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# D7.1 COMMUNICATION PLAN



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**Table 1.** Table with version management

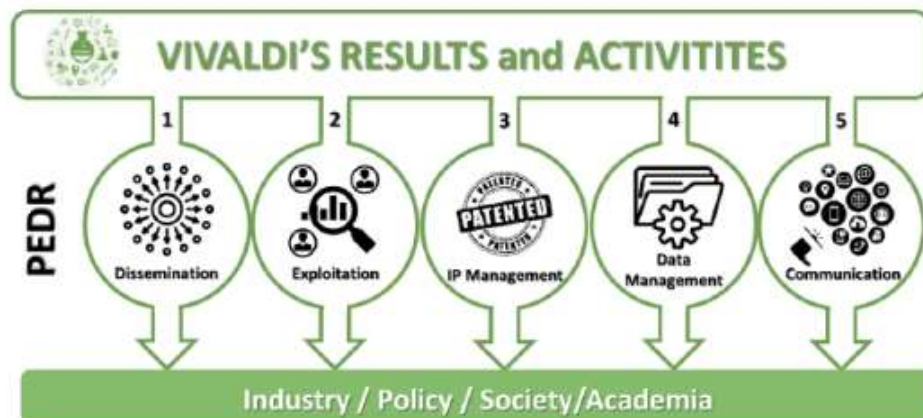
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V1	26 November 2021	CVE
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**Table 2.** Reference to the Consortium

<b>Coordinator:</b>	UNIVERSITAT AUTÒNOMA DE BARCELONA (UAB)
<b>Associated Beneficiaries:</b>	<ol style="list-style-type: none"><li>1. UNIVERSITAT AUTONOMA DE BARCELONA (UAB)</li><li>2. UNIVERSITAET FUER BODENKULTUR WIEN (BOKU)</li><li>3. LULEA TEKNISKA UNIVERSITET (LTU)</li><li>4. VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. (VITO)</li><li>5. HELMHOLTZ-ZENTRUM FUR MWELTFORSCHUNG GMBH (UFZ)</li><li>6. ACONDICIONAMIENTO TARRASENSE ASSOCIACION (LEITAT)</li><li>7. PROCESSIUM (PROC)</li><li>8. FUNDACIÓ UNIVERSITARIA BALMES (UVIC)</li><li>9. CO<sub>2</sub> VALUE EUROPE AISBL (CVE)</li><li>10. ISLE UTILITIES BV (ISLE)</li><li>11. NUTRITION SCIENCES (NUT)</li><li>12. AVANTIUM CHEMICALS BV (AVT)</li><li>13. SUNPINE AB (SUNP)</li><li>14. COMPAÑIA CERVECERA DAMM, S.L (DAMM)</li><li>15. BIOAGRA SPOLKA AKCYJNA (BZK)</li><li>16. NOVAMONT SPA (NVMT)</li></ol>

## Executive Summary

The VIVALDI project's Communication Plan (D7.1) is the fifth component of the Plan for Dissemination and Exploitation of the Results (PEDR) that contains all the required initiatives to maximise the impact of VIVALDI project.



**FIGURE 1. Main axes of VIVALDI's Plan for Dissemination and Exploitation of the Results**

The communication plan focuses on the promotion of all VIVALDI project's activities, ensuring an appropriate level of public engagement.

In order to accomplish this, the communication plan:

- Sets the communication objectives, that are functional to reach the project's priorities.
- Identifies and analyses the target audience, grouping the most relevant stakeholders based on common interest and potential impact on the project.
- Defines and adapts the key messages to each stakeholder group.
- Lists the key communication tools and channels to be used to deliver the key messages to the right audience.
- Organises all communication activities in an implementation plan, appointing responsibilities, timeframe and KPIs.

The leader of WP7 "Communication and dissemination" (CVE) will be the main responsible for implementing the communication plan, coordinating the consortium's input and supporting the project's partners to maximise the visibility of all activities undertaken.



