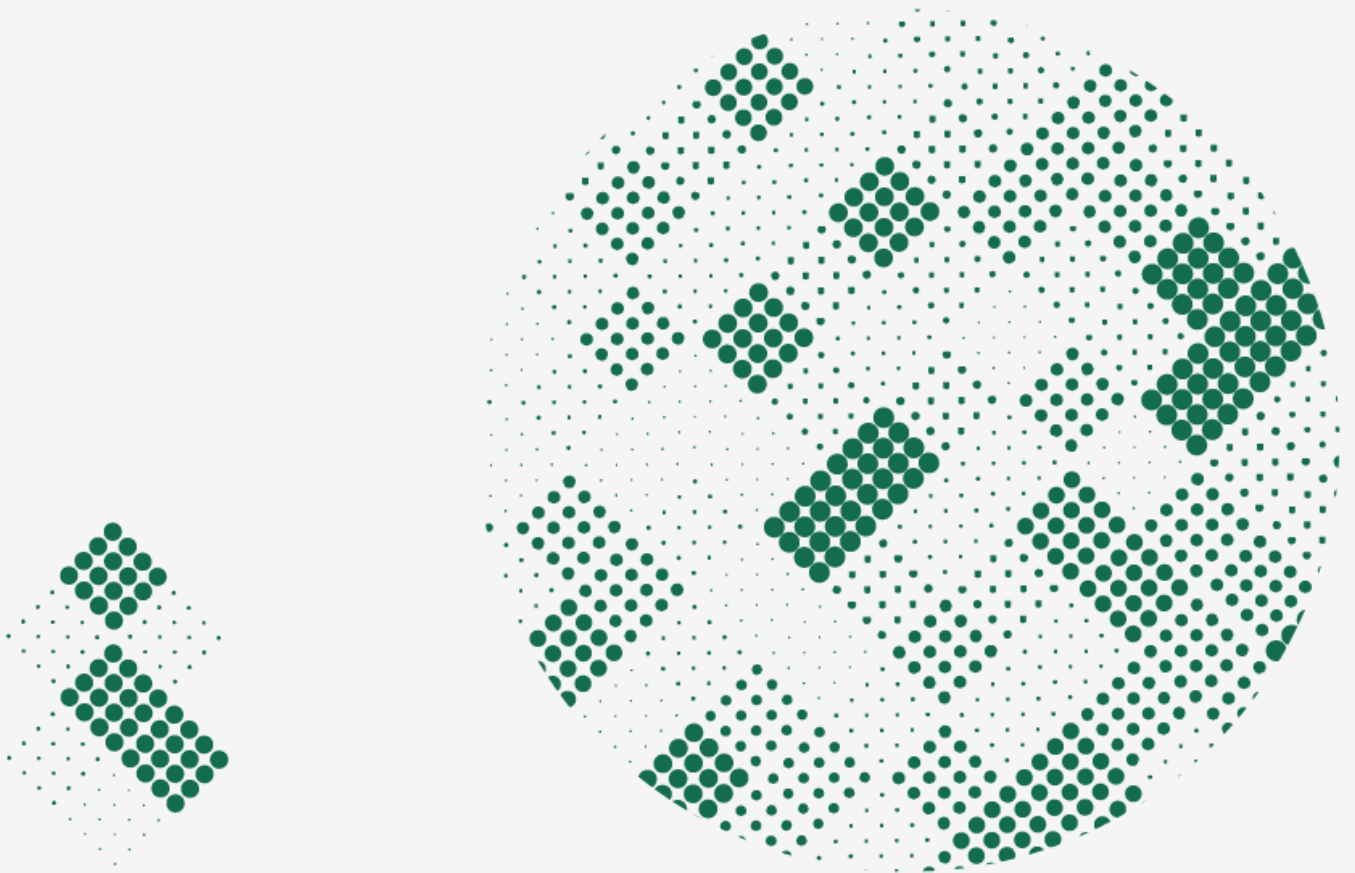




RESPONSIBLE  
RESEARCH AND  
INNOVATION IN  
TERRITORIES

# **Deliverable 4.5**

## **Transformative Outlook for the Innovation in Active Ageing in Sabadell**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006439



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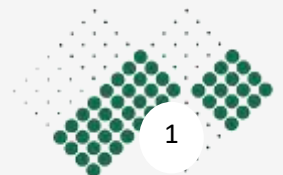
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## Deliverable 4.5

# Transformative outlook for the Innovation in Active Ageing in Sabadell

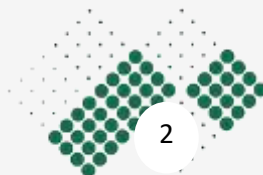
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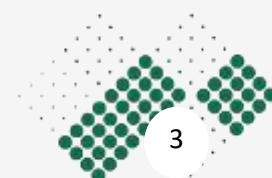


## RRI-LEADERS Partners

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P2	UNIVERSITY OF WESTERN MACEDONIA	PANEPISTIMIO DYTIKIS MAKEDONIAS	UoWM
P3	THE DANISH BOARD OF TECHNOLOGY FOUNDATION	FONDEN TEKNOLOGIRADET	DBT
P4	THE CATALAN FOUNDATION FOR RESEARCH AND INNOVATION	FUNDACIO CATALANA PER A LA RECERCA I LA INNOVACIO	FCRi
P5	ZURICH UNIVERSITY OF APPLIED SCIENCES	ZURCHER HOCHSCHULE FUR ANGEWANDTE WISSENSCHAFTEN	ZHAW
P6	REGIONAL ASSOCIATION OF LOCAL GOVERNMENT OF WESTERN MACEDONIA	PERIFEREIAKI ENOSI DIMON DYTIKIS MAKEDONIAS	LGA-WM
P7	SOFIA DEVELOPMENT ASSOCIATION	АСОЦИАЦИЯ ЗА РАЗВИТИЕ НА СОФИЯ (ASSOTSIATSIA ZA RAZVITIE NA SOFIA)	SDA
P8	MUNICIPALITY OF THALWIL	GEMEINDE THALWIL	THA
P9	ECONOMIC DEVELOPMENT AGENCY OF SABADELL CITY COUNCIL	PROMOCIO ECONOMICA DE SABADELL	PES SL



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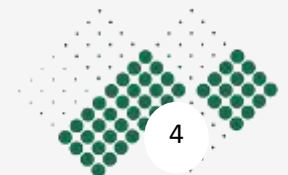


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## List of acronyms / abbreviations used in this document

AIRR – Anticipation, Inclusiveness, Reflexivity, Responsiveness

ESDI – *Escola Superior de Disseny* (School of Design)

FUNDIT – *Fundació del Disseny Tèxtil* (Textile Design Foundation)

PAESC – *Pla d'Acció per a l'Energia Sostenible i el Clima* (Action Plan for Sustainable Energy and Climate)

PECT – *Projecte d'Especialització i Competitivitat Territorial* (Specialisation and Territorial Competitiveness Project)

PES – *Promoció Econòmica de Sabadell* (Economic Development Agency of Sabadell City Council)

R&I – Research and Innovation

RIS3 – Regional Innovation Strategy for Smart Specialisation

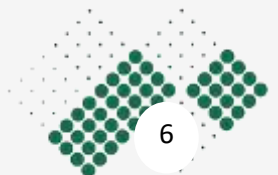
RIS3CAT – Regional Innovation Strategy for Smart Specialisation for Catalonia

RRI – Responsible Research and Innovation

UAB – *Universitat Autònoma de Barcelona*



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## Executive Summary

The Transformative Outlook is a future-oriented action plan, which includes a vision for the overall development of the policy area chosen by *Promoció Econòmica de Sabadell (PES)*: Innovation in Active Ageing. The Transformative Outlook compiles 5 objectives and 9 actions resulting from the co-creation process conducted along the different stages of the project:

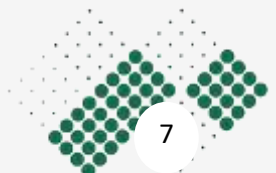
- Stage one - Interviews and Focus Groups for the stakeholder mapping and analysis of policy discourse.
- Stage two - Iterative Delphi Survey and World Café for the definition of the future objectives and actions.
- Stage three - Citizen Review Panel and Stakeholder Workshop for the improvement and consensus of the objectives and actions of the Transformative Outlook.

