



D7.1 – Public Engagement Strategy

September 2022

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1 Technical References

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2 List of Abbreviations

A2C Agro2Circular

AoM Agenda of Meeting

CARM Autonomous Community of Region of Murcia

CDS Communication and Dissemination Strategy

CEBM Circular Economy Business Models

DoA Description of the Action

Dn.n Deliverable (number)

DIS Data Integration System

ExC Exploitation Committee

F2F Face to face

GA General Assembly

IAP2 International Association of Public Participation

KPIs Key performance indicators

MoMs Minutes of Meetings

PC Project Coordinator

PM Project Manager

REA European Research Executive Agency

SP Stakeholder Panel

Tn.n Task (number)

WPn Work Package (number)

3 Glossary

Co-creation: Process for collaborative knowledge generation by academics working alongside other stakeholders, promoting meaningful interactions and better utilisation of products and resources.

Description of the Action: In an H2020 project, the DoA is a document that captures the essence of the envisaged solution in the form of high-level needs and features that gives the reader an overview of the final project deliverable(s). It includes the project work plan and information regarding the project scope, cost, time and risks, as well as information such as milestones, deliverables, and project organisation and approach. The DoA contains the project charter and the project work plan of a PM² project.

Face-to-face infrastructure: In the context of public participation processes, face-to-face participation structures include those in which people can physically see one another, in person (meetings in the same room) or virtually through teleconferences to enable citizen engagement at all levels.

Public engagement: It is understood as the myriad of ways in which the activity and benefits of higher education and research can be shared with the public. Engagement is a two-way process involving interaction and listening and to generate mutual benefit. The concept is considered a synonym for public participation and/or citizen engagement and both terms will be used throughout the document.

Virtual infrastructures: In the context of public participation processes, virtual infrastructures comprise of online platforms, application software and collaborative channels that assist purposeful citizen engagement at all levels (Inform, Consult, Involve, Collaborate, Empower) within a given territory (municipality, region, country, EU).

4 Executive Summary

This document constitutes the deliverable 7.1 *Public Engagement Strategy* and is a summary of activities and results of the Agro2Circular project undertaken within task 7.1.1 *Public engagement strategy*, representing its main outcome. This is a living document which will be updated on M24 (D7.2; September 2023) and M34 (D7.3; September 2024), detailing the activities implemented and the lessons learnt, to be applied at the European level in the D7.16 *Report on potential for adoption and scale-up potential* of the A2C project and other EU regions, namely Lombardy (D7.17) and Lithuania (D7.18).

The objective of the public engagement strategy in A2C is to contribute to the co-design and acceptance of the A2C multidimensional model and to demonstrate the adoption in the Murcia A2C cluster and its replication & scale-up potential. The public engagement strategy has a regional scope (the Region of Murcia Autonomous Community), while a community-based innovation scheme will be based at the local level in one of the municipalities (within T7.1.2).

Therefore, the aim of D7.1 is to design the conceptual framework for public engagement (section 5). As a first step, an ecosystem analysis will be performed, considering the existing infrastructures for public engagement and the relevant stakeholders for the A2C project at the regional and municipal levels (section 6).

Subsequently, a diagnosis is performed in section 7, providing recommendations and selecting the most suitable resources to be used in the A2C citizen engagement. Furthermore, an action plan (section ¡Error! No se encuentra el origen de la referencia.) is briefly drafted with priorities and activities to be deployed along the project. The main results will be further developed in future versions of this deliverable.

Finally, the dissemination and communication measures are defined in section 9. These will be refined in the following periods and reported in M24 (September 2023) and M36 (September 2024), together with conclusions and lessons learnt.

5 Agro2Circular Engagement Process

Public engagement is understood as the myriad of ways in which the activity and benefits of higher education and research can be shared with the public. Engagement is by definition a two-way process involving interaction and listening and to generate mutual benefit. The strategy relies on the **Quadruple Helix of Stakeholders** model (Figure 1), which is crucial for adequate co-creation. It is understood as collaborative knowledge generation by academics working alongside other stakeholders [1] in promoting meaningful interactions and better utilisation of products and resources and the designing of a community participation methodology for public engagement to ensure a meaningful adoption, replication & scalability of the A2C systemic solution model.

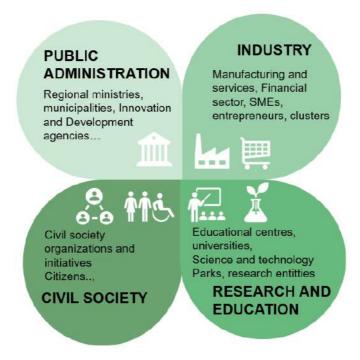


Figure 1. Quadruple Helix of Stakeholders

The present **public engagement**¹ strategy relies on the IAP2 Core Values for Public Participation² which will contribute to identifying those aspects of public participation which cross national, cultural, and religious boundaries, and help make better decisions which reflect the interests and concerns of potentially affected stakeholders:

- 1. Public participation is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process.
- 2. Public participation includes the promise that the public's contribution will influence the decision.
- 3. Public participation promotes sustainable decisions by recognising and communicating the needs and interests of all participants, including decision-makers.

² https://www.iap2.org/general/custom.asp?page=corevalues



¹ Public engagement and public participation are essentially the same and both terms are used synonymously throughout this deliverable.

- 4. Public participation seeks out and facilitates the involvement of those potentially affected by or interested in a decision.
- 5. Public participation seeks input from participants in designing how they participate.
- 6. Public participation provides participants with the information they need to participate in a meaningful way.
- 7. Public participation communicates to participants how their input affected the decision.

The process of citizen engagement entails different levels of public participation based on the *Spectrum of Public Participation* Figure 2. Spectrum of Public Participation. Source: *Vancouver Mayor's Engaged City Task Force. Final Report.* (2014) based on IAP2 Spectrum of Public Participation Figure 2). In the A2C project, the level of participation required will be analysed in subsequent sections: participation according to the goals of the specific action, its complexity and sensitivity.

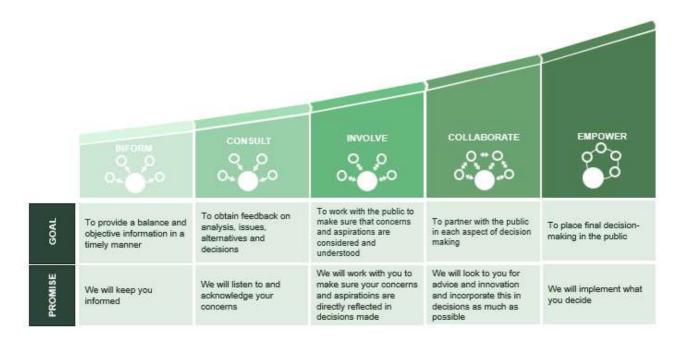


Figure 2. Spectrum of Public Participation. Source: *Vancouver Mayor's Engaged City Task Force. Final Report.* (2014) based on IAP2 Spectrum of Public Participation

- Inform: These actions are aimed at providing the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions. The Inform level is considered as transversal across the spectrum of processes since effective engagement requires a strategic flow of information. Examples: lectures and seminars in educational institutions.
- Consult: These actions are aimed at obtaining public feedback on analysis, alternatives and/or decisions, but with little interaction. This level is appropriate when specific input is required by the public but early engagement is not possible. The targeted public is informed about how their feedback influenced the decision. Examples: interviews, surveys and questionnaires on packaged food consumption and recycling behaviours.

- Involve: Actions at this level require working with the public to ensure that concerns
 and needs are understood and considered, by means of a two-way exchange of
 information and discussion and providing opportunities to influence the outcome.
 Decisions at this level are made by the administrations, although the issues raised
 should be considered. Examples: focus groups and study circles.
- Collaborate: Actions in which the public is directly engaged in decision-making and involved in the interactive process, often including an attempt to find consensus solutions. These actions require creating trust and ensuring a genuine engagement, being costly and time-consuming while implying risks that can damage future relationships with key stakeholders. In the A2C framework, this level corresponds to the stakeholder panel, including representatives of organisations, industrial companies, and associations which are relevant to the A2C's results uptake, such as environmental or consumer associations and the generation of a video documentary.
- **Empower:** This level represents the highest participation grade, in which the public is given the opportunity to make decisions for themselves. A decision could be made by the community through a process that requires little interaction, such as a referendum or voting measure. The level promises to implement what you decide. To achieve real empowerment, three main dimensions should be covered: <u>awareness</u> about the problem to be addressed (specifically, generation of waste in the agrifood sector); <u>capacity building</u> at the individual and collective level on the importance and economic, social and environmental benefits of the circular economy; and <u>the generation of a favourable environment</u> for the implantation of the A2C model. Examples: circular economy governance desks and ballot measures.

For further understanding of this document, several activities and deliverables related to the public engagement strategy should be considered:

- The A2C project DoA, which is Annexe 1 to the Grant Agreement number 101036838 and contains the details of how the action (project) will be carried out. This document was prepared during the initiating and planning phase of the project.
- Among other activities, a pilot community-based innovation action (T7.1.2) aiming at public engagement will be implemented, promoting circular social practices among citizens and raising awareness will be arranged within WP7. The lessons learnt and the impacts will be reported at M35 (D7.4).
- The social evaluation (T7.4) will facilitate the monitoring and assessment of the public engagement strategy and the transition towards circularity. This will allow identifying synergies between the public engagement actions planned within A2C, and between them and other existing initiatives and platforms. The evaluation framework and methodology will be described in D7.5 (M9).

