

# AQUIFER PROJECT: “Innovative instruments for an integrated management of groundwater in a context of an increasing scarcity of hydrological resources”

## *T4.3.1 Report of the Workshops to launch AQUIFER web platform*

*November 2022*

## TABLE OF CONTENTS

<b>ACTIVITY DESCRIPTION .....</b>	<b>2</b>
<b>WORKSHOPS DESCRIPTION .....</b>	<b>3</b>
<b>FRENCH WORKSHOP .....</b>	<b>3</b>
<b>SPANISH WORKSHOP .....</b>	<b>6</b>
<b>PORTUGUESE WORKSHOP .....</b>	<b>9</b>
<b>CONCLUSIONS .....</b>	<b>11</b>
<b>ANNEX 1 – LIST OF PARTICIPANTS IN THE FRENCH WORKSHOP .....</b>	<b>12</b>
<b>ANNEX 2 – LIST OF PARTICIPANTS IN THE SPANISH WORKSHOP .....</b>	<b>14</b>
<b>ANNEX 3 – LIST OF PARTICIPANTS IN THE PORTUGUESE WORKSHOP .....</b>	<b>16</b>

## ACTIVITY DESCRIPTION

Table 1. Activity description	
<b>Activity</b>	T4.3. Workshops for the involvement of stakeholders contributing to the AQUIFER web platform
<b>Deliverable</b>	T4.3.1. Report on web-platform launching workshops
<b>Name of the activity</b>	Workshops
<b>Date</b>	In France: 13 September 2023 In Spain: 14 September 2023 In Portugal: 20 September 2023

In the framework of T4.2 of the AQUIFER project, it is defined to make the preparation and launching of an online platform of innovative practices in groundwater management. This platform, will work as a decision support system for the users and will also gather information about strategies and innovative practices in the management of groundwater resources. Hence, the platform will allow the responsible entities to find the solution that best fit to their challenges.

The activity 4.3.1 aimed to contribute and present the platform to water stakeholders through the organization of online workshops, one in each country: France, Spain and Portugal.

So, during the final testing period of the platform, that took place between September and October 2022, the three clusters of the AQUIFER consortium (Aqua-Valley, Catalan Water Partnership and Portuguese Water Partnership) have given the voice of the water sector in each country through the organisation of workshops.

A total of three workshops have been conducted online, in France, Spain and Portugal with a common agenda including a presentation of the context of water resources in relation to climate change, the presentation of the AQUIFER project, the presentation of the platform and a time for discussion to gather related comments.

## WORKSHOPS DESCRIPTION

### FRENCH WORKSHOP

#### OVERVIEW

The first of the three workshops, was led by AquaValley and was organized for French stakeholders of the groundwater sector on September 13<sup>th</sup>. The session counted with the special collaboration of Dominique Darmendrail, from BRGM, who carried out a presentation about groundwater issues in the context of climate change.

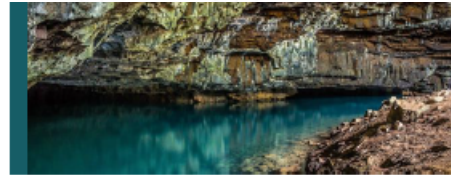
The workshop also included a focus on the actions carried out in France in the framework of the AQUIFER project: presented by Sandra Beranger and Pierre Lecointe, from BRGM.

The presentations of the AQUIFER project and the platform were conducted by Mylène Hache and Simon Olivier from Aqua-Valley. The feedback was positive, and the platform was appreciated both for its technical interest and for its design. 91 % of the participants think that is a useful tool.

The recommendations mainly concerned the need to have a good communication around the platform and to maintain it updated.



