SIRENE
SOCIAL INNOVATION RESPONSIVE ENVIRONMENTS NETWORK

POLICY BRIEF

Co-funded by the European Union

AUTHORS

ECHAlliance
Federica Porcu
Dimitris Georgoulis
Karolina Mackiewicz

CONTRIBUTORS

SHINE 2Europe
Carina Dantas

F6S
Tajana Medakovic

AFEdemy, Age-friendly Environments Academy BV
Willeke van Staalduinen

Visual Editing

Bruna Catarino, SHINE 2Europe
Joana Vieira, SHINE 2Europe

PROJECT WEBSITE

sireneproject.eu

Copyright (c) 2024 SIRENE | Social Innovation Responsive Environments Network

This publication is licensed under a **Creative Commons Attribution-ShareAlike 4.0** (CC BY-SA 4.0) International License.

PARTNERS AND CONTACTS

The Horizon Europe project SIRENE | Social Innovation Responsive Environments Network started in November 2022 and runs until the end of October 2024. The consortium is formed by six organisations from five different European countries:

SHINE 2Europe Lda, Portugal
European Coordinator
Carina Dantas
carinadantas@shine2.eu
shine2.eu

AFEdemy, Academy on Age-Friendly Environments in Europe BV, The Netherlands
Willeke van Staalduinen
willeke@afedemy.eu
afedemy.eu

ECHALLIANCE Company Limited by Guarantee, Ireland
Karolina Mackiewicz
karolina@echalliance.com
echalliance.com

F6S Network Ireland Limited, Ireland
Tajana Medaković
tajana@f6s.com
innovation.f6s.com

ISRAA - Istituto per Servizi di Ricovero e Assistenza Agli Anziani, Italy
Oscar Zanutto
faber@israa.it
israa.it

Fundacion Tecnalia Research & Innovation, Spain
Silvia Urra
silvia.urra@tecnalia.com
tecnalia.com

Co-funded by the European Union

SIRENE | Social Innovation Responsive Environments Network is a Coordination and Support Action, co-funded by the European Union under Horizon Europe Programme (topic HORIZON-EIE-2022-CONNECT-01-02) through the Grant Agreement n. 101096077.

EXECUTIVE SUMMARY

Over the two years (2022-2024) of its lifecycle, the SIRENE project, as part of its efforts to support the growth of social innovation actors in Smart Healthy Age-Friendly Environments (SHAFE), has engaged in liaison activities with other EU funded projects and initiatives. These activities resulted in various capacity building and learning exchange opportunities, as well as several expert and policy discussions.

This policy brief highlights the key insights gained from these activities, offering guidance for social innovation actors and policy actions based on recommendations at different levels. These actions aim to foster the implementation of SHAFE through social innovation.
By embracing these insights, social innovation actors and policymakers can support the development of Smart, Healthy, Age-Friendly Environments that improve the quality of life of all citizens as they age, especially those in vulnerable situations.