Under WP8, communication will focus on local and regional dissemination, supporting the actions planned under WP7. deliverable 8.1 (*Communication and Dissemination Strategy*) provides the guidelines for overall communication, engagement and dissemination activities to be performed during the project, published during the first quarter of the project. In addition, T8.3 foresees social communication campaigns designed for enhancing and aligning the public and civic engagement strategy (T7.1), while T8.6 entails a comprehensive

training plan for local actors and education services. To this end, a set of didactic materials will be drafted (D8.6, D8.7) including lessons learnt to be shared with other initiatives working on community-based research, participatory methods and education for environmental issues or local climate change mitigation as well as those targeting cluster and industry about circular business models, financing and regulatory issues.

The A2C public engagement strategy will be deployed following **a four-step process**, detailed in sections 6, 7, 8 and 9.

- Ecosystem analysis (section 6): Gathering information on existing resources for public participation in the region of Murcia (cluster level) and the municipality of Alhama de Murcia (local level), both in terms of relevant infrastructure and stakeholders.
- 2. **Diagnosis** (section 7): In which the virtual and F2F infrastructures detected in the ecosystem analysis and suitable for the A2C project are selected, drafting recommendations and analysing of the level of participation required in the action plan, to determine the infrastructures that must be designed.
- 3. Action Plan (section 8): Based on the ecosystem analysis and the diagnosis, this section is an action-oriented timeline in which key resources and responsibilities are defined together with concrete activities. The action plan is dynamic, and therefore developed in a collaborative way, revised and adjusted along the project lifecycle.
- 4. **Dissemination and Communication** (section 9): Complementary to the full dissemination and communication strategy described in D8.1, describes further the communication plan and features of the local outreach desk.

6 Ecosystem Analysis

This section aims to analyse the existing citizen engagement infrastructures and processes, to ensure the efficiency and effectiveness of the A2C citizen engagement strategies in the region of Murcia. The use of these infrastructures in the A2C project will be further explained in the section diagnosis, and action plan.

The region of Murcia is located in southeast Spain, limited to Alicante (Valencian



Figure 3. Region of Murcia and the municipality of Alhama de Murcia. Source: <u>IDERM</u>

Community) in the northeast, Almeria (Andalusia) in the southwest, Granada and Jaen (Andalusia) in the west, and Albacete (Castilla- La Mancha) on the north. lt confirmed by municipalities. Specifically, pilot activities for citizen engagement will be carried out in the Municipality of Alhama de Murcia, in the centre of the region (Figure 3. Region of Murcia and the municipality of Alhama de Murcia. Source: IDERM).

Therefore, the ecosystem analysis will cover these two levels (regional and local).

The activities developed under the engagement strategy and their results will be studied in terms of replicability and transferability to other regions and countries at the EU level, to be included in the D7.16 Report on potential for

adoption and scale-up potential of the A2C project.

6.1 Analysis of the Citizen Engagement Infrastructure 6.1.1 Regional Level 6.1.1.1 Virtual

Virtual infrastructures comprise online platforms, application software, and collaborative channels having as a purpose citizen engagement at all levels (Inform, Consult, Involve, Collaborate, Empower), in the region and its municipalities.

6.1.1.1.1 Region of Murcia Participation Platform

The Region of Murcia participation platform (https://participa.carm.es/) responds to the regulation document (Law 12/2014 of the Region of Murcia Autonomous Community) that recognises the rights of citizens to participate in public affairs and requests the implementation of measures and tools to articulate this participation, applied within the scope of public administration of the Region of Murcia Autonomous Community and entities conforming the public sector. It is aimed at the Region's citizens as well as citizen organisations having the region as their main area of activity.



Figure 4. Citizen participatory platform (Region of Murcia)

This technological platform is managed by the CARM and specifically, by the Office for Transparency and Citizen Participation (OTPC). It allows the diffusion, and the management of the citizen participation tools, promoting channels to interact with regional administrations in designing and evaluating public policies.

Currently, the platform foresees 5 types of participative processes:

- Citizen contributions: This is the most basic level participation instrument. Any
 citizen or entity previously registered as a user of the platform can log in to formulate
 concrete propositions, and vote (positively or negatively) or comment on others'
 propositions.
- Public consultations: This tool allows the exploration and collection of opinions, proposals and suggestions from the citizens about specific actions or initiatives of the regional government (preliminary bills, plans, programmes, strategies, or other public policy instruments) through questionnaires or surveys. Public consultations on

regulations are a special type of public consultation in which the public opinion of citizens and most representative stakeholders is collected, prior to the elaboration of a draft bill on the problems that the regulation aims to solve, its need and opportunity and potential alternatives.

- Participative deliberation processes: These processes are initiated by regional administration to collect opinions, propositions and suggestions from citizens and civil society, combining virtual and presential activities.
- Citizen participation forums: This instrument collects the opinion and proposals of a group of persons (representatives of civil society organisations, citizens, and representatives of the regional administration) designed by the regional administration on certain governments. The forums can only be promoted by the administration and have a temporary nature to achieve the objectives for which they were summoned. Currently, there are no active forums.
- Citizen initiatives: This instrument allows citizens requesting the regional
 administration to start a regulation procedure or action related to a specific topic, as
 long as a minimum of 2000 signatures are collected among the citizens of the Region
 of Murcia. Citizens or civil society organisations from the region can start citizen
 initiatives.

The website also includes links to different territorial scopes of participation, such as the municipalities, communities of citizens from Murcia in other Spanish regions and abroad, participation at the national and the EU level, as well as resources and information for associations. Other contents provide information on activities to promote citizen participation, such as workshops or funding.

The platform also communicates through Twitter using the account @RMTransparencia

6.1.1.1.2 Open Data Region of Murcia

The URL of the portal is https://datosabiertos.regiondemurcia.es/.

This website responds to the commitment of the Region of Murcia administration to join the Open Data Initiative. The website works at the Inform level, providing data on a wide range of indicators (environmental, social, economic). Data can be used to generate applications and services. Currently, two applications are already launched: AGROCLIMA (integrated management of meteorological data with open access for agricultural planning, developed by the Institute in Murcia for Agricultural Innovation and Research – IMIDA) and Agenda Regional – Region de Murcia Digital (for mobile devices, providing information on next events extracted from the Region of Murcia digital portal, developed by an SME). Although there are no applications on the topics related to the circular economy, the platform includes a section where citizens can suggest the development of other services. Thus, this space could also host the data integration system, in the form of a link, generated in the A2C project.

6.1.1.1.3 Open Knowledge Site of the Region of Murcia

URL: https://conocimientoabierto.carm.es/

It is an open access repository where documents are stored and disseminated using normalised protocols to ensure the visibility of the documents and their authors, in such a way they are findable by specialised and generalist search engines.

The repository was initiated as a training modality by the public administration school in 2011 and became a project for knowledge management in 2014 collecting digital contents

from research, technical reports and other publications from the Region of Murcia. The website is currently coordinated by the transparency office of the Region of Murcia, while the document upload is overseen by designated persons in charge of each collection depending on the topics covered (Agriculture, Livestock and Fishing, Social Policies, European Union).

6.1.1.1.4 Transparency Site of the Region of Murcia

This website can be found at URL https://transparencia.carm.es/.

It responds to the obligation of the autonomous community to provide active advertising that is regularly updated and published without an explicit requirement by the citizenship, thus ensuring the transparency that constitutes the first level of public participation (Inform) regarding institutional and organisational information, relationships with society, regulations, contracts and agreements, grants and subsidies, as well as information on budgets, properties, assets, land planning and environment. The information provided refers to the public administrations, autonomous bodies, public entities, foundations, and consortiums. The website includes information on corporate and civic participation bodies, the regulatory frameworks governing them, their sessions and the agreements achieved. The bodies that may be related to A2C will be further explained in section 6.1.1.2 of this deliverable.

The transparency platform also includes links to the open data website and the participation website.

Other communication channels are:

- Twitter https://twitter.com/RMTransparencia
- YouTube https://www.youtube.com/channel/UCnaWZAz4krBWI3GVcJw6wvA

6.1.1.1.5 SITMURCIA: Geoportal of the Region of Murcia Spatial Data Infrastructure

This service can be accessed at https://sitmurcia.carm.es/.

Integrated into the Spanish Spatial Data Infrastructure (IDEE), the Region of Murcia Spatial Data Infrastructure (IDERM) provides georeferenced data on different thematic areas, that can be visualised (thus relevant for transparency and information) using a GIS visor (hosted) or WMS/WMTS services.



Figure 5. SIT MURCIA (Geoportal) homepage

Particularly, the thematic area infrastructures and equipment are included, through the Local Infrastructures and Equipment Survey (EIEL), a qualitative and quantitative analysis tool of the services under the competencies of municipalities, allowing the distribution of resources and the planning of public investments. The survey for the Region of Murcia (EIEL-CARM) can be accessed through the IMIDA: https://geoportal.imida.es/eiel_carm/

Among the infrastructures and services included, it provides information on the location of different bins (paper/board, plastic, organic, batteries) as shown in Figure 6 for Alhama de Murcia. This information could be used in the engagement of local actors for the community-based scheme: for example, it could host the information on bins installed to collect food waste.

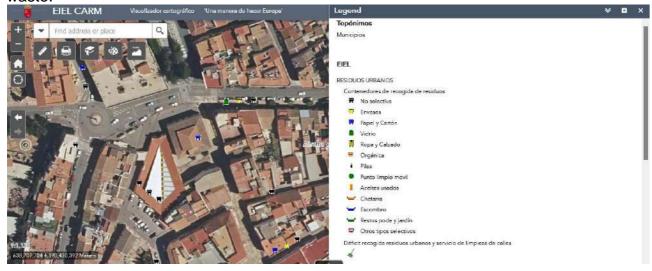


Figure 6. EIEL CARM showing equipment on urban waste in Alhama de Murcia

6.1.1.1.6 Plataforma Tierra

The Plataforma Tierra (Tierra Platform, URL: https://www.plataformatierra.es/) is owned by the CAJAMAR non-profit foundation partner of the A2C Project, created by the Cajamar credit cooperative bank private funding entity. It is available in English.

