Interreg
North-West Europe

Co-funded by the European Union

AquaCOM

AquaCom

Call for participation of Early Adopter Communities

Guidance Document & Application Details

May 2024

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Introduction

This document outlines information and guidance for groups who would like to submit an application to become one of 15 Early Adopter Communities (EAC) to participate in the AquaCOM Project.

If your Renewable Energy Community (REC) or Sustainable Energy Community (SEC) is interested in and excited by the potential of aquathermal energy as a renewable energy source to support community heat generation in your local area, please read on.

One of the main objectives of the AquaCOM project is to develop a replicable model for Energy Communities to implement aquathermal energy systems in their local areas. To do this effectively and innovatively, we would like to ensure that we have input and guidance from a diverse range of Energy Communities from the project countries (Belgium, France, Germany, Ireland, Netherlands).

That is why we are now seeking 15 Energy Communities that would like to participate in, and be involved in the project, as innovative representatives of the broader Energy Community network in that country.

The project will provide participating Early Adopter Communities with an opportunity to learn from industry experts within the consortium and within the broader aquathermal energy network, and will provide them with hands-on mentoring and technical support to develop a viable aquathermal energy implementation plan for their area.

Representatives from the 15 successful Early Adopter Communities will be facilitated to participate in visits to the project pilot sites (Belgium, France Netherlands) and in masterclasses and training initiatives. Their direct hands-on experience and knowledge will also inform and provide valuable input in developing relevant learning materials and guidelines throughout the project.

Collectively, we believe that aquathermal energy technologies can provide a viable alternative and addition to existing renewable energy generation models such as wind and solar power.

We invite you to join us in accelerating this journey.

AquaCOM Project Team

April 2024

1. AquaCOM Project Overview

What is AquaCOM?

AquaCom is a 4 year project which is being implemented in 5 countries in North West Europe, by 9 project partners. It is funded through the EU Interreg North-West Europe Programme (60%) and from the project partners' own funds (40%).

The AquaCOM project team

The objective of the project is to develop and test a replicable model for local district heating initiatives, using aquathermal energy technologies, and which Energy Communities can scale and replicate. This model - or template – will cover technical specifications, project governance, project financials, etc. in the form of a 'how to' guide for the implementation of local heating projects by Energy Communities as they tackle the challenge of reducing dependence on fossil fuels.

What is Aquathermal Energy?

Aquathermal energy (AQE) technologies enable the extraction of heat or cold from water – surface water from rivers, canals, lakes – and subsequent processing, through heat pumps, to support local or district heating. Although AQE technology already exists, and numerous AQE projects are already in operation, particularly in Belgium and Netherlands, there are a number of barriers to its widespread adoption, including:

- lack of clarity and appropriate national legislation;
- absence of relevant regulation in many countries;
- challenges in establishing a robust and reliable model to project the potential energy which may be generated from different water sources;
- the generally low level of knowledge and awareness around this renewable energy source.

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Why Aquathermal Energy?

To achieve our national and EU 2030 and 2050 targets of eradicating reliance on fossil fuels, we all need to play our part in accelerating a citizen-led just transition by adapting and adopting multiple energy sources.

AquaCOM aims to do this by establishing, and potentially proving, that aquathermal energy technologies can be adopted on a widespread, sustainable basis, as a viable renewable alternative to wind and solar energy generation.

To do this, 3 pilot sites have been selected which will be developed and commissioned within the project:

1. Rotselaar Water Mill Complex, Belgium: Development of a heat network for a small co-housing site. By using heat from the river Dijle - combined with green electricity from the watermill – to power the heat pump, a 100 % sustainable heating solution will be achieved;
2. Vlieland Municipality, Netherlands: an AQE pilot site, involving installation of heat exchangers in the new quay wall to provide power for a local domestic heating network as part of a heating transition plan for the only village on the Island, by 2030;
3. Municipality of Lorient, France: examining the feasibility of developing a renewable energy production system using the power available from the estuary that separates the municipalities of Lorient and Lanester, as part of a larger and longer-term strategy for the development of a large-scale estuary-based heat recovery solution to contribute to the decarbonisation of the region.