FIGURE 1. FRENCH WORKSHOP ABOUT AQUIFER PLATFORM PRESENTATION



**ATELIER DE PRESENTATION**  
**PLATEFORME TRANSNATIONALE DE PRATIQUES INNOVANTES POUR LA**  
**GESTION DES RESSOURCES EN EAU SOUTERRAINES | PROJET AQUIFER**

**Mardi 13 Septembre 2022 | 16h00-17h30**

>> [INSCRIPTION](#)

**16h00 | OUVERTURE DE LA SESSION**

Accueil et présentation du programme  
*Mylène HACHE, Chargée de mission – Aqua-Valley*

Les enjeux autour des eaux souterraines dans un contexte de changement climatique  
*Anne-Valérie HAU-BARRAS, Directrice régionale déléguée Occitanie - BRGM ou Sandra BERANGER, Ingénieur hydrogéologue, chef de projet BRGM*

**16h20 | PRÉSENTATION DE LA PLATEFORME DE PRATIQUES INNOVANTES POUR LA GESTION DES RESSOURCES EN EAUX SOUTERRAINES**

Présentation de la plateforme et de ses différentes fonctionnalités  
*Mylène HACHE, Chargée de mission – Aqua-Valley ou Simon OLIVIER, Chargé de projet – Aqua-Valley*

**16h40 | DISCUSSIONS ET DEBATS**

Collecte des contributions et commentaires autour de la plateforme  
*Mylène HACHE, Chargée de mission – Aqua-Valley*

**17h00 | LE PROJET AQUIFER : PRINCIPALES ACTIVITÉS ET RÉSULTATS ATTENDUS**

Présentation du projet Aquifer  
*Mylène HACHE, Chargée de mission – Aqua-Valley ou Simon OLIVIER, Chargé de projet – Aqua-Valley*

Focus sur les actions menées en France dans le cadre du projet  
*Sandra BERANGER, Ingénieur hydrogéologue, chef de projet – BRGM Ou Pierre LE COINTE, Hydrogéologue – BRGM*

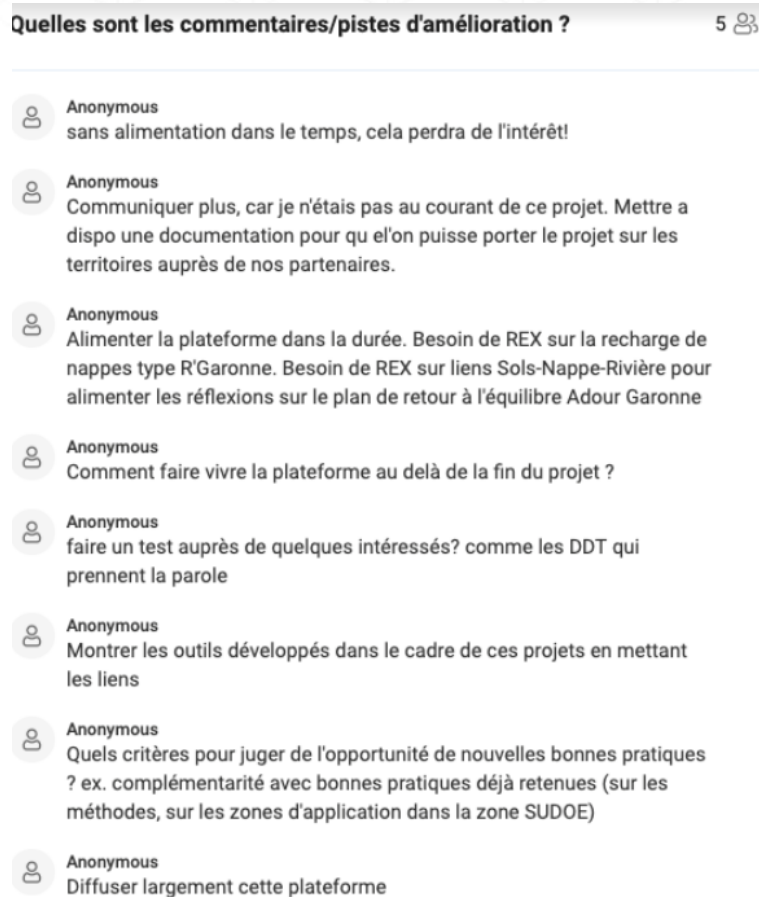
**17h30 | CLOTURE**

*Yvan KEDAJ, Directeur général - Aqua-Valley ou Mylène HACHE, Chargée de mission – Aqua-Valley*



FIGURE 2. FRENCH WORKSHOP AGENDA

## COMMENTS REGARDING THE PLATFORM



Participants can vote at [slido.com](https://www.slido.com) with #aquifer

FIGURE 3. FRENCH WORKSHOP COMMENTS AND ADVICES

“Without power in time, it will lose interest!”

