubs are critical players in their national innovation ecosystems and gather assertive regional outreach and experience in co-designing capacity-building programmes, supporting entrepreneurs, liaising with local, regional and national authorities and connecting to broader society.

EIT Hub structure

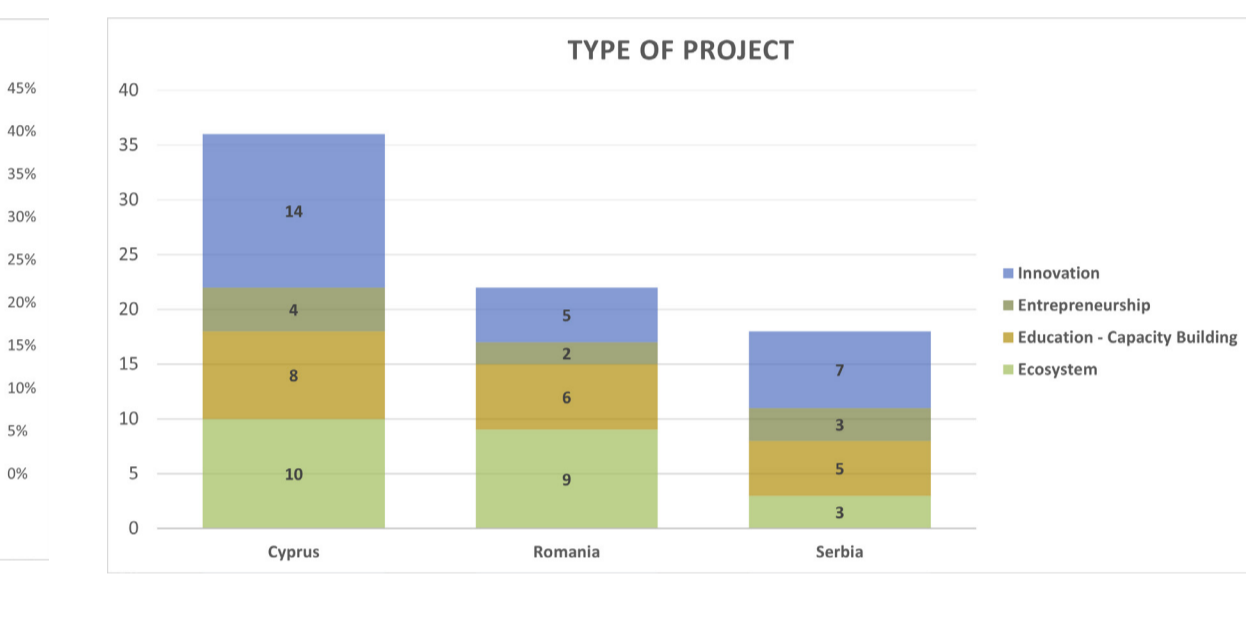
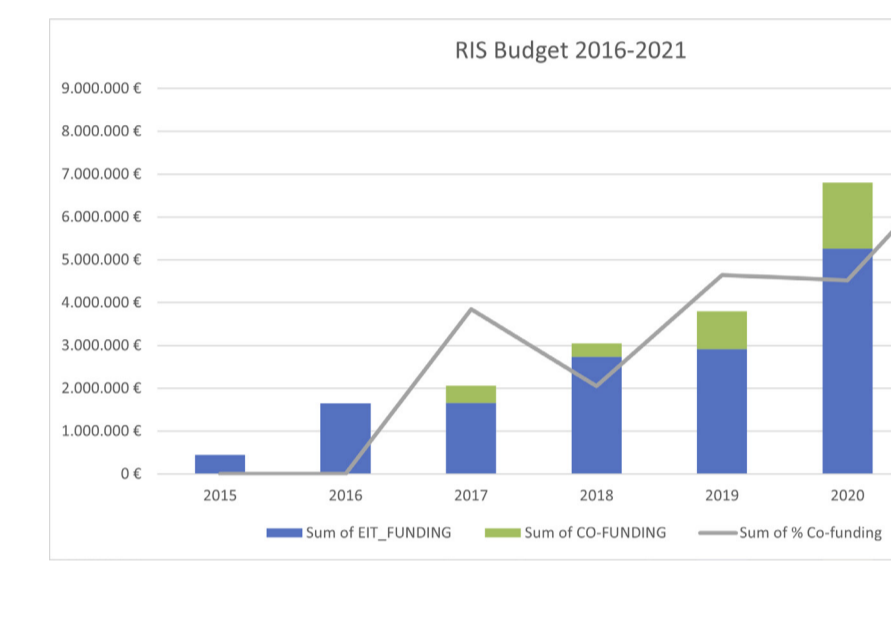
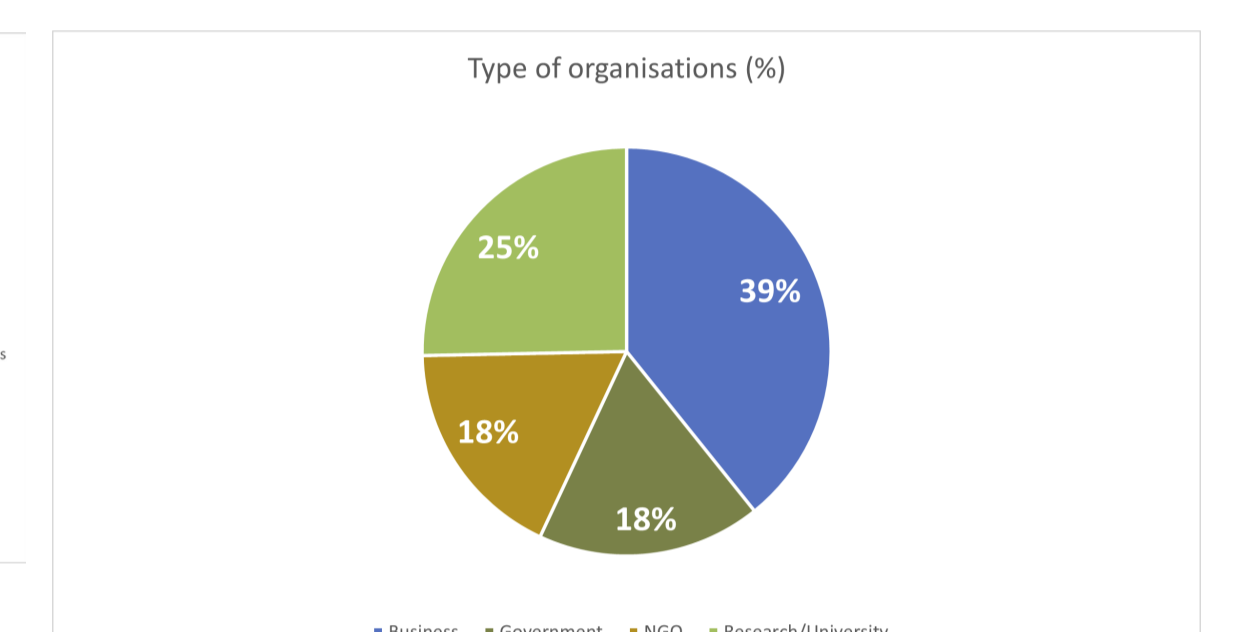
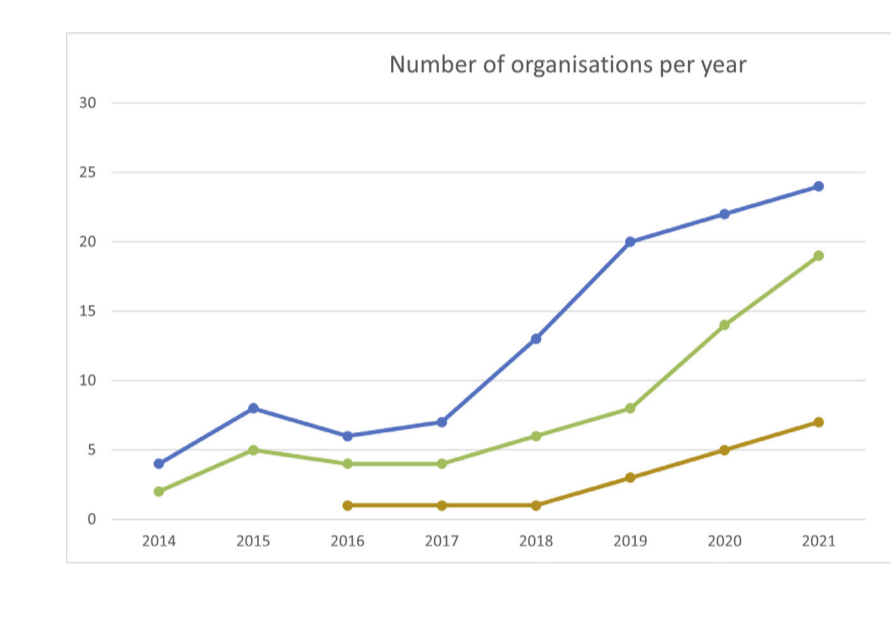


