REcovery and REcycling of nutrients TURNing
wasteWATER into added-value products
for a circular economy in agriculture

Grant Agreement No:	730398	**Project Acronym:**	Water2REturn
Project Title:	Recovery and Recycling of nutrients TURNing wasteWATER into added-value products for a circular economy in agriculture		
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Project Coordinator:	BIOAZUL		
Start date of the project:	01.07.2017	**Duration of the project:**	57 months
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Contributing WP:	**WP10: Communication, Dissemination and Exploitation**		
Dissemination level:	Public		
Authors:	UECBV		
Contributors:	BIOAZUL, ELO, 2B		
Version:	**1.0**		

List of abbreviations

W2R	Water2REturn
WP	Work Package
D	Deliverable
EU	The European Union
EC	European Commission
EASME	European Agency for Small and Medium Enterprises
H2020	Horizon 2020

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Executive Summary

This document reports on the full set of communication and dissemination material produced within the Water2REturn project for promoting the project to a wider audience and for supporting the implementation of the Communication Plan (D10.1). The initial communication package developed at this early stage of the project (M3) is based on basic project information (objectives, expected impact and consortium). Further steps, updated Communication plan (M49) and updated versions have be produced at later stage, alongside the project evolvement and in line with key milestones and achievements. All communication and dissemination material is available on the dedicated project website and private area for consultation or download.

Introduction

In order to generate the maximum impact, the W2R Communication and Dissemination activities, besides of media and general public, are addressed to specific categories with specific messages. There are 5 main groups of categories that are relevant for the Water2REturn project. They are:

- Farmers
- Industry
- Public authorities
- Academics
- Consumers & NGOs

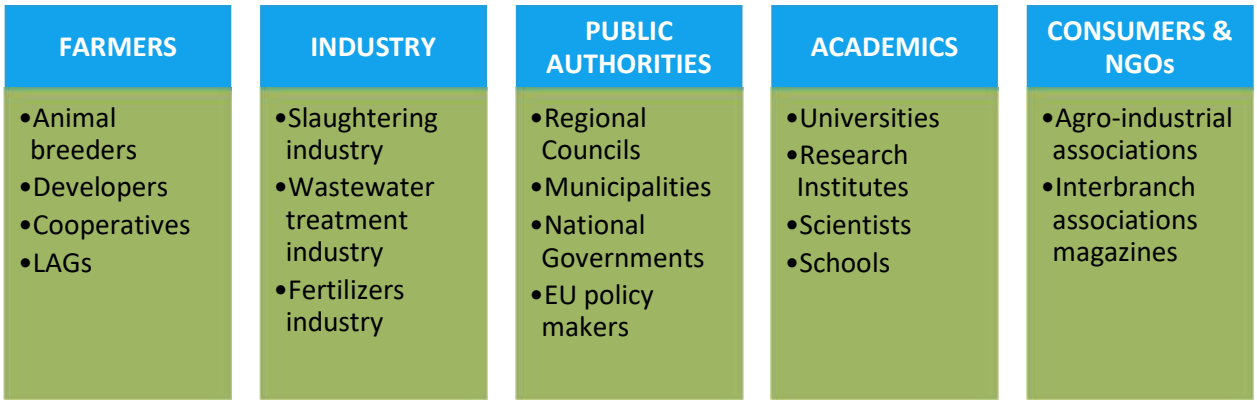


***Figure 1**: Stakeholder map*

In order to achieve this target and engage end users, stakeholders and general public, different Communication & Dissemination material have been developed during the project and they are presented in the next sections of this deliverable.

1. Logo

Six different logos have been produced at M3, all based on the same core design but with slightly different formats that can be adapted to different media e.g. website, leaflets, poster.

		
1. Square Water2REturn logo	2. Square W2R logo	3. Square image-based logo
		
4. Rectangular Water2REturn logo	5. Rectangular W2R logo	6. Long rectangular Water2REturn logo

***Figure 2**: Water2REturn logos*

2. Templates

Power Point and deliverable templates have been prepared in a way that can be adapted by the partners for their own use.