The AquaCOM consortium

The project consortium is comprised of 9 partners, from Belgium, France, Germany, Ireland and Netherlands.

	Partner	Location	Role
1.	Ballyhoura Development CLG	Ireland	Lead Partner
2.	EXTRAQT b.v.	Belgium	Project Partner
3.	Ecopower c.v.	Belgium	Project Partner/ Pilot
4.	REScoop.eu	Belgium	Project Partner
5.	Province of Fryslân	Netherlands	Project Partner
6.	Groep Huyzentrat	Belgium	Project Partner
7.	University of Oldenburg	Germany	Project Partner
8.	SPL BER	France	Project Partner/ Pilot
9.	Municipality of Vlieland	Netherlands	Project Partner/ Pilot

Associated Partners (no.21) also support the project, and are committed to sharing and spreading knowledge and awareness on the project's progress with their own regional and national networks, and/or to participating in the shaping of the project by making their knowledge and expertise available to the consortium, if and as required.

2. Early Adopters

Who can be an Early Adopter?

Renewable Energy Communities (RECs) or Sustainable Energy Communities (SECs) from any of the 5 AquaCOM partner countries (Belgium, Ireland, Netherlands and parts of Germany and France - see Figure 1 below) are warmly invited to submit an application to become an AquaCOM Early Adopter.