The 5 objectives and 9 actions defined in this report outline the necessary steps towards the policy area *Innovation in Active Ageing*. The Transformative Outlook is aligned with current strategies and policy initiatives at municipal and regional level. It also considers the results of various projects implemented by the municipality or local R&I stakeholders. Therefore, it seeks to expand and enrich existing territorial policies, strategies, initiatives, and priorities, within a specific timeframe.

The RRI keys and AIRR dimensions have guided the process and outcomes of each objective and the specific actions of the Transformative Outlook. Overall, the Transformative Outlook is an action plan to facilitate the adoption and integration of the RRI-AIRR framework into territorial policymaking.



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## Preface

### The RRI-LEADERS Project

RRI-LEADERS is a three-year EU-funded project (2021-2023) exploring the relevance of the principles for Responsible Research and Innovation (RRI) to territorial policymaking. The territories in RRI-LEADERS consist of three European cities and one region and act as demonstrators for the transformative potential of RRI-AIRR on a sub-national level. Through a co-creation process involving multiple stakeholders and citizens, each territory will analyse and integrate RRI-AIRR to their chosen policy areas:



**The city of Sofia (Bulgaria):** Support for innovation; digital transition and new skills; youth employment and entrepreneurship; and sustainable urban development.



**The municipality of Thalwil (Switzerland):** Energy transitions and climate change responsiveness.



**The city of Sabadell (Catalonia, Spain):** Inclusiveness and alignment of the territorial innovation ecosystem with societal challenges considering sustainability, focused on the topic of active ageing.



**The region of Western Macedonia (Greece):** Economic transition to low-carbon economy, in particular a smooth and innovative transition from the coal value chain towards an alternative development paradigm.

The **Transformative Outlooks** are the final outputs of the co-creation process. These outlooks consist of an action plan with measures for implementing the intended transformation in each territory through the integration of RRI-AIRR as a framework for addressing territorially significant policy areas. The following is the Transformative Outlook for Sabadell.

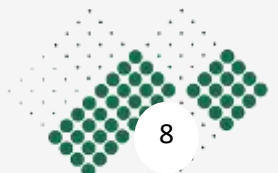
Please visit the project website for more information: [www.rri-leaders.eu](http://www.rri-leaders.eu).

### The RRI-AIRR Framework

Originally, Responsible Research and Innovation (RRI) has been an approach used to align research and innovation processes and outcomes with societal needs and expectations, including ethical considerations, promotion of gender equality, and inclusion of perspectives from societal actors. Instead of applying the elements of RRI to research and innovation activities only, this project seeks to integrate RRI into territorial governance with the aim to foster a systematic approach to responsible, science evidence-based policymaking.



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The project integrates two complementary understandings of RRI: The five RRI keys and the four AIRR dimensions – making up the RRI-AIRR Framework. The RRI keys are of different conceptual natures but can be understood as *policy agendas*. The five RRI keys are: public engagement, open access, gender equality and diversity, ethics, and science education. The AIRR dimensions can be seen as *process requirements*, outlining four characteristics of an RRI process. The four dimensions are: anticipation, inclusiveness, reflexivity, and responsiveness. (Klaassen et al., 2014)




The project adopts the following understanding of RRI: “A transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products” (von Schomberg, 2011).

The understanding of RRI diverges only slightly from this definition in that it does not promote the separation of innovators from the rest of the societal actors as mentioned above and instead seeks to include all societal actors as co-creators in the innovation processes. In doing so, RRI-LEADERS’ interpretation of RRI draws heavily on the extension of the RRI framework proposed by Stilgoe, Owen and Macnaghten (2013), who emphasise the prospective notion of responsibility by introducing four dimensions of RRI – anticipation, inclusiveness, responsiveness, and reflexivity, largely known as the AIRR dimensions. RRI-LEADERS integrates these four dimensions into its methodological design and operational implementation.

RRI KEYS	
	<b>Public Engagement</b> is about bringing together researchers, policymakers, industry and civil society organisations and NGOs, as well as citizens, to deliberate on matters of science and technology.
	<b>Open Access</b> is about the practice of providing open access to scientific information that is free of charge to the user and is reusable.
	<b>Gender Equality and Diversity</b> is about overcoming all barriers associated with gender, age, race, ethnicity, disability, and socio-economic status, and making science, research, and innovation fully accessible to people from the widest range of backgrounds, perspectives, and experiences, across all scientific disciplines and at all hierarchical levels.
	<b>Ethics</b> is about conducting research in such a way that allows others to have confidence and trust in the methods and findings of research.
	<b>Science Education</b> is about making science education and careers attractive for young people, targeting to drastically improve science and technology-literacy in our society.
AIRR DIMENSIONS	
	<b>Anticipation</b> is about systematic thinking on any known, likely, plausible, and possible implications of research, innovation, policy, or action.



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	<p><b>Inclusiveness</b> is about the integration of perspectives from a wide range of societal actors (including non-organised and non-institutionalised citizens and community groups) and their involvement in multi-stage co-creation processes in a wide range of policy areas.</p>
	<p><b>Reflexivity</b> is about critically scrutinising one's own activities, commitments, and assumptions, and being aware of the limits of one's knowledge. It implies a reflection about societal circumstances to reassess practices and adjust initiatives.</p>
	<p><b>Responsiveness</b> is about placing societal needs in the focus of plans and actions of public leadership and governance, and engaging society in the processes of policy design and decision-making, as well as policy implementation, monitoring, and evaluation.</p>

## The Co-Creation Process

Co-creation has been the main approach of implementing the RRI-LEADERS project since the very start. The first step was an extensive mapping, focused on the state-of-play regarding the RRI-AIRR framework in the four territories. Following this, Quadruple Helix stakeholders were engaged to develop ideas on the developments around the policy area and integration of the RRI-AIRR framework. Based on this input, the first draft of the Transformative Outlook was developed in 2022. Citizens were then engaged to review and validate the Transformative Outlook in 2023. Finally, the Transformative Outlook will be presented to policymakers in order to achieve their endorsement.

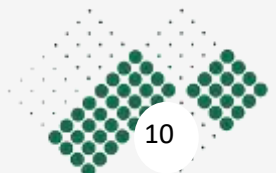
### Mapping 2021

The first stage of the co-creation process involved a large number of stakeholders. The co-creation process began in March 2021 conducting 17 semi-structured qualitative interviews with actors in the territorial R&I eco-system. Interviews included organisations, governmental agencies, representatives of the research and business sector of the municipality of Sabadell and Catalonia. Interviews were followed by an online focus group, carried out on 25<sup>th</sup> April 2021 with 12 stakeholders with the aim of further exploring the findings from the analysis of the previous interviews. In July 2021 a participatory workshop with 10 stakeholders from organisations other than those previously involved was held, to examine the perceptions of territorial stakeholders with regard to RRI keys and AIRR dimensions, and their relevance to the overall development policy in the territory. Finally, between October and November 2021 four separate focus groups were held with a total of 21 stakeholders that represented research, business, policy making and civil society.

This entire process allowed *Promoció Econòmica de Sabadell* (PES) to know more about the practical experience with RRI keys and AIRR dimensions of a sample of territorial stakeholders and narrow down the policy focus. RRI-AIRR exploration was framed by three initial policy areas (Circular Economy, Active Ageing and Intelligent Design Applied to Industry), the final 4 focus groups were determinant to narrow down the policy focus. Thus, the topic of Active Ageing was nominated as the most interesting innovation strategic policy to be developed in the city by the stakeholders.