1. Presentation cover page

2. Presentation internal page

3. Presentation final page

Figure 3: *Water2REturn Power Point presentation template*

3. Social media channels

Twitter, LinkedIn and YouTube channels have been set up since the beginning of the project and they are constantly updated with new contents. The project is maintaining a strong visibility following the good results obtained during the second reporting period, strongly involving all the partners in the communication and dissemination activities. Below it is possible to consult the results reached through these channels.

3.1. Twitter

Twitter account is one of Water2REturn most active dissemination channel. From July 1st, 2017 up to January 31st, 2022, the Twitter account got 946 followers and posted 1392 tweets with an average of 2,7 tweets per day and 26 tweets per month.

***Figure 4**: Twitter account*

	TOTAL TWEETS	IMPRESSIONS	INTERACTION RATE	CLICK ON THE LINK	RETWEETS	LIKES	ANSWERS
JULY	6	6.8K	2,3%	8	27	46	0
AUGUST	3	5.4K	1,3%	12	10	32	0
SEPTEMBER	5	3.6K	2,4%	13	19	68	16
OCTOBER	6	4.0K	3.3%	6	20	48	0
NOVEMBER	4	3.1K	1,5%	9	15	26	0
DECEMBER	2	2.2K	0,6%	2	3	8	1

***Figure 5**: Twitter statistics from 01/07/2021 to 31/12/2021*

3.2. LinkedIn

LinkedIn channel has been used to address messages to a professional audience through targeted posts. At the time of writing, LinkedIn page counts 314 followers.

***Figure 6**: LinkedIn account*

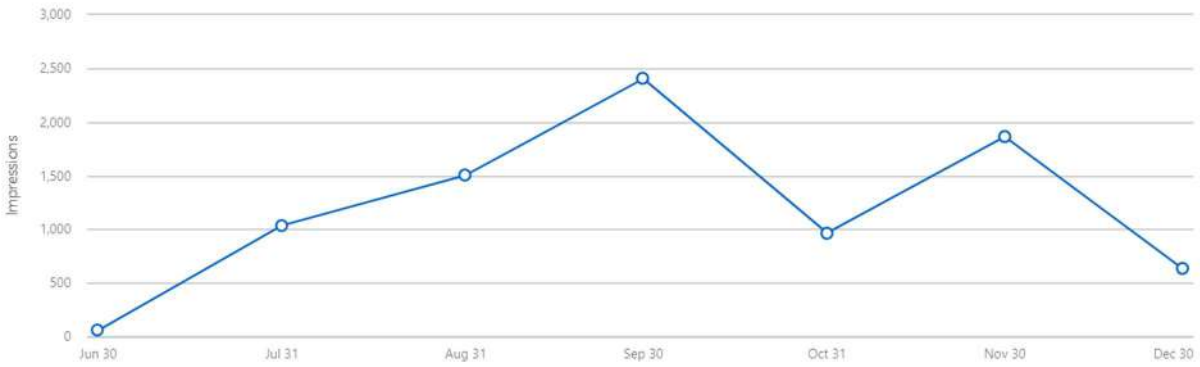


***Figure 7**: LinkedIn statistics from 01/07/2021 to 31/12/2021*

3.3. YouTube

26 videos have been published on W2R YouTube channel, in particular videos focused on the Water2REturn system at Matadero del Sur, products obtained for agricultural use, Water2Return official video interviews and highlights and integral versions of each capacity building workshop performed.

