ALFA

UNLOCKING THE BIOGAS POTENTIAL OF LIVESTOCK FARMING

D2.6

ALFA support tools – Final Version

FBCD

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PROJECT INFORMATION

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REVIEWERS	SIE CERTH
DATE	30/05/2025

DISSEMINATION LEVEL

PU	Public, fully open	X
SEN	Sensitive, limited under the conditions of the Grant Agreement	
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Classified C-UE/EU-C	EU CONFIDENTIAL under the Commission Decision No2015/444	
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DOCUMENT HISTORY

VERSION	DATE	CHANGES	RESPONSIBLE PARTNER
v0.1	11/05/2025	Update on digital presence of ALFA HUBs, Biogas Cases, Biogas Forum and Knowledge Centre along with additional details of the Engagement Platform.	Q-PLAN
v0.2	21/05/2025	First full draft version	FBCD
v0.3	26/05/2025	Internal Quality Review	SIE, CERTH
v0.4	27/05/2025	Review by the project coordinator	Q-PLAN
v1.0	30/05/2025	Final version submitted to the EC	Q-PLAN

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ABBREVIATIONS

CHP	Combined Heat and Power (cogeneration)
DST	Decision Support Tool
GA	Grant Agreement
GHG	Greehouse Gas
GDPR	General Data Protection Regulation
RES	Renewable Energy Source

Executive Summary

ALFA's main objective is to tap the potential of biogas production from livestock farming, enhance the wider uptake of RES and increase the share of bioenergy as a baseload energy source, while ensuring reduced emissions from untreated animals' waste and supporting the creation of new jobs and revenue for the livestock farming industry. During its three years, the project will support at least 50 livestock farmers in six EU countries (IT, DK, BE, SK, EL, ES) to overcome existing barriers and viably take up biogas solutions whilst providing a more informed basis for policymakers and stakeholders by unveiling biogas market dynamics. ALFA Support Tools has be created to provide actionable knowledge and science-based information to livestock farming for the potential of biogas and a fruitful environment for ideas exchange, networking and collaboration. While ALFA will raise the awareness of the general public on misperceptions about biogas and bioenergy.

This document titled ***D2.6 ALFA support tools – Final Version***, has been elaborated as a deliverable (type Other: websites, patents, filling, etc.) of the ALFA project and provides a comprehensive account of the planning, design, development, and implementation of the ALFA Engagement Platform describing the approach followed for the development of the ALFA Support Tools as part of it. The ALFA Engagement Platform serves as an online platform to provide a fruitful environment for hosting the ALFA Support Tools for smooth uptake of biogas solutions in livestock farming. This note describes the final work that has been done in connection with making the final version of the ALFA tools.

The operation and management of ALFA Tools and the operation of ALFA Engagement Platform process are part of Task 2.3: Design and development of the ALFA Tools, which was led by FBCD and runs up to M31 (May 2025) and Task 2.1: Development and Operation of the ALFA Engagement Platform and Hubs, which is led by Q-PLAN, which runs up to M36 (October 2025). The preliminary version of the ALFA tools was available online through the ALFA Engagement Platform (www.alfaep.eu) since **August 2023 (M10**) and since then it has been continuously improved and updated.

A main component of the ALFA tools in the project is the online **Decision Support Tool** (DST), created to help farmers decide whether it might be an opportunity for them to establish a biogas plant or participate in the deliveries for one. Furthermore, the ALFA Engagement Platform hosts a repository of interested **Biogas Cases (Atlas Map)**, providing in a form of an illustrated map success stories that serve as inspiration and catalysts for collaborative efforts and synergy development. Moreover, ALFA Engagement Platform hosts the **Biogas Forum**, an open environment, which serves as a nurturing ground for exchanging best practices, incubating innovative ideas, forging connections, and fuelling project activities. And finally, the **Knowledge Centre** which acts as a store of valuable and interesting data and tools, aiding in the mainstreaming of biogas solutions and supporting informed decision-making.

A significant part of the effort has been to incorporate country-specific information on a number of conditions for the participating partner countries, regarding the Decision Support Tool, and must be used in conjunction with the other tools developed in the project. ALFA Support Tools and the ALFA Engagement Platform are part of tasks that run during the whole course of the project.

This report is the final version of the reporting for the ALFA support tools in ALFA. (***D2.6 ALFA Support Tools – Final Version*** on **M31 – May 2025**).

The ALFA Support Tools and the ALFA Engagement Platform have been crafted with a specific focus on meeting the needs of livestock and agriculture farmers who are keenly interested in the potential of biogas solutions. However, their impact extends far beyond the boundaries of a single

industry, playing a pivotal role in shaping the digital landscape and driving progress in areas like informed decision-making, robust community engagement, and expansive knowledge sharing.

The ALFA Engagement Platform is not limited to one sector; it is a resource addressed to a diverse audience, including livestock and agricultural farmers, biogas experts, policymakers, and civil society. Its multifaceted nature is reflected in its essential components, each tailored to cater to the unique requirements of these different stakeholders. Overall, the ALFA Support Tools are not just another set of online tools; they represent a kick start in the journey toward advancing the biogas industry, fostering a sense of community, and empowering all stakeholders with the knowledge and tools necessary for a sustainable future.

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1. Introduction

Production of **biogas from livestock manure** can help to **reduce** greenhouse gas (**GHG**) emissions and support a more sustainable and circular bioenergy system. However, this potential is largely untapped mainly due to lack of awareness and support measures for market uptake.

ALFA aims to **increase** the use of **biogas** from **livestock farming** as a renewable energy source and reduce GHG emissions caused by fossil fuel consumption and the decomposition of animal waste. The project has **supported** over **50 livestock farmers in adopting biogas solutions** and **provided information and tools** to **reduce investment risk and support financial frameworks**.

Moreover, ALFA has **raised awareness** of biogas and bioenergy among the general public and provided science-based information to livestock farming decision-makers. The project has be carried out in six representative European (EU) countries focusing on **overcoming barriers to biogas adoption**, such as limited awareness and inadequate financial frameworks. The ultimate goal is to enhance the wider uptake of renewable energy systems and increase the share of bioenergy as a baseload energy source.

By performing the actions, ALFA's aim was to reach the following goals:

- Analyse the state of play, identify regional differences, and investigate framework conditions to identify drivers and barriers to biogas adoption in the EU livestock farming industry;
- Co-create ALFA support measures which are replicable and effective in driving biogas adoption in the livestock farming industry in accordance with the identified needs and challenges;
- Develop a suite of ALFA Tools under the ALFA Engagement Platform, which facilitates collaborations and knowledge exchange among sectorial actors and provide credible estimation of biogas potential of farms;
- Deploy ALFA's biogas uptake support measures in real-world market conditions across European countries to facilitate the integration of renewable energy into their final energy consumption mix;
- Evaluate results and use evidence to communicate project results, provide policy recommendations, and promote mutual learning, and exploitation in order to scale the livestock biogas ecosystem across Europe.

ALFA has improved understanding and social acceptance of biogas production facilities through a suite of educational material based on existing research findings, as well as support livestock farmers and stakeholders in tackling barriers to the uptake of biogas systems and technology in the livestock farming industry. ALFA has collaborated with relevant initiatives and provided tools to aid in the replication of its own project results, ensuring their long-term viability for supporting the uptake of circular bioeconomy practices.

Deliverable D2.3 ***ALFA support tools – Initial Version*** was describing the work undertaken within task T2.3 with design and development of ALFA Support Tools, which include:

1. The **Decision Support Tool** (DST) assisting the farmers to estimate the biogas potential of their farm for energy generation along with its translation into profitability and benefits (environmental and social), tapping into existing tools.
2. The **Biogas Cases (Atlas Map)**, an interactive map dynamic map showcasing biogas facilities and highlighting exemplary instances of livestock farms using biogas.

3. The **Biogas Forum**, a fruitful environment for knowledge exchange, good practices, making connections and promoting networking.
4. The **Knowledge Centre** aggregating the different types of knowledge produced by this project (i.e., WP1 Reports), webinars and training material, policy recommendations generated by the ALFA project, and other data and tools for mainstreaming biogas from other EU projects and/or other sources, compromising a rich repository.

This document encompasses the platform's key components, technical intricacies, user experience considerations, GDPR, security measures, and knowledge sharing. With a clear outline of the project's journey, this deliverable aims to highlight the platform's potential to transform the biogas industry and foster a sense of community among its stakeholders.

In more details this report compromised of the following sections:

- The **introduction** establishes and communicates the main role and purpose of ALFA Support Tools within ALFA Engagement Platform and its components within the ALFA project and within the wider context of establishing networks of bioenergy communities and value chain actors. Finally, it briefly describes the various sections of the report.
- **Section 2** describes the **overview** of the ALFA Engagement Platform both as web platform and a liaison and network structure including objectives pertaining to the platform operation and management, security components, as well as the landing page.
- **Section 3** presents the **ALFA Support Tools** as part of ALFA Engagement Platform. It concisely accounts for all the basic components operating within the ALFA Support Tools and under the ALFA Engagement Platform that were developed when the platform appeared officially online in August 2023.
- **Section 4** highlights the **promotion strategy** and future plans.
- **Conclusions** summarizes **future plans** with respect to the online activities of ALFA Engagement Platform in the period after the project ends.

Last but not least, the Annexes of this report include the: The **ALFA Engagement Platform Cookies and Privacy Policy** (Annex I); and the **Online Registration Process** in Biogas Forum (step by step process (Annex II).

2. Overview of ALFA Support Tools as part of ALFA Engagement Platform

2.1 Objectives

The EU aims to achieve net-zero greenhouse gas emissions by 2050. The management of agricultural and livestock waste, producing biogas as a renewable fuel, can improve environmental sustainability, and contribute to carbon-neutral energy generation within the EU[1]. The European biogas sector is shifting from an energy crop-based, subsidy-reliant model to one focused on organic waste and agricultural by-products, biomethane production, and sustainability in response to the ambitious greenhouse gas reduction targets set in the "Green Deal." [2]

Under this framework, the Objective 2.3 of ALFA Project set a suite of tools and services for the uptake of biogas solutions in the livestock sector. The **ALFA Support Tools** consisted of the following parts and are hosted online on **ALFA Engagement Platform**:

- Decision Support Tool
- Biogas Cases | Atlas Map
- Biogas Forum
- Knowledge Centre

The ALFA tools were continuously developed, updated and enriched during the course of the project and the final version of the ALFA Support Tools is described in this deliverable D2.6.The ALFA Engagement Platform and ALFA Support Tools targeted a **diverse audience**, each benefiting in distinct ways, with the ultimate goal of supporting the European Union's commitment to achieving net-zero greenhouse gas emissions by 2050. **Livestock and agriculture farmers** stood to gain through the platform's decision support tools, aiding them in implementing biogas solutions tailored to their farms. **Biogas experts** found a collaborative space within the Biogas Forum to exchange best practices and innovative ideas, contributing to the growth of the biogas sector. **Policymakers** benefited from valuable insights and data, enabling informed decisions for sustainable agriculture and greenhouse gas reduction in line with the EU's "Green Deal". **Civil society** benefited from a Knowledge Centre filled with information, nurturing awareness and informed choices. The platform's aim is to **facilitate a transition** within the European **biogas sector**, shifting from energy crop reliance to organic waste and biomethane production, aligning with the EU's ambitious carbon-neutral combustion targets and advancing environmental sustainability, thereby accelerating progress towards the 2050 net-zero greenhouse gas emissions objective.

[1] Cornelis Bumharter, David Bolonio, Isabel Amez, María Jesús García Martínez, Marcelo F. Ortega, New opportunities for the European Biogas industry: A review on current installation development, production potentials and yield improvements for manure and agricultural waste mixtures, Journal of Cleaner Production, Volume 388,2023,135867,ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2023.135867.

[2] Ulysse Brémond, Aude Bertrandias, Jean-Philippe Steyer, Nicolas Bernet, Hélène Carrere, A vision of European biogas sector development towards 2030: Trends and challenges, Journal of Cleaner Production, Volume 287, 2021, 125065, ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2020.125065.

2.2 Design and Implementation phase

The ALFA Engagement Platform is **publicly available** at **www.alfaep.eu** since M10 of the project (**August 2023**) and was designed to the graphical identity of the project website and overall the project graphical identity as it was developed during the early stages of the project, in order to enhance the feeling of uniformity and seamless browsing experience among the ALFA Engagement Platform and the project website (available at https://alfa-res.eu/). It is designed and developed to be **accessible** from desktops, laptops, tablet and mobiles across all operating systems (e.g., Android and iOS). Some sections of the platform include **multilingual capabilities** to overcome possible language barriers.

The main work for the development of the ALFA Engagement Platform with the ALFA Support Tools focused on two main axes: (i) **front-end design** and (ii) **back-end design**. The front-end and back-end development progressed in parallel, culminating in the main integration effort during the final weeks of the hard launch. The main steps followed for the front-end and back-end integration of the ALFA Support Tools into the ALFA Engagement Platform are illustrated in the following figure, along with the dependencies among activities.

The **front-end design** of the toolbox focused on the development of the ALFA Engagement Platform **user interface and user experience** (UI / UX). The User Interfaces were designed starting from wireframing, moving to the pre-design and implementation/prototyping phase. The basic pages about the ALFA Engagement Platform were designed and developed, including the **landing page, ALFA Support Tools pages, interactive capabilities (e.g., filtration), login/registration and contact** form, among others, along with the sitemap of the ALFA Engagement Platform. This was done in parallel with the definition of the main structure of the ALFA Engagement Platform (a more detailed presentation is provided in Section 4). **All the ALFA partners** supported in the design and layout of the tool pages, either with **feedback** and ideas for an efficient user–friendly experience or **feeding** the Biogas Library (part of the Knowledge Centre) **with useful material**, while providing **translations**, where needed. For that reason, a template shared with ALFA HUBS to collect information for the Hub Manager, their organisations, and countries, along with the needed translation. Finally, the **integration of translated versions** of the content of AFA Support Tools interfaces was completed. Section 4 of the present report is dedicated to the detailed presentation of the ALFA Support Tools front-end design. A **second round of improvement** was completed, incorporating comments and feedback of all partners. All the above drove to the hard launch of the ALFA Engagement Platform on time, in M10 (August 2023), following the ALFA Grant Agreement (GA).