The platform allows to register as a user through a form, the compulsory fields being personal data (name, surname), the field of activity (Agriculture/Livestock, Industry and services, Knowledge, Public Bodies and Associations, Financing, Consumers, others) and fields of interest (including different types of crops and livestock species).

After registering, the platform offers a summary of upcoming events and meteorological predictions (Figure 7) as well as information on key agricultural indicators (market prices), links to videos and news.



Figure 7. Screenshot of Plataforma Tierra

In the top bar, the main menu is included with the following sections:

- **Markets:** Detailed information on market indicators in Spain and other countries, with filtering options and graphs.
- **Innovation:** This section offers news on different topics: sustainability, rural development, the agri-food industry, etc. It also contains a repository of documents that could also contain those generated during the project.
- Tools (beta version): Including links to different apps. Currently, three tools are
 available: one of them for water and fertilisation management in crops, another for
 meteorological forecast and the third one on markets. Upcoming apps are under
 development: integrated pest management and soil management, a field book for
 integration and automatization of all exploitation aspects, and carbon footprint and
 sustainability. This space could also include a link to the tool developed under the
 A2C project (DIS).
- Training: This section contains an agenda of courses, working days and seminars
 on different aspects related to the agrifood sector, such as soil diagnosis,
 digitalisation tools, greenhouses, etc. The training events can be filtered depending
 on the user's interest (Figure 8). Courses on the topics covered by Agro2Circular
 could be offered and linked in this section, aimed at different professionals and
 including technical and financial aspects.

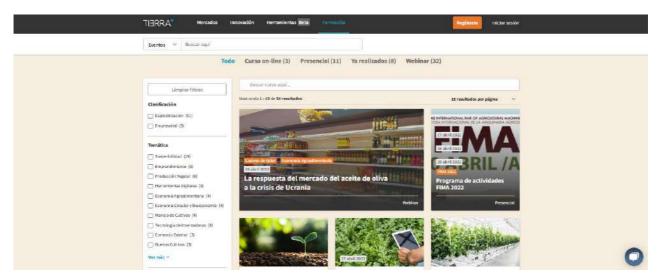


Figure 8. Training section of Plataforma Tierra

6.1.1.2 Face-to-Face

Face-to-face participation structures include those in which people can physically see one another, in person (meetings in the same room) or virtually through teleconferences.

6.1.1.2.1 Sectoral Councils

Different types of collegiate bodies operate in the Region of Murcia, among which those related to the topics of A2C will be described. These bodies meet the requirement of the government (President, Vice-president, or Regional Councillors):

- Regional Agricultural Advisory Council: This collegiate body has a consultative
 and assessment role for the Councillor on Agriculture. It is composed of political
 representatives (General Directors on Research and Technological Transfer),
 representatives of labour unions in the agricultural sector, agricultural organisations,
 and professional colleges. It meets every quarter (ordinary sessions) and by
 requirement (extraordinary sessions).
- Regional Advisory Council of Agriculture Professional Organisations. Aimed at
 promoting the participation and collaboration of professional organisations in the field
 of agriculture, sharing information and seeking agreements, and elaborating reports
 on regulations on agriculture, livestock and rural development. It meets on a quarterly
 basis) and by requirement (extraordinary sessions). This council has participated
 before in programmes for the distribution of fruits and vegetables in schools.
- Regional Environmental Advisory Council: Comprised of representatives of the
 regional government, universities, research centres, environmental associations,
 consumer associations, business associations and commerce chambers. It should
 meet every quarter. According to news in the press, environmental organisations left
 the council in 2018 and later again in 2020, allegedly based on the lack of significance
 in decision-making³.

³ https://www.murcia.com/region/noticias/2018/11/06-manifiesta-inutilidad-consejo-asesor-de-medio-ambiente.asp



 Regional Advisory Council of Social Economy: Includes representatives of the regional government, municipalities, social businesses, and labour unions.

In addition, the following bodies are technical and consultative boards that provide qualified advice on the issues considered by the President or Vice-President:

- Regional Consumption Advisory Council: Comprised of representatives of business associations, as well as consumers and users' associations, regional and local administrations.
- Regional Advisory Council on Citizen Participation. Includes representatives of the regional government, representatives of civic organisations and public servers in local and regional administrations. This council meets on a biannual basis (ordinary meetings) and as required by one-third of its members (extraordinary meetings).

6.1.2 Local Level

The City Council published the Regulation on Citizen Engagement in 2012 (BORM20/02/2012⁴) which details the processes and bodies involved. In the regulation, different levels of public participation are covered. In this way, the regulation sets the means and the channels for the Inform level, as well as the Consult level, through public surveys and questionnaires. In addition, it regulates the right to participation, through propositions, and the arrangement of public consultations and referendums. The regulation also foresees the foundation of associations and entities for public participation at the local level, the potential funding through subsidies, their inclusion in the local register of these associations, and their participation in local decision-making bodies.

In addition, the City Hall implemented the Strategy for Sustainable and Integrated Urban Development (EDUSI) 2017-2023, which includes a **specific plan for citizen engagement** collecting contributions from different social and economic agents, experts, technical and political staff and citizens, which included a process for citizen engagement through meetings, forums and local assemblies, on specific topics and also transversal issues.

6.1.2.1.1 Virtual

The website of the Councillorship of Public Participation⁵ offers different opportunities for public participation.

- Participative budgets were arranged in 2021, allowing the citizens to vote on which
 projects to invest a certain amount (400.000€). After explanatory meetings (face-toface), the citizens could vote virtually on which projects should be funded. The poll is
 now closed, and the citizens are kept informed on the status of the projects.
- Agenda Urbana 2030: the agenda is currently being developed to deploy the SDGs at the local level. A virtual survey was open until June 2022 to collect feedback from citizens on different topics, including environmental awareness, mobility, and waste recycling. In further stages, the participation of the Citizen Engagement Assembly and the Economic and Social Council is expected.

Moreover, there is a website called Alhama Suma (http://www.alhamasuma.es/), directly related to the EDUSI, in which citizens can give their opinions on the strengths and weaknesses of the city in different areas: Environment and Climatic Change, Infrastructure

⁵ https://ayuntamiento.alhamademurcia.es/areas/area.asp?id=29



⁴ http://transparencia.alhamademurcia.es/transparencia-municipal/reglamento-de-participacion-ciudadana/

and Services, Natural and Cultural Heritage, Society and Demography, Economy and Employment, and an additional space where citizens can provide suggestions.

6.1.2.1.2 . Face-to-Face

The city of Alhama has two stable bodies for public presential participation:

- The Local Council of Economy and Employment (since 1998) is comprised of 19 economic and labour organisations.
- The Local Assembly of Citizen Engagement (since 2012) is comprised of 26 neighbourhood associations and social organisations.

6.2 Stakeholders and Services

The stakeholders and services related to the engagement strategy in the Region of Murcia and the municipality of Alhama, which are relevant for A2C topics, will be mapped in this section.

Several sources of information will be taken into account for the purpose all along the project lifecycle:

- Regional register of associations (especially those on agriculture, environment protection and consumers).
- Sociograms and lists of key actors are to be developed within the participatory processes realised in the region and the municipality.
- Consultations with key stakeholders and experts in the region.

Key actors are identified within the following profiles according to the Quadruple Helix of Open Innovation: Public Administration/Public Services; Private Sector (Industry); Citizens and Civil Organisations; and Research and Education.

The key actors and services are listed in the tables below (Table 1to Table 7).

6.2.1 Public Administration/Public Services

Stakeholders in the public sector were gathered from institutional websites, at the regional and local levels. The selection criteria to be included as relevant were their relationship and competencies in the fields of environment, economy, regional development and research and education.

6.2.1.1 Regional

Table 1. Public administration sector stakeholders at the regional level

Regional Government (Partner):

Regional Ministry of Business, Employment, Universities and Spokeswoman

Regional Ministry of Education

Regional Ministry of Transparency, Citizen Participation and Public Administration

Public Services

Instituto de Fomento (INFO) (partner)



Scientific Park in Murcia (depending on INFO, hosts technological businesses)

Official Commerce Chambers (Murcia, Cartagena, Lorca)

Fundación Séneca (Science and Technology Agency)

6.2.1.2 Local

Table 2. Public administration sector stakeholders at the local level

Local Government: City Hall of Alhama de Murcia Departments

Infrastructures, Public Services, Energy Efficiency, Administrative Environmental Management, Public Contracts Department

Associations, Transparency, Citizen Engagement, New technologies, Sports, Internal affairs, Dependencies and Transport Department

Equality, Social Welfare, Older people, and Consumption Department

Citizen service, Urban Quality, Parks and Gardens Department

Development, Employment, Commerce, Hospitalities Department

Youth, New Technologies, Environment, Animal Welfare Department

6.2.2 Private Sector (Industry) 6.2.2.1 Regional

Stakeholders in the private sector were gathered using search engines (Google). In the case of the agri-food sector, the websites of partners AGROFOOD and PROEX and previous meetings held with these partners provided information on existing actors, since these partners are themselves associations of businesses. The actors selected can be considered examples, since only those devoted to the production and exportation of the crops studied in the project are detailed, avoiding an excessive extent of this document. In the case of the plastics, cosmetics, and nutraceuticals, the businesses in these subsectors were selected from the website of the Association of Chemical Industries in the Region of Murcia (AMIQ). Likewise, commercial centres and supermarkets delivering food (fruits and vegetables) that may be involved in the circular economy model proposed by A2C and can be found through the register of the Commerce Chamber of Murcia⁶. They are considered to be of interest due to the retail delivery of food and the use of fruits and vegetables generating waste at greater scale than citizens (and sometimes packed in plastics). The inclusion of tourism and hospitality services is based on their identification as an area of consumption where food loss and waste are significant issues [2], with these two sectors taking a high weight in the Region of Murcia. Finally, regarding the financial sector, the entities with the most presence in the agricultural sector have been selected.