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### Stakeholder Engagement 2022

After the mapping, an iterative Delphi survey was used. The online expert-based Delphi survey was designed in three rounds, using three questionnaires that allowed stakeholders to develop ideas and reach agreements about potential future developments around the policy area and integration of the RRI-AIRR framework. 30 experts (13 men and 17 women) in Active Ageing from academia and research, policy makers, industry and business and civil society were invited to participate in the three rounds of the Delphi study. However, only 20 experts participated in the first round. Second and third rounds had also some dropouts, only 16 people responded the questionnaire in the second round and 14 did it in the in the final round.

The stakeholder engagement was followed by the organisation of a World Café event, a very interesting opportunity to exchange knowledge and opinions among participants experienced in Active Ageing and innovation policies. The World Café was held on 14<sup>th</sup> July 2022 in Sabadell and recruited 11 people (8 men and 3 women) from business/industry, academia, civil society and public administration.

Both, the Delphi survey and the World Café contributed to shaping the final Transformative Outlook composed by 5 objectives.

### Citizen Engagement 2023

The Citizens Review Panel was the last stage of the co-creation process, where citizens reviewed and validated the Transformative Outlook by suggesting improvements to the objectives and actions herein. The event gathered 12 people from different ages, however, 3 out of 4 people were over 50 years old. This fact reveals the lack of interest on active ageing policies among citizens under 50 years old, and more specially among youngsters. Participants' backgrounds and gender were diverse, too. 8 of 12 attendees were female, and 8 out of 12 had tertiary studies.

The meeting inspired a very interesting debate among the participants where all the citizens had the opportunity to have their say. As a result, all the actions from the 5 objectives were tackled and assessed in depth. All the actions received a good acceptability, and two new actions were created and proposed to be incorporated in the Transformative Outlook. Ultimately, a very productive working session took place, which brought into light the importance of active ageing policies in the city of Sabadell and the citizen's involvement in their co-creation process.

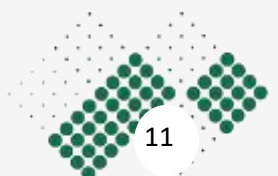
The results of the work of the Citizen Review Panel were reviewed by 10 experts in the follow-up stakeholder workshop who transformed all the input made by the citizens into realisable actions. This task entailed altering the original actions or suggesting new actions to make the actions realisable.

### Endorsement 2023

Finally, the Transformative Outlook will be formally presented to the city council departments with competences to deploy the proposed objectives and actions.



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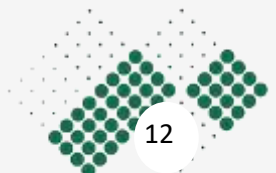
## Visualisation of Innovation in Active Ageing and Objectives

Below is an illustration of the policy area and objectives, including the actions and key RRI-AIRR measures for each objective.

Policy Area	Innovation in Active Ageing
<b>Objective 1</b>	<b>Increasing by 15% the number of photovoltaic panels installed in public and private nursing homes</b>
Action 1.1	Collection of basic data from nursing homes.
Action 1.2	Giving practical information about energy transition to the nursing homes.
Action 1.3	Exploring measures to regulate benefits from energy savings.
Action 1.4	Piloting the project in a nursing home.
Main RRI-AIRR Measures	Public engagement, open access, science education, anticipation, inclusiveness, reflexivity and responsiveness.
<b>Objective 2</b>	<b>Creation of a senior lab</b>
Action 2.1	Providing information about the senior lab to the citizens, organisations, academia and businesses.
Main RRI-AIRR Measures	Public engagement, anticipation, science education, inclusiveness, and reflexivity.
<b>Objective 3</b>	<b>Preparation of good professionals in the socio-sanitary field to attend elderly people, considering the Expertise of Senior Professionals</b>
Action 3.1	Triggering collaboration between senior and junior healthcare professionals at university level.
Main RRI-AIRR Measures	Public engagement, ethics, science education and responsiveness.
<b>Objective 4</b>	<b>Creation of a participatory tool for identifying the elderly people challenges</b>
Action 4.1	Elaboration of a communication plan to engage the users.
Main RRI-AIRR Measures	Public engagement, ethics, open access, inclusiveness and reflexivity.
<b>Objective 5</b>	<b>Development of pilot projects for the design of technology-based products focused on Active Ageing</b>
Action 5.1	Promotion of the transfer of knowledge from the senior lab to start-ups and companies focused on Active Ageing through different activities.
Action 5.2	Reinforcement of the territorial innovation ecosystem through the enlargement of its pool of talent.
Main RRI-AIRR Measures	Public engagement, gender equality & diversity, anticipation, reflexivity and responsiveness.



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## Introduction to Sabadell

Sabadell is the 25<sup>th</sup> most populous city in Spain, and the 5<sup>th</sup> most populous city in the region of Catalonia, with a total population of 216,500. Due to its strategic geographic position in the industrial area of Vallès and its proximity to Barcelona, the city has significant opportunities for the development of a competitive industrial and research structure on a regional, national and European level.

In terms of economic activity, the tertiary sector is highly developed, with commerce generating a high turnover rate among businesses. The secondary sector – that of manufacturing – is also an important aspect of the city's economy, whose turnover is owed to a great extent to the construction sector. Sabadell moreover depends largely on the textile and paper industries which have been evolving in the city since the Industrial Revolution. Sabadell, together with other nearby towns, is one of the main important points of economic activity in the south of Europe.

It also counts with the presence of several universities and R&D institutions which enrich the innovation and technological ecosystem.

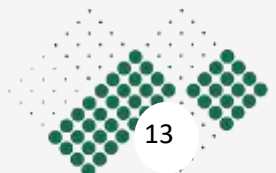
Sabadell's current goal is to promote projects encouraging innovation, new technologies, knowledge, and activities associated with the industry. It is committed to the revitalisation of the local economy, based on a strategy focused on five main axes: healthcare, logistics, research and technology, aeronautics and design and fabrics. Moreover, sustainability represents a cross-cutting vector in these processes.

Over the last years, the city of Sabadell has been engaged in the deployment of Smart Specialisation Strategies (RIS3) in Circular Economy, Active Ageing, and Intelligent Design in Industry, meant to build competitive economic advantage. It is currently leading a project in the framework of the Research Innovation Strategies for Smart Specialisation in Catalonia (RIS3CAT) instrument: Specialisation and Territorial Competitiveness Project "Vallès Industrial" (PECT Vallès Industrial), which aims to promote this territory as a reference in the specialisation domain of industrial systems and to become a centre for innovation and design in this field. It was also the leading partner of the RELOS3 project, an Interreg project focused on implementing regional Smart Specialisation Strategies (RIS3) in a local context by actively involving local authorities, innovation actors and companies. The promotion of the territorial innovation ecosystem and the generation of a policy change at local level, are therefore the focus of Sabadell's participation in the RRI-LEADERS project.

In October 2021 Sabadell City council signed an agreement with the *Universitat Autònoma de Barcelona* (UAB), the *Corporació Sanitària Parc Taulí* and the *Fundació FUNDIT- ESDi* for the creation of the Urban Campus of Life and Health Sciences. All 4 institutions agreed to launch a large-scale project that includes a set of training, research, innovation and business creation actions. Among the projects that will be carried out, a recovered old factory will host a large part of the UAB degree in Nursing, as well as new studies and complementary services related to healthcare.



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## Introduction to Policy Area: Innovation in Active Ageing

Population ageing is one of the greatest challenges of contemporary societies. Maintaining population healthy and active appears as a clear necessity in all countries in order to be able to meet their social and economic demands. Besides, during the last decade governments have started to look at the important potential of the elderly people and their contribution to our societies. Thus, the importance of the elderly people has awoken interest among local, regional and national governments, which have been working towards creating a set of measures, strategies and policies to promote Active Ageing.

According to the World Health Organisation “Active ageing applies to both individuals and population groups. It allows people to realize their potential for physical, social, and mental well-being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance<sup>1</sup>”.