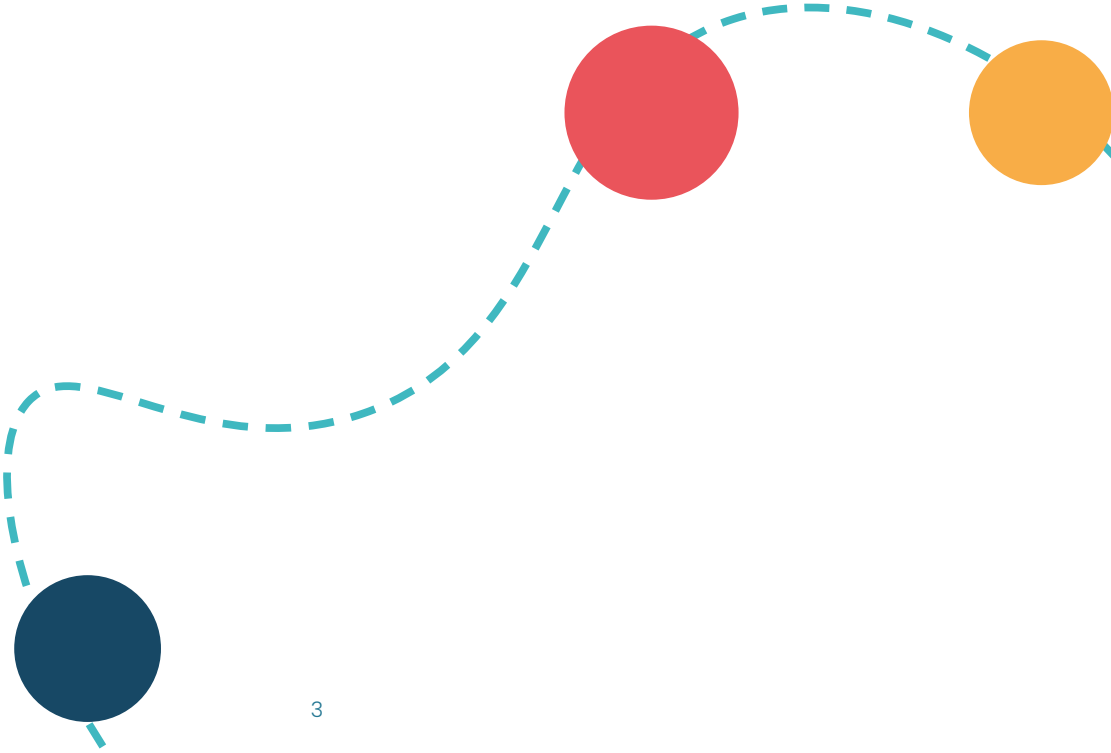


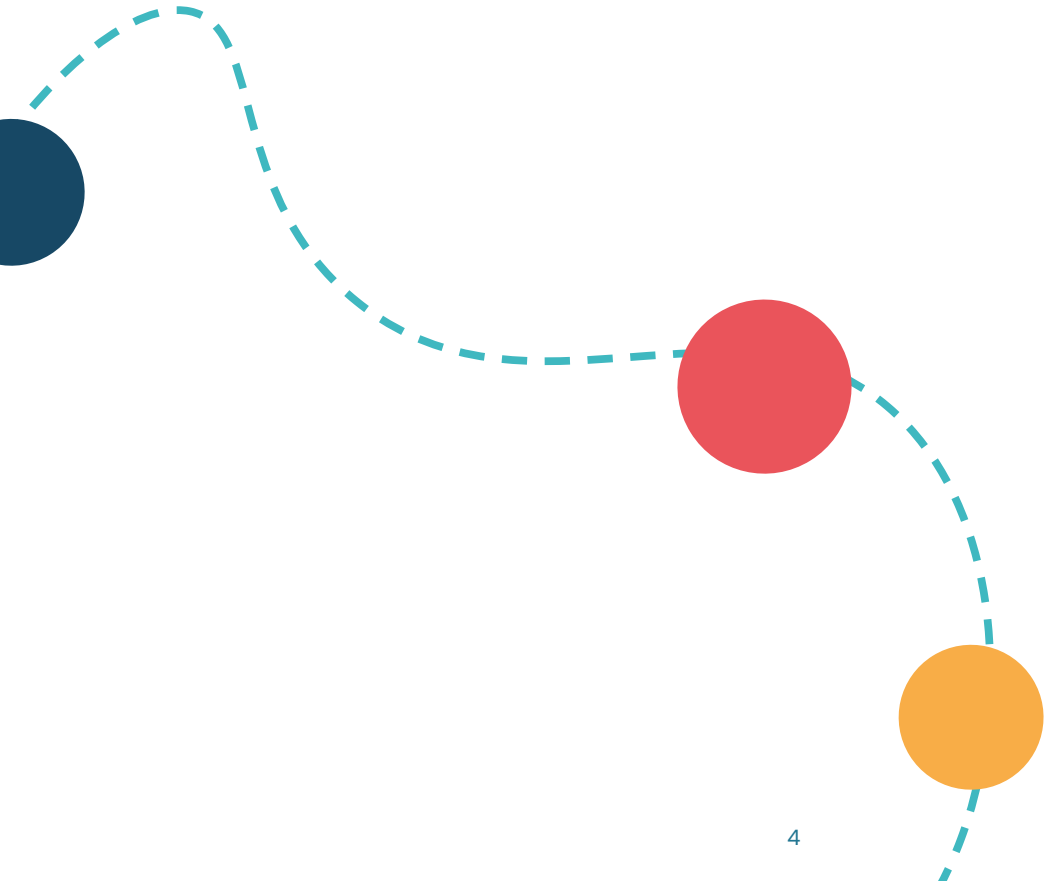
TABLE OF CONTENTS

1. Introduction 5

2. Key insights from SIRENE liaising and learning exchange activities 6
2.1. Challenges 6
2.2. Insights for social innovation actors 7