Hubs orchestration process



Co-creation and stakeholders engagement results

Over seven years, the programme has orchestrated joint efforts on designing, building, and delivering mission-oriented portfolios of related programmes in education, entrepreneurship innovation, and ecosystem activation to drive adaptation and resilience, building local and international networks for innovation, giving a space for experimentation and innovation.



CONCLUSIONS

1 Innovation can be a driver to stop brain drain, but opportunities should not be limited to entrepreneurship funding: they should include interconnected activities in capacity building and ecosystem activation and development.

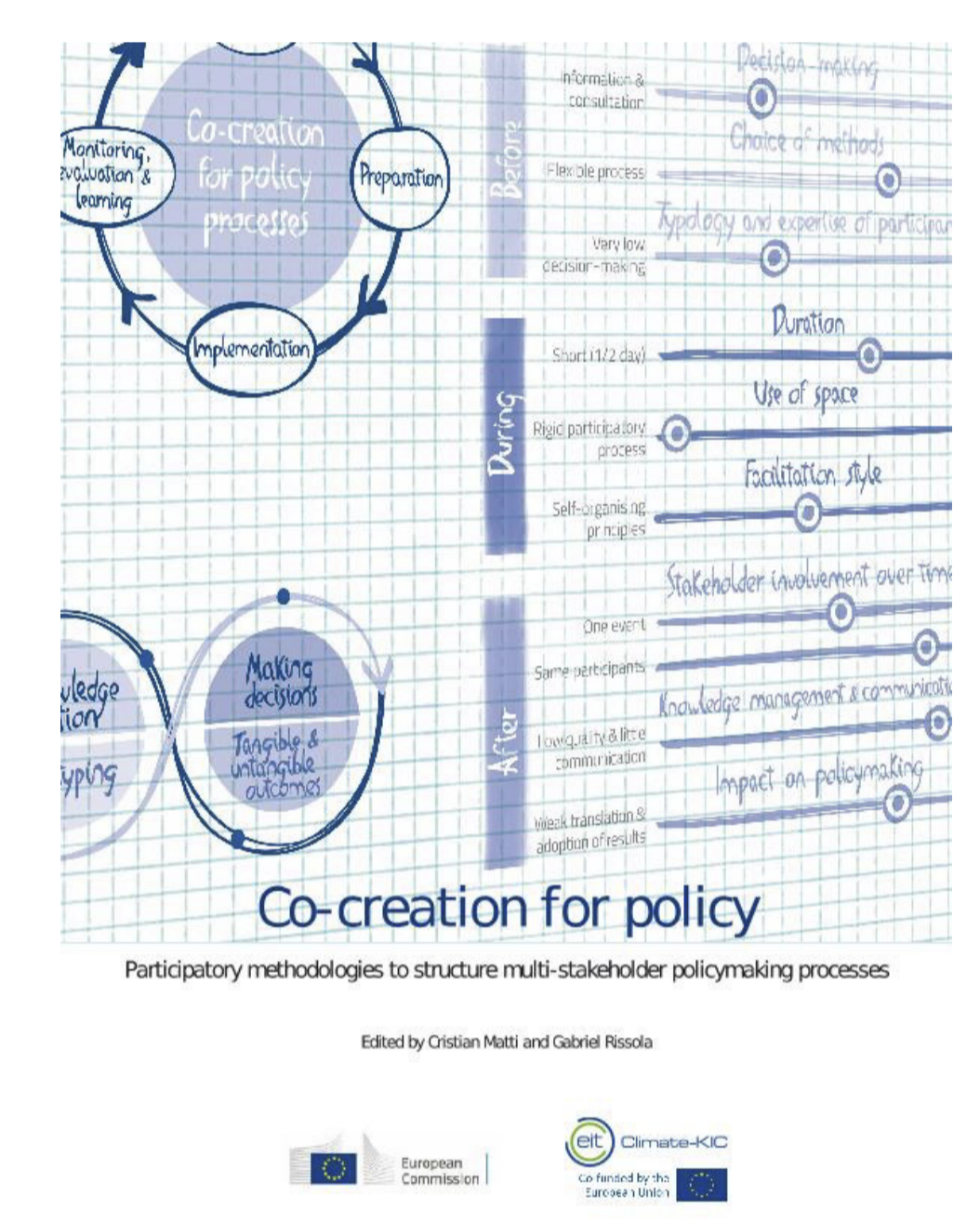
Romania is one of the countries that is phasing the most severe diaspora of youth towards Western Europe and is experiencing lock-in due to institutional setting and poor entrepreneurial opportunities. It is representative of the Eastern European challenges. Hence, the focus of the EIT Climate-KIC Hub in Romania has been on education and early acceleration. It resulted in involving more than 150 youth across the country in sustainability-related professional paths and enabled their interconnection.

2 Innovation is a process that requires time and relationship building among a variety of actors. Public funding to support such activation is necessary. The quality and variety of actors in the ecosystem are pivotal.

EIT Climate-KIC Cyprus hub, the third island for extension in the Mediterranean and the natural connector between Europe, North Africa and the Middle East, has been able to activate more than 40 projects in 7 years and engaged both local and international actors in responding to the main challenge of the country in adapting to climate change whilst activating job opportunities for