The importance of maintaining our aged society healthy and active, fulfilling their needs and demands, brings associated the development of multiple technological products. Thus, a new economic market focused on elderly people needs has emerged under the name of Silver Economy. As the European Union remarks “Silver Economy encompasses a unique cross-section of economic activities related to production, consumption and trade of goods and services relevant for older people, both public and private, and including direct and indirect effects.”<sup>2</sup>

As all contemporary industrial cities of Europe, Sabadell faces important challenges linked to sustainability, productivity, innovation, transparency and social engagement. In the current global scenario, industrial demands and production are rapidly changing and every territory is in charge of implementing effective strategies. The Municipality of Sabadell is committed to deepen into the work already done with regard to the smart specialisation in the territory, by leveraging the specific advantage of a local authority to address the existing challenges within its territory and act as a bridge between society and science.

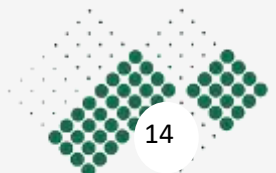
The elderly is a growing collective that could easily act as promoters and users of solutions that ensure a more efficient use of resources. Therefore, they could provide their views on ageing-related challenges. Policies aimed at Active Ageing could create opportunities for technological design, innovation and experimentation.

At municipal level, universities, companies, the city council and local citizens are coming together to advance and innovate in the field of Active Ageing. Several agents in the city linked to the field of health play a leading role in promoting new projects to deal with challenges affecting the elderly. In addition, one of the city’s universities is committed to developing educational material on this subject, and to promoting entrepreneurship in the field of health care.

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<sup>1</sup> World Health Organization. (2002). Active ageing: a policy framework. World Health Organization (page 12) <https://apps.who.int/iris/handle/10665/67215>

<sup>2</sup> European Commission, Directorate-General for Communications Networks, Content and Technology, Worthington, H., Simmonds, P., Farla, K., et al., The silver economy : final report, Publications Office, 2018 (page 6) <https://data.europa.eu/doi/10.2759/685036>



## Synthesis of Findings

### Synthesis of Findings from Stakeholder Mapping and Analysis of Policy Discourse in Sabadell

Main findings from the stakeholders mapping show how the RRI-AIRR concept is not known equally by all stakeholders. Therefore, academia and research stakeholders are very familiar with the RRI-AIRR framework, due to the nature of the research institutions and universities, while citizens are barely familiar with the concept. The RRI-AIRR framework was not familiar for most of the businesspeople. Despite some of the thematic keys and principles were implemented to a small extent, sometimes they were confused with the terminology of social responsibility. Public administration is an important practitioner of the RRI keys and AIRR dimensions, since it integrates an important number of them. However, the RRI-AIRR approach is little known by administration and public employees. The different level of knowledge of RRI-AIRR principles among stakeholders appears as a real challenge.

Although a large number of stakeholders did not consciously implement the RRI-AIRR framework in their daily activity, most of them could contribute to the adoption of RRI principles and the AIRR dimensions within territorial governance. Moreover, some stakeholders have been actively involved in different innovation processes in the territory of Sabadell that applied the RRI-AIRR framework. This was a very interesting finding since they could play an important role at the local level, and lay the foundation for the implementation of RRI keys and AIRR dimensions in Sabadell's policy action.

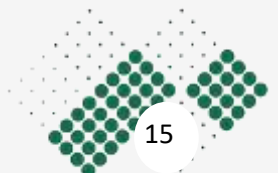
Furthermore, findings highlight the importance of the Strategy for the Smart Specialisation of Catalonia (RIS3CAT) to provide support for the generation and development of innovative projects. Thus, the participation of the municipality of Sabadell in the Specialisation and Territorial Competitiveness Project "Vallès Industrial" (PECT Vallès Industrial), which "aims to promote this territory as a benchmark in the specialisation domain of industrial systems and to become a centre for innovation and design in this field", has been crucial to select the Active Ageing topic, since a lot of the territorial stakeholders interviewed for the mapping were familiar with it.

The capitalisation on the RIS3CAT framework and the PECT-Vallès and RELOS3 activities has been detected as a strategic policy priority. Thus, the most efficient strategy is to capitalise on the existing efforts of the Catalan Government and different stakeholders in the Vallès Occidental to embed the RRI-AIRR approach in the different activities by making use of all the guidelines and tools developed for the implementation of RIS3CAT and PECT-Vallès. All these tools provide a growing framework of public activities where the RRI approach is advertised, and promote the participation of many stakeholders with little or no experience in innovation or public policies processes.

Finally, findings show the importance of the local government in implementing RRI-AIRR framework in the territorial innovation processes, as well as its capacity to align all the stakeholders and bridge regional policies.



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## Synthesis of Findings from the Delphi Study Conducted in Sabadell

The Delphi study was a very interesting co-creative process that allowed Sabadell to deepen into the policy focus from a more specific perspective. The 3 Delphi rounds allowed to reach consensus on 13 barriers, 24 solutions and 14 RRI-AIRR integration solutions. A total of 51 statements are distributed among 5 objectives which were later debated during the World Café event. Thus, the World Café allowed participants to examine in-depth the statements that reached consensus and ratify or reject them.

Among the main findings it is important to highlight how important the topic of Active Ageing was considered by all the participants. The lack of current strategies or measures on this topic for the territory awoke the interest of the participants to work in finding actions to fulfil the 5 presented objectives.

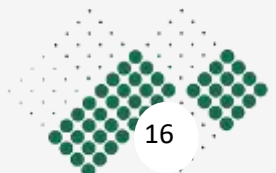
Thus, when talking about the first objective (Increase by 15% the number of photovoltaic panels installed in public and private nursing homes), participants reached consensus on the importance of **Finding a way to grant the installation of photovoltaic panels**. They also showed interest in the following solution: **Perform a crowdfunding campaign**. Although this statement did not reach consensus in the Delphi study and did not get a high ranking during the World Café, it was considered as part of a new solution. Thus, the merge of both statements brought a new solution: perform a crowd-lending campaign where not only the nursing homes could be involved but also the whole community, creating energy communities.

In relation to the objective 2 (Create a senior lab: elderly people directly participating in the creation process of new products and services), among the different statements, the solution **“Personalised participation according to situation and needs: face-to-face or online (depending on mobility and availability) and/or at home if it is necessary (participation of volunteers who assist the person during the process)”** received agreement but was far below the level of a consensus; which shows to forecast a non-easy development of personalised channels of elderly people participation, whether on line or face to face. The solution **“Carry out a proper communication and dissemination campaign”** got the second place in the ranking. Thus, a consensus of this statement is clearly appreciated since it reached the maximum rate in the Delphi study.

In the objective 3 (Prepare good professionals in the socio-sanitary field to attend elderly people, considering the Expertise of Senior Professionals), the following barrier **“Healthcare professionals are not valued enough”** and the solution **“Improvement of working conditions”** where the best rated statements in the World Café. Although in the Delphi study they were ranked in second place as a barrier and solution, during the World Café these statements gained the highest importance. Participants underlined the importance of improving working conditions previously to the improvement of economic incentives as wage is a consequence of it.

In objective 4 (Create a participatory tool for identifying the challenges before elderly people), 12 statements reached consensus. Thus, during the World Café, another voting was conducted in order to narrow down the most important statements to advance the policy focus. Arising from the voting, none of the statements reached a clear consensus. However, the statement with the highest rate in the Delphi study coincides with that of the World Café voting: **Guarantee the participation of all the stakeholders from the quadruple helix**.

In objective 5 (Development of pilot projects for the design of technology-based products focused on active ageing), the statement **“Direct end-user participation through participation programmes”** was ranked as the top solution, the participants of the World Café also considered this statement crucial to implement



policy objective 5 in the territory. The statement “**Digital illiteracy and digital gap**” achieved second place in the rating, being considered a very important barrier to overcome so as to implement the policy objective.

### Synthesis of Findings from the Citizen Review Panel and stakeholder workshop in Sabadell

The Citizen Review Panel in Sabadell brought together 12 citizens from different ages and backgrounds and lasted for a full working day. During the co-creation approach of the meeting allowed the participants to voice their opinions while suggesting improvements to the experts' objectives and actions. The results obtained in the Panel were reviewed by 10 experts in a follow-up stakeholder workshop.