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## List of abbreviations

<b>3-HP</b>	3-Hydroxypropionic Acid
<b>BIs</b>	Bio-based industries
<b>CA</b>	Consortium Agreement
<b>CCU</b>	Carbon Capture and Utilisation
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>GA</b>	Grant Agreement
<b>GHG</b>	Greenhouse Gas
<b>IA</b>	Itaconic acid
<b>IB</b>	Innovation Board
<b>KPIs</b>	Key Performance Indicators
<b>LA</b>	Lactic Acid
<b>LCA</b>	Life Cycle Assessment
<b>PEDR</b>	Plan for Dissemination and Exploitation of the Results
<b>RTOs</b>	Research and Technology Organisations
<b>R&amp;D</b>	Research and Development
<b>SA</b>	Succinic Acid
<b>TEA</b>	Techno-economic Assessment
<b>TRL</b>	Technology Readiness Level
<b>WP</b>	Work Package



# 1. Introduction

## 1.1. VIVALDI project in brief

VIVALDI - innoVative bio-based chains for CO<sub>2</sub> VALorisation as aDded-value organIc acids – is a Horizon 2020 project funded by the European Commission. Starting from June 2021, the project will last 48 months.

The overarching objective of VIVALDI is to develop an integrated solution for the conversion of CO<sub>2</sub> emissions into added-value organic acids as a response to the urgent need to reduce GHG emissions. Focusing on bio-based industries (BIs), VIVALDI presents these BIs an opportunity to shift towards circular economy by turning their CO<sub>2</sub> emissions into high-value products that can be again utilised as raw materials in the production of biomaterials. VIVALDI will use real off-gas emissions from four key BI sectors (Pulp & Paper, Food & Drinks, Bioethanol and Biochemicals) and will focus on the bioproduction of 4 industrially relevant organic acids with different applications and market penetration: lactic acid (LA), succinic acid (SA), itaconic acid (IA) and 3-hydroxypropionic acid (3-HP).

The adoption of the VIVALDI concept allows the transform of current biorefineries into plants with negative GHG emissions and sets the path towards the implementation of a new CO<sub>2</sub>-based industrial sector that is environmentally and economically competitive with the current fossil-based alternatives.

## 1.2. Scope of the deliverable

Due to similar principles and integrated approach, the communication plan (D7.1) and the dissemination plan (D7.2) has been developed simultaneously. It is however important to clearly distinguish them.

On one hand, the objective of the dissemination plan is to diffuse the results of the project. Therefore, the centre of the deliverable is the target audience, what is their current knowledge, why and how to reach them, and which impact will have to share with them VIVALDI's results.

On the other hand, the communication plan focuses on the project's activities and progress. Hence, the communication plan has at its centre the means and the actions that will ensure the target audience engagement.

While some tools and target audience might coincide or serve the purpose of both plans, the different focus and subsequent structure should ensure as little repetitions as possible between the two deliverables.



## 2. The communication plan

The communication plan supports the achievement of the VIVALDI project's general objectives and increases its impact by effectively sharing the project's developments, goals and benefits with a wider audience, beyond the boundaries of the project.

The plan will guide the consortium efforts in communication activities by identifying the key communication objectives, messages, means and target stakeholders. These elements are then combined into a well-structured timeline of actions, making sure to raise the audience engagement and awareness of the VIVALDI's process and environmental and economic benefits.

The communication plan follows the following structure:

- The setting of project-specific and high-level objectives.
- Identification of key messages to be conveyed to reach the objectives.
- Listing of communication activities and means that will be used to deliver the right messages to the right audience.
- A detailed timeline of all communication activities.
- Clarification of partners' responsibilities.
- Definition of measurable key performance indicators (KPIs).

Each element of the plan has been determined based on the current knowledge. When needed, the plan will be updated to continue to fit the project and consortium needs. A midterm review will be carried out to include an overview of the so far realised activities.

### 2.1. Objectives

The VIVALDI communication plan has a double objective: a project-specific one that aims at bringing the progress, activities and benefits of VIVALDI closer to the stakeholders; and a high-level one that intends to raise awareness on CCU and its role to contribute to reaching EU's ambitious goals on carbon neutrality and carbon circularity.

Both objectives go hand in hand and reinforce each other.