3. Policy recommendations 9
Local level 9
National level 9
International Level 10

4. Conclusion and further reading 11



1 INTRODUCTION

SHAFE has its roots on the holistic concept of age-friendly environments, developed by the WHO in 2007, which has since been significantly integrated into the new era of digitalization and health[1]. The concept combines built environments (housing, public spaces, and buildings) with information and communication technology (ICT) applications to create healthy and friendly environments that enable independent living, better societal participation, and wellbeing. This is achieved through user-centred design, where the person is at the core of the digitization process.

The specific aim of SHAFE is to enhance two main aspects of Age-Friendly Environments[2] :

- **People:** Citizenship, lifelong learning, and social interaction related to functional ability.
- **Places:** Houses, built environments, community spaces, and outdoor facilities.

The SHAFE approach has made significant progress in fostering innovation through co-creation, living environment initiatives, and digital skills training aimed at enhancing the citizens' lives in the health and wellbeing domain. Despite these efforts, **realising the full potential of SHAFE remains challenging due to its holistic nature, which requires extensive dialogue and consultation among diverse stakeholders[3].**

Moreover, despite the availability of numerous innovations, the large-scale implementation of SHAFE environments and housing continues to lag. behind. The market for these solutions is highly attractive and holds great potential, but the building sector is not yet fully connected to the innovative, responsive, inclusive, and eco-friendly aspects of these solutions[4]. This represents an **exciting investment opportunity that would greatly benefit from stronger alignment between social innovation actors and policy makers.**

This policy brief seeks to bridge the gap by providing social innovation actors with a practical guide to support the effective implementation of SHAFE across Europe.

Through the liaison and learning exchange activities conducted during the SIRENE project's lifecycle, several insights have been collected and categorised into five main themes for social innovation actors:

- Technology is a catalyst for SHAFE implementation.
- Collaboration and participatory approaches lead to effective solutions.
- Social innovation ecosystems amplify innovation.
- Personalised and inclusive care models lead to improved outcomes.
- A long-term vision and impact are of uttermost importance.

The recommendations stemming from these priorities will be further be presented through a series of actions at the following levels:

- Local level
- National level
- International level

[1] Memorandum of Understanding for the implementation of the COST Action "International Interdisciplinary Network on Smart Healthy Age-Friendly Environments" (NET4AGE-FRIENDLY) CA19136, (2020).

[2] Dantas, C., van Staalduinen, W., Smart Healthy Age-Friendly Environments (SHAFE) Position Paper, (2020)

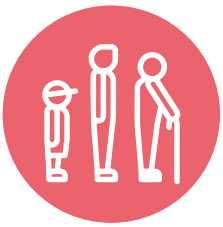
[3] DigitalHealthUptake project, Executive Digest, SHAFE approach implementation for Digital Health Solutions, z2024)

[4] Severinsen, C., Breheny, M. & Stephens, C., (2015) Ageing in Unsuitable Places, Housing Studies, 31:6, 714-728

2
KEY INSIGHTS FROM SIRENE LIAISING AND LEARNING EXCHANGE ACTIVITIES

2.1. Challenges

Despite significant progress in fostering age-friendly environments, several challenges persist that hinder the full implementation of SHAFE in Europe. These challenges are multifaceted, ranging from the specific needs of ageing populations to broader structural issues in the integration of social, technical, and business innovations. Through a series of expert and policy discussions with other projects and initiatives, as well as social innovation actors, the following challenges have been identified:



Ageing population needs: Urban environments often do not adequately meet the specific needs of people as they age, particularly regarding accessibility, mobility, healthcare, and social inclusion.

Digital divide: Some older adults and people in vulnerable situations frequently struggle with digital tools, which can hinder the effectiveness of smart healthy solutions designed to promote independence.

Fragmented efforts: Social, technical, and business innovations often operate in silos, limiting their collective impact on addressing ageing-related challenges.