As an update to the previous version of this deliverable in terms of front-end design, three new sections have been added to the ALFA Engagement Platform. Even if they are not directly connected with the ALFA Support Tools, they are part of the updated version of the ALFA Engagement Platform, and include:

I. A **Mentors Section**: serves as a dedicated portfolio of experienced farmers and experts who contribute to the project's knowledge-sharing and capacity-building objectives. This section was developed to support the "Farmer/Expert to Farmer Advice" service and highlight the individuals facilitating peer-to-peer learning and practical guidance. Experts and farmers interested in becoming mentors were invited to express their interest through an online form available on the platform. Upon acceptance, mentors were registered and asked to provide detailed profiles, including information such as their area of expertise, country, thematic focus, professional background, experience with biogas, and contact details where appropriate, respecting GDPR Rules and incorporating the corresponding Informed Consent Form, described in the Privacy Policy.

Each mentor profile is publicly accessible and presented in a standardised format, allowing users to easily browse and identify relevant experts. The section is structured to reflect geographic diversity and thematic relevance, enabling farmers and project stakeholders to connect with mentors who best match their needs. In this way, the Mentors Section functions not only as a professional directory but also as a dynamic knowledge-transfer tool, promoting collaboration and direct support among practitioners across Europe.

Further details about this service are available in Deliverables D2.4 *"ALFA Market Uptake Support Measures – First Version"*[1] and D2.5 *"ALFA Market Uptake Support Measures – Interim Version"*.

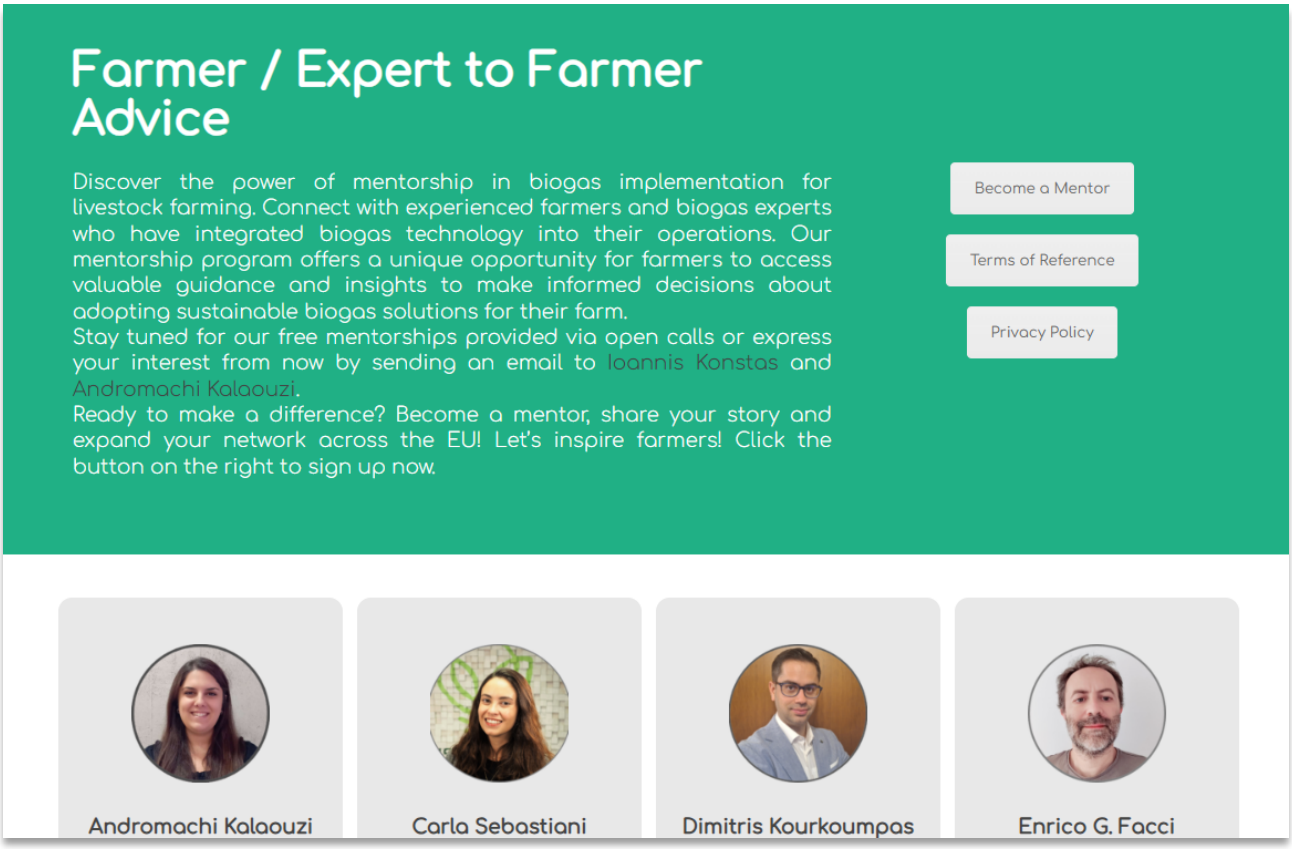

Figure 1. Farmer/Expert to Farmer Advice Page

II. **News Section**: This area features key updates/news session related to the project. It is directly linked to the ALFA website and social media channels and includes announcements such as the launch of the Open Call, capacity-building activities, mutual learning sessions, and field visits. Each news item is accompanied by relevant visuals or links for further reading and may direct users to associated platform sections (e.g., Open Call details or webinar recordings). The layout is designed to be user-friendly and regularly updated, ensuring that visitors remain informed about both recent developments and upcoming activities. The News Section supports transparency, visibility, and stakeholder engagement by keeping the community connected to the project's progress in real time.

[1] D2.4 "ALFA market uptake support measures – First Version", SIE, 2023, link

Figure 2. News Section of ALFA Engagement Platform

III. **Open Call Section**: The Open Calls Section played a vital role in supporting ALFA's mission to identify and assist promising biogas-related initiatives through targeted support measures. Hosted as a standalone section within the Engagement Platform, this space was active during the application periods and provided all necessary information for interested applicants, including eligibility criteria, application guidelines, deadlines, and evaluation procedures. It also offered access to the online submission form, ensuring a smooth and transparent application process. The section was widely promoted through the News Section, social media, and partner networks, leading to substantial visibility and a strong response from the community. The Open Calls Section thus represents a key component of ALFA's stakeholder engagement and innovation support strategy.

The **back-end design** of the ALFA Platform and ALFA Support Tools played a central and complex role within this digital infrastructure. It served as the **technical framework** that underpins the user-friendly interface, managing data, storage, retrieval, and overall platform functionality. This back-end architecture was purposely built to handle advanced decision support algorithms, complex database management, and rigorous security protocols for user data protection. Essentially, it acted as the engine that powers the platform, efficiently processing information, managing user interactions, and facilitating the dynamic content delivery of the Knowledge Centre and Biogas Cases | Atlas Map. This back-end structure provides a robust foundation for this digital ecosystem, ensuring reliability, scalability, and a seamless user experience. Consequently, it ensured that the ALFA Platform and Support Tools operated with **maximum efficiency** and maintain consistent resource availability for the ALFA Engagement Platform diverse user base.

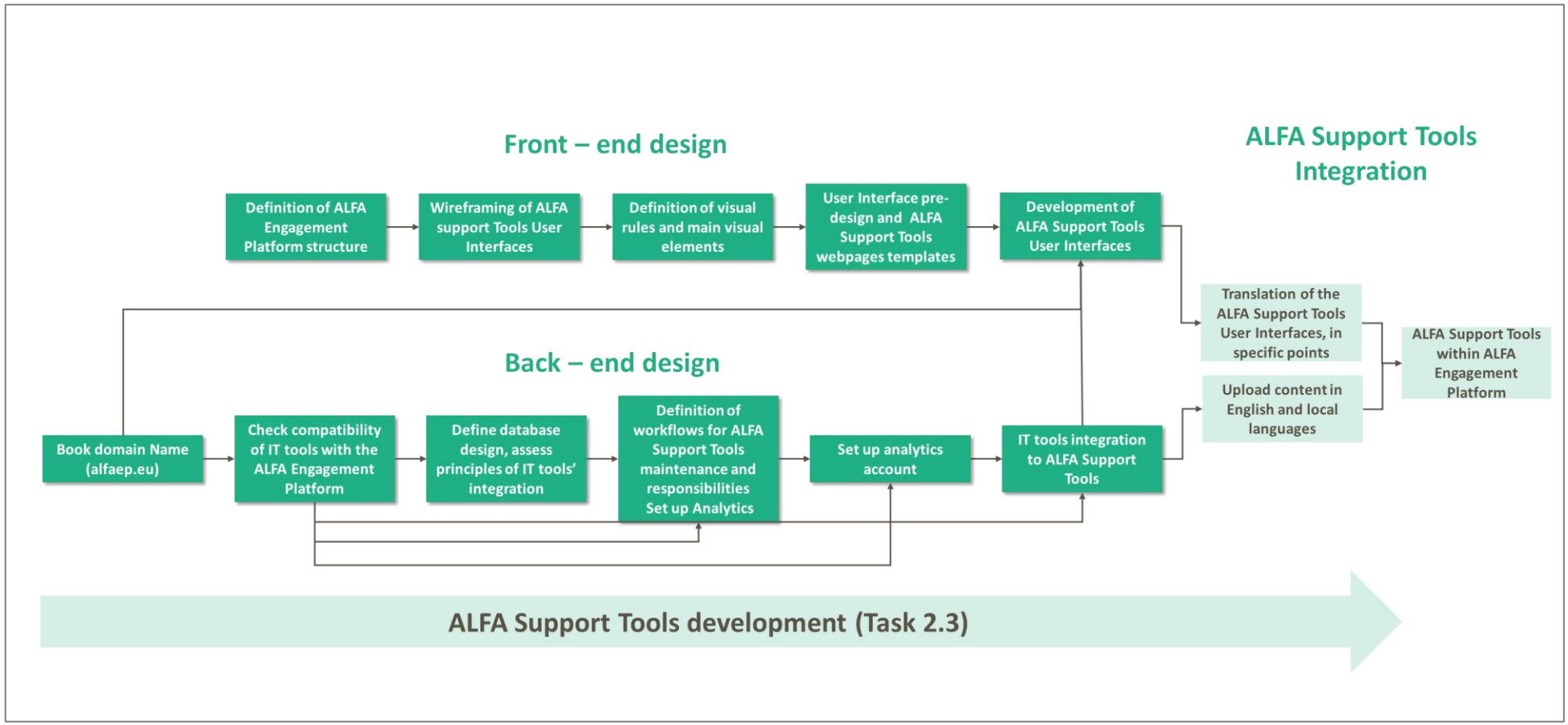

Figure 3. ALFA Engagement Platform with ALFA Support Services workflow and dependencies

2.3 Data Security and Privacy

Access to the ALFA Support Tools, integral components of the ALFA Engagement Platform, was designed to be user-friendly and **open accessible**. Most notably, these tools were available **free of charge** without requiring prior registration. However, it is important to note that while all users can **freely view** the content in the **Biogas Forum, registering was necessary** for those who wish to engage in discussions and provide comments, ensuring a secure and constructive environment for community interactions.

A **Cookie disclaimer** and **Privacy Policy** were embedded in the ALFA Engagement Platform. The latest and detailed version of the ALFA Privacy Policy can be found at the latest Data Management Plan (DMP) – by the time of reporting this they would be D6.4 ***Data Management Plan – Interim Version*** and in the project's website.

This privacy and cookies policy describes, in accordance with the EU General Data Protection Regulation 2019/679, how and when ALFA, a project funded by the EU Horizon Europe research and innovation programme under the number 101075659, collects, uses and shares ALFA Engagement Platform visitors' and users' information.

2.4 Home and Layout

The ALFA Engagement Platform had been crafted to provide a **user-friendly layout** that adapts seamlessly to **various devices**, ensuring effortless navigation throughout its **multifaceted components**. This design, illustrated in the following figure, established a harmonious user experience.

The **header section** served as the platform's welcoming gateway, prominently featuring the project's **logo**, which aligned with the **project's visual identity**. It was complemented by the **main navigation menu**, offering swift access to the diverse components and resources of the platform. This approach enhanced user efficiency in exploring the platform's offerings.

Within the main content area, users encountered concise **descriptions** of each component (**ALFA Support Tools**), supported by elements such as buttons and icons that facilitated direct access to the corresponding ALFA Support Tools. This user-centric approach aimed to simplify the journey to relevant resources and maximise engagement.

The **footer** featured an array of resources. Users had the opportunity to subscribe to the ALFA project's **newsletter**, ensuring they stay updated on the latest developments and insights. **Social media** links to the ALFA project's profiles provided avenues for deeper engagement and community involvement. Additionally, a direct link to the **Privacy Policy and cookies and the Data Subject Request Form** section underscored the commitment to data protection and transparency. It is also important to note that the footer contained vital information regarding the **project's funding**, highlighting the support received from the European Union's Horizon Europe framework.

To further enhance user awareness and compliance with project's **privacy and cookies policies, a user-friendly pop-up window** had been incorporated. This window, displayed upon the user's first visit to the ALFA Engagement Platform, guided them through the Privacy Policy and cookies information, ensuring informed and secure browsing.

Lastly, in order to streamline the **newsletter integration**, Q-PLAN actively sought the necessary API key from the Dissemination manager, successfully embedding it within the footer, further enhancing the user experience and their ability to stay connected with the project's updates and activities.