Table 3. Private sector stakeholders at the regional level

Private Organisations and Industry (End-Users)

⁶ https://www.camaramurcia.es/censo-de-empresas/



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Agricola Santa Eulalia Agridemur AgroCazalla Agrodolores El Mirador

Agromark AgroMediterránea Hortiberia Hortofruticola 3 Puentes

Mercagrisa Peregrin Cota 120 Soltir

SUBASUR Surinver Deilor Difrusa

Almerca Cricket El Montes Puerto Export

Kernel KPE Sabas Urcisol

Adesur AgroTomy Peregrin Camposeven

Sacoje Verdimed Florette Paloma

Fruca G's Tana Cítricos de Murcia

AMC J Garcia Carrión Cynara Marín Gimenez

Hida Alimentación Manuel García Alkäcil

Campoy

Cosmetics

Aromsa

Iberchem

Natuaromatic

Nutraceuticals

Nutrafur

HTBA

Plastic Producers and recyclers

Palec Ecologico Galian Plastics Onlyplast Plasbel

Reciplast Plastirama Plastics Ros Marin

Retailers, Supermarkets, Services

Food chains (Aldi, Mercadona, Lidl, Spar, Superdumbo)

SMEs, entrepreneurs (small supermarkets, market vendors, F&V local shops)

Tourism and hospitality services: i.e., Foodtopia (restaurant/catering service engaged in reduction of food losses)

Agrifood Clusters and Associations

Agritech Murcia https://www.agritechmurcia.com/

Industrial and Business Associations

Asemuplast (Region of Murcia)

AMIQ (Association of Chemical Industries in the Region of Murcia)

AEMA RM (Environmental Businesses Association-Region of Murcia)

AGRUPAL (Association of Canning Industries)

FECOAM (Association of Agricultural Cooperatives)

Financing Intermediaries

Caja Rural Central

Globalcaja

Caja Rural Regional

Private Non-Profit Organisations

CETENMA - Technological Centre for Energy and Environment

CEEIM- Business and Technological Centre in Murcia

CEEIC- Business and Technological Centre in Cartagena

6.2.3 Citizens and Civil Society Associations 6.2.3.1 Regional

The associations included in this section is the result of searching within the Regional Register of Associations of the Region of Murcia⁷. In the association type field, "Amas de Casa/Consumidores/Usuarios" (Housewifes/Consumers/Users), "AMPAS" (Associations of Parents of Schoolchildren), "Ecologistas" (Environmentalist), "Educativas" (Educational), "Federación" (Federation), "Profesionales" (Professionals) and "Vecinos" (Neighbours) are included.

Table 4. Civil society organisations related to A2C at regional level

Environmental Associations

Ambiente Europeo

Región de Murcia Limpia

Murcia Residuo Cero

Teachers for future, Fridays for future, parents for future

Ecologistas en Acción

ANSE- Asociación de Naturalistas del Sureste

Education Associations

⁷ Link to Search form at the Register



Confederación Regional De Asociaciones De Madres Y Padres De Alumnos De Murcia "CONFAMUR"

Consumer Organisations (and others)

Federación murciana de asociaciones de amas de casa, consumidores y usuarios THADER

Asociación de Consumidores y Usuarios en Red, CONSUMUR

REAS MURCIA – Alternative and Solidary Economy Network

Professional Associations and Trade Unions

Agronomic Engineers Official College

Agricultural Engineers and Agricultural Technicians Official College

Environmentalists Official College (COAMBRM)

Chemists Official College (COLQUIMUR)

Biologists Official College

Veterinaries Official College

Asociación de Biotecnólogos de la Región de Murcia (BIOTECMUR)

ASAJA (Agricultural Association of Young Farmers)

COAG-IR (Coordination Entity of Farmers and Stockbreeders)

UPA (Union of small farmers)

Associations of market vendors

6.2.3.2 Local

The associations included in this section are the result of searching within the Regional Register of Associations of the Region of Murcia⁸. In addition to the association type field, the field municipality follows the same criteria as the ones for the regional level.

Table 5. Civil society organisations related to A2C at local level

Environmental Associations

Asociación ECOESPUÑA

Asociación Centro de Desarrollo humano y Educación ambiental, Ashram Jardín de Alhama

Asociación "La Almajara" de Alhama de Murcia

Asociación "La Hojarasca, educación por naturaleza"

Asociación de amigos de la agricultura - Las Barracas -

⁸ Link to Search form at the Register



Asociación promotora de huertos urbanos. APHU

Asociación Red Agroeconatura 2020

Consumer Organisations

Asociación De Amas De Casa, Consumidores Y Usuarios De Alhama de Murcia

Educational Organisations

Federación de Asociaciones De Padres De Alumnos de Alhama de Murcia (FAPA Alhama de Murcia)

6.2.4 Research and Education

6.2.4.1 Regional:

At the regional level, the sector of research and education comprises the three universities: UM and UPCT are public, and together comprise the Campus Mare Nostrum, while UCAM is a private university. All of them have university chairs (Cátedras Universitarias) related to the topics of A2C.

Table 6. Education and research entities at the regional level

UM (University of Murcia)

University Institute of Water and Environment (INUAMA)

PROSUR Chair on Food Biotechnology

Chair on Water and sustainability - EMUASA

Chair on Water ecoefficienc HIDROGEA

Chair on Food security and sustainability

Chair on Perfume and Cosmetic industry Natuaromatic

Chair Primafrio (logistics)

Open Chair for innovation and participation

Chair on Social Corporative Responsibilit

Chair on social economy

Universidad Politécnica de Cartagena (UPCT)

Chair on sustainable agriculture in Campo de Cartagena COAG

Chair G's Spain

Chair Logistics 4.0 Primafrio

Chair Agritech

Chair Takasago

Universidad Católica San Antonio (UCAM)



Chair on Food for Health

Chair on Sustainable Development

Chair on Circular Economy and SCR

Chair on biomaterial engineering

Chair on Food Innovation

Chair on Innovation in transport and logistics Primafrío

Chair on Responsible Agrofood Systems

Chair on Insect industrial production and Circular Economy in Biowaste management

Chair on innovation in Fruit and Vegetable transformation industry

UM & UPCT

Chair on Environment Autoridad Portuaria de Cartagena Campus Mare Nostrum

Research Centres

CEBAS- CSIC- Soil Science and Applied Biology Centre

IMIDA - Region of Murcia Institute for Research and Agricultural and Environmental Development

CIFEAs (Integrated Centres for Agricultural Training and Experimentation)

CIFEA Jumilla

CIFEA Lorca

CIFEA Molina de Segura

CIFEA Torre Pacheco

6.2.4.2 Local

Education at the local level comprises primary and secondary schools. The centres included have been searched through the Regional Ministry of Education in the Region of Murcia (EDUCARM⁹). We have focused on Alhama de Murcia, where the Community based engagement models will be tested during T7.1.2 but other centres may be added at the regional level. Those marked with a "*" have already implemented zero waste activities¹⁰, an initiative promoted by the collective "Teachers for future Spain" (https://teachersforfuturespain.org/), which brings together teachers of the whole country who implement actions to move towards sustainable management of Spanish schools and the development of environmental education.

¹⁰ Map of schools with Zero waste initiatives



⁹ https://mapaescolar.murciaeduca.es/mapaescolar

Table 7. Education and research entities at the local level

Primary Schools	Secondary Schools and VET centres	Primary and Secondary Schools
CEIP Sierra Espuña	IES Miguel Hernández*	Colegio Azaraque s. coop.* (private)
CEIP Príncipe de España	IES Valle de Leyva*	(1 2007)
CEIP Antonio Machado CEIP Nuestra Señora del Rosario		
CEIP Ginés Diaz -San Cristóbal		
CEIP Ricardo Codorníu CEIP Reina Sofía CEIP La Costera		I

7 Diagnosis

The Diagnosis phase defines the contextual basis for the action plan to be specified in the following section.

Based on the previous analysis of the existing infrastructures, the bodies and spaces of participation that are existing and relevant for A2C co-creation processes are selected in this section. They are both institutional and private, as well as those resulting from previous participatory processes. The infrastructures identified will be involved in the A2C citizen engagement.

The knowledge acquired in the previous ecosystem analysis has also allowed the detection of potential strengths, weaknesses, opportunities and threats (barriers) for the implementation of participative processes foreseen in the A2C project that is organised in form of a SWOT matrix.

Subsequently, the levels of participation required by co-creation and citizen empowerment processes are analysed to determine the actions that are more appropriate for the action plan (section ¡Error! No se encuentra el origen de la referencia.).

Finally, the virtual and face-to-face infrastructure that must be created in order to implement the engagement strategy (together with the existing ones) is proposed.

7.1 Selection of Existing Infrastructure

After the analysis of the existing virtual and face-to-face infrastructures for participation at the regional and local levels, the following (Table 8) have been selected since they are considered relevant to the project topics (Circular Economy, Environmental Management, Social Economy, Public Engagement) and the scope of the project. For example, the provision of information, spaces for collecting feedback from civil society and fostering participation and collective decision.