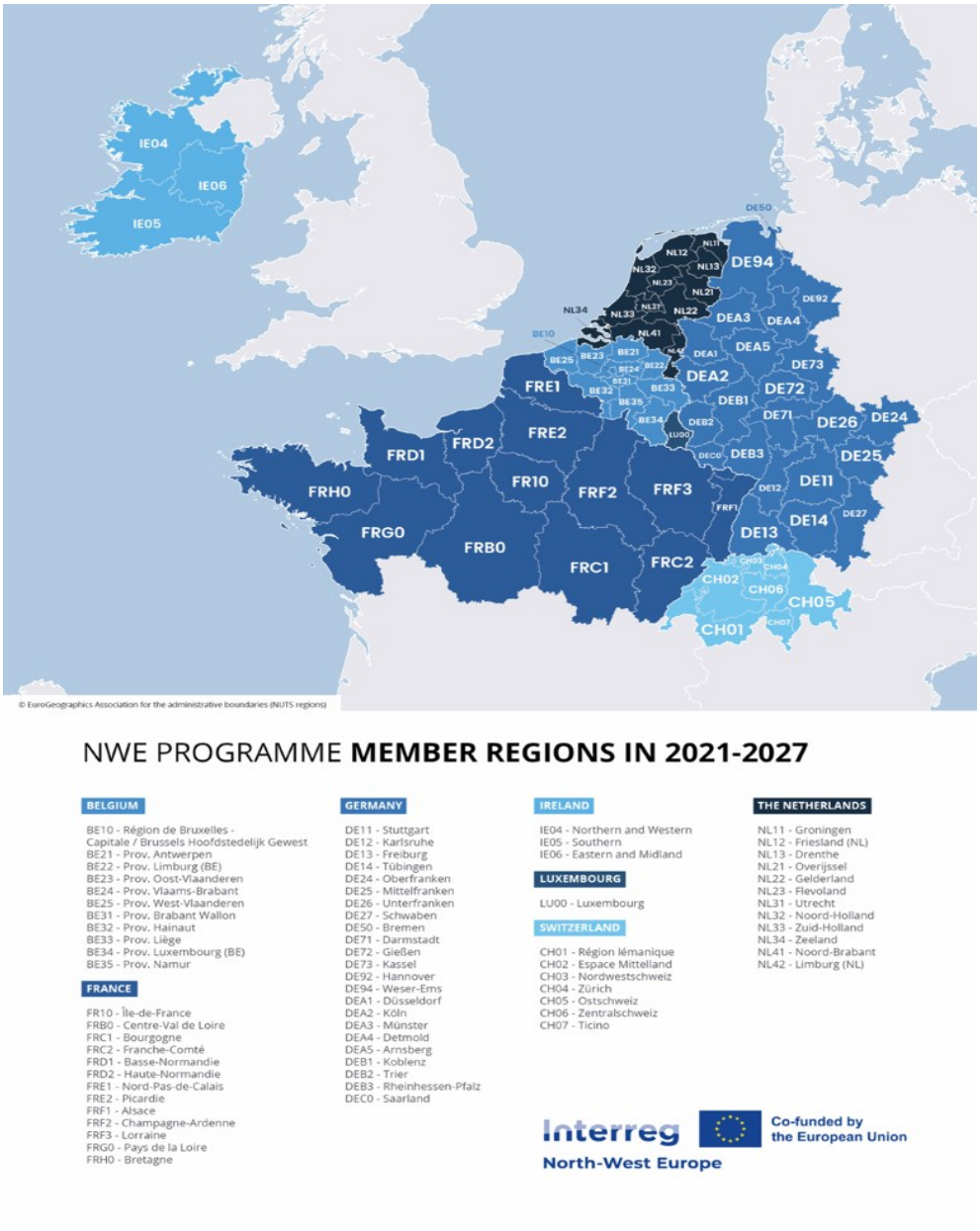

Figure 1. *Map of InterReg North West Europe Region*

The Early Adopter (EA) approach which is central to AquaCOM provides an opportunity for Energy Communities (RECs or SECs) to expand their knowledge of the potential for aquathermal energy deployment within their own regions. To do this, they will be facilitated to access technical and other expertise, and to develop a project implementation plan for their own communities, through collaboration with the project team and with other Early Adopters.

On-site learning will include four trips to European locations for pilot site visits, as well as online training and workshops. To fully benefit from their involvement, applicants will need to nominate members of their Energy Community who will be available to participate, to share their learning, and to represent them.

What is an Energy Community?

An Energy Community may be a REC – Renewable Energy Community – or a SEC – Sustainable Energy Community.

a. RECs – Renewable Energy Communities

A Renewable Energy Community is a legal entity: which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity; the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities; the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.

Essentially it is an active group of like-minded citizens working collectively to play their part in the energy transition. The group may take the form of any legal entity including a Co-Operative, a Partnership, a Company with community interest, a Foundation, a Non-profit customer-owned enterprise, a Social Enterprise, an Association (e.g. housing), and a certain form of municipal or public ownership an association.
By acting as a legal entity, Renewable Energy Communities can be active in all nationally regulated energy markets, and can: play an important role in reducing local energy poverty; benefit from improved energy efficiency; and further empower community members to play their part in achieving a Just Transition.

b. SECs – Sustainable Energy Communities

A Sustainable Energy Community is any community which is working together to develop sustainable energy solutions. In Ireland, for example, a community which is member of the Sustainable Energy Communities (SEC) network, and which is keen to explore the potential of aquathermal energy as an energy solution, may apply to become an Early Adopter. (The Sustainable Energy Communities (SEC) network is an Irish programme which engages and enables over 800 communities to work together to achieve their community energy plans and goals).

Energy Communities (RECs or SECs) may be a member of a European network such as REScoop.eu, of a national network, such as Energie Samen in Netherlands, the Sustainable Energy Communities (SEC) network in Ireland, DGRV or BBEn in Germany, REScoop Vlaanderen or REScoop Wallonie in Belgium, Energie Partagée in France, or similar.

By acting as one entity, Energy Communities can be active in all nationally regulated energy markets, and can play an important role in reducing local energy poverty, benefiting from improved energy efficiency, and further empowering community members to play their part in achieving a Just Transition.