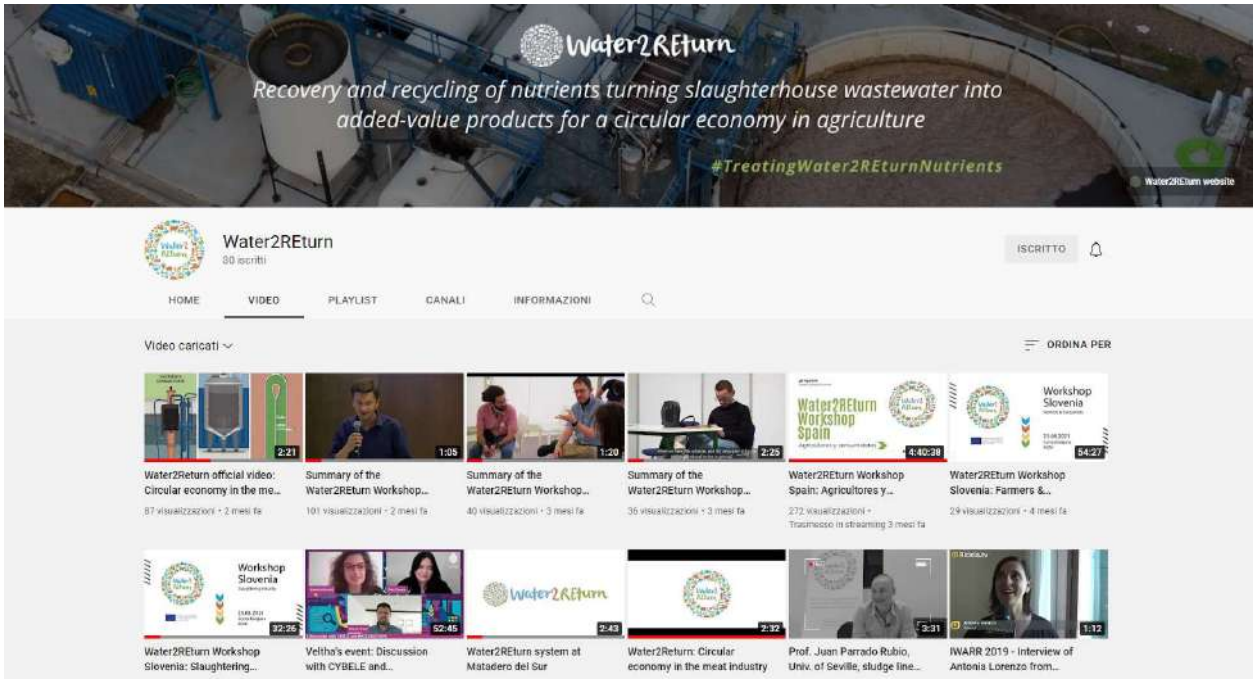
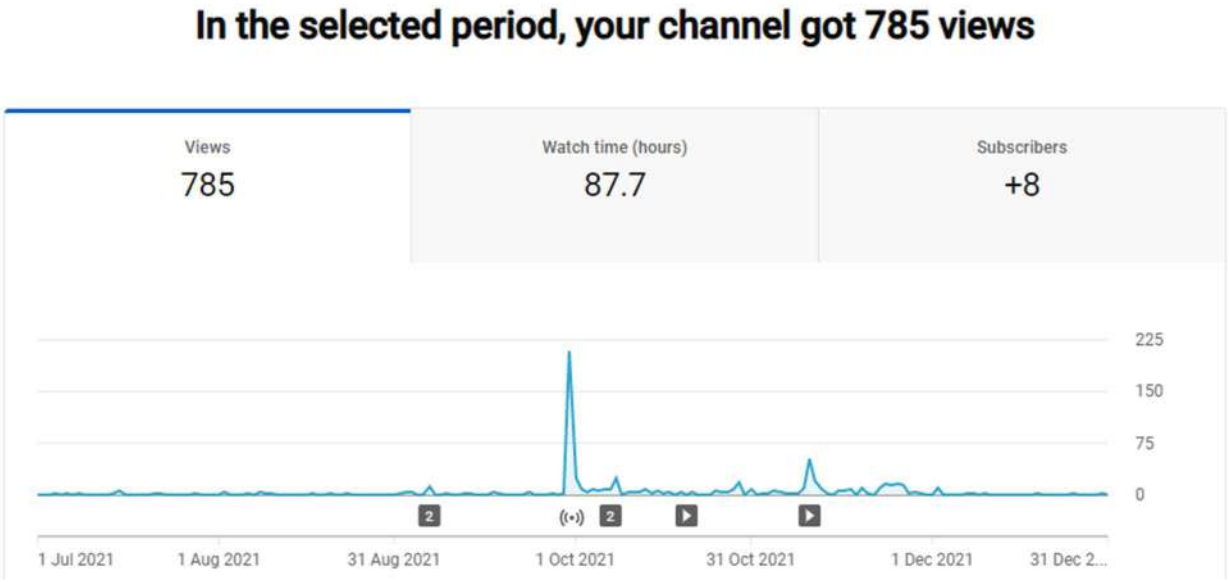
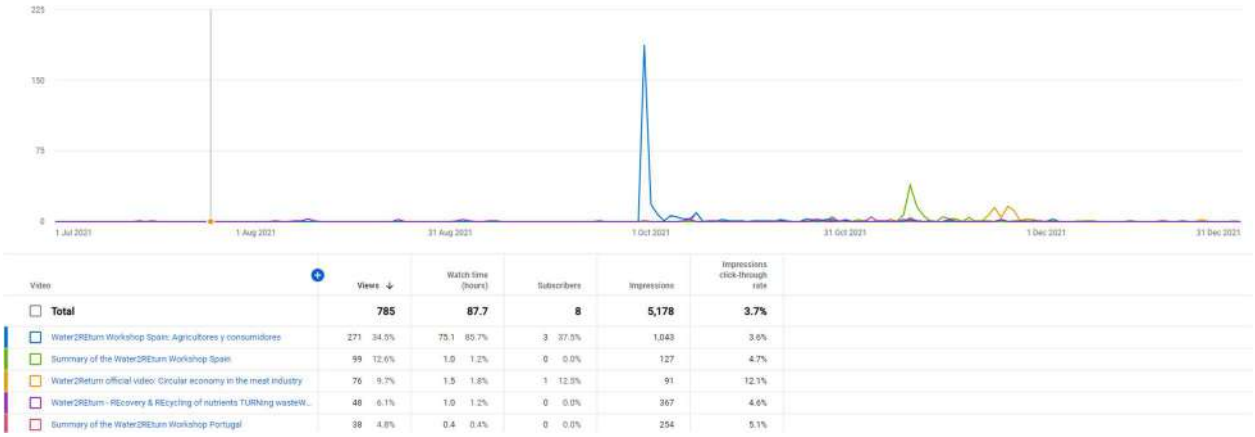