**Table 3.** Communication plan's objectives

Project-specific objectives	High-level objectives
Increase the project's visibility and broad stakeholders engagement	Increase the recognition of CCU technologies as a solution to promote EU goals on resource





	circularity and reduction of emissions in industrial settings beyond bio-based industries
Raise awareness among different stakeholders that are likely to be interested in, use or benefit from VIVALDI's progress. This will contribute to developing potential partnerships and knowledge exchanges to support the successful future deployment of VIVALDI solutions.	Increase shared understanding among key stakeholders about the actions needed to progress CCU (e.g. better inclusion of CCU in upcoming legislative measures and increased funding at national and EU level on CCU technologies).
Broadcast the feasibility of VIVALDI at TRL up to 5 (achieved by the end of the project, in 4 years), thus enabling a smoother passage to upscale in the industrial environment and, furthermore, to commercialization and deployment. Highlighting the scalability and replicability of the technology will open the door to wider replication and will reduce the duration of the learning curve, achieving reductions in production costs faster.	Raise awareness on the state-of-the-art of CCU technologies and promote the high scalability and replicability to increase the competitiveness of European key industrial actors (e.g. energy-intensive industries).
Reach the general public to inform them of VIVALDI objectives and progress adapting the messages to the audience and using the most appropriate tools.	Inform the general public of the advantages of CCU technologies concept from an environmental, economic and social viewpoint, thereby increasing social acceptance. Climate mitigation is today's major societal challenge, and CCU solutions can only be embraced if the public recognizes their contribution to climate goals and the local economy.

## 2.2. Target audience

The communication plan aims to reach a diverse and wide audience, promoting VIVALDI technologies, the concept of carbon circularity and industrial symbiosis whose actions can impact the deployment of VIVALDI technologies.

To ensure a high level of effectiveness in communication activities, VIVALDI identifies and divide the target audience into groups of stakeholders based on their shared interests and potential impact on the project's objectives. This analysis supports the consortium and WP7 to better design the messages and choose the most fitting communication means per type of audience.

A detailed analysis, including the stakeholders' current knowledge and attitude towards the subject, and the barriers that might need to be overcome in order to reach VIVALDI's project objectives, can be found in the Dissemination Plan (deliverable 7.2).

The identification and analysis of the target stakeholders are based on current knowledge. Future updates and modifications might be introduced in the plan as they emerge in the course of the project.



Industrial stakeholders
<b>Target audience profiles</b>
<p>Industries of various sizes and from different sectors that are dealing with hard to abate GHG emissions and that are interested in enhancing the sustainability of their processes:</p> <ul style="list-style-type: none"> <li>• Bio-based industries</li> <li>• Chemical companies</li> <li>• Other CO<sub>2</sub> emitters (such as iron and steel industry, and petrochemicals)</li> <li>• Wastewater treatment operators</li> </ul>
<b>Potential impact</b>
<ul style="list-style-type: none"> <li>• Industries discover and replicate VIVALDI's solutions, accelerating the development and deployment of CCU, and reducing the duration of the learning curve and the production costs.</li> <li>• Contribute to trigger-off a new CO<sub>2</sub>-based chemicals industrial sector that contributes to reach EU climate targets.</li> <li>• Increase their collaboration with different stakeholders and the formation of new partnerships.</li> </ul>
<b>Communication approach</b>
<ul style="list-style-type: none"> <li>• Inform these stakeholders about what is CCU, its environmental and economic benefits and the advancements that VIVALDI is bringing to the field and the new business models created.</li> <li>• Include them in the discussion and engage with them in first-person via various activities.</li> </ul>

R&D community
<b>Target audience profiles</b>
<p>R&amp;D centres, especially in the field of biochemical, climate and environmental sciences/technologies:</p> <ul style="list-style-type: none"> <li>• RTOs</li> <li>• Universities</li> <li>• R&amp;D departments of small, medium and large industries</li> </ul>
<b>Potential impact</b>
<ul style="list-style-type: none"> <li>• Increased research, impact analysis (LCA/TEA analysis) and validation of CCU technologies.</li> <li>• Knowledge exchange on CCU development and applications.</li> <li>• Encourage research to take further steps towards higher TRL.</li> <li>• Higher awareness of EU opportunities for R&amp;I projects and partnerships.</li> </ul>
<b>Communication approach</b>



- Provide science-based evidence and information on the technical feasibility, benefits and required future steps to deploy VIVALDI solutions.
- Highlight the collaborative approach of the VIVALDI project and the multidisciplinary nature of the consortium.