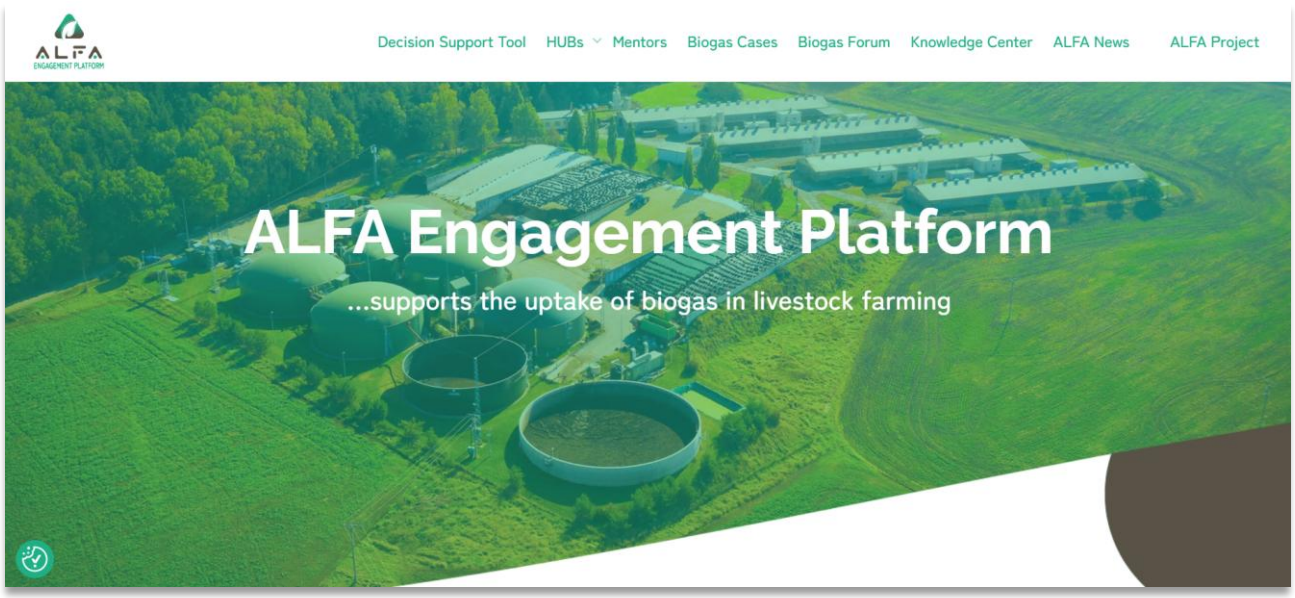

Figure 4. ALFA Engagement Platform Home Page I

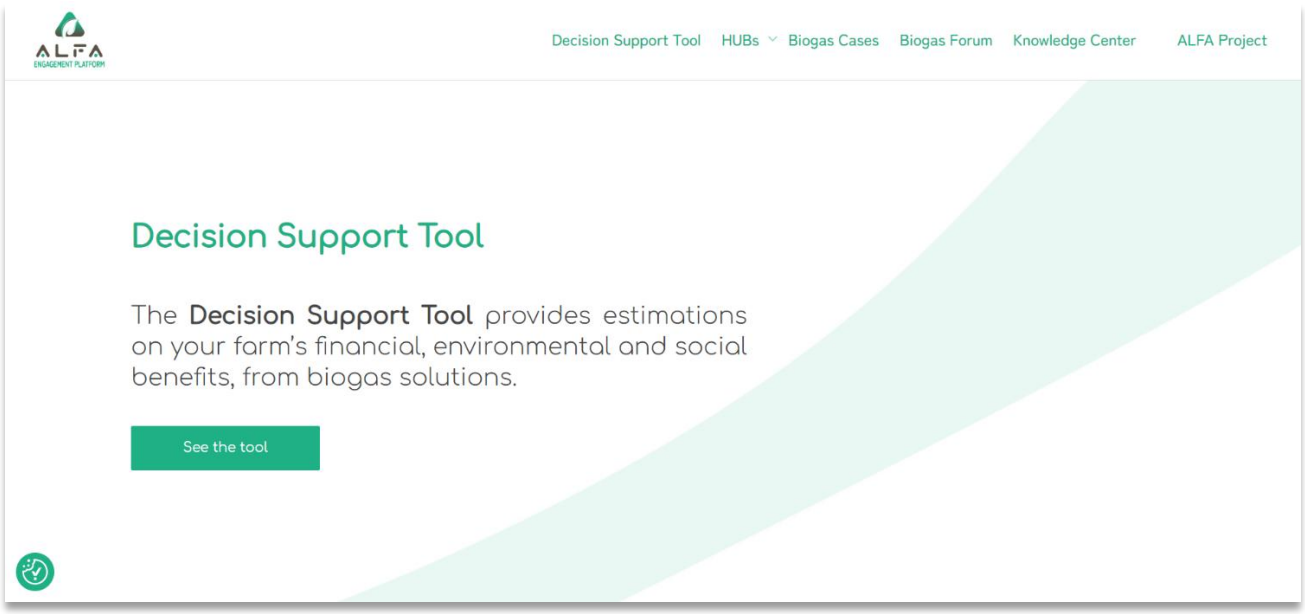

Figure 5. ALFA Engagement Platform Home Page II

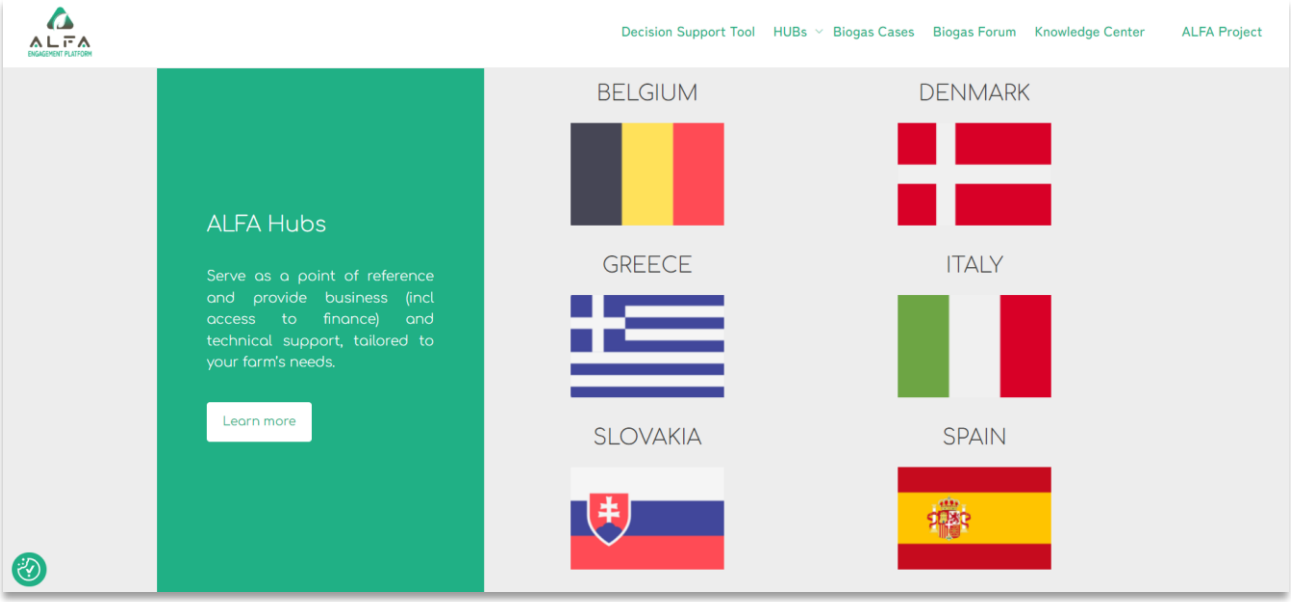

Figure 6. ALFA Engagement Platform Home Page III

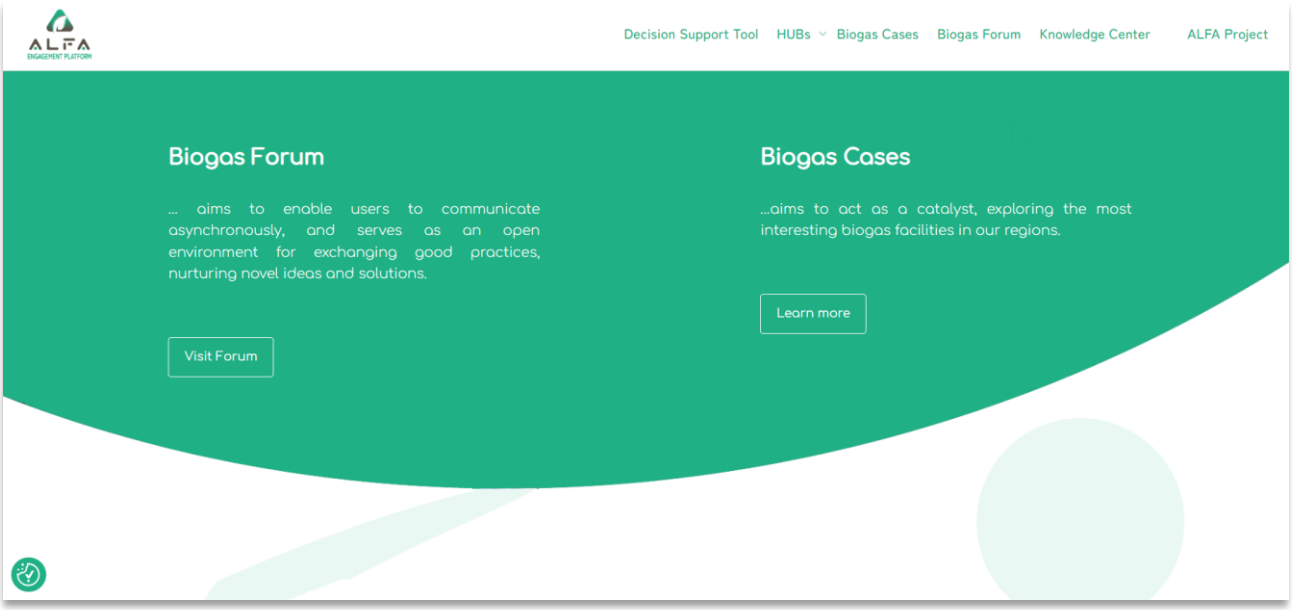

Figure 7. ALFA Engagement Platform Home Page IV

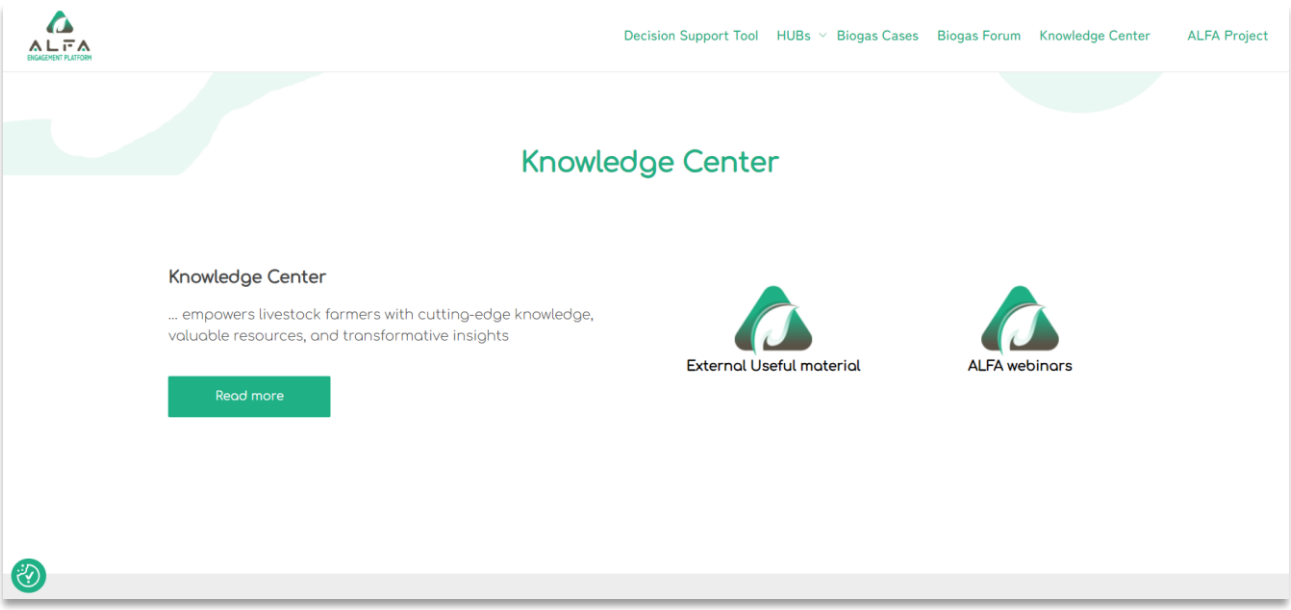

Figure 8. ALFA Engagement Platform Home Page V

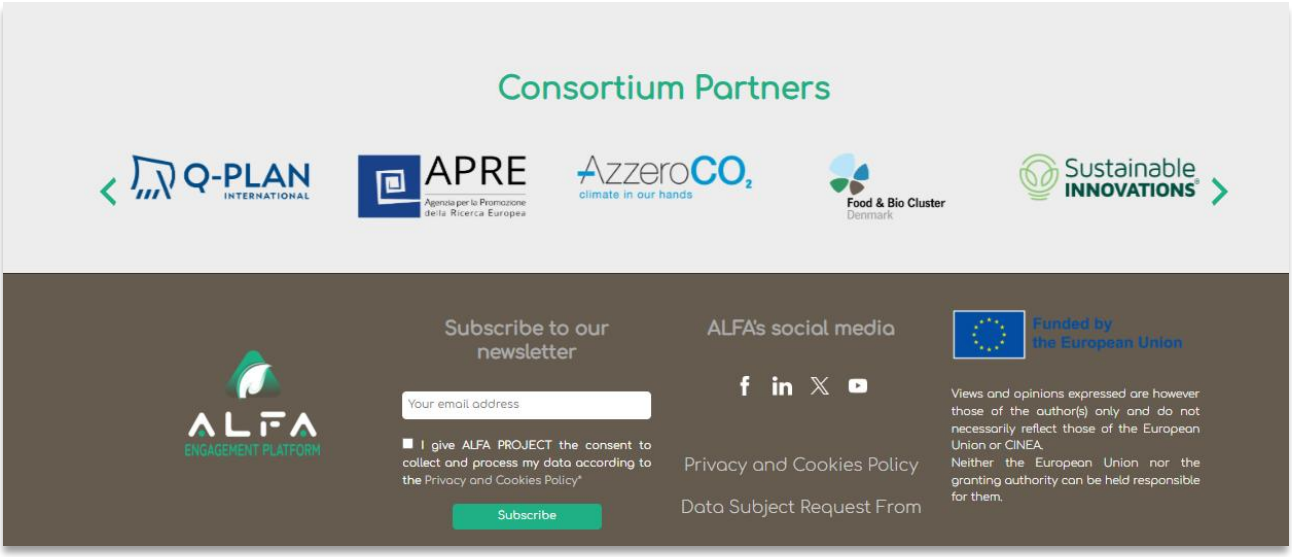

Figure 9. ALFA Engagement Platform Home Page VI

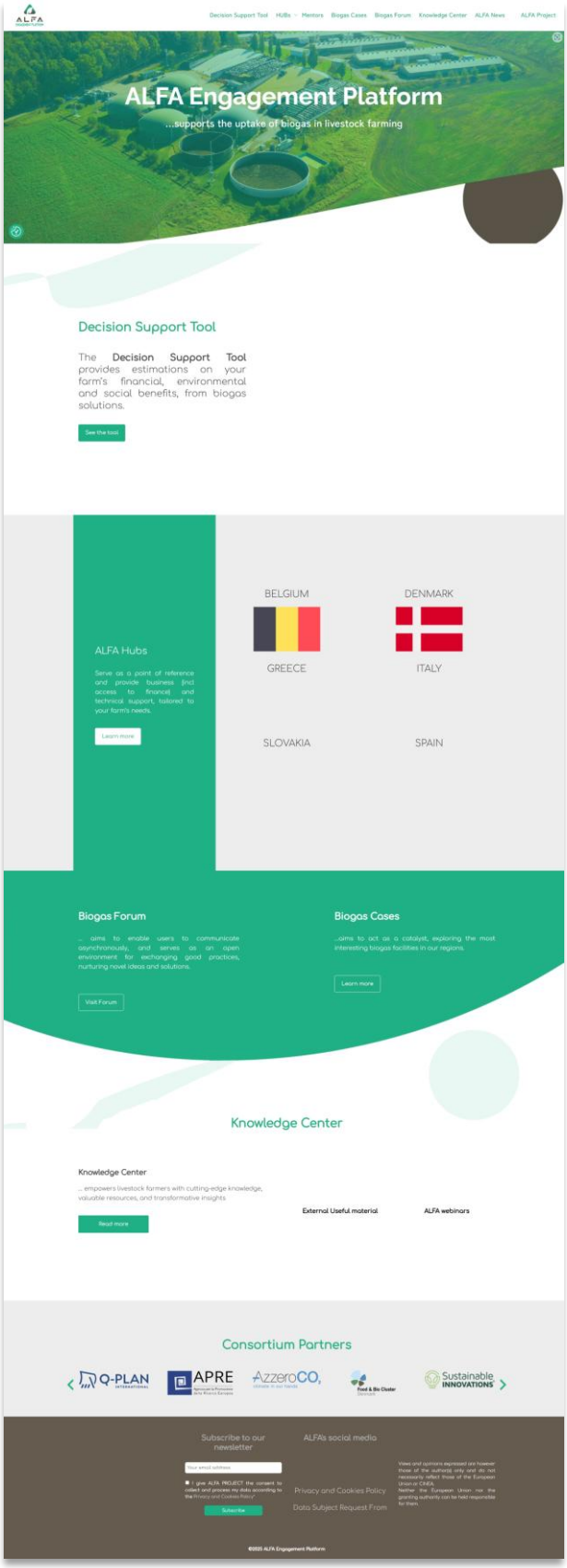

Figure. ALFA Engagement Platform - Home page Overall

3. ALFA Support Tools

3.1 Decision Support Tool (DST)

3.1.1 *Final Version*

The final version of the Decision Support Tool can be found directly at this link or accessed from the ALFA platform, this is the final version of the calculation program for biogas production. The program has been updated with adjustments and additions since the preliminary version was introduced.

In this version, it is necessary to know about the biomasses that are available for biogas production so that an expected biogas production can be calculated.

In the model that has been developed, it is possible to choose whether you want to enter information about the biomass that is available or whether you want to enter some information about the number of different animals that are on the farm and what is available from production in general.

Information about the company and the farmer is not necessary for the actual calculation in this version, but these are used in the event that ALFA partners want to contact that person for possible support. The information that the individual user enters into the model is not saved, so there are no challenges with regard to data storage. Once a user has used the tool, they can print the results, but they are deleted as soon as the program is exited. The user must save the printed version themselves.

Farm description.

In this section, we would like to have basic information about the farm so that we can form an impression of it.

A holding can consist of several farms. If the holding consists of more than one farm, we would like to know how big these are and how far apart they are. This may have implications for later calculations of costs for transport and logistics.

Under "Type and number of animals", several different ones can be selected. These can be used to estimate the quantities of livestock manure that these give rise to, depending on which country you are in.

Information about the area, water consumption, electricity and heat consumption can be used to assess whether it is appropriate to establish biogas production on the farm.