Sustainability: Urban regeneration and social innovation initiatives must be sustainable, environmentally conscious, and adaptable to evolving demographic and environmental needs.

Growth of social innovation actors for SHAFE implementation: Realising the full potential of SHAFE remains a challenge because of its holistic approach, which requires extensive dialogue and consultation among different stakeholders.

2.2. Insights for social innovation actors

Over its two-year lifecycle (2022-2024), the SIRENE project actively engaged and stimulated the stakeholder community around the topic of SHAFE (Smart Healthy Age-Friendly Environments). By organising capacity-building webinars, participating in events across Europe, and collaborating with several EU-funded projects and initiatives, SIRENE brought together diverse social innovation actors on multiple occasions.

The discussions held during these activities allowed the collection of valuable insights reflecting trends and needs related to technology, participation, inclusion, collaboration, value-based care, and long-term vision. These insights, categorised into five main themes, provide guidance for social innovation actors aiming to implement SHAFE in Europe.

1. Technology is a catalyst for SHAFE implementation

- **Digital literacy as a barrier:** Continuous education and support are essential to help overcome technological challenges and engage with digital health tools.
- **Need for engagement:** Healthcare providers should create user-friendly, engaging digital tools, potentially incorporating gamification to increase usability and motivation.
- **Importance of data mapping:** Effective data mapping enhances community engagement by identifying and addressing local needs.
- **Digital twins as a tool:** Utilising digital twins for real-time urban environment analysis facilitates better planning and resource allocation tailored to people at different ages.

From SIRENE synergies

- **Webinar on Building Smart Healthy Age-Friendly Environments:** jointly organised by the SIRENE project in collaboration with the URBANAGE project, this webinar explored how to create smart, healthy, age-friendly environments. It emphasised the importance of collaboration for developing innovative solutions tailored to older adults. The development of digital twins was highlighted as a powerful tool for real-time urban planning, enhancing resource allocation and accessibility for older citizens.
- **Information Wall Developed with DHU Project:** the information wall co-developed by the SIRENE and DHU projects explains key concepts for implementing twinning schemes. In addition, it features reports on the experiences of DHU twinnings, offering practical steps for replicating these models.

2. Collaboration and participatory approaches lead to effective solutions

- **Importance of co-creation:** Engaging the relevant users in designing their own care pathways and solutions ensures their needs are prioritised, leading to more effective outcomes.
- **Collaboration across sectors:** Integrated care requires cooperation between healthcare professionals, policymakers, and community organisations to support people of different ages.
- **Participatory design:** Involving the community in decision-making fosters inclusivity and ensures solutions meet local needs.
- **Overcoming silos:** Collaboration between sectors is crucial to break down silos and create more effective, integrated solutions.

From SIRENE synergies

- **SIRENE Ecosystems Capacity Building Workshop:** this workshop emphasised the importance of ongoing dialogue and capacity building as critical to fostering social innovation, with a focus on simple ecosystem development approaches and long-term sustainability.
- **Webinar on Co-Creating Policies with Older Adults:** organised in collaboration with the City&Co project, this webinar focused on co-creating age-friendly urban policies, with insights from cities in Bucharest, Poland, and the Netherlands.

3. Social innovation ecosystems amplify innovation

- **Ecosystem building:** Creating permanent, multi-stakeholder ecosystems fosters continuous collaboration and innovation, breaking down barriers to progress.
- **Continuous improvement:** Ecosystems need to evolve based on new data and insights to stay relevant and ensure sustainable social innovation.
- **Learning from experience:** Sharing best practices from successful ecosystems accelerates innovation and cross-regional learning.
- **Trust and regular engagement:** Building trust within partnerships and maintaining consistent communication are key to ecosystem success.

From SIRENE synergies

- **Webinar on Establishing Ecosystems:** this webinar highlighted the need for practical, multi-stakeholder collaboration and regular meetings to foster connections and engage communities in tailored solutions.

- **Webinar on Networking and Ecosystem Expansion:** practical tips were shared on networking, stakeholder management, and effective communication for growing social innovation ecosystems.

4. Personalised and inclusive care models lead to improved outcomes

- **Value-based care:** Emphasising personalised care and shared decision-making improves patient satisfaction and health outcomes.