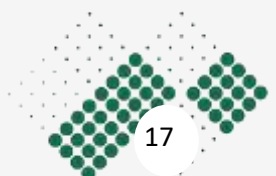
Among the 5 objectives presented, **objective 1** *Increasing by 15% the number of photovoltaic panels installed in public and private nursing homes* **was the one mostly discussed by the citizens**. Sustainability was understood as a clear societal challenge calling to all citizens. Thus, the elderly should be able to contribute to climate change mitigation through different measures. Both action 1.1 *Collection of basic data from the nursing homes* and action 1.2 *Giving practical information about energy transition to the nursing homes* were fully debated and several questions emerged related to:

- The percentage of photovoltaic panels to be installed.
- The amount of time to be spent into the objective analysis, rather than into the objective execution.
- The relevance of the objective into the active ageing local policies.
- The uncertainty on how the elderly will benefit from the green energy production in the nursing homes. How could we ensure that the energy production will benefit the users rather than the private owners of the nursing homes?

The citizens also identified as necessary to add a new action (1.3), focused on analysing the economic benefits that photovoltaic panels can generate to the elderly living in nursing homes.

Objective 1 was also much debated among the experts since it represents an important challenge. In order to address all the questions and suggestions from the citizens, they agreed **on mapping and analysing the state of play** regarding the energy consumption, energy production, etc. of the nursing homes. This first measure clearly pointed out the importance of action 1.1. to define the percentage of photovoltaic panels to be installed in the nursing homes. **Raising awareness and better communicate** the objective were conceived as key points to deploy action 1.2. Moreover, the experts agreed on proposing a **new action to regulate the savings obtained from green energy**: Action 1.3 *Exploring measures to regulate benefits from energy savings*. Finally, the experts added a new action with the objective of piloting the objective in one public building. Since all the nursing homes are private, a pilot experience could be conducted in one of the public Senior Residential Buildings of the city. This pilot experience will put into practice actions 1.1 and 1.2 and will help to define appropriate measures to regulate energy savings in the nursery homes (action 1.3), before encouraging nursing homes to increase the number of photovoltaic panels.

**Objective 2** *Creation of a senior lab* **received a very good level of acceptance among the citizens** and did not create too much debate. However, participants suggested to group all the existing agorae and panels dedicated to the elderly people of the city of Sabadell to feed this action, rather than creating a new group to fulfil action 2.1 *Providing information about the senior lab to the citizens, organisations, academia and businesses* necessities. The experts agreed on the citizens proposals related to action 2.1, they highlighted



the **importance of having a good communication campaign** and the need to explore the Senior Lab dissemination in existing agorae and forums were the elderly people meet.

**Objective 3** *Preparation of good professionals in the socio-sanitary field to attend elderly people, considering the Expertise of Senior Professionals* **had an important level of acceptability**. The citizens only underlined the importance of including action 3.1 *Triggering collaboration between senior and junior healthcare professionals at university level* in the future academic programmes, rather than offering it as an extracurricular activity. The experts suggested to involve the professional associations to recruit senior professionals who would like to mentor future junior professionals.

**Objective 4** *Creation of a participatory tool for identifying the elderly people challenges* was linked by the citizens to Objective 2. The citizens stressed again the excessive number of participatory groups in the city dedicated to the elderly people. Thus, they considered to create a new action, to be emplaced before the current action 4.1 *Gathering different stakeholders for the creation of the participatory tool*, focused in the analysis of the current participative groups and tools. This new action would allow to have a real radiography of the city agorae dedicated to active ageing and to focus on the citizens' recruitment from existing groups. Moreover, they underlined the digital gap as a possible barrier to take part of the new participatory tool.

Since some of the objectives of the Transformative Outlook are focused to boost or improve existing solutions, the stakeholder workshop was an incredible opportunity to get to know about the current state of some of the objectives. This was the case with Objective 4, whose actions were considered obsolete. Some of the experts involved in the objective deployment confirmed that, since the tool has been already created, neither action 4.1 nor the new action proposed by the citizens were necessary. However, they proposed to replace them by **a new action focused in implementing the participatory tool**. This new action should be based on communicating the tool and ensuring the users engagement. Thus, action 4.1 has been renamed as *Elaboration of a communication plan to engage the users*.

**Objective 5** *Development of pilot projects for the design of technology-based products focused on Active Ageing* **received a good level of acceptability**, however, some questions arose during the debate:

- How knowledge will be transferred to the start-ups?
- How active ageing policies will benefited from talent retention?

These questions called for better explanation of the actions 5.1 *Promotion of the transfer of knowledge from the senior lab to start-ups and companies focused on Active Ageing through different activities* and 5.2 *Reinforcement of the territorial innovation ecosystem through the retention of talent* in the Transformative Outlook.

The experts commented the importance of both actions and modified part of the action 5.2, considering that **talent should be boosted through collaboration mechanisms rather than retention ones**. Thus, the title of action 5.2 was slightly modified: *Reinforcement of the territorial innovation ecosystem through the enlargement of its pool of talent*.



Objective 1: Increasing by 15% the number of photovoltaic panels installed in public and private nursing homes

OBJECTIVE AND ACTIONS	TIME FRAME
<b>OBJECTIVE 1:</b> <i>Increasing by 15% the number of photovoltaic panels installed in public and private nursing homes</i>	
<b>Action 1.1: Collection of basic data from nursing homes</b> Collection of basic data in order to analyse the status quo of the nursing homes in Sabadell. This action will gather information about the energy consumption of nursing homes, the available roof area to install the panels, the number of nursing homes with photovoltaic panels and their usage, energy consumption, energy production, etc.	2023-2025
<b>Action 1.2: Giving practical information about energy transition to the nursing homes</b> According to the data obtained and analysed from action 1.1, practical information about photovoltaic panels (benefits, challenges, opportunities, installation, financing options...), as well as information about energy communities will be provided to nursing homes. This should be done through a communication plan.	2025-2027
<b>Action 1.3: Exploring measures to regulate benefits from energy savings</b> Ensuring that energy savings benefits will revert into nursing homes users rather than into the nursing homes own profit.	2025-2027
<b>Action 1.4: Piloting the project in a nursing home</b> Before encouraging to increase by 15% the number of photovoltaic panels in nursing homes, the successful implementation of the experience in a pilot nursing home should be achieved.	2027-2029

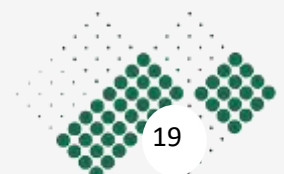
### Elaboration and Justification

The active role of the elderly in addressing societal challenges appears as crucial to promote Active Ageing. Moreover, the European Union has highlighted the need of European regions to implement sustainable policies to become climate neutral by 2050. The increasing number of elderly people points out how relevant their participation to cope with sustainability challenges is.

As users of nursing homes, they could actively contribute to the implementation of green energy consumption and reduce the energy footprint. However, during the co-creation process, several barriers



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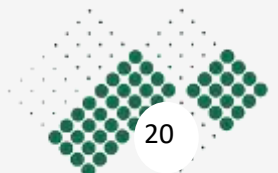
were detected for the easy landing of this objective. Since all the nursing homes are private, no public investment in green energy infrastructure has been done. Moreover, the national legislation does not oblige to generating or consuming green energy in private buildings. Participatory processes also showed the importance to disseminate and better communicate the benefits of consuming and generating green energy through photovoltaic panels. In this regard, a lack of general knowledge in photovoltaic panels and green energy generation was detected. Several doubts emerged concerning financial and installation procedures as well as the pros and cons of consuming and generating solar energy.