How can we participate?

Energy Communities (ECs) of all types, level of development, sizes and scope are encouraged to submit an application to participate in the project as Early Adopters.

AquaCOM hopes to be able to select a diverse range of 15 Early Adopters, ranging from RECs which have already successfully implemented local energy generation initiatives, to SECs which are committed, but are in a much earlier stage of development.

To ensure that Early Adopters are representative, and in acknowledgement of the fact that groups may be at different stages in their familiarity with aquathermal energy (AQE), the application form requires applicants to categorise their group within one of the following 3 categories:

1) **Project Ready:** An established Renewable Energy Community that has already invested in other renewable energy sources, comprising of multiple members with defined roles and capacity to implement an aquathermal energy project. This group will have a specific end user/s and a specific body of water in mind, but will likely require technical support and guidance to bring the project to implementation stage.

2) **Actively Engaged:** An established renewable energy community, with an interest in learning more about aquathermal energy technologies, keen to determine if AQE could be an option for potential community-led power generation in their local area, and eager to pursue this as a potential project. Groups in this category will likely have a potential end user(s) and a specific body of water in mind.

3) **Early Stage:** An established group or a sub-committee of a group working together as an Energy Community, this group may be a Renewable Energy Community, but is more likely to be a Sustainable Energy Community (SEC) or similar. This group is committed to learning more about the potential for AQE, but may not yet have identified end user/s. They may or may not have identified a suitable body of water which AQE technologies could draw on.

Are there any technical barriers to participation?

No.

The 3 categories (Project Ready, Actively Engaged and Early Stage) have been devised to ensure that groups at different stages of their renewable energy journey derive maximum benefit from their participation.

However, RECs which consider themselves to be in Category 1 (Project Ready) should have already *firmly* identified:

1. **A potential body of water,** such as a river, sea, ocean, canal or lake, within reasonable proximity[1] of their proposed end user/s;
2. **Potential end user/s,** such as a sizeable building, a housing cluster or a community of individual houses, community facilities, etc.

Category 2 groups (Actively Engaged) will likely be actively considering one or several options and *may be* assessing proximity and suitability of a water source.

Throughout the project, Category 3 groups (Early Stage) will be supported and guided to work through a process to determine the capacity and scale of their potential water source, as well as the feasibility for delivery to potential end users.

[1] Ideally within 500m of the end user/s, and no more than 1km.

Why be an Early Adopter?

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Early Adopters will have the opportunity to enhance their knowledge of the sustainable energy space, particularly in relation to aquathermal energy (AQE), through a range of online and in-person activities.

Early Adopters will become well versed with the legislation and policies which underpin the development of community-led AQE projects in their own countries. They will participate in site visits and site-based Masterclasses, and will have access to online tools and training resources as they are being developed.

Finally, each Early Adopter group will be supported and mentored to assess the financial and operational feasibility of their proposed project, if they have one in mind, and to develop their own project-specific plans for implementation within their own community. And most importantly, there will be plenty of opportunities for meeting like-minded people from other countries, and for learning from one another, as well as time for chats and fun.

Networking, Mentoring and Support

The Early Adopter Network participating in AquaCOM will be facilitated to draw on and engage with the established network of 2250 Renewable Energy Communities across the EU, which is coordinated by REScoop.eu, an AquaCOM project partner. Early Adopters will have access to a transnational network of experts in the field of AQE and renewable energy including researchers, policy makers and engineers. This network, and particularly the project partners, will provide ongoing expert mentoring and support to Early Adopters to ensure that their project plans are viable, implementable and based on a proven technical and governance model.

Project Planning

Early Adopters will be supported to develop a Learning and Participation Plan within AquaCOM, which will be based on each Energy Community's objectives and aspirations around AQE. By the end of the project, Early Adopters will have a clearly defined pathway and implementation & governance plan tailored to their needs, which will allow them to initiate their AQE project.