Table 8. Virtual and face-to-face infrastructures for participation at regional and local level

Туре	Regional Level	Local Level
Virtual	Region of Murcia participation platform SIT Murcia (geoportal) Open data platform Transparency site Plataforma Tierra	Councillorship of Public Participation Alhama Suma
Face-to-face	Regional Agricultural Assessment Council Regional Assessment Council of Agriculture Professional Organisations. Regional Environmental Assessment Council Regional Consumption Assessment Council Regional Assessment Council of Social Economy	Local Council of Economy and Employment Local Assembly of Citizen Engagement

Regional Assessment Council on Citizen Participation

Moreover, key alliances are being identified based on the analysis of the key stakeholders. A sociogram elaborated in a collaborative workshop with stakeholders (section 8.1) will be used as a tool to identify their key alliances, action sets and feasibility. Questionnaires will be used along the project implementation aimed at the different stakeholders to visualise the degree of affinity with the project objectives and their capacity to influence in this context. Moreover, once the agents are mapped, the sociogram will allow us to establish action sets that will gather agents with common positions as well as possible conflicts existing in the territory. Finally, through the sociogram, feasible alliances will be identified, both for strengthening their connection and managing conflicts. Further relevant actors missed in previous processes will be targeted.

7.2 Preliminary Review

During the A2C kick-off meeting, the presentation of the WP7 included three preliminary questions for the partners involved with their existing networks and channels that could be useful for the project. The answers obtained were used as a first step for the ecosystem analysis. As a result of this analysis, a preliminary SWOT matrix was elaborated.

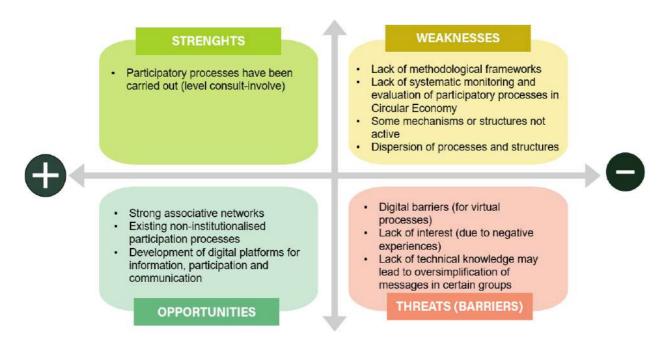


Figure 9. Preliminary SWOT matrix: engagement processes for the implantation of the circular economy

Moreover, a workshop was organised in Alhama de Murcia (where the coordinators and other partners are based) at the end of June (M9) under WP7 activities (T7.1) aiming at the analysis of the collaboration spaces existing in the project. Further workshops will help to improve and validate the first draft of the SWOT matrix and provide orientations on how to take advantage of the detected strengths and opportunities and how to overcome weaknesses and address threats. Some of the strengths have been already detected and summarised in Figure 8. Strengths and opportunities should be taken into consideration

alongside the A2C engagement process to consolidate the strategy and to ensure the adoption of the systemic solutions and their transferability to other EU contexts.

7.3 Levels of Participation in A2C Activities

A2C foresees the citizens' engagement process in the Region of Murcia entailing different levels of participation, based on the *Spectrum of Public Participation* developed by the International Association of Public Participation (IAP2), as shown in Figure 10.

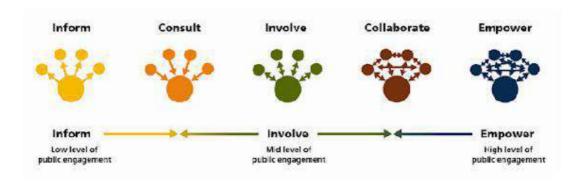


Figure 10. Levels of public participation.

Source: http://tompkinscountyny.gov/tccp/publicparticipation

The spectrum ranges from low participation, where people are simply informed about the relevant problems and alternative solutions (on websites for example) to high participation, where they are empowered to take the final decision on the issue at hand (i.e., through deliberative forums or referendums) [3].

The spectrum levels within the A2C project will be applied as follows:



<u>Citizen engagement goal:</u> To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

Promise to the public: We will keep you informed.

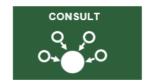
Information only involves a one-way flow of information from the project to citizens, although it is an important foundation for community engagement since it builds knowledge and allows citizens to understand the public decision-making process and take informed decisions. The Inform level of public participation gives citizens what they need to fully understand the project's actions so that they can reach their own conclusions. Some authors ([4], [5]) consider that the Inform level should be placed across the spectrum, since effective engagement requires effective information. This way, although informing does not involve community participation per se [6], it increases the understanding of the issues, the ability

of the stakeholders and communities to address them, and the compliance with regulations [7].

The Inform level is appropriate in situations where there is no opportunity for the public to influence decision-making. Simply informing them is the appropriate activity. Indeed, all the relevant stakeholders (administration, business, academia, and civic society) will be targeted at the Inform level on all the activities and results of the A2C project through the project website (https://agro2circular.eu/), social media (@Agro2Circular), scientific dissemination, press releases, flyers and brochures specially designed for the local level. In addition, a local website will be developed by the WP8 leader (ICONS) including specific information in the global contexts, and spaces for participation (questionnaires, surveys, events) to be managed by the Local Outreach Desk (PRIMA, KVC) and WP7 partners will use their websites (i.e. CARM: section of Regional Ministry of Agriculture) as an information platform on the news and events carried out in the project. Moreover, lectures, workshops, open visits and seminars on site are planned by the partners (AGRO, PRIMA, PROEX). These activities overlap and are to be coordinated with those in WP8. Specifically, the following actions will be taken:

- (i) Meetings with stakeholders (i.e., the association of food industries AGRUPAL) that will be potential future users of the process, model and valorisation technologies.
- (ii) PROEX as producers and exporters will also inform their associated partners in internal assemblies and using their internal channels.
- (iii) Third parties' events such as the Science Week Fair organised by Fundación Seneca, held every year at the end of October/beginning of November at the Malecon Park (Murcia) where technological parks (CETEC; CTNC) have a dedicated stand, will constitute an opportunity to engage users through posters and small experiments or merchandise related to the project to general society (families, schools), policy-makers and industry. AGROFOOD also collaborates in this event.
- (iv) Awareness raising talks will happen in primary/secondary schools, VET centres, universities and companies. In this regard, AGROFOOD has already taken part in regional events disseminating the A2C projects to the wide public (as part of WP8, T8.3) establishing a basis for further contacts with potential attendants in future activities.
- (v) Training activities (included in T8.6) aim to train professionals (active and potential), unemployed people as lifelong training, universities (through related chairs, some of them already backing the project through letters of support) and cover not only technical and technological aspects, but also the financial and perspectives (especially for companies).
- (vi) A stand at the local weekly market in Alhama de Murcia (held every Tuesday, 9:00-14:00) will be managed by PRIMAFRIO, to provide information to visitors and vendors about the project and to distribute materials (brochures, flyers). KVC, CNTC and AGROFOOD will provide support to this activity, collaborating in the stall; a shift planning will be established among these entities to optimise the efforts and offer different types of specific information to the stakeholders interested.

- (vii) Scientific and professional dissemination: as stated in the A2C outreach strategy (D8.1): scientific dissemination of the project results is planned along the project implementation, in the form of papers in peer review journals and contributions to congresses and conferences. Publication of papers in professional journals will also contribute to the engagement of the industry in the adoption of the A2C model. In this regard, AGROFOOD is invited by the editorial board of the CTNC biannual magazine (*CTC Alimentación* ¹¹), published in printed form for the agri-food sector in the region but also available online. This professional magazine has already published information on the project.
- (viii) Industry fairs and events: It is also planned to participate in events such as fairs, symposiums and brokerage events in different sectors. For instance, CTNC and AGROFOOD are involved in the organisation of the International Symposium on Food Technologies, a meeting point for companies in the sector that takes place coinciding with the Murcia Food Brokerage Event organised by INFO (next date March 2023). Likewise, CETEC foresees participation in the AGRICULTURAL FILM Conference (March 2023).



<u>Citizen engagement goal:</u> To obtain public feedback on analysis, alternatives and/or decisions.

<u>Promise to the public:</u> We will keep you informed and will acknowledge concerns and provide feedback on how public input influenced the decision.

The Consult level of public participation focuses on feedback and is the basic minimum opportunity for the public to input on analysis, alternatives or decisions. The responsibility for the decisions remains with the government or the organisations doing the consulting (i.e., the project manager).

The Consult level is appropriate when specific input is sought from citizens for the decision-making, but early engagement is not possible throughout the process. There is a wide range of ways to perform consultations, some of which include processes that require little or no dialogue (surveys in a newsletter or digital platform) or involve a debate (public meetings, focus groups).

Several activities in the Region of Murcia and their community-based schemes require the willingness of stakeholders (among them citizens) to provide information.

(i) Surveys about awareness of citizens and companies: covering i.e., their consumption and disposal habits of fruits, vegetables and plastic packages, as well as recycling behaviours to improve the effectivity of the A2C systemic solution

¹¹ https://ctnc.es/publicaciones/



- model, while reducing the cost of implementation. The surveys would be tailored depending on the sector/group.
- (ii) Surveys aimed at the private sector: input from companies will be required to explore the adoption possibilities and viability analysis (covering economic benefit) of the A2C solution including the data integration system and the business models developed. The viability analysis will also cover the logistic aspects of the circular solution, such as the responsibility of the collection and storage or the benefits foreseen. It gives consideration for the additional costs which stakeholders incur in the adoption of such practices. Feedback on problems of interest in the sector will also be gathered, such as finding biobased products that fulfil their requirements and subsidising options.
- (iii) Consultations on training needs will be aimed at different publics, including VET and assimilated (vocational training, lifelong learning) on existing gaps in curricula on circular economy so that university (undergraduate, MSc) as well as companies recognise their needs for unmet skills.

These surveys will be hosted on the A2C platform and the website (in a specific section). The partners will contribute to obtaining results with links on their websites (especially institutional partners) on the level of awareness of the circular economy. In addition, the EU Platform EUSurvey (https://ec.europa.eu/eusurvey/) will also constitute a useful tool for consultations.