Before launching a public call to increase the number of photovoltaic panels in the nursing homes 4 actions have been defined:

- Action 1.1: This action aims to map and analyse the state of play of nursing homes in Sabadell regarding energy consumption and production. Thus, the first step needs to be focused on data collection, i.e. energy consumption of nursing homes, available roof area to install photovoltaic panels, number of nursing homes with photovoltaic panels and their usage, energy consumption, energy production, etc.  
This action will call for the collaboration of several departments of the municipality, especially those involved in energy transition and social services. Further, the department in charge of deploying the data collection will need to define how the information will be obtained (using public workforce or contracting external services).
- Action 1.2: According to the data obtained and analysed from action 1.1, practical information about photovoltaic panels (benefits, challenges, opportunities, installation, financing option...), as well as information about energy communities will be provided to nursing homes. Thus, communication and dissemination will be key to guarantee the nursing homes engagement. Providing tailor-made advice to each nursing home would increase their engagement.  
Although this action aims to reach mainly the boards of directors of nursing homes, so they could implement some changes in energy consumption and production, it also calls for reaching out to nursing homes users since they could have their say in how to improve energy consumption and thus reduce energy bills.
- Action 1.3. Despite providing tailor-made advice to the nursing homes, it is necessary to ensure that benefits obtained from green energy will have a positive impact on their users. Thus, the local government will need to explore different measures to regulate it. These measures could range from creating an eco-friendly label with benefits to all those nursing homes using and generating photovoltaic energy, to creating a municipal regulation to ensure that most of the savings revert on decreasing the users' final bill or into a better in-house climate control (cooling and heating) of the nursing homes. Therefore, the elderly people are very vulnerable to climate change and guaranteeing their climate comfort will be necessary for their well-being.
- Action 1.4. Before launching a public call to increase the number of photovoltaic panels in the nursing homes, conducting a pilot experience would be very valuable. This pilot experience should deploy the previous actions and proceed with the installation of photovoltaic panels. Thus, the pilot experience will help to detect barriers and identify solutions to improve the objective feasibility.



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Since all the nursing homes in Sabadell are private, the pilot experience should be deployed in one of the Public Senior Residential Buildings of the city. Otherwise, a public call for tenders could be published to find a private nursing home to pilot it.

### Relation to ongoing policy processes/strategies

The city of Sabadell is a signatory of the Covenant of Mayors initiative with the aim to support implementation of the EU 40% greenhouse gas-reduction target by 2030 and the adoption of a joint approach to tackling mitigation and adaptation to climate change. Thus, in 2021 the Action Plan for Sustainable Energy and Climate of Sabadell 2021-2030 (PAESC) was approved. The PAESC consists of 40 actions, structured in 6 strategic axes.

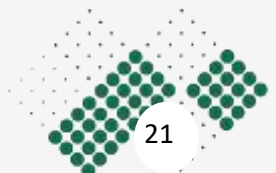
Objective 1 of the Transformative Outlook is clearly aligned with strategic axis 3 - *Increase in local generation of energy and energy efficiency, towards the ecological transition* - and strategic axis 5 - *A sensitized and committed society in a resilient and prepared territory for the risks of climate change*. Arising from these strategic axes of PAESC, several specific actions can be found which clearly encompass the objective:

- *Promote energy photovoltaic consumption in municipal facilities.*
- *Promotion of the use of renewable energy from geothermal or other green energy sources.*
- *Implement actions to improve and optimize the energy management system of the municipal buildings.*
- *Sustainable construction ordinance that goes beyond the technical building code.*
- *Consolidation of the Office of Energy Rights to fight against energy vulnerability.*

Promotion of energy communities and photovoltaic panels' installation in industrial areas has been done by PES during the last years. This policy wants to be transposed into urban areas with the objective to let population know about the benefits of energy communities and their feasibility.

Moreover, Sabadell will build in the following years the first public nursing home in the city. The above presented actions could help to foster new initiatives on photovoltaic panels in the public domain.

Since this action cannot be deployed by PES, it will be transposed to the competent departments (Social Action and Energy Transition). However, PES will keep exploring energy transition in the industrial areas of Sabadell, boosting new actions and initiatives among the industries and companies. The definition of a roadmap towards green industry will be done in the following years by participating in the URBACT Action Planning Network IN4GREEN. The IN4GREEN network will explore how to help companies and industries to move into green energy and to adapt new circular economy strategies. Thus, the study of photovoltaic panels' installation, the roof availability to install them and the exploration of energy communities, among other initiatives, could feed objective 1 and promote the exchange of knowledge to advance towards the city green transition.

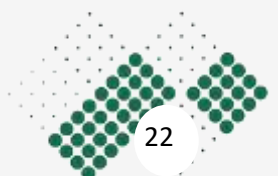


## RRI-AIRR Framework

RRI RELATED MEASURES	
Public engagement	Engagement of different stakeholder groups will be done through the organisation of informative sessions about energy communities and photovoltaic panels' installation.
Open access	Upload in the municipal webpage relevant documents and information about energy communities and photovoltaic panels (finance, installation, etc.)
Science education	The local senior university could run specific sessions about green energy. Moreover, The Action Plan for Sustainable Energy and Climate of Sabadell 2021-2030 (PAESC) foresees the creation of the Office of Energy Rights that could act as a space communication and science education.
Anticipation	Disseminate a poll about energy communities and green energy to get a feeling of the real interest of population on this objective.  Moreover, the Action Plan for Sustainable Energy and Climate of Sabadell 2021-2030 (PAESC) anticipated several key actions that could support action 1.1.
Inclusiveness	The Action Plan for Sustainable Energy and Climate of Sabadell 2021-2030 (PAESC) plans to take measures on vulnerable neighbourhoods with the promotion of energy communities. Both actions could be integrated in this future measure.
Reflexivity	The Action Plan for Sustainable Energy and Climate of Sabadell 2021-2030 (PAESC) foresees the creation of the Office of Energy Rights that could act as a space of dialogue and evaluation.
Responsiveness	Feedback from stakeholders could be collected from different surveys about energy consumption and energy solutions. Responses could be published on the website or in the future Office of Energy Rights.



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## Objective 2: Creation of a senior Lab

OBJECTIVE AND ACTIONS	TIME FRAME
<b>OBJECTIVE 2:</b> <i>Creation of a senior lab</i>	
<b>Action 2.1:</b> <b>Providing information about the senior lab to the citizens, organisations, academia and businesses.</b>  The senior lab building was created, but its users' engagement needs to be done in order to boost and consolidate the senior lab.	2023-2024

### Elaboration and Justification

The creation of a senior lab is conceived as a place where elderly people could directly participate in the creation of new products and services focused on them. A place where all their needs could be gathered and be transformed into future product ideas. The idea of creating a senior lab started in 2014 by the stakeholder *Parc Taulí Research and Innovation Institute (I3PT)* in the framework of the project PECT Vallès Industrial. Since then, some steps have been taken and the building to host the Senior Lab created. The senior lab is placed in a recovered old industrial building next to the hospital Parc Taulí and has been called "*S-àvies/is: Laboratori d'Idees*". Despite having a physical space to start working, the lab does not yet have staff associated to run the project and a roadmap to start working. Hence, its users' engagement needs to be organised in order to boost and consolidate the senior lab.

Users' engagement will start by scanning existing agorae like the Advisory Council of the Elderly, senior social centres, associations, etc. where elderly people meet. Providing information about the senior lab to the senior citizens will be crucial to engage them. Since the objective of the Senior Lab is to detect the seniors' needs and transform them into new products and solutions, academia and businesses need to be properly informed about the project.

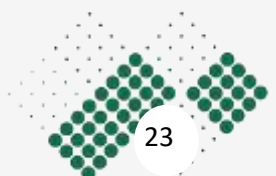
Thus, action 2.1 will disseminate the project to the citizens, organisations, academia and businesses and boost their participation in order to consolidate the senior lab. Also, the action aims to define stakeholders' participation and create information campaigns together with the leading institution of the senior lab, Parc Taulí Research and Innovation Institute (I3PT). PES will support the I3PT in the objective development in all those areas that could be competent in.