For groups at the early stages of their project journey, AquaCOM will provide a supported opportunity to assess the viability and potential of AQE in the Energy Communities area using state of the art tools and resources. Technological tools are being developed by Extraqt, an AquaCOM project partner dedicated to the implementation of AQE as a sustainable heating source for buildings.

Learning & Knowledge-sharing

AquaCOM will develop learning resources for Energy Communities throughout the project. The themes and content of these materials will be informed by input from Early Adopters, as representatives of Energy Communities. They will play a critical role in helping us to identify the priority learning needs of Energy Communities eager to pursue AQE projects, and to ensure that the learning materials are targeted and relevant to community-led project implementation.

Site visits

AQE as a power source is more established and advanced in some AquaCOM partner countries (Belgium, Netherlands), than in others (France, Germany, Ireland), and Early Adopters will have the opportunity to learn from one another. A representative of each Early Adopter will be invited to visit the AquaCOM pilot sites in Belgium, Netherlands and France, with the project team. They will also attend masterclasses at the sites, and will be facilitated to discuss and learn about project activities, challenges and considerations directly with the project teams.

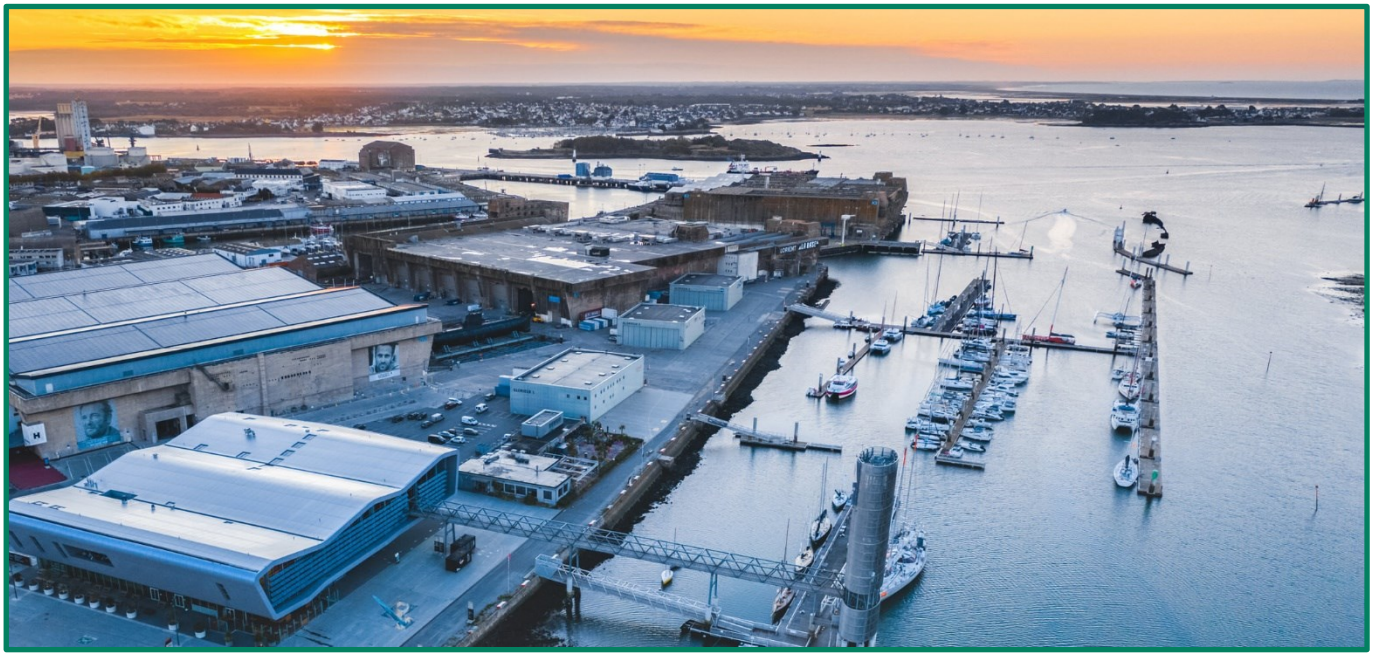
Driving the Energy Transition

By participating and contributing to AquaCOM, as an Early Adopter, Energy Communities will be playing an active and vital in role in the decarbonisation journey taking place across the globe, as well as taking action to prevent further negative impacts from climate change. Almost 50% of the EU's energy consumption relates to heating and cooling of space: through involvement as an Early Adopter, communities will be actively contributing to the EU 2030 and 2050 renewables targets through a citizen-led Energy Community approach, as well as accelerating a bottom-up Just Transition.

What does an Early Adopter have to do?

Energy Communities wishing to submit an application form should:

- Operate as an Energy Community[2];
- Be located in the Interreg NWE regions Belgium, France, Germany, Ireland, or Netherlands (see map on p.6);
- Be willing to commit to participating in AquaCOM for the duration of the project, until mid 2027;
- Be comfortable communicating in English;
- Be available and willing to nominate at least 1 representative[3] to attend and participate in site visits and masterclasses, as outlined in the table on page 10;
- Be able to nominate a committed group of 2 to 3 individuals to support and input to the identification of training needs, and development of learning resources to address these needs;