## Public authorities

### Target audience profiles

EU and national authorities in charge of policy frameworks and regulations that guide the achievement of EU climate targets and that provide funding for research and development:

- Policy makers
- Standardisation bodies
- Think tanks and/or topical organisations (e.g. NGOs and industrial associations)

### Potential impact

- Contribute to the development of positive regulatory frameworks and market incentives that take into consideration CCU's potential and support its deployment and uptake.
- National and EU R&I programmes support the development of CCU projects, from low to high TRL.

### Communication approach

- Report about the general outcomes of the project and its contribution to transition to a circular economy and to achieve climate targets.
- Provide sector-specific recommendations that would be required to support the upscaling of VIVALDI technologies.
- Share detailed information on the major R&I's challenges and priorities.

## General public

### Target audience profiles

The general public means the wider audience, including e.g. students and general consumers.

### Potential impact

- Higher awareness of the risks posed by climate change and possible mitigating solutions for the GHG emitting industries, such as CCU.
- General public's support for urgent regulatory measures to reduce GHG emissions.
- Higher awareness and acceptance of CO<sub>2</sub>-based products.

### Communication approach



- Raise public awareness on the project's objectives and activities, and more largely on the challenges at stake for the climate.
- Inform the general public of the advantages of CCU technologies adopted by industries from an environmental, economic and social viewpoint with ad-hoc material and using appropriate means.

## 2.3. Key messages

Based on the identified objectives, a set of key messages have been defined and shaped to each target audience and in relation to the activities that compose the implementation plan. The core characteristics of the messages must be the clarity, credibility, consistency, accuracy and completeness of the information shared.

The key messages are at the heart of the communication plan, being the fundamental element from where to build each communication activity and the relation with the target audience.

**Table 4.** Communication plan's key messages

Target audience	Key message	Communication objective
<b>Industrial stakeholders</b>	VIVALDI develops reliable, sustainable and cost-effective CO <sub>2</sub> capture & conversion technologies, which enhance the sustainability of BIs current processes and products, and open new business opportunities.	Encourage industries to replicate and invest in CCU technologies to reduce their carbon footprint.
	VIVALDI solutions aim at transforming biorefineries thanks to its circular approach, in which the wastes are transformed into novel sustainable compounds to be reused by the plant or to be sold externally, creating new business models.	Increase the knowledge on CCU, carbon circularity and industrial symbiosis, especially of those industries (or industrials hubs) that do not consider such solutions.
	Thanks to the EU research and innovation programme, different actors come together to work on promising solutions that contribute to mitigating climate change as well as boosting the EU's economy.	Contribute to get industries closer to society.
<b>R&amp;D community</b>	VIVALDI project accelerates the development of CCU technologies that reduce BIs' GHG emissions, their	Highlight the key role of research and knowledge exchange to develop CCU solutions and increase their TRL, but



	dependency on fossil carbon import and exploitation of essential resources including water.	also to analyse the impact of such technologies.
	Industrial actors, renowned R&D centres and sectorial associations work together to deploy promising solutions to mitigate climate change.	Increase the collaboration between R&D communities and industries through partnerships and EU funded projects.
<b>Public authorities</b>	VIVALDI contributes to the development of a new CO <sub>2</sub> -based industrial sector that is environmentally and economically competitive with the current fossil-based alternatives.	CCU is an opportunity to ensure the global leadership of EU BIs and to move away from fossil resources.
	VIVALDI project pushes forward the development of low TRL solutions that have the potential to reduce the carbon footprint of hard to abate industries, contributing to reaching EU climate targets.	Positive policy frameworks and EU programmes support are essential for the further development and deployment of CCU at the EU level.
<b>General public</b>	VIVALDI project develops technological solutions to reduce the environmental footprint of chemical industries, contributing to mitigating climate change.	Showcase how technological solutions answer societal problems.
	CO <sub>2</sub> -based products are safe, of high quality and contribute to reducing the consumers' impact on the environment.	Bring the general public closer to science/technology and engage them in following the project progress.
	Thanks to the EU research and innovation programme, different actors come together to work on promising solutions that contribute to fighting climate change as well as boosting the EU's economy.	Showcase what is happening in an EU funded project and how it brings together different actors to generate benefits for society.