- **Adaptation of healthcare providers:** Healthcare providers need to promote active patient involvement, rethinking traditional dynamics.

- **Local community engagement:** Engaging local communities ensures that innovations meet real needs, fostering successful project implementation.

- **Focus on local needs:** Engaging local experts and citizens helps create scalable community-based services that effectively address needs.

From SIRENE synergies

- **Webinar on Transforming Care for Older People:** this session emphasised co-designing care solutions with end-users, addressing digital literacy barriers, and focusing on value-based care.

- **Webinar on Collaboration and Co-Creation:** organised with the 4P-CAN project, this webinar stressed the need for local community engagement, breaking down silos, and fostering co-creation to empower local leadership.

5. The importance of long-term vision and impact

- **Long-term goals:** Projects need to articulate desired long-term impacts, such as improved community health and wellbeing, alongside immediate results.

- **Understanding impact:** Clearly defining impact ensures that social innovation projects generate meaningful change.

- **Adaptability for long-term impact:** Social innovations must remain flexible to adapt to evolving societal and technological changes.

- **Feedback mechanisms:** Incorporating continuous feedback allows for adaptation, ensuring the relevance and success of age-friendly environments.

From SIRENE synergies

- **Webinar on Defining Impact:** This session explored the significance of defining and assessing the impact of social innovation projects, along with tools for measuring success.

- **Webinar on Social Innovation Growth:** The panel highlighted the importance of cohesive policies, cross-sector partnerships, and long-term adaptability for sustainable social innovation.

3
POLICY RECOMMENDATIONS

The insights gathered from the SIRENE project's liaison and learning exchange activities highlight the crucial role of social innovation in implementing SHAFE across Europe. To effectively translate these insights into action, strategic recommendations are needed at multiple levels: local, national, and international.

These policy recommendations are designed to guide social innovation actors in fostering the development of inclusive, sustainable, and responsive environments for healthy ageing. By addressing the challenges of ageing populations, technological integration, and sustainable urban development, these recommendations aim to ensure SHAFE's holistic and widespread implementation across Europe.

Local level

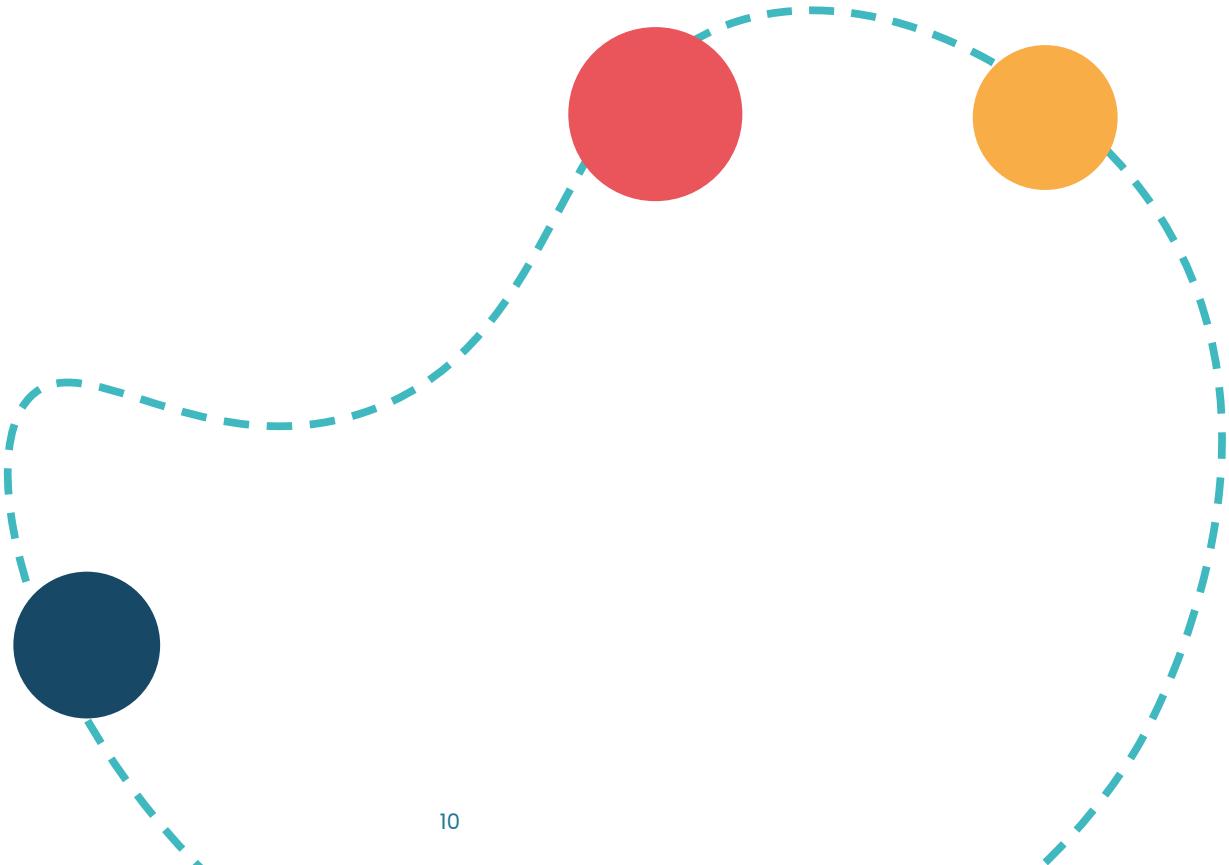
- **Understanding needs:** Promote co-creation processes to reveal specific needs and preferences.
- **Importance of inclusivity:** Engage people of all ages from diverse backgrounds to develop more comprehensive urban policies, ensuring their voices are considered in decision-making processes.
- **Accessibility matters:** Prioritise accessibility in urban design to enhance quality of life of people as they age, facilitating their full engagement in community activities and independence.
- **Environmental quality:** Design urban spaces with considerations for greenery, air quality, and noise levels to respect the comfort of their users, ensuring a better living environment.
- **Continuous engagement:** Foster ongoing interaction with citizens to achieve sustainable urban development. Establishing councils of older adults can bridge gaps and provide structured ways for citizens to influence policy.
- **Technological support:** Leverage user-friendly technology at local level to enhance citizen engagement and feedback collection, ensuring inclusivity across age groups.