- Be available to attend and participate in a range of online activities between September 2024 and April 2027, including online training sessions, input to ad-hoc project meetings, online information events on various aspects of AQE, etc;
- Be willing to promote and publicise the AquaCOM project, and their role in it, to a wider regional and national audience.



Lorient port. © Lorient Bretagne Sud Tourisme

[2] See page 6 – What is an Energy Community?
[3] See page 10 – How much does it cost to Participate?

What else is involved?

With the support of the consortium, Early Adopters will develop a Learning and Participation Plan, which will include learning activities and technical supports, based on their own community's plans and ambitions.

The local knowledge and experience of the Early Adopters will be a vital input to guide and inform the development of training events and materials, to ensure that quality resources are developed, and that they respond to training and capacity building needs specified by the target communities and Energy Communities.

Early Adopters will also be relied on to promote AquaCOM, disseminate information and updates about the project, their involvement in the project, and the potential for aquathermal energy within their own area.

Early Adopter's participation in AquaCOM will be show-cased by compiling the 'story' of the project, with input from all involved. The intention is that this resource will provide an insight into the

development of an aquathermal energy project, and that it will inspire Energy Communities across North-West Europe to explore its potential.

Finally, Early Adopters may be invited to participate in and/or to represent the Early Adopters, locally, nationally or elsewhere, if such opportunities arise.

What sort of time commitment is required?

Event	Date	Location
Introduction session – project team and all Early Adopters	7th of September 2024 (eve)	Online
Meeting with project partner/s in your country	September 2024	In person
Pilot Site Visit, Early Adopter induction, Masterclass and Open Day	2nd - 4th October 2024	Vlieland, Netherlands
Pilot Site Visit Masterclass and Open Day	April 2025	Lorient, France
Pilot Site Visit Masterclass and Open Day	April 2026	Rotselaar, Belgium
End of Project Symposium	Spring 2027	Brussels, Belgium
Contribution to development of community-focussed training sessions, networking	October 2024 to October 2027	Online meetings as required – 2 to 6 hrs/ mth – will vary

Early Adopters will be required to nominate 2 or 3 individuals to act as the primary participants for the duration of the project, until mid 2027, and who will be available to participate in planned project activities, a summary of which is outlined in the table below.

How much will it cost to participate?

AquaCOM will cover pre-agreed travel, accommodation and related expenses for costs incurred by 1 representative from each participating Early Adopter, relating to site visits, masterclasses, in-country transport expenses, etc.