## 2.4. Communication tools and channels

Communications tools and channels are fundamental instruments that allow conveying the VIVALDI's key messages to different types of audiences most directly and engagingly.



The choice of one mean instead of the other depends on the message to be communicated, the target audience and the desired outcome.

**Table 5.** Communication tools and channels

<b>Toll/channel</b>	<b>Objective</b>	<b>Target audience</b>
<b>Website</b>	The primary source of information about the project and its progress for all target audiences. Information and updates are straightforward and easily accessible.	All target audience.
<b>LinkedIn group account</b>	VIVALDI profile on LinkedIn mirrors the main updates in the project's website, ensuring a wider reach beyond sectorial experts. The interactivity of the mean allows for direct interaction with the audience and to spread the news to wider and wider networks capitalising on the partners' involvement.	All target audience, but being LinkedIn a tool for the professional network, it proves to be especially suitable to reach industry stakeholders, the R&D community, and the public audience.
<b>Twitter account</b>	Straightforward, user-friendly way to communicate briefly and simply the progress, news and events related to the VIVALDI project to a wide audience, fostering public engagement, encouraging interactions and inbound traffic to the website.	All target audiences but especially suited to reach public authorities, the R&D community and the general public.
<b>Newsletter</b>	All target audiences will be able to voluntarily subscribe to the biannual newsletter of VIVALDI project to stay up-to-date in a consistent way on VIVALDI progress. The newsletter offers all relevant updates at a glance and in a visual way, thanks to the use of pictures and infographics. All news and articles links will be available for the readers to read the full content summarised.	All target audience.
<b>Short video capsules</b>	Informational and educational visual explanation of the project, ensuring to reach a wide audience in an engaging and clear way. The videos will be uploaded on YouTube and will be published on the website and social media of the project.	All target audience but especially the general public.
<b>Open doors day</b>	Open doors events will be organised to explain VIVALDI and partner's activities more directly and openly. The involvement of local communities (e.g. schools) will be essential for the general public to better understand how science helps tackle major	Industry stakeholders, R&D communities and the general public.



	scientific challenges of our time, like reduction of CO <sub>2</sub> emissions and reuse of resources.	
<b>Communication kit</b>	A communication kit including various types of material (e.g. leaflets, posters, roll-ups, etc.) will be created to present short, visual and straightforward information on the VIVALDI project and EU funded projects at a wider scale. Such material will be distributed widely to physical events and conferences, and virtually. The aim is to raise awareness of the project, to establish the project's identity and to guide interested readers to the project website and social media.	All target audience.
<b>Media engagement</b>	Short interviews, opinion articles of consortium members and press releases focused on specific project results and milestones will be produced and distributed on selected, relevant media of various nature to raise awareness of the project among all target audiences.	All target audience.

### 3. Implementation plan and governance

The implementation plan lists and describes all the key communication actions and activities that will be carried out throughout the project. The plan build on the elements analysed so far: communication objectives, target audience, key messages and means. The purpose is to guide the consortium and the WP7 leader in implementing each activity in a timely and effective way.

In order to do so, the implementation plan describes in detail each activity identifying:

- Time and location (when applicable) of each activity
- Partners involved and responsibilities
- Target audience
- The activity impact and expected results
- The KPIs identified to measure the activity's success

All the communication activities described in the Implementation plan are coordinated by VIVALDI Communication and Dissemination Officer (Lara Tottolo, from CVE).

The project partners are called to collaborate and participate in implementing the communication plan. The entire consortium will be involved in all communication activities, which will be undertaken in a coordinated way, exploiting synergies and avoiding overlaps. Each partner will also act as a multiplier, making use of its



organisation's network and channels (such as websites, newsletters, social media, events and workshops) to ensure maximum visibility and engagement of VIVALDI's activities.

All partners shall report the communication activities they will undertake to the Communication and Dissemination Officer, which is in charge of recording and reporting all VIVALDI communication actions.