<u>Citizen engagement goal:</u> To work with the public to make sure that concerns and aspirations are considered and understood.

<u>Promise to the public:</u> we will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.

At the Involve level, citizens are invited into the process to a greater extent than at the Consult level. The goal is to work with the public throughout the process and to make use of their knowledge and expertise on a given issue. This implies a two-way exchange of information that encourages discussion while providing an opportunity to influence the outcome. The Involve level not only ensures a common understanding, but also the products or services provided are better tailored to the stakeholders' needs. The regulation, standardisation or behaviour needs are accepted and sustainable and the resources are effectively applied at this level.

At the Involve level, the public is invited into the process, usually from the beginning, and is provided multiple opportunities for input as decision-making progresses. However, while 'Involve' assumes a greater level of participation by stakeholders as they work through issues and alternatives to assist in the decision-making process, the organisation undertaking the engagement generally retains responsibility for the final decision. In A2C,

the Involve level will be mainly implemented in the co-creation of the multidimensional model and in the community-based scheme. Some of the activities at the involvement level are:

- (i) Collection of materials (F&V waste, multilayer plastic) to be incorporated into the circular value chains. Agri-food companies (farmers and the juice industry) are involved in the project collecting multilayer plastics and F&V waste to be processed by the technological partners.
- (ii) Video game contest for students: organised by PRIMAFRIO, the aim of the contest is to engage students to develop video games in specific workshops on circular economy and programming. It has been joined with the eco-school award initiative. The City Halls of Murcia and Alhama also collaborate in this activity, and the contest's first edition (pilot) will be presented in September 2022, with the intention of expanding to other secondary schools in future years. The project will seek support in schools that are already implementing zero waste initiatives.
- (iii) Edition of a documentary: this activity can also be considered as part of the community-based scheme. The documentary will follow the process in the market, the start of the waste collection and the collection itself, and the shipment to the entities that process the wastes (CETEC, CTNC). Some issues to be confirmed in this activity will be the level of involvement of the participants and the scope (local or regional).
- (iv) Involvement in the circular economy using biobased packaging: PROEX as a representative of 56 entities of the agri-food sector (industry) has declared their interest to be users of the biobased packaging developed within the project.
- (v) Involvement in waste collection in markets: led by PRIMAFRIO in the community-based scheme (T7.1.2). Two associations of markets (sellers) have been already contacted to explain the project and request collaboration and transfer to the CTNC. Waste (leftovers) from the vending stalls is collected. The containers are provided by PRIMAFRÍO. This activity raises the need for dissemination of materials in Spanish, mentioned in the Inform level above, which will be addressed in section 9.

Other activities included at this level are, i.e., workshops, focus groups on innovative business schemes and social sustainability indicators accompanied by volunteering days (in clean-ups). These activities will be carried out in collaboration with AGROFOOD, due to their wide experience in dissemination of the circular economy and organisation of workshops.



Citizen engagement goal: To partner with the public in each aspect of the decision-making.

<u>Promise to the public:</u> We will seek direct advice and innovation in formulating solutions from you. Your advice and recommendations will be incorporated into the decisions to the maximum extent possible.

At the Collaborate level, the public is directly engaged in decision-making in an interactive process with an emphasis on two-way processes. The Collaborate level of public engagement includes all the elements of Involve but takes it a step further, including an explicit attempt to find consensus solutions. However, similar to the Involve level of participation, the administration or project management board remains the ultimate decision-maker.

At this level, it is important to create trust and to ensure that there is genuine engagement. and this can be costly and time-consuming. Besides, there can be risks involved in processes at this level. If the promise is seen as being broken (e.g., if members of a community cannot agree on ways forward, or if some sections of the community feel their views were not taken into account), trust can be broken and future relationships with key stakeholders can be significantly damaged. The Collaborate level is particularly useful for controversial issues and complex problems because it entails a high level of participation. In A2C, the Collaborate level is represented by the stakeholder panels, which will be created to bring together partners and representatives of organisations, industrial companies, and associations which are relevant in the A2C's results uptake. The panels will make recommendations on the necessary features of the project's results, as well as on the systemic circular solution. In addition, stakeholders will contribute to building new market routes and implementation vehicles in different industrial sectors. Related to the demonstration activities, online meetings, pop-up activities, and workshops for stakeholders will be organised to gain specific feedback from the A2C targeted sectors. Moreover, the collaboration will be sought with projects funded under the same call and topic: FRONTSHIP (https://frontsh1p.eu/), Circular Foam (https://circular-foam.eu/) and EcoeFISHent (https://ecoefishent.eu/), are examples, although this list will be updated along the project in upcoming versions of this document. Moreover, collaboration is also planned with projects in similar calls; for instance, A2C (represented by AGROFOOD and CTNC) has already participated in a workshop organised by PestNu (https://pestnu.eu/) project. During the project implementation, new stakeholders will be contacted by KVC as systemic approach manager to join the stakeholders' network of A2C, using mailing rounds, through the EU Circularity Platform or participation in related discussions during significant events (i.e. Green Deal Arena) and they will be invited to join one project meeting per year where possible, in addition to other specific meetings. At this stage of the project, two panels are being created: one of them at the local/regional level, and an international stakeholder panel. The criteria for selection of the stakeholders' panels will be the representativity of each sector in the quadruple helix (Figure 1), the interest of the project reflected through Letters of Support, and the existence of previous contacts among the partners. At the current stage of the project, we have the following members that are: UNC Unione Nazionale Consumatory Umbria and Sammontana.



Citizen engagement goal: To place final decision-making into the hand of the public.

Promise to the public: We will implement what you decide.

At the Empower level, the public has the opportunity to make decisions for themselves, which implies a shared responsibility for making decisions and accountability for the outcomes of these decisions.

Empower represents the most challenging approach in community engagement, since it represents a commitment by the initiators (administration, government, project management board) to participate as a stakeholder and to share power in decision-making for collaborative actions.

The benefits of the empower level are often more innovative results, reduced conflict in controversial issues and greater commitment to ongoing actions. Nevertheless, it does not necessarily require great interaction between citizens and decision-making organisms. Some examples of this level are a referendum, participatory budgets and other ballot measures. Legislative and policy frameworks also give power to communities to make decisions, although this term may be misleading, since it may involve delegating the authority of administrations or policy-makers [5]. It should also be highlighted that the Empower level may incur a high risk of tokenisation, and paperwork and bureaucracy often wear down active citizens [8].

Within the A2C project, the Empower level will sit at an operational level, rather than a decision-making level, providing opportunities and resources for communities to directly contribute to the solution, valuing local talents and skills and acknowledging their capacity to be decision-makers in their own lives [4].

7.4 A2C Virtual and Face-to-Face Infrastructure 7.4.1 A2C Virtual Infrastructure

In addition to the already existing participation infrastructures mentioned in section 7.1, the following virtual channels and sites will be used for the A2C public engagement:

Web platforms

A2C website (https://agro2circular.eu/) – active, managed by ICONS as WP8 leader. The website homepage includes information on the project (why, what, how, where, who), resources to download (deliverables, flyer, postcard), and news at EU level. It is linked to the Spanish version through the menu.



Figure 11. A2C website homepage (What? section) in English

• A2C local website: in development. It will be managed by PRIMA as partner leading the local outreach desk, and KVeloce responsible for the engagement strategy. It is expected that the local A2C project will reproduce the general project website, but with the addition of detailed information on the pilot demonstrators, the community-based scheme and the A2C systemic model including all the relevant factors (governance, regulation, policy, financing, etc.). It will also include adapted communication materials (brochures, posters, etc.) and news and activities for the implementation of A2C participatory processes: proposals, forums, consultations, calls for meetings, workshops, or ballots.

The technical features of the local website are under discussion and development.

• Social networks: The Twitter channel (@Agro2Circular) and the official hashtag #agro2circular have been set, as well as the LinkedIn profile. Other social networks may be used if relevant, under the decision of the local outreach desk and according to the dissemination and communication strategy (D8.1).

7.4.2 A2C Face-to-Face Infrastructure

Different structures and spaces for public participation will be created within the A2C Project. Some of them are proposed at this stage of the participation strategy and their creation and functions (meeting periods, composition, tasks) will be further discussed along the project implementation:

• A2C Space at the regional level: This space will be aimed at providing information on the project and the systemic circular solution of A2C The local outreach desk will deploy a stand at the local market (near the zones dedicated for food stalls, see figure 12 and Inform paragraph in section 7.3) on a regular basis, from October 2022 to the end of the project, where information on the project will be provided and the activities will be carried out. A space in Alhama de Murcia will be also requested from the City Council, as a supporting entity where participatory events, seminars, workshops and meetings will be held. It will also be the office of the local outreach desk.



Figure 12. Zones of the Alhama market with food stalls (marked in light green). One of the areas is located around the food market hall (Mercado de Abastos), marked with a shopping cart in the map.

- Coordination and Management Group: This group will be composed of the
 partners responsible for the public participation methodology of the project. They will
 establish agile and flexible governance systems to ensure the smooth
 communication and coordination towards all stakeholders (policy makers, industry,
 research and education, and citizens). The coordination and management group will
 coordinate the different bodies created for the engagement process and act as
 mediator in case any controversy arises.
- Driving Group: This group will be built in Q3 2022 after the circular economy workshop held in Alhama de Murcia in June 2022. The group will act as a local stakeholder panel, composed of representatives of the key stakeholders from the quadruple helix of social innovation: University of Murcia, Regional Development Agency (INFO), Industry (Agrofood, Proexport, Cajamar), Regional and Local initiatives, NGOs, together with KVeloce (Systemic Approach Manager) and PRIMA (Local Outreach Manager). Their main objectives are to generate synergies with other existing and ongoing projects at the local and regional level, organising activities, seeking mutual support, and detecting solutions for the implantation of the circular systemic solution.