→ [We have to update the platform after the project](#)

“Communicate more, because I was not aware of this project. Provide documentation so that we can bring the project to the territories with our partners. Feeding the platform over time.”

→ [We have to update and communicate](#)

“Show the tools developed within the framework of these projects by putting the links”

→ [Include in documentation all the link to the innovative practices](#)

“What are the criteria for judging the opportunity of new good practices? ex. complementarity with good practices already adopted (on the methods, on the areas of application in the SUDOE area)”

→ We have to define the criteria's to select the future practice for the website

“Disseminate this platform widely”

→ We have to communicate



FIGURE 4. KEY WORDS ABOUT THE PLATFORM



FIGURE 5. THE UTILITY OF THE PLATFORM ANSWERS

## SPANISH WORKSHOP

The second of the three workshops was led by CWP and gathered Spanish stakeholders.

The event started with a general overview of the state of the art of the management and monitoring of groundwater resources, by José Luís García from IGME, who also provided a general introduction to the project AQUIFER.

Enric Queralt from CUADLL presented an update of the activities carried out in the recharge ponds in the Llobregat river's alluvial plain and the SWOT analysis carried out.

Pablo del Amor from CRCC that updated the audience about the monitoring activities that CRCC has been carried out in the Campo de Cartagena demosite.



FIGURE 6. PRESENTATION OF THE MONITORING ACTION IN CAMPO DE CARTAGENA (LEFT) AND THE EXPERIENCES IN THE LLOBREGAT'S RIVER RECHARGE PONDS (RIGHT).

After that, Sergi Compte form CWP presented the platform and its functionalities and concluded with the survey to gather the feedback from the assistant stakeholders. A 94% of the participants considered that the platform will be useful to improve the management of the groundwater. The recommendations pointed out to the availability to incorporate new practices, some of the participants were interested in the cooperation and networking potential of the platform. Regarding the recommendations, some users pointed out the interest in disseminate the project in a borader way, towards the general society and other users highlighted the importance to include contact information of the stakeholders in the web platform or in the success story sheets.