youth. The orchestration enabled the different projects to be connected and interact, enabling a more substantial impact on the initiatives. The ambition is to position Cyprus as the innovation Hub for the Mediterranean, and a crucial aspect is how to leverage the interests of different stakeholders.

3 Co-creation and system innovation practices through pan-European (and beyond) networks of specialisation can speed up innovation investments and also institutional development.

EIT Climate-KIC Serbia hub, the first country in the Western Balkans to join the Community since 2016, has coupled the work on innovation and ecosystem to the country's policy direction towards the circular economy. The specialisation in the priority of the country's economy and development has been crucial to activating the local ecosystem. Differently from EU countries, the case of Serbia shows how to activate innovation ecosystems on the border of Europe and how this can advance knowledge and preparation for accession process.



ACKNOWLEDGEMENTS

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The EIT is the European body established in 2008 in order to contribute to sustainable economic growth and competitiveness by reinforcing the innovation capacity of the Union and Member States. The EIT operates mainly through Knowledge and Innovation Communities (KICs); KICs contribute to strengthening local innovation ecosystems, inter alia, by fostering closer interactions between the actors of the knowledge triangle and by favouring better coordinated relations with financial and public institutions, as well as with citizens. Against the backdrop of persisting regional disparities in innovation performance in Europe, the EIT launched a regional innovation scheme (RIS) in 2014.

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