### Relation to ongoing policy processes/strategies

The city of Sabadell is currently leading the *Specialisation and Territorial Competitiveness Project "Vallès Industrial"* (PECT Vallès Industrial), which aims to promote the territory as a reference in the specialisation domain of industrial systems and to become a centre for innovation and design in this field. The project consists of 5 operational lines dedicated to enhance the innovation ecosystem through the quadruple helix participation. One of the operational lines of PECT is clearly aligned with objective 2. Thus, the operational



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line 4 entitled “Industrial design and innovation at the service of active ageing in Vallès” needs to be considered as the starting point of objective 2, since the first multi-actor approach was done in terms of active ageing in the territory. The operational line 4, lead by The Parc Taulí Research and Innovation Institute (I3PT), is focused on creating an inclusive space where elderly people could discuss about the product design according to their own needs.

Objective 2 will support the operational line 4 of PECT and consolidate the creation of a senior lab, a participative space dedicated to conceive new products and services with and for elderly people.

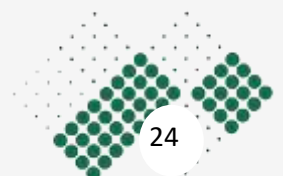
The city of Sabadell has a permanent space dedicated to the elderly people called the Advisory Council of the Elderly. A participation instrument, created in 2000, with the purpose of stimulating the participation of citizens and their associations in the management of the general affairs of the city and especially in those related to the elderly. This instrument could actively cooperate with the Senior Lab both in the communication campaign and in the users’ engagement. At the same time the Senior Lab could be used to address some of the problems or barriers detected in the Advisory Council of the Elderly meetings.

#### RRI-AIRR Framework

RRI RELATED MEASURES	
Public engagement	Communication campaign about the objective in order to inform as much stakeholders as possible.
Anticipation	Organisation of several “Aged Society & Design thinking” conferences, embedded in PECT, to identify elderly people needs and to detect new products and services opportunities.
Science education	Connecting with other European Living labs in order to exchange ideas and improve the pool of knowledge about living labs.
Inclusiveness	Enhance the inclusion of all the elderly people by scanning the diverse organisations, agorae and associations elderly-oriented of the territory.
Reflexivity	Organisation of different design thinking workshops “Generació d’Idees”, embedded in PECT, dedicated to identify and discuss about the main challenges of elderly people.



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## Objective 3: Preparation of good professionals in the socio-sanitary field to attend elderly people, considering the Expertise of Senior Professionals

OBJECTIVE AND ACTIONS	TIME FRAME
<b>OBJECTIVE 3:</b> <i>Preparation of good professionals in the socio-sanitary field to attend elderly people, considering the Expertise of Senior Professionals</i>	
<b>Action 3.1:</b> <b>Triggering collaboration between senior and junior healthcare professionals at university level</b>	2024-2025

### Elaboration and Justification

Collaboration between senior and junior healthcare professionals is randomly implemented. Cooperation is not done at the workplace due to an important number of barriers like salary, professional recognition and timetables. At the same time, retired professionals do not have the opportunity to share their experience with students or young professionals. Collaboration between senior and junior should be fostered at the early stages of the healthcare careers, starting at university. Thus, in order to integrate the expertise of senior professionals to prepare good professionals in the socio-sanitary field to attend elderly people, it is necessary to involve academia and university.

Sabadell will host in 2024 the future Urban Campus dedicated to life and health studies. The campus is a ten-minute walk from the Sabadell's hospital, creating an incredible opportunity to link sanitary professional activity to academic activity. Objective 3 has been conceived as a proposal to be launched to both: Sabadell's hospital (Hospital Parc Taulí) and the future Urban Campus.

The enrolment of seniors into mentoring activities can be approached from 2 different ways:

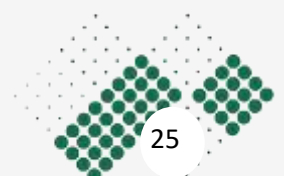
- Retired seniors can be contacted through professional associations.
- A labour agreement could be proposed between the university and the hospital, where those professionals about to retire could reduce their work load in the hospital in favour to share their knowledge at university.

### Relation to ongoing policy processes/strategies

In October 2021 Sabadell City council signed an agreement with the UAB, the Corporació Sanitària Parc Taulí and the Fundació FUNDIT- ESDi for the creation of the Urban Campus of Life and Health Sciences. All 4 institutions agreed to launch a large-scale project that includes a set of training, research, innovation and business creation actions. Among the projects that will be carried out, the city will host a large part of the UAB degree in Nursing, as well as new studies and complementary services.



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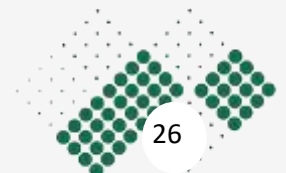


RRI-AIRR Framework

RRI RELATED MEASURES	
Public engagement	Creation of a permanent agora where multiple stakeholders could discuss how improve junior-senior collaboration.
Ethics	Implication of the university ethics committee.
Science education	Communication of the achievements in this matter to the citizenship.
Responsiveness	Annual surveys to monitor the project and give response to the main barriers and challenges.



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## Objective 4: Creation of a participatory tool for identifying the elderly people challenges

OBJECTIVE AND ACTIONS	TIME FRAME
<b>OBJECTIVE 4:</b> <i>Creation of a participatory tool for identifying the elderly people challenges</i>	
<b>Action 4.1:</b> <b>Elaboration of a communication plan to engage the users</b> The participatory tool has been created, but it needs to be set in motion.	2023-2025

### Elaboration and Justification

This action complements objective 2 and objective 5 providing knowledge about main challenges that elderly people are facing. While objective 2 focuses on the creation of a physical space where dialogue could be enhanced, objective 4 seeks to create a permanent virtual space through a participatory tool.

The creation of a participatory tool not only would reinforce objective 2 but also would generate knowledge to design and develop technology-based products focused on active ageing (objective 5).

Currently, the tool has been already created and is ready to be used. However, a communication plan to engage the users and disseminate the tool is needed. The plan should explore the main channels to promote the tool, like social networks, and the design of a good communication campaign.

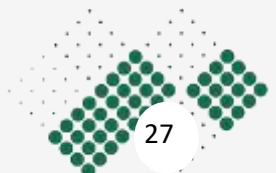
Since this tool is owned by the Parc Taulí Research and Innovation Institute (I3PT), PES will help the I3PT to its dissemination, through its connection to other municipal departments in charge of useful instruments like the Advisory Council of the Elderly.

### Relation to ongoing policy processes/strategies

The city of Sabadell is currently leading the *Specialisation and Territorial Competitiveness Project “Vallès Industrial”* (PECT Vallès Industrial), which aims to promote the territory as a reference in the specialisation domain of industrial systems and to become a centre for innovation and design in this field. The project consists of 5 operational lines dedicated to enhance the innovation ecosystem through the quadruple helix participation. One of the operational lines of PECT is clearly aligned with the objective 5. Thus, the operational line 4 entitled “Industrial design and innovation at the service of active aging in Vallès” needs to be considered as the starting point of this action, since the first multi-actor approach was done in terms of active ageing in the territory. The operational line 4, lead by The Parc Taulí Research and Innovation Institute (I3PT), is focused on creating an inclusive space where elderly people could discuss about the product design according to elderly people necessities, but also to promote several activities to deep into elderly people challenges.



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Objective 4 of this Transformative Outlook supports objective 2 and provides objective 5 with a permanent source of information that should guarantee a continuous updating of elderly people needs. Moreover, objective 4 should allow a wider scope of participation, guaranteeing age and gender diversity.

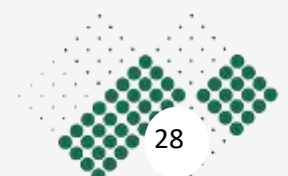
The city of Sabadell has a permanent space dedicated to the elderly people called the Advisory Council of the Elderly. A participation instrument, created in 2000, with the purpose of stimulating the participation of citizens and their associations in the management of the general affairs of the city and especially in those related to the elderly. This instrument could actively cooperate with the Senior Lab both in the communication campaign and in the users' engagement. At the same time the Senior Lab could be used to address some of the problems or barriers detected in the Advisory Council of the Elderly meetings.