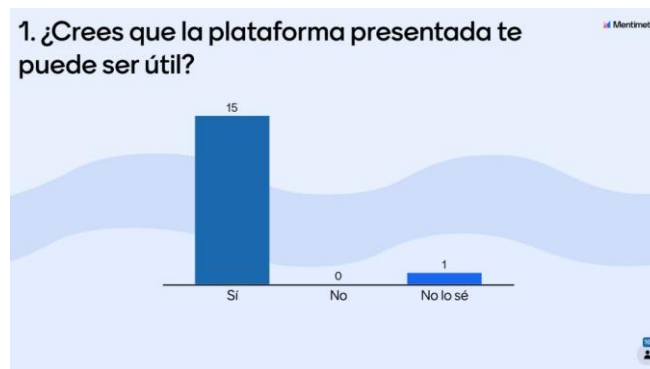


FIGURE 7. ANSWERS REGARDING PLATFORM UTILITY



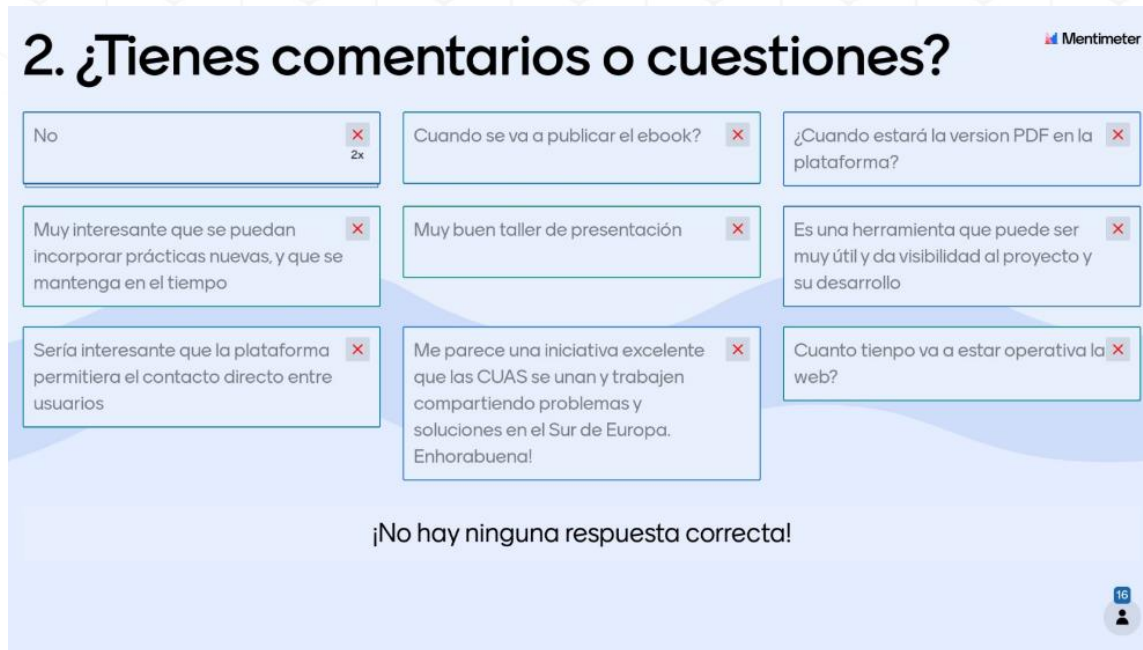


FIGURE 8. COMMENTS AND QUESTIONS REGARDING THE PLATFORM

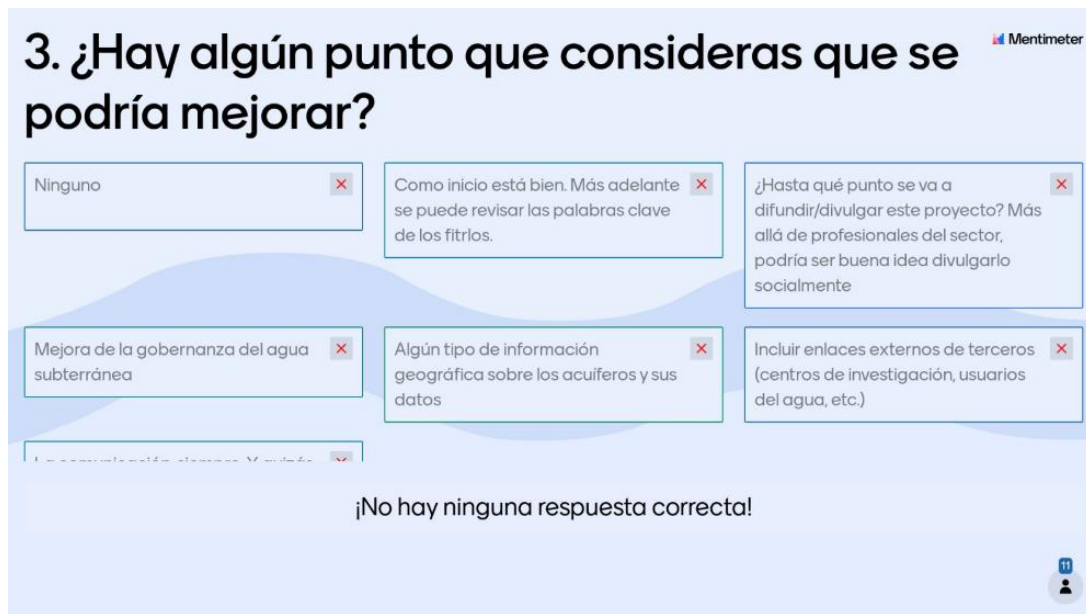


FIGURE 9. IMPROVEMENTS TO THE PLATFORM



FIGURE 10. KEYWORDS FOR THE PLATFORM

As a whole, the main part of the participants agreed that the platform would be an interesting tool of benchmarking between regions and a repository of information in order to plan the management strategies for the groundwater resources. The cooperation potential and the usefulness of the platform was also pointed out by some of the participants.