***Figure 8**: YouTube channel*





Video	Views	Watch time (hours)	Subscribers	Impressions	Impressions click-through rate
Total	785	87.7	8	5,178	3.7%
Water2REturn Workshop Spain: Agricultores y consumidores	271 34.5%	75.1 85.7%	3 37.5%	1,043	3.6%
Summary of the Water2REturn Workshop Spain	99 12.6%	1.0 1.2%	0 0.0%	127	4.7%
Water2Return official video: Circular economy in the meat industry	76 9.7%	1.5 1.8%	1 12.5%	91	12.1%
Water2REturn - REcovery & REcycling of nutrients TURNing wasteW...	48 6.1%	1.0 1.2%	0 0.0%	367	4.6%
Summary of the Water2REturn Workshop Portugal	38 4.8%	0.4 0.4%	0 0.0%	254	5.1%

***Figure 9**: YouTube statistics 01/07/2021 to 31/12/2021*

4. Digital and printed material

4.1. Poster

A poster has been developed and improved in M43.

***Figure 10**: Water2REturn poster*

4.2. Leaflet

A project leaflet adaptable in graphical terms also to the brochure has been developed in order to provide information about the project. It has been delivered at conferences, workshops and seminars that have been organised and/or attended by the partners.

***Figure 11**: Water2REturn leaflet*

4.3. Roll-up

The roll-up has been developed in a very simple way in order to attract people to Water2Return stand installed during events, fairs and conferences.