8 Action Plan

8.1 Regional Workshop on Public Engagement

Under WP7, a regional workshop on public engagement was planned for June 2022 in Alhama de Murcia at the regional level to establish in a participatory approach toward the stakeholders' needs and priorities. Moreover, this workshop served to nurture further public engagement activities. It was organised to identify the interest, opinions, and wishes of the partners involved in WP7 at the regional level and to detect potential infrastructures and analyse synergies and barriers. The workshop represented a key point for organising the community-based scheme.

8.2 Public Engagement Activities

In the current document, a preliminary list of activities suitable for each level of participation is proposed. Nevertheless, it must be taken into consideration that the action plan is dynamic, and these will be updated in a collaborative manner, with contributions from all partners in subsequent workshops.

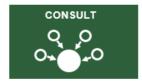


Inform: to provide balanced and objective information promptly to the public (quadruple helix, see section 5).

Activities under this level of participation may include:

- Information (online and printed materials).
- Communication (website, social networks).
- Education & Training (seminars, webinars).

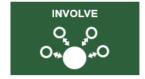
See section 9



Consult: to obtain feedback on analysis, issues, alternatives and decisions.

Activities under this level of participation entail two-way interactions, and may include:

- Surveys (using EUSurvey)
- Polling
- Interviews



Involve: to work with the public to make sure that their concerns and aspirations are considered and understood.

Activities under this level of participation entail two-way interactions and include:

- Workshops
- Short documentary (collective recording)
- Waste collections (markets, F&V producers) for A2C value chains
- Focus groups
- Forums online



Collaborate: to partner with the public in each aspect of the decision-making process.

Activities under this level of participation entail repeated and iterative interactions and creative feedback techniques, and may include:

- Sociograms and collaborative mapping
- SWOT
- Tree of problems
- Pop-up events: this is a technique used in branding based on temporary events, such as meetings, providing information or groundings for dialogue between stakeholders in neutral environments¹².
- Co-design of the decision-making process (A2C systemic solution)
- Collaborative building of monitoring and evaluation indicators



Empower: to place final decision-making in the hand of the public. The development of stable participation, monitoring and evaluation structures that have competencies and decision-making capacity should be setup in order to work across the Empower level. For example, activities for the setup of permanent structures for the collaboration and coordination within the public administration and with external actors.

These activities will be fine-tuned with the stakeholders, first during the regional economy workshop (see section 8.1) and in subsequent working sessions. The current status and more detailed timelines will be provided in further versions of the Public Engagement strategy (M24, M36).

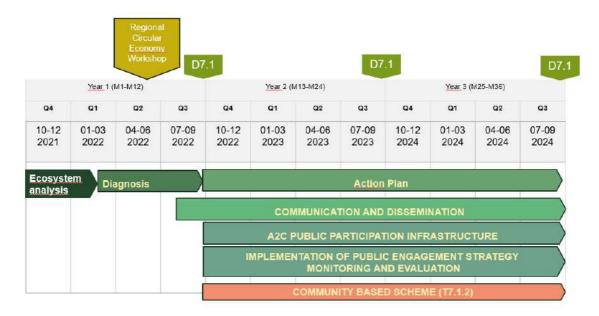


Figure 13. Gantt of the public engagement strategy

¹² https://participedia.net/method/179



8.3 Monitoring and Evaluation

It is recommendable to establish monitoring and evaluation processes throughout the public participation process, incorporating criteria and indicators defined in a qualitative and participative manner. Continuous monitoring and evaluation allow us to rectify processes and results when required and to adapt to the current context, taking advantage of arising opportunities. This activity is foreseen within T7.3 led by KVeloce with the collaboration of UVEG for social and economic evaluation at the project scope and will take into consideration of the cultural criteria indicating the involvement of all sectors of the population at the local level (for the community-based scheme), the regional level (for the systemic model) and if there are population groups that are being excluded.

Likewise, the participatory process in A2C should be subject of specific evaluation, parallel to the social impact evaluation. Indicators established for the evaluation must consider different scopes (short term to long term, local to regional and EU) and cover aspects such as the degree of involvement and the degree of participation perceived in the A2C space.

9 Dissemination and Communication

'Citizen engagement requires good communication – but good communication alone is not citizen engagement'.

Alec Walker-Love, Europe-based communications specialist with a background in urban mobility

During the elapsed time since the beginning of the project (October 2021) and the publication of this document (October 2022), project partners have made efforts to spread the project through the main website. In addition, a local website in Spanish has been developed, reinforcing the dissemination and communication of the events and activities at the local and regional levels in Alhama de Murcia and the Region of Murcia, where the project has been introduced. Furthermore, dissemination and communication materials in Spanish with a stronger focus on the activities carried out in the community-based scheme are being elaborated. These are the brochures and posters that will complement the video subtitled in Spanish.

The most important content of the actions will be sent to local and regional media to publish them. To reach and engage citizens in the activities, a clear and simple communication strategy has been put in place. Catchy messages are tailor made to the different stakeholders in the quadruple helix (public administrations, citizens and vendors from the market, educational centres, industry).

Once the general aim of the project has been explained to the citizens, the actions will be segmented according to the degree of citizen involvement and the type of public. To this end, several ways are being currently evaluated, from dedicated and programmed marketing campaigns to informative and awareness raising actions aimed at the citizens of Alhama de Murcia and the autonomous region.

9.1 Approach

Communication covers a wide range of actions targeted to several stakeholders or target audiences and should also communicate evidence-based information about areas and contents related to the project. In the case of A2C, these contents may among others relate to the impacts of plastics in the environment, the routes followed by the F&V waste from the collection in markets or by producers to the obtention of new products, the creation of new value chains, the need of governance, and regulatory and financing tools to put in place circular economy models. These contents may be produced by the consortium but also by third parties. A responsible innovation communication must select, curate and disseminate contents based on validated information, and make them easily understandable for all.

The most important objective (primary objective) is to engage citizens in the activities planned for the co-creation of a multidimensional circular economy model at the regional level, that can be replicated in other geographical contexts. Secondly, it is intended to engage and involve several stakeholders (research and academia, public administration, companies and investors, among others, to be detailed in section -).

The communication activity in A2C in Murcia will allow the collection and distribution of data to optimise the engagement rate of all target groups, taking into consideration those that play a role as multipliers (civil society entities, NGOs, foundations, cultural centres, etc.).

9.2 Local Outreach Desk

The Local Outreach Desk was established in WP8, led by PRIMAFRIO and includes personnel from KVC, AGRO, CARM, and INFO. As shown in table 8, the Local Outreach Desk is also closely related to the A2C Outreach Manager (ICONS) and has a strong relationship with other institutional bodies, some of whom have already signed letters of support to state their interest in the project.

Team Members	Esther Ballester (PRIMAFRIO) Irene Garre (PRIMAFRIO) Aran Blanco (KVC) Ana Belén Morales (AGROFOOD) Beatriz Vallina (KVC)		
Relation with Institutional Bodies	 Instituto de Fomento (INFO) Instituto tecnológico del Calzado y el Plástico (CETEC) Instituto Tecnológico de la Conserva (CTNC) Ayuntamiento de Murcia Ayuntamiento de Alhama de Murcia Universidad de Murcia (UMU) Universidad Politécnica de Cartagena (UPCT) 		
Relation with other WPs and partners	ICONS (A2C Outreach Manager) – WP8 WP8 partners		

As indicated in the A2C outreach strategy (8.1), the Local Outreach Desk led by PRIMAFRIO will be responsible of defining the local D&C strategy, including the appropriate channels, messages and communication formats to foster engagement.

9.3 Communication Strategy

Engagement in communication refers to the community and aims at reaching a long-term alliance with a certain audience that allows sustaining knowledge, fostering the adoption of more culture-centric expressions of problems, solution-finding processes and facilitating structural transformations [9],[10]. Engagement is not restricted to interaction, the participation in demonstrators or involvement in a predefined period, while these could be considered as dimensions or outputs: **engagement means a medium and long-term sustainable relationship with feasible changes at the behavioural level.** In addition, the engagement of audiences contributes to the sustainability of the A2C project in the medium and long-term (Hanson et al., 2009).

This strategy considers that a multi-channel approach merging traditional and innovative media could contribute to accomplishing the objective as expressed in the project proposal. This way, the partners based in the Region of Murcia where the A2C model will be cocreated and implemented will attend and organise specific events while using their networks

and their influence through interpersonal and direct communication, social media and also traditional press and mass media (at the local level, in line with the project scope). The actions planned are further detailed in section 8.2. The communication strategy should also consider opposition research, specific audience targeting and continuous adjustment of the messages provided, when required, linked to the follow-up of the actions and responses obtained (including audiences' reactions and unintended results).

A double approach (upstream and downstream) will be used in A2C dissemination and communication for engagement.

- **Upstream:** refers to reaching a group that has interpersonal influence and can create change due to its relationship with the service-users instead of directly targeting the service-users (for example, citizens, companies or professionals in the agricultural sector). In addition, these groups could be more likely to influence and have the ability to modify contextual factors. For instance, policy-makers, public administration officers, community leaders or investors are groups to be considered in upstream actions.
- **Downstream**: to recruit service users for the A2C project will involve a significant effort in social marketing and public communication. Efforts should be made to design and implement the campaigns responding to the specific needs and preferences of citizens and main sub-targets.

It must be taken into consideration that upstream initiatives might be necessary for downstream efforts to be effective.