It is also important to know whether there are existing biogas plants nearby or the possibility of connecting to another outlet for the biogas.

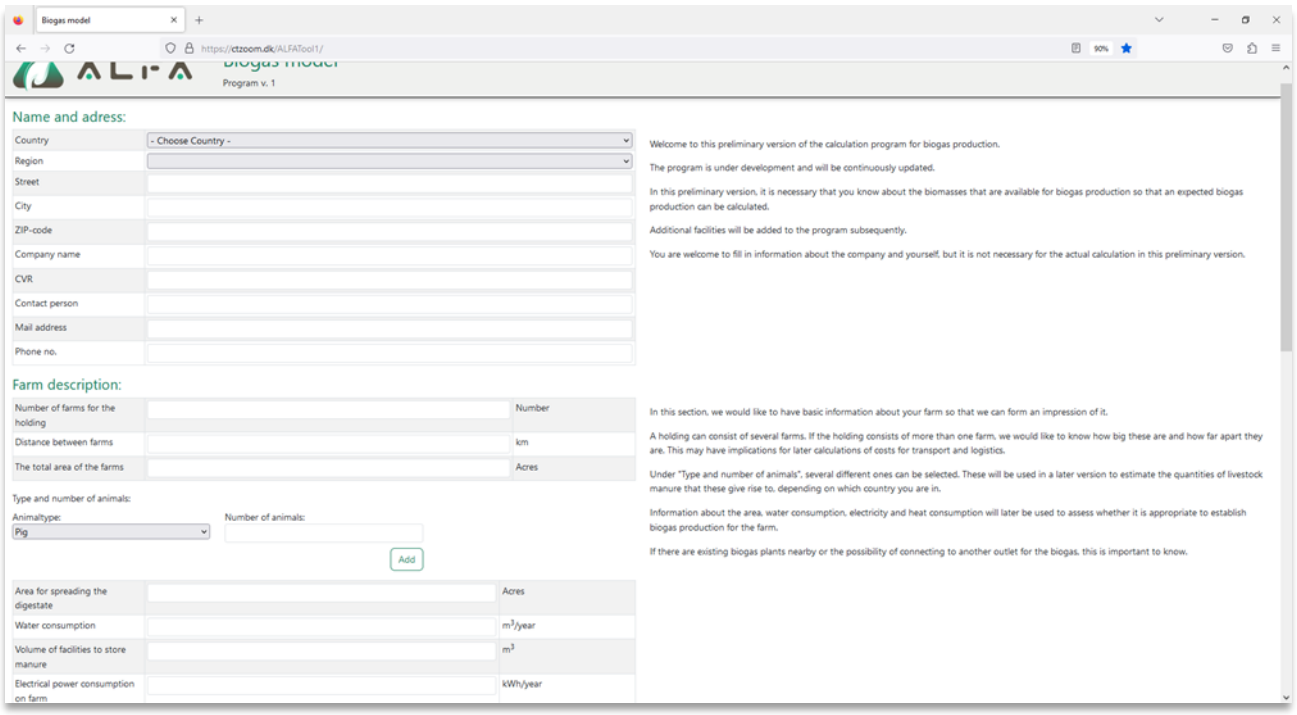

Figure 10 Overview of information about the specific farm

Biomass

In this section, it is specified which biomasses are available for biogas production.

It is important to carefully select these biomasses, as these choices are the calculation basis for the biogas production.

It is possible to choose between four different categories of biomass. When you have chosen the category, options appear in the box with biomass types.

When you have chosen a biomass type, some default values for the dry matter content and for the organic part of the dry matter appear in the boxes below. If you have more precise information for the biomass in question, you can enter these instead of the default values.

You have to select all the biomasses that are available and add them one at a time.

The program adds all the biomasses together and calculates the expected gas production based on these.

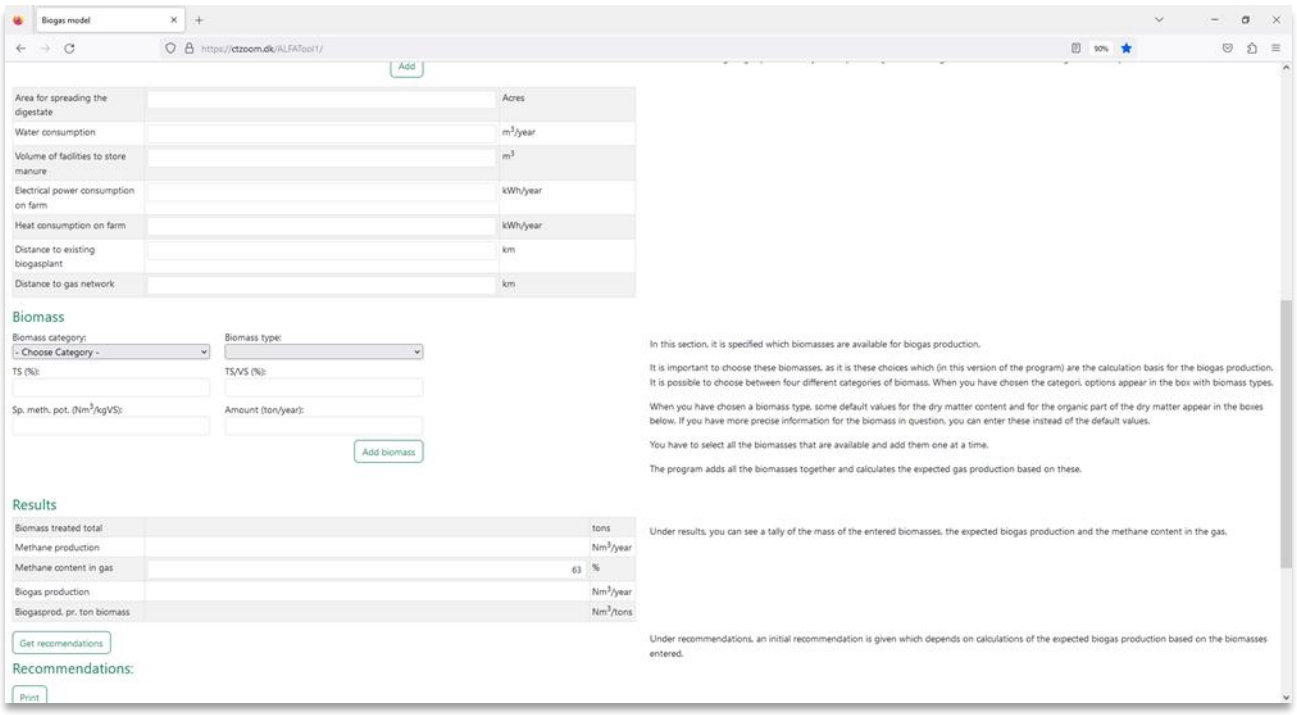

Figure 11 Section for entering information about the available biomasses

Results.

Under results, you can see a summation of the mass of the entered biomasses, the expected biogas production and the methane content in the gas. The expected biogas production at a given location is calculated based on the information provided regarding the available biomasses.

Based on the estimated biogas production, it is calculated how large a production of electricity and heat can be expected under the given conditions. The result of the calculations is displayed online, and it is also possible to print out a note about the preliminary results directly from the online tool.

Please note that any information entered by the user into this tool is not stored or retained by the system. All data is processed temporarily and is automatically deleted upon exiting the program. Users are responsible for saving by printing their results, as no data will be preserved beyond the active session. If desired, results may be printed during use; however, it is the user's responsibility to securely store any printed or exported materials.

Recommendations

Under recommendations, an initial recommendation is given which depends on calculations of the expected biogas production based on the biomasses entered. As a standard part, it is recommended that, after the calculation, the user of the tool contacts one of the national hubs in ALFA for expert help.