Due to budgetary constraints, AquaCOM can only provide financial support to 1 representative from each EA. However, we will warmly welcome the participation and inclusion of additional representatives in relevant activities, at their own cost.

3. Apply now!

Submit Your Application

The online application form is available here and completed application forms must be submitted, through this online application. The new deadline for applications is 17:00 CEST, 7th June 2024.

If you experience any technical difficulties in accessing this form, please email aquacom@ballyhoura.org, include a contact name and telephone number, and we will try to respond to your query within 24 hours.

Application Form

If you would like to view the questions ahead of submission, you can do so here:

PDF of Form

How will applications be assessed?

The assessment process has been designed to ensure that a diverse range of Early Adopters can participate, representing all 5 countries in the project scope and representing a wide cross-section of Energy Communities at varying stages of their sustainable energy journeys.

The application form is divided into 5 sections:

1. Applicant Group's Details
2. Background and Experience
3. Group's Aquathermal Energy Journey
4. Participation and Engagement
5. Project Potential – (may be recategorised - q.13 in application form – if its development stage aligns more closely with one of the other project categories).

Responses to the questions in Sections 2, 3, 4 & 5 will form the basis of the application assessment.

Applications will be assessed against 3 criteria, as outlined below.

Assessment Criteria	Marks Available
1. Capacity to input and actively participate in project activities; Commitment to project.	40 marks
2. Project potential.	30 marks
3. Group capacity to deliver on proposed aquathermal project/ initiative.	30 marks

TOTAL	***100 marks***

Informed Consent & Privacy Declaration

In compliance with EU and national data protection legislation, we need your express consent to process personal data and information provided in the application form.

In order to progress this application, you will be required to indicate in your application form that you consent for the information provided in your application to be held on computer or other relevant filing system.

Purpose and Use of Collected Data

The personal data that will be collected from Early Adopter applications for the AquaCOM project is as outlined in Section 1 of the Early Adopter Application Form, and includes:

- Name and address of Energy Community;
- Name, address, email and telephone number of primary contact person;
- Applicant Type (group structure);
- Membership or participation in relevant networks.

No sensitive information will be requested or recorded by the AquaCOM project in this application process.

Personal data including contact information submitted on this application form will be stored and shared by members of the AquaCOM project consortium and the funder only. We will not share, sell or lease your personal data to any third parties, unless required by national laws in effect. Data will be protected from unauthorised access and manipulation of any kind and will be retained for a minimum of 7 years, and a maximum of 10 years, in line with funder regulations.

Timeline for Selection Process

The deadline for applications has been extended to the 7th of May 2024. Thus, the following dates have been postponed too.

Applications Open	25th April 2024
Overview of Aquathermal Energy – Webinar	2nd May 2024 19:00 CET
Overview of Aquathermal Energy – Webinar	21st May 2024 15:00 CET
Deadline for submission of completed applications	~~24th May 2024~~ 7th June 2024
Notifications to successful Early Adopters	~~5th June 2024~~ 19th June 2024
Acceptance Deadline for selected Early Adopters	~~14th June 2024~~ 28th June 2024

Get in Touch

If you have any further questions or if you wish to have a chat about your group's suitability, the AquaCOM project team would be delighted to hear from you. You can contact us by email to aquacom@ballyhoura.org and a member of the project team will follow up with you.

Alternatively, you may contact a member of the project team in your own country.

Belgium	elsie@haertjens.be Colette.vanloy@ecopower.be	+32 4 96 96 44 50 +32 4 76 42 40 76
France	lfauvin@splber.fr	+33 7 63 72 57 83
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Ireland	ssweeney@ballyhoura.org jpitcherfarrell@ballyhoura.org	+353 87 636 0117 +353 86 041 6861
Netherlands	a.metz@fryslan.frl	+31 6 42 49 84 27

Completed application forms must be submitted *through the online application form only*, to aquacom@ballyhoura.org by 17:00 CET on 7th June 2024.