In the Spanish workshop the profile of the participant companies was quite diverse, with the representation of the public and private sectors, companies of different profiles, users associations, government agencies and universities all of them from Spain and some representatives from South American countries.

## PORTUGUESE WORKSHOP

Among the Portuguese stakeholders, the workshop was led by PPA and realized on September 20th.

The workshop in Portugal was held with the presence of the presidents of the 3 Portuguese entities partners of the project, AR, ISA and PWP, that made the opening of the session giving the framework of the importance of groundwater in the context of climate change.

In that sequence Professora Cláudia Cordovil from ISA, presented the AQUIFER project with a special focus on the activities developed in Portugal, namely in GT1, where were installed probes to measure nitrates in Coruche.

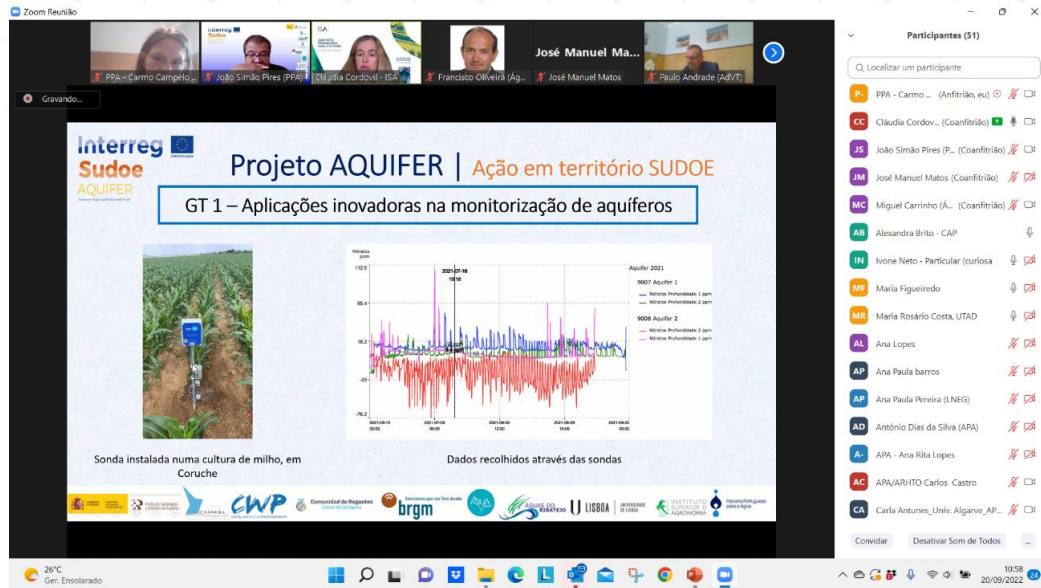


FIGURE 11. PRESENTATION OF THE ACTIVITIES DEVELOPED IN PORTUGAL IN THE WP1.

The platform was presented by Miguel Carrinho from AR that presented all the activity in which the platform was developed and then made a guided visit to the first version of the platform that will host the 30 innovative practices and will be open to receive other selected practices.

The presentation of the platform was followed by a debate where the stakeholders participated to comment and reinforced the importance of the platform even if no specific technical comment was made.