**Table 6.** Implementation plan

Activity	Expected output	Target audience	Timeframe	WP involved	KPIs
<b>Visual identity design</b>	WP7 will design and develop an original and recognisable project logo, graphic elements and templates for presentations and reporting to be used by the entire consortium in all communication material, internal and external meetings and happenings.	All target audience	M1-M5	WP7, with input from the consortium, is responsible for the design and correct use of the visual identity in all communication material.	<p>1 project logo in all needed variations (colour, black and white) and formats (JPEG, PNG and VECTOR).</p> <p>1 set of templates including meeting minutes, letterhead, press release, reports, PPT presentation, vertical and horizontal posters.</p>
<b>Website</b> (design, management and monitoring)	<p>A user-friendly website will be developed by WP7 with input from the consortium in M5.</p> <p>The website created includes both general and specialised information interfacing different target audiences. The information permanently</p>	All target audience	M1-M48	WP7 is responsible for the development, management and monitoring of the website.	50 interactions per month.



	accessible include details about the project, the consortium, contact details, news, events and a library gathering all written and video content. The project's progress, results, and impacts will be added as they are obtained.			The consortium contributes by providing content and project's updates.	
<b>Social media accounts</b> (LinkedIn, Twitter and YouTube)	WP7 opens social media accounts on the most relevant social media identified (LinkedIn, Twitter, YouTube). Information and updates about the project, news and events will be regularly published ensuring a high level of engagement and growth of the network.	All target audience	M6-M48	WP7 is responsible for the development of visual elements, editorial plan, community management and monitoring.  The consortium contributes by providing content, project's updates and involving their networks.	1 LinkedIn post per week/100 subscribers.  2 tweets per week/100 followers.
<b>Short videos</b>	WP7 will coordinate the realisation of informational, educational and visual explanations of VIVALDI's activities, with the objective to raise awareness on the benefits of the CO <sub>2</sub> -based industry.	All target audience	M8-48	WP7 is responsible for coordinating the realisation and distribution of the video.  The consortium will contribute with proprietary images and footage,	1 video realised per year.



	Videos will be distributed online via the website, social media, communication portals and other online platforms.			participating in the creation of the script and volunteering for interviews.	
<b>Open doors days</b>	The consortium organises open doors day to the different industrial and academic partners' sites for, e.g., young students, professionals and PhD students interested in deepening their knowledge on the VIVALDI project, carbon circularity and industrial symbiosis.	Industry stakeholders R&D community General public	M8-48	The consortium partners, with the support of the WP7 team, organise one open day including the involvement of local communities per year.	1 Open doors day per partner.
<b>Communication kit</b>	WP7 will produce a communication kit including a leaflet, poster, roll-ups, banners and a general PPT presentation with general information about project objectives, approach, partners, and impact to be used for conferences and events by the entire consortium.  The kit will be available in an electronic version on the website to download and print it if necessary.	All target audience	M6-48	WP7, with feedback from the consortium, develops the communication kit, distributes it to all partners and ensures the use of such material in relevant happenings.  Each partner will be responsible for printing the material.	1 communication kit designed.



<p><b>Media engagement</b></p>	<p>WP7 with input from the consortium develops a network of EU and national journalists with different degrees of specialisation on VIVALDI topics to ensure a wide reach.</p> <p>Collaboration among WP7 and the other WPs is essential to prepare together relevant content to be distributed to the media identified during an agreed timeline.</p>	<p>All target audience</p>	<p>M1-48</p>	<p>WP7 coordinates the development of a media network and ensures the involvement of the consortium in the timeline setting and content creation.</p>	<p>1 media engagement per year.</p>
<p><b>Newsletter</b></p>	<p>The WP7 team releases, with the consortium's collaboration, a semestral newsletter for project partners and all target stakeholders gathering project updates, publications, events and news about sectorial developments, funding opportunities and the European environmental policies.</p>	<p>All target audience</p>	<p>M6-48</p>	<p>WP7 designs the template of the newsletter and coordinates the development of a biannual newsletter.</p> <p>The consortium shares the responsibility for content creation and reporting updates and results achieved.</p>	<p>2 newsletters per year.</p>



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