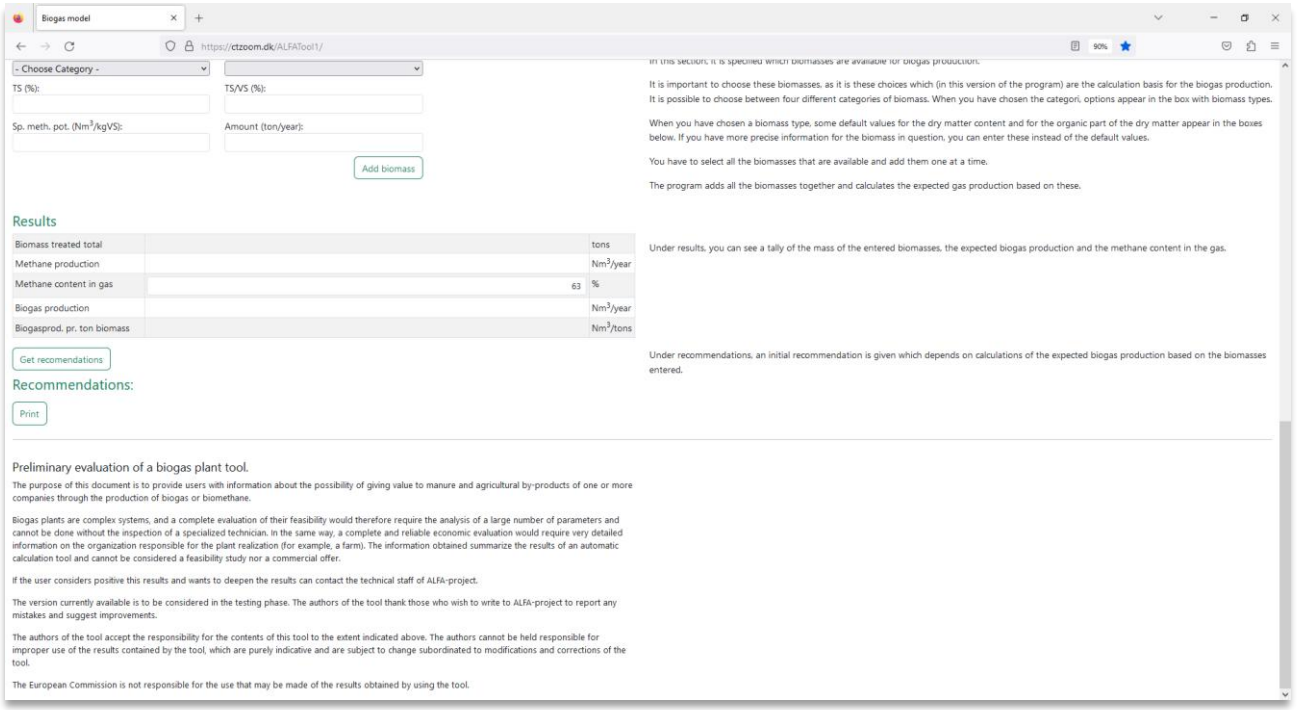

Figure 12 Finally, the recommendations can be viewed and printed as a file.

3.1.2 *Development of DST*

In order to achieve more precise estimates and better calculations, it is necessary that the tool is specific for each of the participating countries. There are very large differences between the participating countries regarding their structural conditions, available types of biomass, framework conditions, economic conditions and more.

Financial estimates are given depending on the country initially selected. There are large price differences between the different countries, and it is always advisable to verify these estimates with local partners.

In the final version there is information on establishment costs from the individual countries as rough estimates. A country-specific estimate of operating costs and income must be verified locally

3.1.3 *Biomass and biogas calculations*

In the final version it is possible to choose between

- Livestock
- Crops
- Residual products
- Industrial products

And for each of the categories to choose between several types of biomasses. After selecting all the biomasses that are available in the case at hand, the expected biogas yield is calculated based on the standard figures for the biomasses in question.

If other biomasses than the pre-selected ones are available for biogas production, the user can enter them under the option "other"

In the calculation of the biogas production, it is possible to update the standard values used if the user has concrete and more accurate information about the available biomasses and their biogas

potential. The standard values are taken from various national articles and models and may vary from country to country.

3.1.4 *Estimation of construction costs*

In order to provide advice on the possible establishment or participation in biogas production, it is necessary to provide financial estimates of what it will cost to establish facilities of the relevant size for the user in question.

There is a very large difference in the establishment prices between the participating countries, which is why exact estimates of the financial aspects cannot be given. These must be clarified in collaboration with local expertise in the field.

3.1.5 *Estimation of operating costs*

In order to give advice on the profitability of establishing a biogas production or participating in a biogas production, it is necessary to provide estimates of what it will cost to operate facilities and what income can be expected for the user in question.

There is a very large difference between the operating costs and the possible income between the participating countries, which is why it is necessary to have country-specific information for all the participating countries.

A large number of these costs and income are highly variable, which is why it will be necessary in each case to make some assumptions about e.g., average values. In Denmark, the price for buying and selling electricity fluctuates, for example, every hour and it is not possible to use anything other than average values in this context.

Furthermore, there may be differences in what support there may be for biogas production in the individual countries, including whether it is given for establishment or operation or both.

Based on the estimated calculations made of the possible biogas production, a recommendation is made that it is advisable to try to proceed with plans to establish a biogas production.

3.1.6 *Environmental consequences*

A significant part of the environmental consequences of the establishment of biogas production comes from the impact on the CO_2 accounts.

In order to be able to provide feedback about the environmental consequences, it is necessary that a section, which can help in making a CO2 account for the proposed facilities, be added. A note on how a Danish company has handled this is made but a simple version that all can use has to be developed.

A general description of the conditions for biogas production in Denmark and a note on calculations of CO_2 reduction in small, combined heat and power (CHP) - based biogas plants has been made.

In addition to the impact on the CO_2 accounts, biogas production gives rise to consideration of other environmental effects, including emissions of nitrogen, leaching of nutrients and others. These conditions are described in general terms for the individual cases.

In the context of the ALFA services provided, the selected cases will be able to have an overview of their environmental performance through Life Cycle Assessment (LCA) (provided by CERTH).

3.1.7 *Social aspects*

It is a fact that the production and exploitation of biogas stimulates the local labour market, since it is produced locally and mainly outside of major urban centres.

Although underrepresented, women play a pivotal role in the agricultural and livestock farming, accounting for 39.7% of the agricultural workforce in Greece in 2013. Notably, the young people in farming take up only 10.2% for men and 4.5% for women.

Regarding the social acceptance of biomass powerplants in Greece, the main bottleneck in such projects was the NIMBY (not in my backyard) phenomenon and the lack of knowledge, however 33% of people accepted the potential of a biomass power plant in their region. The feasibility of a biomass plant projected is influenced by knowledge and/or lack of knowledge. It is important to provide information to the neighbours of the plant to help demystify bad opinions that biogas is harmful to the environment.

The implementation of biogas plants represents a great advantage where biogas it is not only a new source of renewable energy, but it should also be seen as a crucial element of the farm: it allows to diversify revenues, to produce energy, to manage the flows of sewage and agricultural residues and to have soil improvers / fertilisers.

These conditions have been described in general terms.

3.2 Biogas Cases Atlas Map

The Biogas Cases component stood as a **map repository (Atlas Map)**, encompassing a diverse array of active biogas facilities that span farms and utilise livestock residues as a primary feedstock, among other configurations. However, its significance extends beyond existing installations; it also opened its doors to potential biogas solutions, forming a rich repository that caters to registered cases spanning the entirety of Europe. This multifaceted resource had a dual function: it acts as an easily navigable directory for residents seeking information about biogas facilities in their proximity, while serving as an inclusive directory where livestock farmers and biogas managers can come together to share insights and resources.

For each registered case, an **informative pinpoint** was developed, providing valuable insights into the unique attributes of each facility. **Key details**, such as geographic location, feedstock utilisation, operational technology, rated power output, case type, installation year, and web links (when available), were presented, offering a holistic view of each case. Moreover, this information was complemented by visual documentation in the form of photos, providing a deeper understanding of each facility's setup and operation.

Within the Biogas Cases, users had at their disposal an array of **filters**, empowering them to pinpoint cases that align precisely with their requirements and interests. Furthermore, users were encouraged to contribute to the repository by **registering new cases**, thereby enriching the directory with fresh insights and expanding its utility as a valuable resource. It was essential to acknowledge that newly registered cases undergo a meticulous validation process overseen by the ALFA Engagement Platform, a measure implemented to ensure the precision and credibility of the information presented.

A noteworthy aspect of this repository is its commitment to inclusivity. As of, for each case pinned on the map, information is presented in both **English and local languages** for all 19, an initiative that caters to a diverse and multilingual audience throughout Europe, ensuring accessibility and relevance for all.

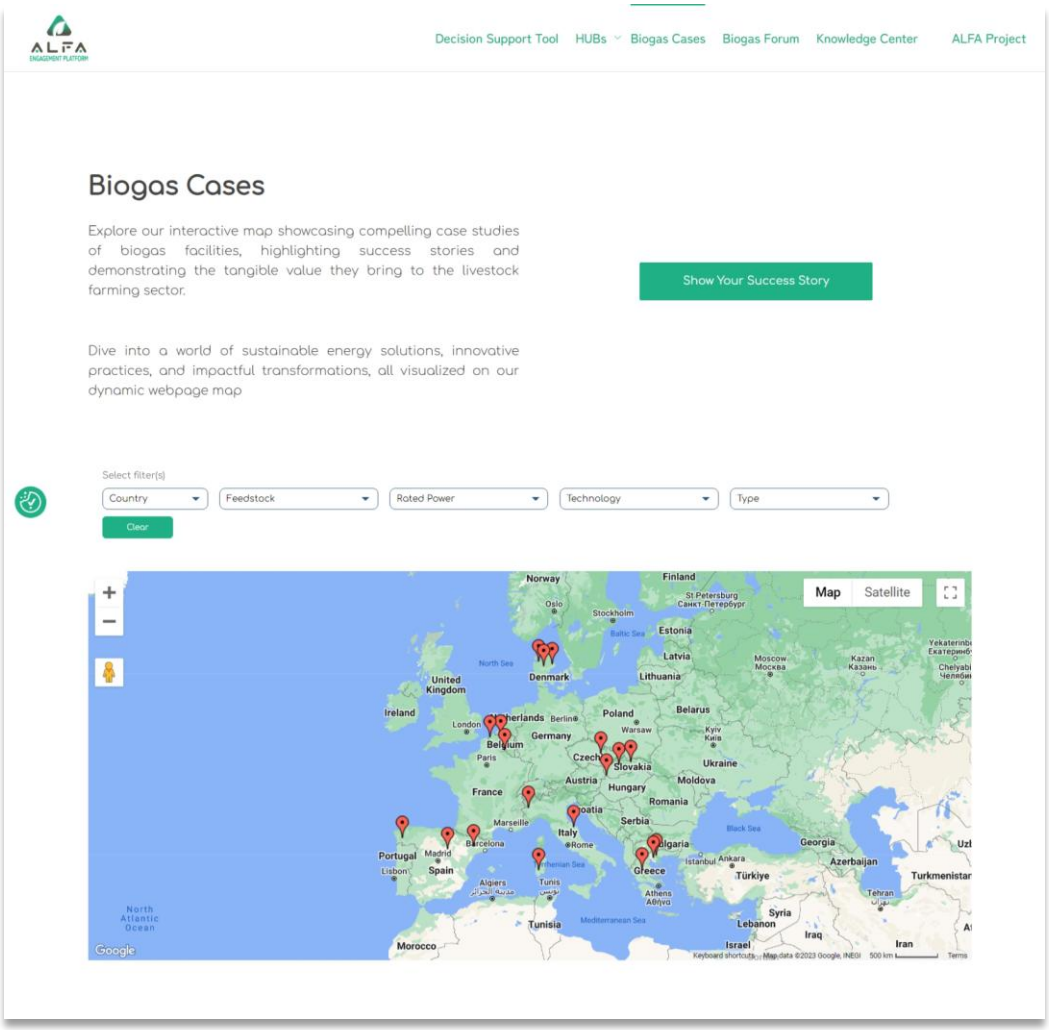

Figure 13. Biogas cases page

As of the time of this report, the Biogas Cases component remains fully functional and continues to serve as a valuable and user-friendly tool for exploring biogas facilities across Europe. While no major structural changes have been made, the platform is able to receive new case submissions and minor content updates, ensuring that the information remains current and relevant. The multilingual support and interactive map features continue to enhance accessibility and engagement among users from diverse regions. Respecting the GDPR Rules, an Informed Consent Form was incorporated in the registration form of new cases.

3.3 Biogas Forum

At the heart of the suite of ALFA Support Tools lies the Biogas Forum, an organised and structured component designed to **foster rich discussions and knowledge sharing**. Operating within a hierarchical framework, the Biogas Forum was organised into **thematic groups**. This thoughtful organisation either ensured that **discussions remained focused**, allowing forum members to engage in conversations that matter most to them, or allowed knowledge exchange in **different languages**, tailored to the needs of stakeholders. Forum members were encouraged to participate actively in these discussions by **subscribing to the thematic groups** that aligned with their interests and expertise. This streamlined approach enhanced user engagement and ensured that members

could connect with like-minded peers and experts in their fields of interest. The figure below presents an overview of the Biogas Forum during the hard launch.

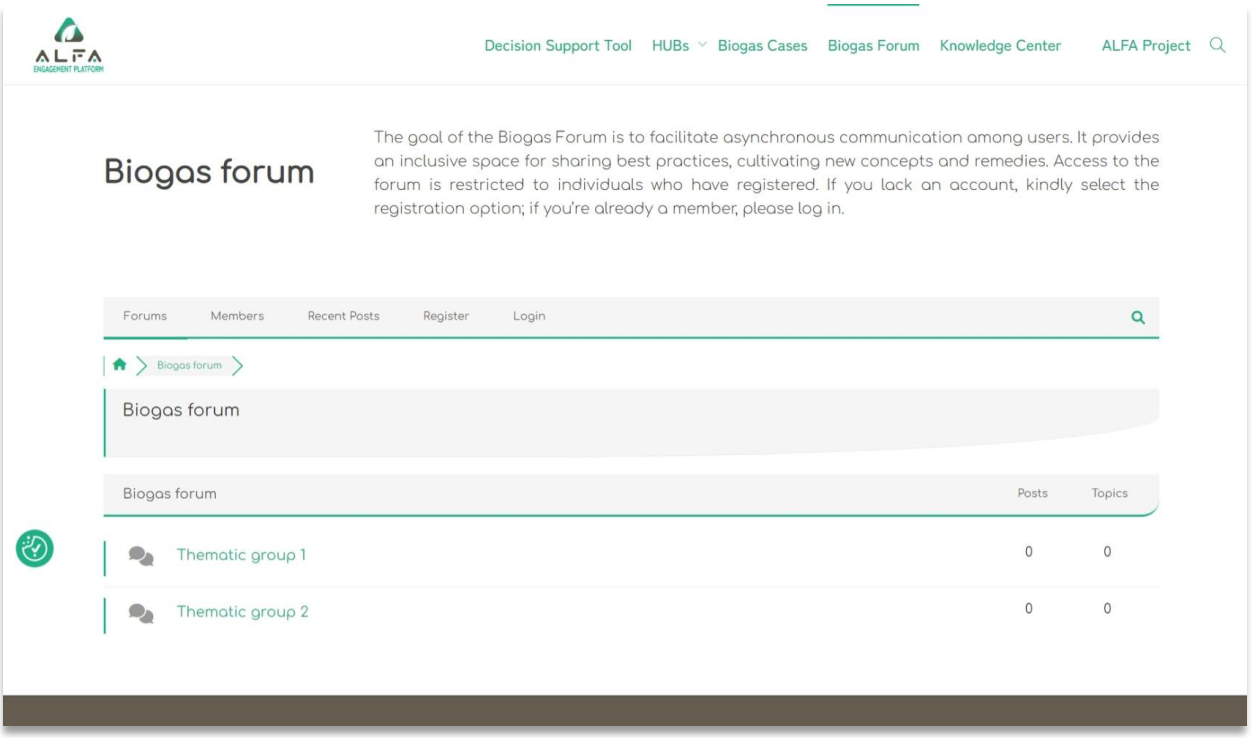

Figure 14. Biogas Forum page

Only **registered members** were granted the privilege to **create and reply to** these invaluable conversations, fostering an environment that prioritises meaningful and informed exchanges. Nevertheless, it was **open to view without registration** to all users. For those who were interested in joining these enriching conversations but were unsure about the registration process, detailed information is thoughtfully provided in Annex II.