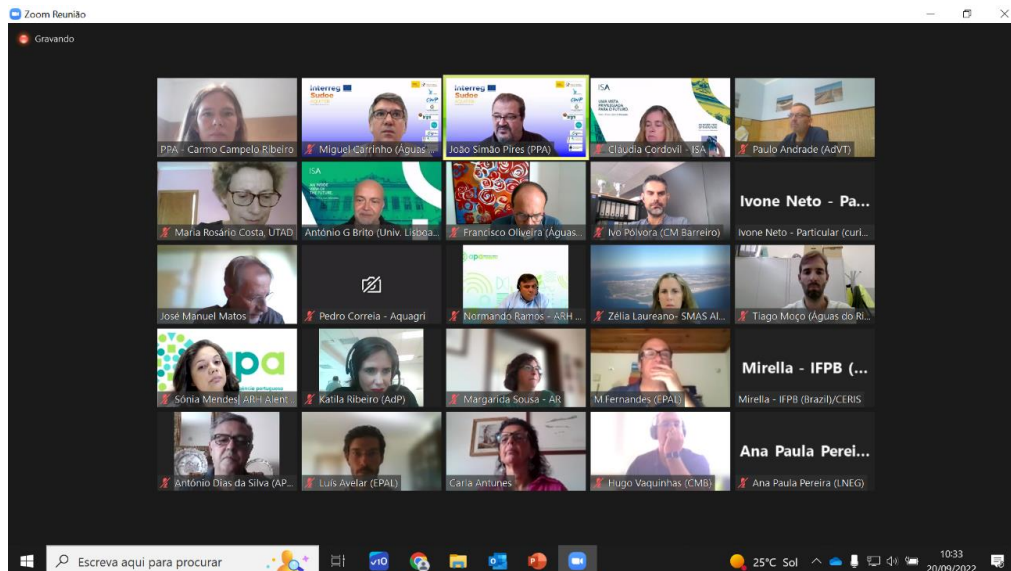


FIGURE 12. DEBATE OF THE STAKEHOLDERS IN RELATION TO THE TRANSNATIONAL PLATFORM.

## CONCLUSIONS

The water stakeholders interested in the workshop cover all segments from academia, public administration to private and public companies.

The major part of the water stakeholders that participated in the three workshops considered the platform as an useful tool and clearly expressed that when directly questioned.

Main suggestions for the platform:

- To keep updating the platform during time to maintain the interest of stakeholders and keep it relevant with new innovative solutions
- Keep communicating the platform over time, especially when updated, to reach more people and become top of mind to be consulted

The keywords more associated with the platform by French and Spanish stakeholders were: innovation, solutions, useful, interesting, cooperation.

## ANNEX 1 – LIST OF PARTICIPANTS IN THE FRENCH WORKSHOP

#	Entity
1	AGENCE EAU ADOUR GARONNE
2	ALTEREO
3	APRONA
4	APRONA
5	BERGA-SUD
6	BRGM
7	BRGM
8	BRGM
9	BRGM
10	CATALAN WATER PARTNERSHIP
11	CD66
12	CEA
13	CEA
14	CHAMBRE D'AGRICULTURE
15	CHMABRE REGIONALE AGRICULTURE OCCITANIE
16	CONSEIL DEPARTEMENTAL DE LA HAUTE GARONNE
17	CONSEIL DEPARTEMENTAL DES PYRENEES-ORIENTALES
18	CUADLL
19	DDT82
20	DDT82
21	DDT82
22	DDTM DU GARD
23	DDTM11
24	DDTM11
25	DEPARTEMENT DE L'AUDE
26	EPTB LEZ
27	HYDRAUSMART
28	HYDRO SIAL
29	IMAGEAU SAUR
30	XYLEM
31	OBSERVATOIRE DU SAHARA ET DU SAHEL
32	PLATEFORME DES BONNES PRATIQUES POUR L'EAU DU GRAND SUD OUEST
33	PLATEFORME DES BONNES PRATIQUES POUR L'EAU DU GRAND SUD-OUEST
34	PPA
35	PREFECTURE DE REGION OCCITANIE - AUTORITE NATIONALE SUDOE
36	TRAQUA S.A.
37	UNIVERSITE DE RENNES 1/OSUR
38	UT SEMIDE
39	VEOLIA