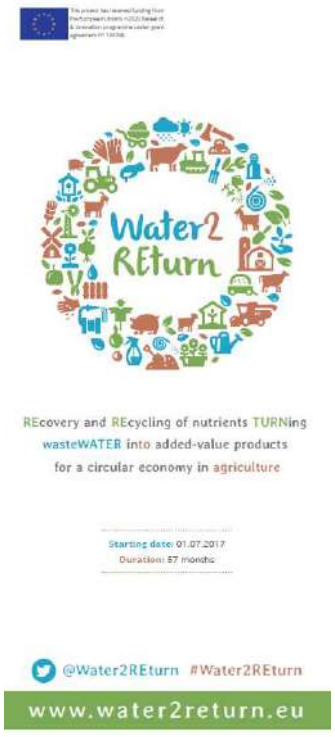


***Figure 12**: Water2REturn roll-up*

4.4. Project Video

ELO has been responsible for producing an engaging, short, and easy to understand video that has been used to explain the main features of the Water2REturn project and its objectives in contributing to the circular economy in agriculture.

The video has been presented at the end of August in the frame of the first Capacity building workshops in Slovenia. The project video is available in multiple languages, including English, French, Italian, German, Portuguese and Spanish.

Figure 13: *Water2REturn project video frames*

4.5. Layman's report

A Layman's Report is under development in order to be used in the Social Awareness section of the project. This will be a maximum of eighteen pages long and it will be written in such a way as to make Water2REturn understandable for non-technicians and the general public. The Layman's Report will be used for communication to policy and decision makers and other kind of interested stakeholders with non-technical profiles.

The following is the draft of the Layman's report content developed by 2B:

- What is Horizon 2020 (H2020)?
- Brief summary
- What are the Water2REturn key findings?
- Water2REturn project at a glance
- Introducing the problem
- Description of the project
- Project overview: objectives and structure
- Results of the project
- Modular applications
- The market: target countries and customers
- Dissemination activities
- Partners involved
- References and Contact information

4.6. Capacity building workshops material

Specific contents have been created for slaughterhouse operators, and for farmers and consumers. It is available at the workshops and on a dedicated section of the Water2REturn website. Customised material (banners, informative translated material etc.) has been designed by BIOAZUL for each workshop performed. This material is accompanying the regional Capacity Building Programme workshops that are taking place in five locations all over Europe (Slovenia, Spain, Italy, Portugal, and Belgium). Below it is possible to consult part of this material. In the event section of project website and the YouTube channel it is possible to go more in details.

***Figure 14**: Capacity buildings workshops series banners*

5. E-newsletters

Four e-newsletters have been produced over the course of the project. The last 2 issues will be published in February and March 2022 in order to include the project results.

***Figure 15**: Water2REturn newsletters*

6. Policy briefs

A set of policy briefs targeted at EU and national-level policymakers will be produced in the last 2 months of the project by ELO which will identify how policy can facilitate the uptake of the innovations and technologies that are piloted in the Water2REturn project. The roadmap will set out how EU implementation of nutrient recovery from industrial wastewater streams can be rolled out across Europe with a supportive policy environment. Follow-up actions will be planned to influence policy and regulation according to the recommendations in the policy briefs. Furthermore, a Policy brief and roadmap to foster EU implementation of the Water2REturn concept has been already submitted as deliverable (D9.1).

7. Questionnaires

Five different kind of questionnaires directed to farmers, slaughtering industry, fertilizer industry, wastewater treatment industry, consumers & NGO have been already developed. Recognising a market footprint they have been updated in an unique link, translated in Italian and Spanish and have been and will be presented during the 10 thematic workshops foreseen during the last 7 months of the project

(August 2021 – March 2022) in order to engage end users and stakeholders. Its results will help in better define the Water2Return go to market strategy.

***Figure 16**: Water2REturn questionnaires*

8. Scientific publications

The scientific partners, such as the University of Seville, the University of Cadiz, and the University of Ljubljana have been responsible for disseminating the project results to the academic community, primarily through publications in journals such as *Water Resources and Industry*, *Water Research*, *Water Resources and Economics,* and others. Below is the list of scientific publications done since the beginning of the project.