National level

- **Sustainability and innovation:** Promote national policies that integrate eco-friendly, sustainable solutions tailored to the ageing population's needs.
- **Investment monitoring:** Monitor national investments in community health and social services to identify trends and ensure effective resource allocation.
- **Sustainable approach:** Implement nationwide sustainability strategies that address both environmental conservation and the ageing population's needs.
- **Need for standardised tools:** Develop standardised evaluation tools at national level, for consistent measurement of urban policy effectiveness across regions.
- **Cohesion in social innovation:** Establish national-level cohesion strategies that integrate digital, health, and social sectors, shaping meaningful solutions through collaboration.
- **Building trust:** Foster trust within communities through effective national health communication and engagement strategies.

International Level

- **Global learning:** Engage in cross-cultural learning, sharing insights and strategies between cities and countries to improve age-friendly urban policy.
- **Empowering co-creation:** Adopt international best practices in empowering local communities for sustainable leadership and social innovation.
- **European policies as catalysts:** Leverage European and international funding mechanisms to support local projects and grassroots innovation.
- **Networking opportunities:** Encourage international collaboration between health tech ecosystems and local stakeholders to foster equitable health access and innovation.
- **Digital inclusion:** Support international efforts to enhance digital inclusion, connecting older adults to global social and economic networks.



4
CONCLUSION AND FURTHER READING

This Policy Brief supports the implementation of SHAFE through social innovation, providing guidance to social innovation actors through key insights and policy recommendations gathered by the SIRENE project liaison and learning exchange activities with other EU funded projects and initiatives.

The SIRENE project supported the growth of social innovation ecosystems delivering eco-friendly and sustainable community-based services for SHAFE (Smart Healthy Age-Friendly Environments) implementation in Europe by providing a workable framework for investment and the broad adoption of high-quality smart living solutions, combining the housing sector and ICT infrastructure – the SIRENE Social Innovation Framework.

The Social Innovation Framework on smart responsive, inclusive and eco-friendly environments brings together information material for citizens, tools to support social innovators, knowledge and information about recent developments, learning opportunities and implementation steps checklists.