9.3.1 Goal and Objectives

The goal of the dissemination and communication within the engagement strategy is to recruit and engage the citizens in the municipality of Alhama de Murcia (for the community-based scheme) and by extension, the Region of Murcia, as is it explained in section 5. The objectives are:

- To increase the impact of the engagement strategy;
- To engage citizens in other activities of the project;
- To communicate the project outcomes;
- To ensure the long-term sustainability of the project demonstrating the success and acceptance of the A2C multidimensional model among the involved stakeholders.

9.3.2 Target Audience

Citizen engagement and communication campaigns, even when they appear to address the general public are directed toward specific segments of the population as seen in Figure 14.

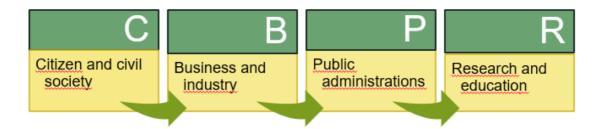


Figure 14. Target groups aligned with the Quadruple Helix of Innovation

Some campaigns often include more than one target audience and can include both upstream and downstream groups. These groups are further explained in section 5, while section 9.4 establishes the segmentation to sustain the engagement.

9.3.3 **Media**

A2C communication campaigns at the local level will require the media mentioned in D8.1 (platforms, online social media, mass media, interpersonal channels, small group meetings, and one-to-one discussions). The media of choice will depend on the key message and specific audiences for each communication campaign, as shown in Table 9.

9.3.4 Resources and Calendar

The table summarises the resources for supporting the citizen engagement strategy through the communication strategy. These resources will be considered for designing the communication campaigns plan, grouped depending on the actions and the specific degrees of participation, target audiences, tools and channels.

Each communication campaign should specify a calendar, considering the following phases:

- **Launch phase:** where the campaign is being initiated, involving the greatest media presence.
- **Body of the campaign:** where media are often used incrementally to remind the audiences of the message of the campaign.
- Final media push: before the campaign ends.

9.4 Main Communication Campaigns

Communication Campaigns (CC) comprise the overall organisation of the communication strategy and are in line with the action plan (section Public Engagement Activities8.2). Five communication campaigns are planned, according to Table 9. Campaigns are ordered from a lower to a higher degree of use of resources and media effort.

The campaigns will be carried out in Spanish to be understood by the local Spanish speaking public.

Table 9. Communication campaigns for public engagement

ID	Aim Target group Key message Approach Channels Resources					
ID	Aim	Target group	Key message	Approach	Channels	Resources
INFORM						
CC1.1	To inform stakeholders about A2C project.	Society as a whole	A2C will develop and test its circular approach in a real case demo site	Downstream	Local press/TV/radio Social media Local website	Current media presence. Flyer ¹³ Posters Personal networks and relations with Media Events (i.e., Science Week)
CC1.2	To disseminate the concept and results	I	That's how A2C works We'll keep you up to date!	Downstream	Website Social media Local press, TV or radio Knowledge transfer and training	
CONSULT						
CC2.1	To obtain valuable information and feedback	Citizens, service users (food, cosmetic, plastic industry)	Without you, A2C does not make sense. Let us know your opinion!	Downstream	Website A2C virtual platform Social media Local press, TV or radio	A2C virtual platform Partner's platforms (links) Social media Local press, TV or radio Current media presence. New tools for feedback gathering (surveys, questionnaires)
CC2.2		Research and education	A2C provides valuable information on how feedback can be obtained and analysed to implement multidimensional and participatory circular economy models	Upstream	Personal relations with university chairs, departments Events and conferences	
INVOLVE						

¹³ In addition to the flyer designed in WP8 for the project, specific flyers for the local level are to be designed by PRIMAFRIO and KVC



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ID	Aim	Target group	Key message	Approach	Channels	Resources
CC3.1	To recruit citizens for cocreating a circular model for the agrifood sector expecting a high degree of involvement and collaboration.	Citizens, service users (farmers), NGOs	Your waste is your treasure. Out of food waste, new food can arise. Your participation is key to achieve the circularity of the F&V sector in the region. Participate in our event [substitute by the name of the event in each case]	Downstream	Events Community based scheme (T7,1.2) Video documentary Local press/TV/radio Social media A2C Virtual platform Local website	Current media – presence. Flyers and posters ¹³ Webinars Presentations Personal networks and relations with media Conferences Events
CC3.2		Industry (Agrofood, cosmetic, plastics) Investors	Invest in a sustainable economic model for the future of agriculture. Participate in our events [substitute by the name of the event in each case]	Upstream	A2C Virtual platform Local website Events Newsletter	
CC3.3		Public administrations Policy makers	A sustainable and circular model must encompass regulatory, economic and governance aspects to become a success. Participate in our events [substitute by the name of the event in each case]		A2C Virtual platform Local website Events	
CC3.4		Research and education	Community-engaged projects could contribute to fill the gap in implementation research. Join our online forum!		Training and knowledge transfer	

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ID	Aim	Target group	Key message	Approach	Channels	Resources
CC4	To involve citizens in the decision-making process through the collaboration and consultation with the public in all relevant areas	Citizens Private/Industry Administration Research & Education (Stakeholder panel) Other projects in the call	We need your participation in the decision-making. We want to hear your voice: Join now the decision-making process.	Downstream	Personal networks Events Local press/TV/radio Social media A2C Virtual platform Local website	Current media presence Flyers Webinars Presentations Personal networks and relations with media
EMPOWER	₹					
CC5	To raise loyalty and engagement during the pilot implementation	Service-users (i.e., citizens, vendors, farmers people participating and already involved)	In A2C we are implementing a participatory circular economy model. We want to hear your voice.	Downstream	Local press/TV/radio Social media A2C Virtual platform Local website	Current media presence Webinars Presentations Personal networks and relations with media

10 CONCLUSIONS

The objectives of public engagement in A2C are:

- To involve all the stakeholders (a quadruple helix of participation) in co-creation processes;
- To foster a systemic change towards new behavioural models, financing methods, policies, etc;
- ✓ To improve the awareness and acceptance of climate-neutral circular economy practices;
- ✓ To increase the deployment of circular solutions and their adoption at the regional level, to be later replicated in other contexts.

The Deliverable 7.1 Public Engagement Strategy & Summary of Activities and Results of the Agro2Circular project will require continuous revision and updating to ensure the foreseen objectives and goals.

At the regional and local level, there is a wide variety of stakeholders and participation infrastructures, having as a purpose citizen engagement at all levels (Inform, Consult, Involve, Collaborate, Empower). The A2C project will leverage these infrastructures and create new ones, deploying different activities (workshops, seminars, events) to identify collaboratively the interest, opinions, and wishes of the citizenship on the co-creation and implementation of a multidimensional circular model, following an action plan.

Dissemination and communication measures are drafted and will be refined in the following periods, allowing the long-term sustainability of the model proposed in A2C.

11 ANNEXES

11.1 References

- [1] T. Greenhalgh, C. Jackson, S. Shaw, and T. Janamian, 'Achieving Research Impact Through Co-creation in Community-Based Health Services: Literature Review and Case Study', *The Milbank Quarterly*, vol. 94, no. 2, pp. 392–429, 2016, doi: 10.1111/1468-0009.12197.
- [2] UN Environment Programme, 'Consumer Information Tools and Climate Change Facilitating low-carbon choices in Tourism, Buildings and Food Systems. Guidance for Policy Makers and Business Leaders'. 2019. [Online]. Available: https://www.oneplanetnetwork.org/sites/default/files/consumer_information_tools_and_climate_change.pdf
- [3] A. Ostling, M. Francoli, and F. Steibel, 'From Informing to Empowering: Improving Government-Civil Society Interactions within Open Government Partnership (OGP)', 2016.
- [4] B. Chappell, 'Community engagement handbook: A model framework for leading practice in local government in South Australia.' Adelaide: Local Government Association of South Australia., 2016. [Online]. Available: https://www.lga.sa.gov.au/__data/assets/pdf_file/0027/551295/LGA-Community-Engagement-Handbook-revised-4th-Edition-June-2016.pdf
- [5] L. Susskind and L. Carson, 'The IAP2 Spectrum: Larry Susskind, in Conversation with IAP2 Members.', *International Journal of Public Participation*, vol. 2, no. 2, pp. 67–84, 2008, [Online]. Available: http://www.activedemocracy.net/articles/Journal_08December_Carson.pdf
- [6] City of Newcastle, 'Community Engagement Framework 2013-2018'. 2013. [Online]. Available: https://www.newcastle.nsw.gov.au/getmedia/d5dae991-ad82-4e60-b284-601ec191cd80/Comm_Engagement_framework_Final_2.aspx
- [7] Department of Environment, Land, Water and Planning, 'Effective Engagement: building relationships with community and other stakeholders. Book 1: An introduction to engagement'. 2015. [Online]. Available: https://sustainingcommunity.files.wordpress.com/2018/05/effective-engagement-book-1.pdf
- [8] L. Robinson, 'Is the Spectrum dead?', *Changeology*, Aug. 02, 2016. https://www.enablingchange.com.au/blog/innovation-2/is-the-spectrum-dead/ (accessed Apr. 07, 2022).
- [9] C. L. Holt and D. A. Chambers, 'Opportunities and challenges in conducting community-engaged dissemination/implementation research', *Transl Behav Med*, vol. 7, no. 3, pp. 389–392, Sep. 2017, doi: 10.1007/s13142-017-0520-2.
- [10] M. E. Villar, 'Community engagement and co-creation of strategic health and environmental communication: collaborative storytelling and game-building', *JCOM*, vol. 20, no. 1, p. C08, Feb. 2021, doi: 10.22323/2.20010308.
- [11] H. M. Hanson, A. W. Salmoni, and R. Volpe, 'Defining program sustainability: differing views of stakeholders', *Can J Public Health*, vol. 100, no. 4, pp. 304–309, Aug. 2009.