During the lifetime of the project the Biogas Forum has shown encouraging engagement from the community. A total of **37 discussion topics** have been created, generating **56 posts** across the various thematic groups. The forum had successfully attracted **161 registered members**, reflecting interest and participation from stakeholders across different regions and areas of expertise. This level of activity indicated that the Forum was serving its purpose as a common space for knowledge exchange, peer-to-peer support, and thematic discussions on biogas and related topics. The **multilingual** and **thematic structure** of the Biogas Forum continued to support **inclusive participation**, enabling members to engage in discussions most relevant to their local context and professional background. Beyond peer-to-peer exchange and thematic discussions, the Biogas Forum had also served as an effective **channel for project-related announcements and activities**. It had been actively utilised to promote **ARC surveys**, **ARC activities**, **Open Call announcements**, and other key updates from the ALFA project. This added functionality has enhanced the Forum's role not only as a space for dialogue but also as a central point for **information dissemination** and **community mobilisation**. The figure below depicts the Biogas Forum while was live.

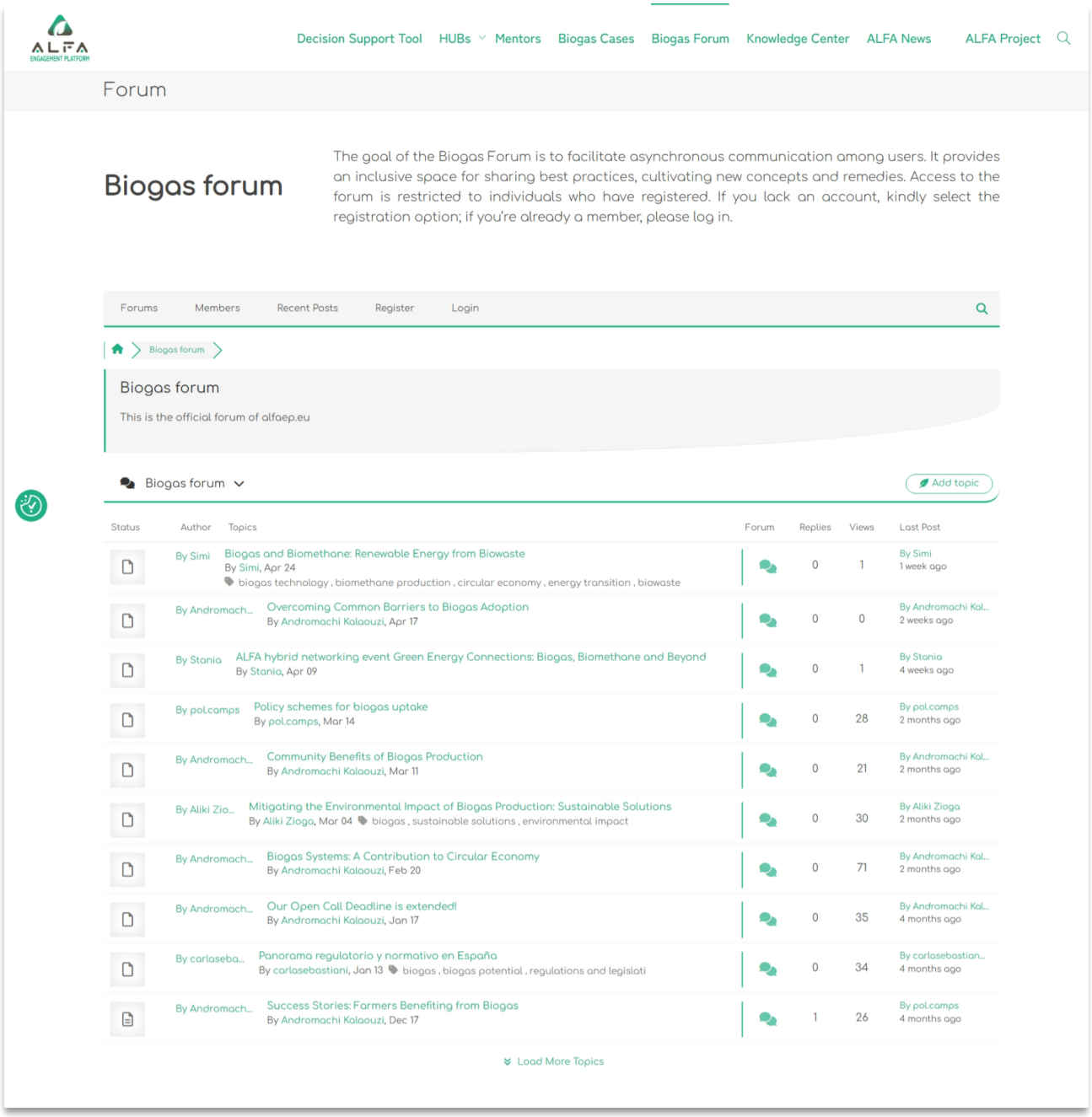

Figure 15. Updated version of Biogas Forum

The impact of the Forum was visible through the **growing number of participants and interactions**, which demonstrated its value as a collaborative tool in the ALFA Support Tools suite. It contributed to building a sense of community, enhanced information sharing, and supported the capacity-building objectives of the project.

3.4 Knowledge Centre

The Knowledge Centre served as a **dynamic, open-access repository**, enriching the ALFA support measures by providing an extensive reservoir of existing articles, materials, and tools that synergised with the drive toward the adoption of biogas solutions in the livestock sector. This repository was divided into two distinct sections, each contributing significantly to the project's mission, as presented in the figure on the next page.

The first section, **ALFA Webinars**, was an integral facet of **ALFA's capacity-building activities**, offering a wealth of valuable insights and expertise. Here, participants could access a series of webinars aimed at enhancing their understanding of biogas solutions and their implementation in the livestock sector. These sessions were designed to empower stakeholders with the knowledge and skills required for effective decision-making. Additionally, it was noteworthy that a series of complementary webinars will be meticulously crafted and subsequently made available throughout the project's duration. The figure below presents an overview of webinar section on Knowledge Centre.

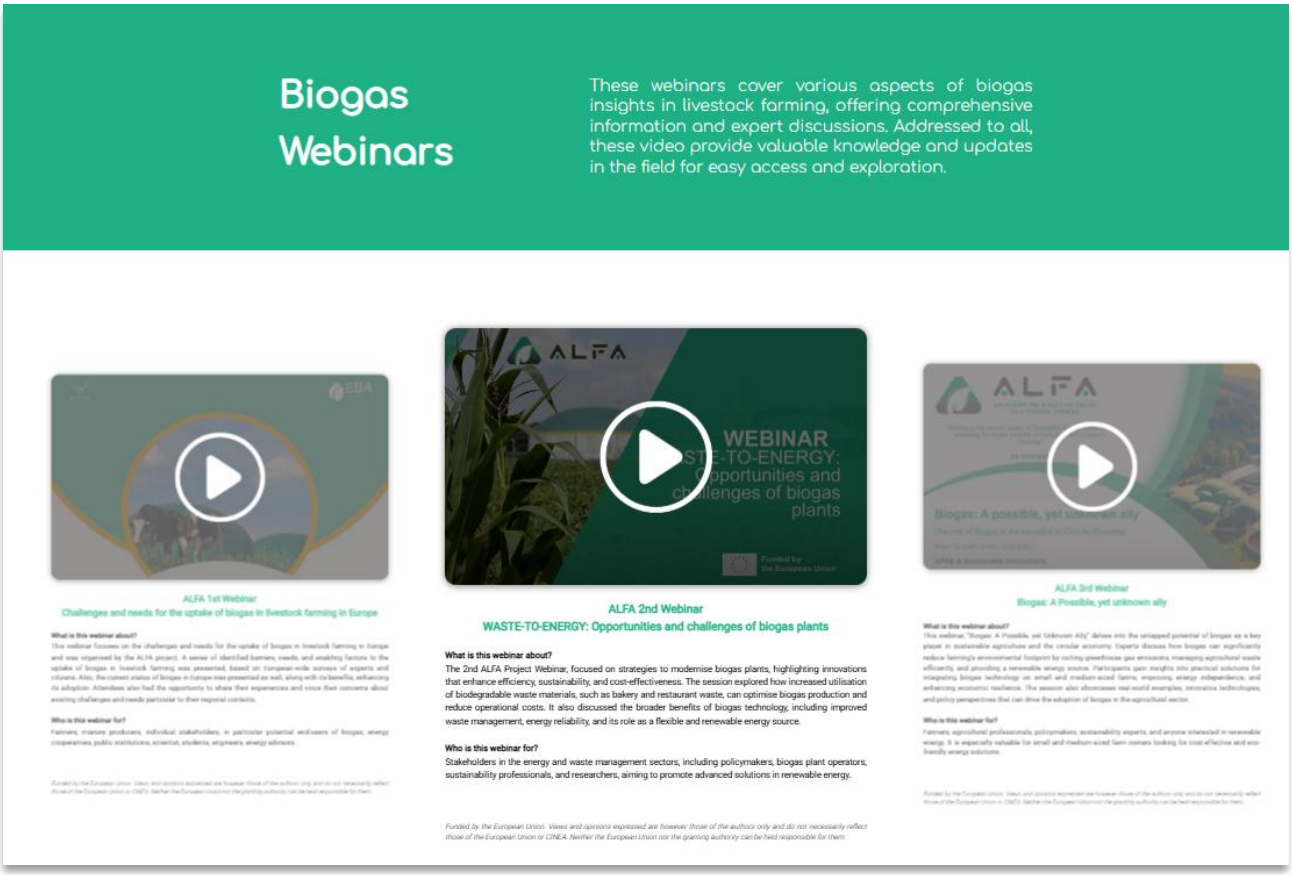

Figure 16. Knowledge Centre and Webinar Section

The second section, titled the **Biogas Library**, was an expansive, open-source, extensive store of resources catering to the broader community of the biogas and livestock sectors in the realm of renewable energy. Within this repository, a user could find an extensive array of materials spanning articles, case studies, documents, multimedia content including videos, and a rich assortment of tools, all thoughtfully curated to provide invaluable insights and guidance. These resources were thoughtfully presented in multiple languages to accommodate a diverse audience.

To facilitate seamless navigation within the Biogas Library, a comprehensive **set of filters** was implemented, ensuring that users can easily access the precise materials they seek. It was essential to note that this repository is continually enriched, consistently introducing new and relevant content with the generous support of ALFA partners.

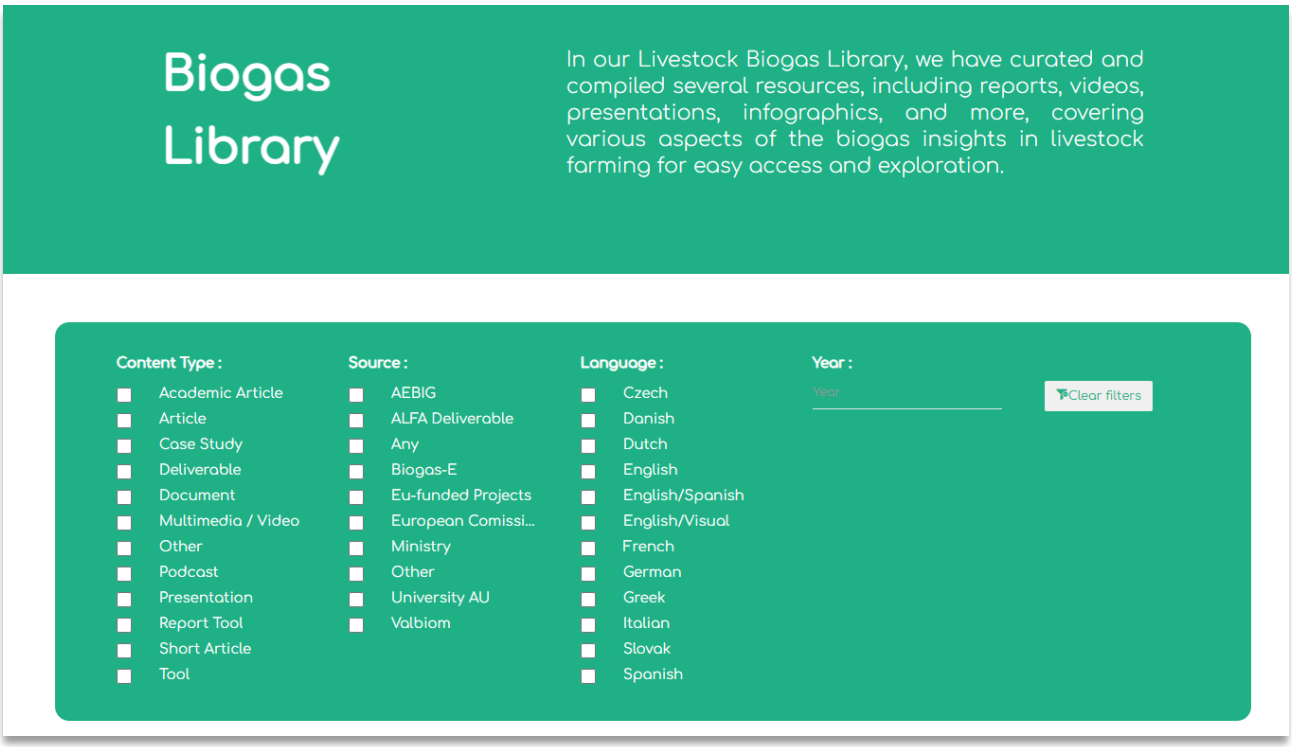

Figure 17. Knowledge Centre Filters

Throughout the project, the Knowledge Centre was actively **enriched** with contributions from ALFA partners. **445 materials** were uploaded (last update 12.05.2025), including articles, case studies, videos, tools, and other relevant resources, in several languages (**10 languages and visuals,** including Czech, Danish, Dutch, English, French, German, Greek, Italian, Slovak, and Spanish). It also features all **three dedicated webinars** (last update 12.05.2025) developed and delivered as part of the project's **capacity-building activities**, all accessible free of charge. In addition, all **public deliverables** produced during the project were made available through the platform, ensuring transparency and broad access to key project outcomes. As the project approaches its conclusion, additional materials are expected to be uploaded, further expanding the platform's value as a lasting resource for stakeholders in the biogas and livestock sectors.