## ANNEX 2 – LIST OF PARTICIPANTS IN THE SPANISH WORKSHOP

#	Entity
1	PPA
2	GAN-NIK
3	CUADLL
4	Dirección de Obras Hidráulicas de Chile
5	Mediotec/INCOSA
6	Global Omnium
7	IGME
8	CRN S.A.
9	Aigües de Mataró
10	Universidad Simon Bolívar
11	Catalan Water Agency
12	Eurecat (research center)
13	Universidad Centroamericana de Nicaragua
14	Ecohyd
15	Centro de Estudios Avanzados de Zonas Aridas (CEAZA)
16	Van Walt
17	UdelaR
18	Santec
19	Facultad de Ingeniería de la UNAM
20	AQUATEC
21	AENA SME S.A.
22	G2SmartEnergy
23	Unió de Pagesos
24	Catalan Institute for Water Research (ICRA)
25	Anddes
26	Amphos21
27	GHS (UPC-CSIC)
28	Cetaqua Andalucía
29	Geoservei
30	Junta Central d'Usuaris d'Aigües del Baix Ter
31	Agua Andinas S.A.
32	IDAEA-CSIC



## ANNEX 3 – LIST OF PARTICIPANTS IN THE PORTUGUESE WORKSHOP

#	Entity
1	LNEC
2	LNEC
3	CERIS-IST
4	Grupo Português da Associação Internacional de Hidrogeólogos
5	ARH Alentejo/APA
6	Universidade de Lisboa / University of Western Australia
7	APA - ARH Algarve
8	Instituto Superior Técnico
9	IST
10	Direção Geral do Território
11	Universidade do Algarve
12	APA - Agência Portuguesa do Ambiente
13	CASAIS - Engenharia e Construção S.A.
14	LNEG
15	APA- ARH do Norte
16	Independente
17	Wakaru
18	TARH
19	SMAS Almada
20	MaSOT
21	Consultora
22	Particular
23	Sociedade agricola do Ximenes
24	APA
25	Águas do Ribatejo
26	José Machado & Costas. Lda.
27	Águas do Ribatejo
28	TARH Lda.
29	EPAL
30	EPAL
31	Vórtice, Lda.
32	Aguas do Ribatejo
33	ARSLVT, IP

34	Câmara Municipal do Barreiro
35	Câmara Municipal do Barreiro
36	EPAL
37	SMAS Almada
38	AR - ÁGUAS DO RIBATEJO EIM SA
39	Aguas Vale do Tejo
40	Agência Portuguesa do Ambiente
41	SMAS de Almada
42	TRIÁGUAS de José Machado & Costas, Lda.
43	RTA Consultoria
44	José Machado & Costas Lda.
45	Águas do Ribatejo, EIM,S.A.
46	Aquagri IIM Lda
47	Early Careers Hydrogeologists Network (ECHN) Portuguese chapter
48	CMB
49	José Machado & Costas, Lda
50	FCT UNL
51	Agência Portuguesa do Ambiente
52	EMAS de Beja, EM
53	Agência Portuguesa do Ambiente/Administração da Região Hidrográfica do Tejo e Oeste
54	APA, I.P.
55	Águas de Gondomar, SA
56	AICEP
57	UTAD
58	Universidade do Algarve / APRH
59	EMAS Beja, EM
60	EMAS de Beja
61	FCUL
62	Instituto Superior de Agronomia
63	ARSLVT
64	TTerra
65	CM Barreiro
66	Câmara Municipal do Barreiro
67	DGT
68	ARBVS
69	IFPB (Brazil) - IST Universidade de Lisboa (Portugal)
70	APA / ARHTO

71	Águas do Vale do Tejo, S.A.
72	AdP Valor
73	ARH Norte/APA
74	APA
75	Águas do Ribatejo
76	Departamento de Geografia e Turismo, Uiversidade de Coimbra
77	CAP - Confederação dos Agricultores de Portugal
78	LNEC
79	DGT
80	FENAREG