### RRI-AIRR Framework

RRI RELATED MEASURES	
Public engagement	Participatory workshop to talk about the creation of the participatory tool.
Open access	Publication of workshop results and other interesting publications in a permanent website.
Ethics	Definition of good ethics and ethics quality of the tool.
Reflexivity	Internal survey to the organisation.
Inclusiveness	Promoting the inclusion of young people to use the application in tandem with the elderly people. This would help to address the digital gap of elderly people and improve the linkages among different age generations.



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## Objective 5: Development of pilot projects for the design of technology-based products focused on Active Ageing

OBJECTIVE AND ACTIONS	TIME FRAME
<b>OBJECTIVE 5:</b> <i>Development of pilot projects for the design of technology-based products focused on Active Ageing</i>	
<b>Action 5.1:</b> <b>Promotion of the transfer of knowledge from the senior lab to start-ups and companies focused on Active Ageing through different activities.</b>	2023-2025
<b>Action 5.2:</b> <b>Reinforcement of the territorial innovation ecosystem through the enlargement of its pool of talent.</b>	2023-2027

### Elaboration and Justification

This objective needs to be understood as the extension of objective 2. While in objective 2 the creation of a senior lab is proposed, a design thinking space between users (elderly people), designers, innovation professionals and local companies for the co-creation and development of products and services dedicated to foster active ageing, objective 5 is focused on promoting the development of pilot projects.

Thus, the creation of a senior lab in objective 2 provides the basis for the deployment of objective 5, that is to say, it provides objective 5 with concepts and ideas for the creation of new products and services focused on active ageing.

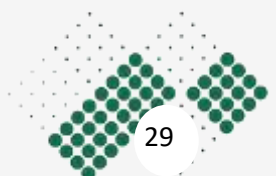
PES will promote the transfer of knowledge through their current annual programmes and activities and will explore the creation of new initiatives to foster action 5.1. Moreover, in order to enlarge and strengthen their territorial innovation ecosystem, PES will explore different options and initiatives to enlarge the pool of talent. Since the talent retention is very complicated in a period when young talented people want to have multiple experiences abroad, exploring collaboration opportunities could be more appealing to them and could result in better projects and solutions.

### Relation to ongoing policy processes/strategies

PES celebrates an annual Forum of Technologies and Innovation, last year edition was about Active Ageing and health. During the forum several start-ups and companies gather together with academia and research centres in order to match future collaboration opportunities. A forum of ideas and offer of technical capabilities looking for opportunities to be developed. Objective 5 focuses on maintaining a permanent transfer of knowledge between the senior lab and all those stakeholders interested in developing Active Ageing products.



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The city of Sabadell is currently leading the *Specialisation and Territorial Competitiveness Project “Vallès Industrial”* (PECT Vallès Industrial), which aims to promote the territory as a reference in the specialisation domain of industrial systems and to become a centre for innovation and design in this field. The project consists of 5 operational lines dedicated to enhance the innovation ecosystem through the quadruple helix participation. One of the operational lines of PECT is clearly aligned with objective 5. Thus, the operational line 4 entitled “Industrial design and innovation at the service of active aging in Vallès” needs to be considered as the starting point of both objective 2 and objective 5, since the first multi-actor approach was done in terms of active ageing in the territory. The operational line 4, led by The Parc Taulí Research and Innovation Institute (I3PT), is focused on creating an inclusive space where elderly people could discuss about the product design according to elderly people necessities.

Objective 5 not only supports the operational line 4 of PECT and consolidates the creation of a senior lab in objective 2, but also helps to consolidate the full PECT project, while it improves the innovation ecosystem from design thinking to industrial development.

#### RRI-AIRR Framework

RRI RELATED MEASURES	
Public engagement	Exploring new public events like senior hackathons dedicated to the design of technology-based products focused on Active Ageing.
Gender equality and diversity	Include a gender equality plan to find equal representation of participants.
Anticipation	Organisation of several “Aged Society & Design thinking” conferences, embedded in PECT, to identify elderly people needs and to detect new products and services opportunities.
Reflexivity	Internal survey to the organisation.
Responsiveness	Expose products ideas in a permanent agora in order to get feedback from future users and citizens.



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## AIRR reflections

Innovation appears as a strategic axis to ensure regional development which calls for systemic interactions among different stakeholders. The well-known quadruple helix model appears as a key aspect to ensure and accelerate any innovation process, consisting in a complex system of interactions, collective learning, networks and linkages that requires an effective model of governance. Local governments have an important role on its deployment by favouring any institutional arrangement. Thus, through their local economic agencies, they can promote interactions among the different stakeholders and facilitate a solid framework to consolidate regional innovation governance.

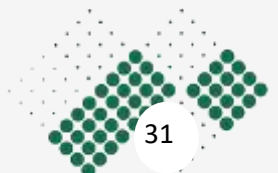
The Economic Development Agency of Sabadell (PES) is clearly committed to the deployment of smart specialisation strategies aligned to find innovative solutions to societal challenges. In this sense, embracing an anticipatory innovation governance capable to approach complex problems like climate change, economic crisis or ageing appears as crucial. Thus, the local and regional innovation ecosystem becomes the cornerstone to ensure effective and efficient solutions.

PES business department is in charge of several initiatives and programmes to boost innovation and improve SME performance: Women entrepreneurship, *Cafè Aventura* (an entrepreneur's "adventure" coffee performing as a start up's panel), Innovation Technologies Forum, among others, as well as several resources on business training. All these programmes incorporate AIRR dimensions:

- Anticipation, through the detection of key topics that might arise interest among the innovation ecosystem. Several improvements could be done with actions that help to anticipate the main topics of interests and the main concerns of the stakeholders. PES business department will explore this dimension through the implementation of surveys or other participatory tools that help to anticipate the main topics of interest.
- Inclusiveness, Sabadell's innovation ecosystem gathers different types of stakeholders. However, civil society is fairly involved. This fact represents a special challenge since innovative solutions to societal challenges need to be designed with the whole society. In this sense, the 5 objectives of the Transformative Outlook will trigger a new way to prioritise stakeholders' participation from the quadruple helix into the different stages of any action or policy. Definitely, the development of the Transformative Outlook objectives might provide us with important lessons to improve inclusiveness in the local government practices.
- Reflexivity, despite the importance of this dimension, has not been systematically integrated into policy evaluation. It could be initiated with the analysis of all the programmes and initiatives than run in an annual basis through different qualitative and quantitative indicators. On doing this exercise we could help to improve the quality and the scope of all the annual programmes and activities developed by the business department of PES.
- Responsiveness, having a quick and positive reaction to social challenges becomes crucial to the city resilience. However, local administration is still far from achieving it. The important volume of administrative tasks arose from every single action make resilience an unresolved and urgent issue. A very challenging dimension to further explore from PES.



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## Communication and Dissemination

The Transformative Outlook of Sabadell in Active Ageing, elaborated by the business department of the Economic Development Agency of Sabadell (PES), will be delivered to all the competent departments of the City Council of Sabadell. Internal dissemination events will be held for this purpose.

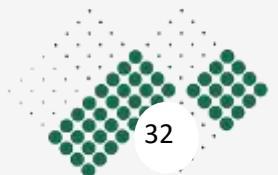
PES has mapped the innovation ecosystem on Active Ageing and explored all main initiatives that could add value to it. The herein action plan compiles a proposal of 5 objectives to be developed by the City Hall of Sabadell through its competent departments. PES will support the City Hall initiatives to communicate and disseminate the Transformative Outlook.

The Transformative Outlook of Sabadell in Active Ageing will be disseminated to all the research centres and academies of the territory, as well as to all the business and industries working in Active Ageing, with the aim to enlarge the innovation ecosystem. PES will welcome all the new Active Ageing proposals and initiatives coming from the stakeholders and will help to their dissemination among the innovation ecosystem.

Finally, civil society will be informed about the Transformative Outlook of Sabadell in Active Ageing through social media and the PES website.



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