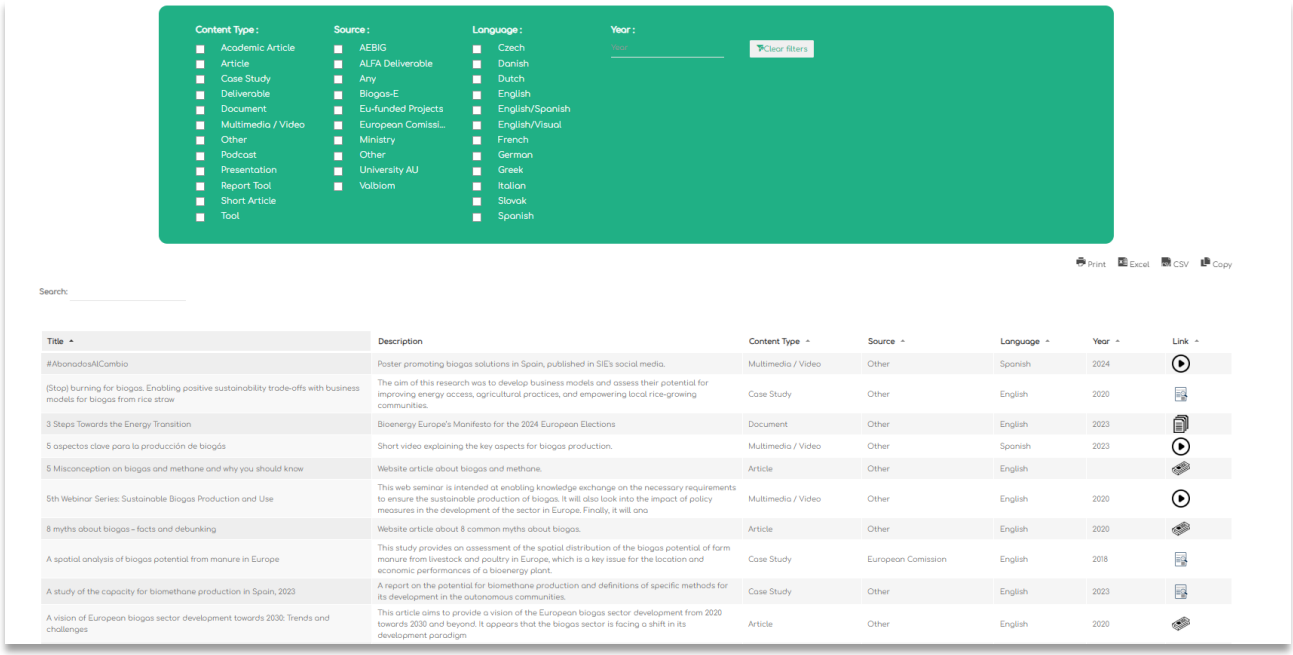

Figure 18. Knowledge Centre List of Materials

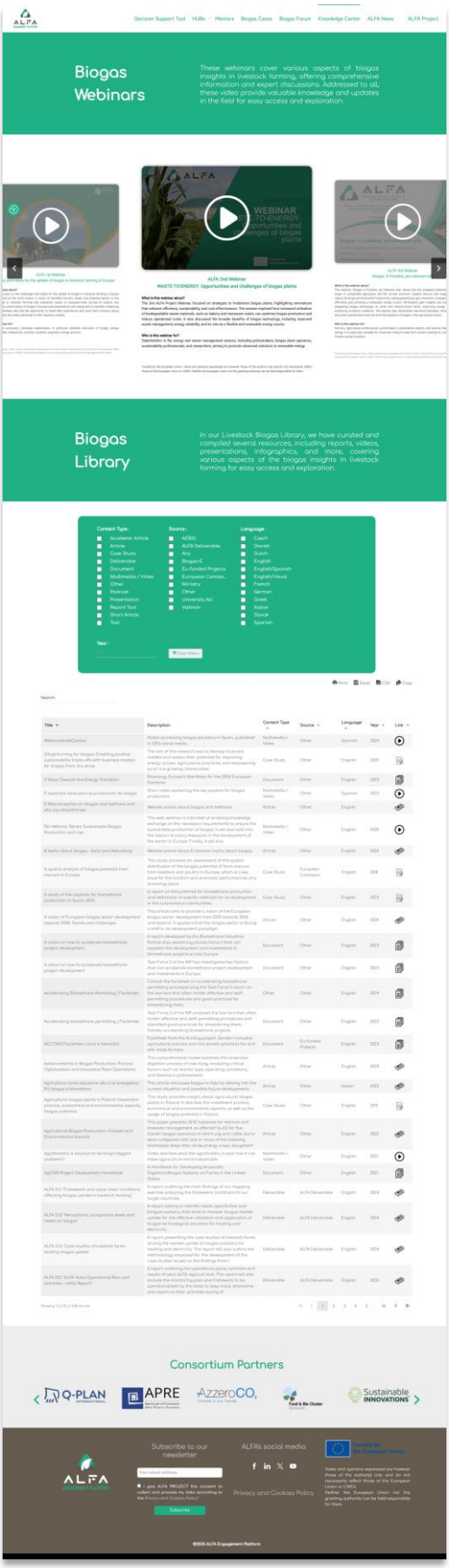

Figure 19. Knowledge Centre

3.5 Promotion Strategy

The promotion strategy of ALFA Engagement Platform and ALFA Support Tools reflected a holistic approach, incorporating both traditional and contemporary methods to ensure **widespread visibility** and **user engagement**. During the project, a series of promotional activities were implemented, harnessing the power of various channels and strategies, including:

- **Press Releases**: Leveraging the reach of local, national, and European Mass Media by disseminating press releases. These served as a fundamental means to share the platform's objectives, success stories, and updates with a broader audience.
- **Partner Collaboration**: Collaboration with ALFA partners and the ALFA project's digital channels, including the website, newsletters, and social media accounts (Facebook, Twitter, LinkedIn), ensured a continuous and far-reaching presence.
- **Awareness Campaigns**: The ALFA Support Tools were thoughtfully integrated into the project's larger awareness campaigns, effectively aligning the tools with the project's overarching goals.
- **Biogas Forum Integration**: The Biogas Forum, a dynamic space for discussions and knowledge exchange, played a pivotal role in engaging potential supported cases and validating support measures, further enhancing the collaborative spirit of the platform.
- **Support Measures for Cases**: The ALFA Support Tools and resources were actively provided to supported cases, allowing them to harness the benefits of the platform's comprehensive offerings.

Throughout these promotional activities, the ALFA Engagement Platform manager (Q-PLAN) worked closely with the ALFA Dissemination Manager (WR) to ensure seamless coordination, avoid duplication of efforts, and maximise the overall effectiveness of project outreach endeavours. Moreover, recognising the importance of breaking language barriers and, where feasible, the activities were translated into national languages to enhance accessibility and expand the platform's reach across diverse communities. This holistic approach ensured that our promotion strategy was versatile, inclusive, and tailored to connect with audiences at local, national, and European levels.

3.5.1 *Dissemination Outcomes – Insights*

The ALFA Engagement Platform has demonstrated strong performance and growing visibility, as evidenced by key Google Analytics indicators. A total of **4,021 unique users** accessed the platform during the reporting period (from August 2023 to May 2025), resulting in **7,542 sessions** and **43,099 tracked user events**. This reflects a consistent and active level of interaction with the platform’s content and tools.

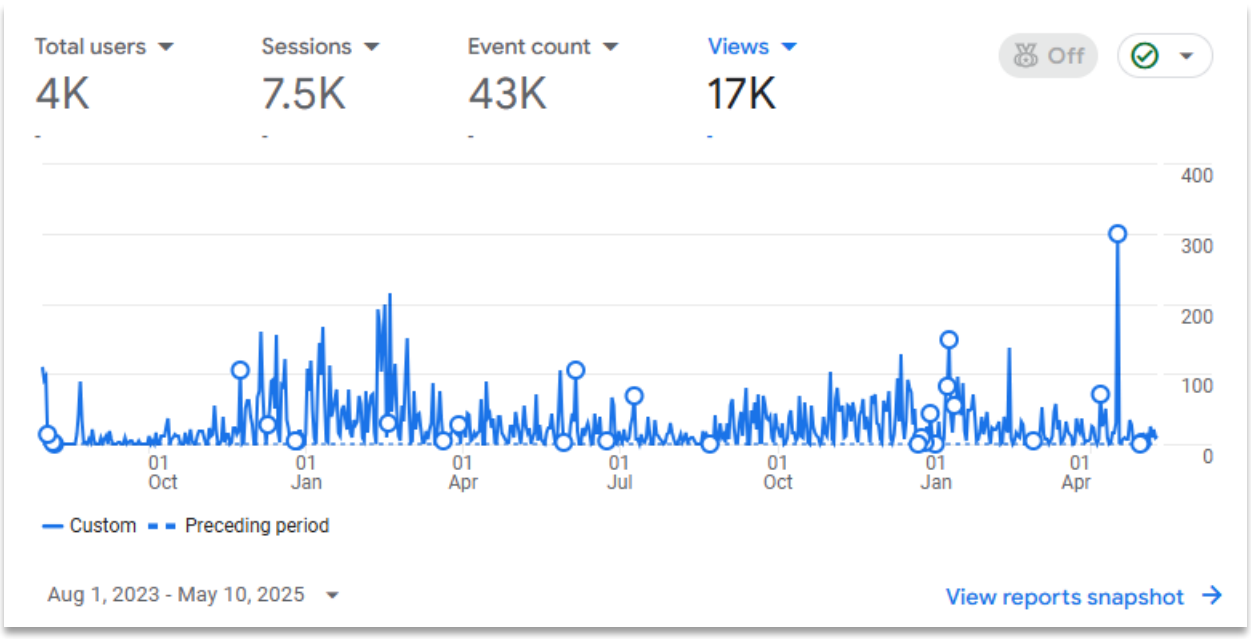

Figure 20. Overview of Google Analytics

Overall, the platform generated **16,989 page views**, with the homepage attracting the most visits (2,954 views), followed by the Open Call page (1,594 views) and the Forum page (1,240 views). These numbers confirm that key areas dedicated to community engagement, support measures, and project participation were among the most accessed.

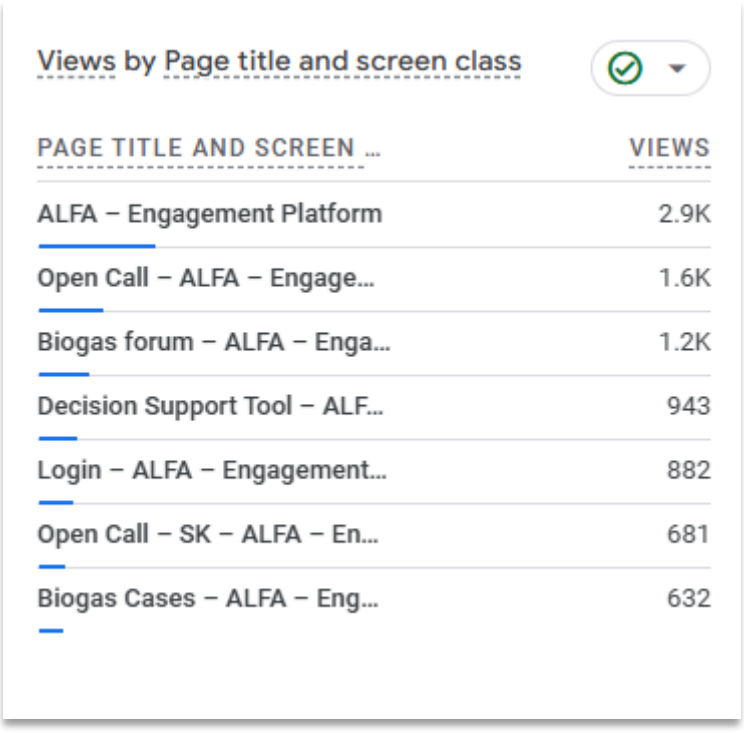

Figure 21. top pages from ALFA Engagement Platform

This data underlines the successful dissemination and uptake of the platform, showcasing its role as a central hub for knowledge sharing, stakeholder interaction, and visibility of ALFA activities.