Partner(s)	Author(s)	Title	Link
USE	Bruno Rodríguez-Morgado, Pablo Caballero, Patricia Paneque, Isidoro Gómez, Juan Parrado, Manuel Tejada	Obtaining edaphic biostimulants/biofertilizers from sewage sludge using fermentative processes. Short-time effects on soil biochemical properties	https://www.ncbi.nlm.nih.gov/pubmed/29037122
UCA	C. Agabo-García R. Solera, M. Pérez	First approaches to valorizate fat, oil and grease (FOG) as anaerobic co-substrate with slaughterhouse wastewater: Biomethane potential, settling capacity and microbial dynamics	https://www.sciencedirect.com/science/article/abs/pii/S0045653520316684?via%3Dihub
UCA, USE	P. Caballero; C. Agabo-García, R. Solera, J. Parrado, M. Pérez	Eco-energetic management of activated sludge derived from slaughterhouse wastewater treatment: pre-treatments for enhancing biogas production in anaerobic conditions	https://pubs.rsc.org/en/content/articlelanding/2020/se/d0se00992j#!divAbstract
UCA	Rosario Solera, Cristina Agabo, Juan Parrado, Montserrat Perez	Biological pretreatment of sewage sludge before anaerobic digestion	N/A

		process	
UCA	Montserrat Perez, Cristina Agabo, Juan Parrado, Rosario Solera	Effect of enzymatic pretreatments on sewage sludge anaerobic digestion	N/A
UCA	EuropaSur	La Cátedra Fundación Cepsa entrega sus premios 2019 de investigación científica	https://www.europasur.es/campo-de-gibraltar/Catedra-Fundacion-Cepsa-investigacion-cientifica-premios_0_1420358288.html
USE	Pablo Caballero Jiménez Ana M. García Martínez Bruno Rodríguez Morgado Luis Martín Presas Manuel Tejada Moral Juan Parrado Rubio	Design of a demonstrative scale fermentation unit for conversion of slaughterhouse sludge into agronomic products: Biostimulants and biofertilizers	http://bioveg.bioplantas.cu/
UL	Resman, Lara Oven, Primož Bertoncelj, Jani Mihelič, Rok	Treatment of microalgae for biostimulation of agricultural plants	https://www.agronomsko-drustvo.si/zborniki.htm

***Table 1**: Scientific publications*

9. Evaluation of effectiveness

All the Communication and Dissemination materials listed in the sections above have been fundamental in order to reach all the KPIs set and assessed at the beginning and during the project and to generate impact.

C&D Tool	KPI identified	Results foreseen	Results achieved (M55)	Evaluation
Website	Page views	At least 5.000	35.544	🟢
	Sessions	10.000	16.646	🟢
Social Media	Number of posts	2.500	2.809	🟢
	Number of fans	1.000	1.294	🟢
E-newsletters	Number of subscriptions to the service	250	187	🟡
Promotional and informative printable	Number of copies printed and	2.000	3.200	🟢

material: posters, roll-up, banner, brochure	distributed			
Project videos	Number of videos	15	26	
Participation in relevant events (conferences, workshops, etc.)	Number of conferences and workshops attended	25	73	
Scientific Publications	Number of publications	10	8	
Synergies with other relevant projects	Number of projects	5	6	
International demonstration event	Number of attendees	50	0	
Capacity buildings workshops	Number of attendees	200	240	
Demonstration and marketing video	Number of visualisation	1.000	210	
Social awareness campaign	Number of copies of the Layman's report	500	0	
Final conference and Brokerage event	Number of attendees	80	/	/

***Table 2**: Evaluation of effectiveness*

Conclusions

Considering that:

- the auto-evaluation of effectiveness done in Table 2 of this deliverable is quite satisfactory and that;
- in the last M42 Review report sent out on 04/06/2021 the European Research Executive Agency positively commented on Water2REturn communication activities stating that "*a large estimated audience has already been reached through a variety of dissemination and communication activities and use of varied platforms*" and that "*a very good publication record has already been achieved showing good impact of the project*";

the materials developed and used for Communication and Dissemination purpose have been effective in reaching the target set at the beginning of the project.

It is fundamental, now, in the last 2 months, to further boost maintaining the same quality level, the Communication and Dissemination activities; in particular the social awareness campaign, the remaining capacity building workshops and host the demo-site visit in order to reach the Water2REturn end users. Communication activities, combined with exploitation and marketing activities, will ensure that the proper audience is reached in the right manner and timing and that the results are fully addressed and exploited.