The SIRENE Framework consists of five building blocks:

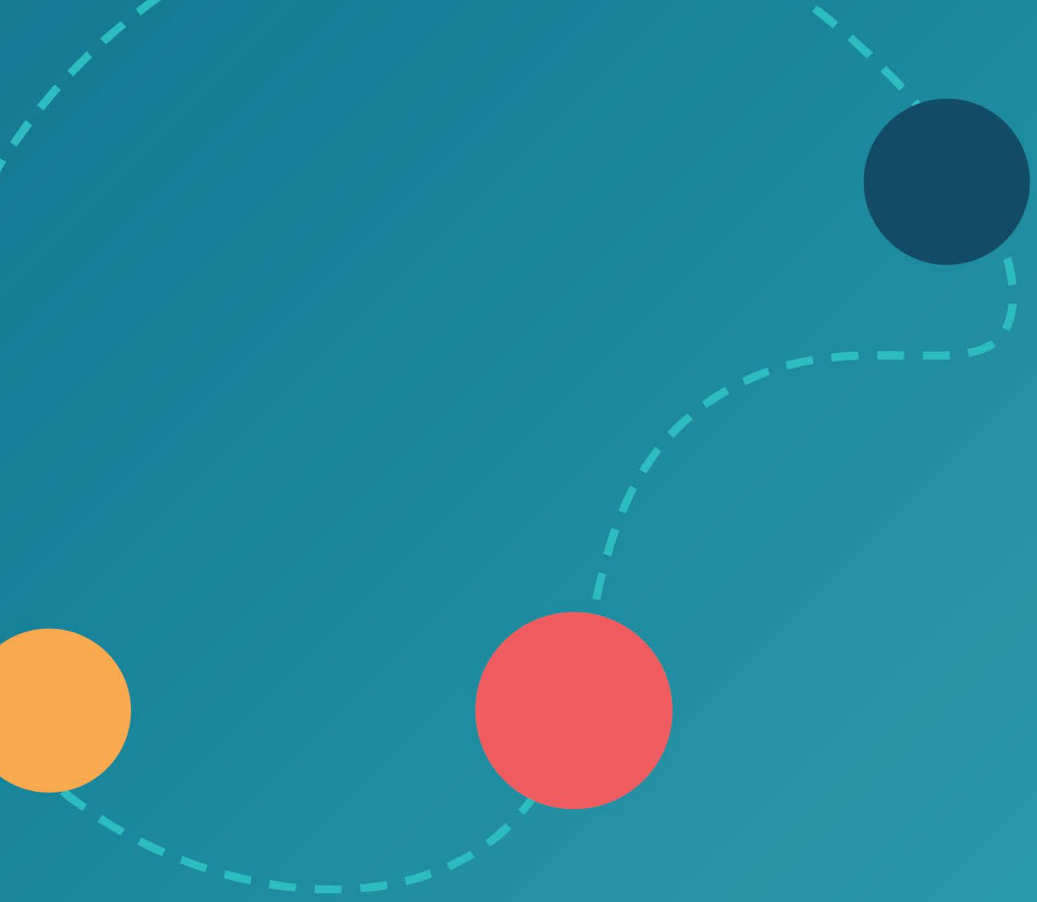
- A manual for innovation actors on social innovation methods and concepts, especially focused on those that can be used to promote responsive, inclusive, eco-friendly environments.
- A capacity-building framework for social entrepreneurs, especially focused on funding opportunities and securing investment.
- A hands-on toolkit of networking and learning exchange initiatives.
- A sustainability strategy that includes examples of SHAFE business models and practical ideas for social innovation investments on SHAFE.
- A blueprint of good practices and social innovation initiatives in SHAFE for benchmark and future twinnings.

Moreover, the SIRENE project has made publicly available the following resources:

- Science cafes
- Video pills
- Info packages
- Capacity building webinars
- Science cafes
- Report on investment monitoring and stakeholders survey

For further information and reading, please visit the SIRENE project website[1].

1 https://sireneproject.eu/



Co-funded by
the European Union

SIRENE | Social Innovation Responsive Environments Network is a Coordination and Support Action, co-funded by the European Union under Horizon Europe Programme (topic HORIZON-EIE-2022-CONNECT-01-02) through the Grant Agreement n. 101096077.