3.6 Sustainability Plan

By the end of the project, the ALFA Engagement Platform is set to evolve into a suite of diverse material, crafted and collected over the course of the project. This digital platform was destined to transform into a pivotal community across Europe. It will serve as a resource, a platform where knowledge, insights, and best practices are congregated, nurturing innovation and facilitating informed decision-making within the biogas sector.

The interim exploitation plan, detailed in the D5.4 document titled ***Exploitation and Sustainability Plan - Interim Version***, set the foundation for leveraging the platform's potential beyond the project's conclusion. As the project nears its end, a more comprehensive and refined plan is expected to emerge. This plan will serve as a roadmap for maximising the utility and sustainability of the ALFA Engagement Platform and ALFA Support Tools, ensuring the enrichment of the biogas community long after the project's official conclusion. The platform is poised to not only stand out for the project's achievements but also as a resource that catalyses the growth and collaboration within the biogas sector across Europe.

As part of the final exploitation and sustainability plan (D5.6 “Exploitation and Sustainability Plan – Final Version”), all core components of the ALFA Engagement Platform will remain accessible for at least three years after the end of the project grant, ensuring continued value for stakeholders. The Biogas Forum will stay active as a moderated space for farmers, experts, and practitioners to exchange insights and engage in thematic discussions. The Knowledge Centre, including the Webinar section and Biogas Library, will serve as a long-term repository of resources, tools, and recorded trainings, supporting continuous learning for livestock farmers, biogas professionals, researchers, and policy actors. The Biogas Cases (Atlas Map) will remain online as an evolving directory of real and potential biogas installations across Europe, enabling users to explore and register new cases. Finally, while the Decision Support Tool and its content will remain available for reference, showcasing supported initiatives and promoting replicability. All tools will be hosted and maintained under the ALFA platform's dedicated web infrastructure, ensuring access and visibility as part of the broader exploitation and scaling-up efforts led by the consortium partners.

4. Conclusions

The present report presented the updated and final version of ALFA tools developed under T2.3 aiming to assist farmers and various stakeholders in adopting the biogas solutions in the livestock farming industry. It includes the **ALFA Engagement Platform**, the **Knowledge Centre**, the **Decision Support Tool** and the **Atlas Map** whist it presents their structure, and components as well as the methodology for the formation and operation.

The **online presence** of ALFA Support Tools (DST, Biogas Cases Atlas Map, Biogas Forum, Knowledge Centre) was **outlined** together with **brief description** of their **layout and content**. In addition, elements of the ALFA Engagement Platform **promotion strategy** were presented, and the **sustainability plan** was discussed. It is worth noting that the design and development of ALFA Engagement Platform aims to ensure that the platform will **outlive the duration of the ALFA project** and become a focal point for the community of biogas in livestock farming.

This report is *D2.6 - ALFA Support Tools - Final Version* and is the final report for the developed tools in ALFA. The report summarizes the improvements and initiatives that have been made in the past period based on the feedback received along the way.

The development of the ALFA Engagement Platform and the ALFA Support Tools mark a significant stride towards the **empowerment of the biogas community** within the livestock farming sector. These digital resources not only serve as a comprehensive **repository of knowledge and tools** but also offer a **collaborative space** that transcends the lifespan of the ALFA project. The value of ALFA Support Tools extends far beyond the immediate, aiming to become a central hub for the biogas community. This digital presence is poised to enable **transformative change**, facilitating informed decision-making, knowledge sharing, and a network of like-minded individuals. By fostering this community, it is not only being aligned with the **EU's sustainability goals** but also spearheading the journey towards a more environmentally conscious and sustainable future for the **livestock farming sector**. In this scheme, ALFA Support Tools represent the backbones in a shared pursuit of a greener, more sustainable tomorrow. Furthermore, the ALFA Engagement Platform **promotes the exchange of best practices and innovation** within the biogas sector, fostering growth and sustainability. Serving as a central hub for the biogas community, these tools are positioned to play a pivotal role in advancing environmental and agricultural sustainability, in line with the objectives of the European "Green Deal" and beyond.

5. Annexes

Annex I: ALFA Engagement Platform Cookies and Privacy Policy

Who we are

ALFA's main objective is to tap the potential of biogas production from livestock farming to enhance the wider uptake of RES and increase the share of bioenergy as a baseload energy source, while ensuring reduced emissions from untreated animals' waste and supporting the creation of new jobs and revenue for the livestock farming industry. During its three years, the project will support at least 50 livestock farmers in 6 EU counties (IT, DK, BE, SK, EL, ES) to overcome existing barriers and viably take up biogas solutions whilst providing a more informed basis for policymakers and stakeholders by unveiling biogas market dynamics. Tools will be created to reduce investment risk and support more robust and efficient financial frameworks to allow massive scalability of biogas. Furthermore, ALFA will provide science-based information to livestock farming decision makers for the potential of biogas and raise the awareness of the general public on misperceptions about biogas and bioenergy. The partners of ALFA consortium, listed below, process certain types of personal data for the purposes of the project. Each partner is responsible for the personal data they collect and process during their activities under the framework of the project:

Q–PLAN INTERNATIONAL ADVISORS PC, Greece (Coordinator), https://qplan–intl.gr/

AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA, Italy, https://apre.it/

AZZERO CO2 SRL, Italy, https://www.azzeroco2.it/en/

CENTRE FOR RESEARCH & TECHNOLOGY HELLAS, Greece, https://www.certh.gr/

FBCD AS, Denmark, http://www.foodbiocluster.dk

SUSTAINABLE INNOVATIONS EUROPE SL, Spain, https://sustainableinnovations.eu/

WHITE RESEARCH SRL, Belgium, https://white–research.eu/

PEDAL CONSULTING SRO, Slovakia, https://pedal–consulting.eu/

EUROPEAN DAIRY FARMERS E.V., Germany, https://www.dairyfarmer.net/

EUROPEAN BIOGAS ASSOCIATION AISBL, Belgium, https://www.europeanbiogas.eu/

For further information, we can be contacted at: info@alfa-res.eu

How we collect your personal data

We collect personal data both directly and indirectly:

Directly. We obtain personal data directly from individuals in a variety of ways, including but not limited to the following cases:

- an individual subscribes to our newsletter/s;
- an individual registers to attend meetings and events we host and during attendance at such events;
- we establish cooperative relationships with an individual;

- we provide professional services pursuant to our contract with the European Commission;
- an individual participates in an interview or survey organized by us.

Indirectly. We obtain personal data indirectly about individuals from a variety of sources, including:

- our research partners;
- our networks and contacts;
- public and open data sources such as public registers, news articles and internet searches;
- social and professional networking sites (e.g., LinkedIn).

What types of data we collect?

We only collect the data that are necessary for the smooth implementation of our project. These data fall into the following categories:

- **contact details** (name/ surname, e-mail address);
- **professional information** (job title, organization, field of expertise);
- **demographics** (e.g., age, gender, nationality);
- **information about what a person knows or believes**;
- **videos and photos** (from people that attend our events).

Bases of lawful processing

We process personal data on the following legal bases:

Legal obligations – for processing activities required for compliance both with applicable national and European legislation as well as with the specific legal and regulatory framework of the Horizon Europe Framework Programme for Research and Innovation of the European Union.

Consent – for processing activities such as organization of surveys and interviews, completing of questionnaires and dissemination of project's results.

Contractual obligations – for processing activities such as reporting to the European Commission and complying with project's publicity obligations.

What we do with your personal data

We process your personal data with the purpose of:

- Conducting research (e.g., interviews, surveys);
- Dissemination our project's results to different types of stakeholders;
- Sending invitations and providing access to guests attending our events and webinars;
- Administering, maintaining, and ensuring the security of our information systems, applications, and websites;
- Processing online requests or queries, including responding to communications from individuals;
- Complying with contractual, legal, and regulatory obligations.

How we secure your personal data when we process it

We continuously apply a personal data risk assessment process to identify, analyse, and evaluate the security risks that may threat your personal data. Based on the results of this risk assessment, we define and apply a set of both technical and organizational measures to mitigate the above security risks, including but not limited to:

- Data Protection Policies to guide our personnel when processing your data;
- Written contracts with organizations that process personal data on our behalf;
- Non–Disclosure Agreements with our personnel;
- Back up process, antimalware protection, access control mechanisms, etc.
- Some of our partners have appointed a Data Protection Officer.

Do we share personal data with third parties?

We may occasionally share personal data with trusted third parties to help us deliver efficient and quality services. When we do so, we ensure that recipients are contractually bound to safeguard the data we entrust to them before we share the data. We may engage with several or all the following categories of recipients:

- Parties that support us as we provide our services (e.g., cloud–based software services such as Dropbox, Microsoft SharePoint, Google);
- Our professional advisers, including lawyers, auditors, and insurers;
- Dissemination services providers (e.g., MailChimp);
- Law enforcement or other government and regulatory agencies or other third parties as required by, and in accordance with applicable law or regulation;
- The European Commission according to our relevant contractual obligations.

Do we transfer your personal data outside the European Economic Area?

We do not own file servers located outside the European Economic Area (EEA). However, some partners may use cloud and / or marketing services from reputable providers such as SharePoint, Dropbox, MailChimp, Google, etc., situated both inside and outside the EEA. We always check that such providers comply with the relevant GDPR requirements before start using their services.

Do we use cookies?

Our websites use cookies. Where cookies are used, a statement will be sent to your browser explaining the use of cookies. Cookies are small text files which are saved on your computer, mobile phone or tablet. They allow the website to remember your actions and preferences (such as login, language, font size and other display preferences) so you do not have to keep re–entering them whenever you come back to the site. You can control and/ or delete cookies as you wish. If you do this, however, you may need to manually adjust your preferences every time you visit a site. For more information on how to manage cookies, please visit: http://www.aboutcookies.org/

We use tools like Google Analytics to better understand how visitors interact with our website. This provides us with important information to enable the site to work better. The information collected is not linked to your personal data. For more information on the cookies set by Google Analytics, please visit: http://code.google.com/apis/analytics/docs/concepts/gaConceptsCookies.html

The following cookies are used by Google Analytics:

_ga: Used to distinguish user. Expires after 2 years;

_gat: Used to throttle request rate. Expires after 1 minute;

_gid: Used to distinguish users. Expires after 24 hours.

Your rights

You have the following rights regarding our processing of your personal data:

- **Right to withdraw consent** – You can withdraw consent that you have previously given to one or more specified purposes to process your personal data. This will not affect the lawfulness of any processing carried out before you withdraw your consent.
- **Right of access** – You can ask us to verify whether we are processing personal data about you and, if so, to have access to a copy of such data.
- **Right to rectification and erasure** – You can ask us to correct our records if you believe they contain incorrect or incomplete information about you or ask us to erase your personal data after you withdraw your consent to processing or when we no longer need it for the purpose it was originally collected.
- **Right to restriction of processing** – You can ask us to temporarily restrict our processing of your personal data if you contest the accuracy of your personal data, prefer to restrict its use rather than having us erase it, or need us to preserve it for you to establish, exercise or defend a legal claim. A temporary restriction may apply while verifying whether we have overriding legitimate grounds to process it. You can ask us to inform you before we lift that temporary processing restriction.
- **Right to data portability** – In some circumstances, where you have provided personal data to us, you can ask us to transmit that personal data (in a structured, commonly used, and machine–readable format) directly to another entity.
- **Right to object** – You can object to our use of your personal data for direct marketing purposes, including profiling or where processing has taken the form of automated decision–making. However, we may need to keep some minimal information (e.g., e–mail address) to comply with your request to cease marketing to you.
- **Right to make a complaint** to your local Data Protection Authority (DPA) (see https://ec.europa.eu/justice/article–29/structure/data–protection–authorities/index_en.htm) regarding any concerns you may have about our data handling practices.

To ask us to do anything of the above, you can contact us by email: alfa.project.eu@gmail.com We will promptly examine your request against the relevant requirements of the laws and regulations governing privacy and personal data protection and we will answer the latest within 30 days after receiving your request. We will ask from you some kind of identification (e.g., photocopy of your identity card or passport) to avoid non–authorized reveal of your personal data. If, for reasons of complexity of the request or a multitude of requests, we are unable to respond promptly, we will notify you within 30 days of any delay, which in no case may exceed two months from the expiration of the 30–day deadline.

How long do we retain personal data?

We retain personal data to provide our services, stay in contact with you and to comply with applicable laws, regulations, and contractual obligations to which we are subject. Please note that we have an obligation to retain data concerning projects funded by the Horizon Europe Framework Programme for Research and Innovation of the European Union for up to five years after the end of the project (unless further retention is requested by auditors). After the expiry of the retention period, and unless further legitimate grounds for retention arise, we will dispose of personal data in a secure manner.

Disclaimer of liability for third party websites

Although our site may contain links to third–party sites, including the sites of the consortium partners, we are not responsible for the privacy practices or content of these sites and we expressly disclaim any liability for any loss or damage that may be caused by the use of these links. We do not monitor the privacy practices or the content of these sites. If you have any questions about the privacy practices of another site, you should contact the site's responsible personnel. We suggest you read the privacy policy of each website you interact with, before allowing the collection and use of your personal data.

We may also provide social media features that allow you to share information on your social networks and interact with our project on various social media sites. The use of these social media features may result in the collection or sharing of information about you. We recommend that you check the privacy policies and regulations of the social networking sites you interact with, so that you can be sure that you understand what information may be collected, used and disclosed by these sites.

Children

We do not knowingly collect, use, or disclose information from children under the age of 16. If we learn that we have collected the personal information of a child under 16, we will take steps to delete the information as soon as possible. Please immediately contact us if you become aware that a child under 16 has provided us with personal information.

Revisions of this Privacy Policy

This Privacy Policy is valid from 30/11/2022 and replaces any other previous notifications that we had issued in the past regarding our personal data management practices. We reserve the right to revise this Policy at any time. The current version will be always uploaded to our website indicating the date of entry into force, so you know when the most recent revision took place. If there are critical changes in this policy or our personal data practices change significantly in the future, we will notify you by posting the changes on our website.

Annex II: Biogas Forum Registration

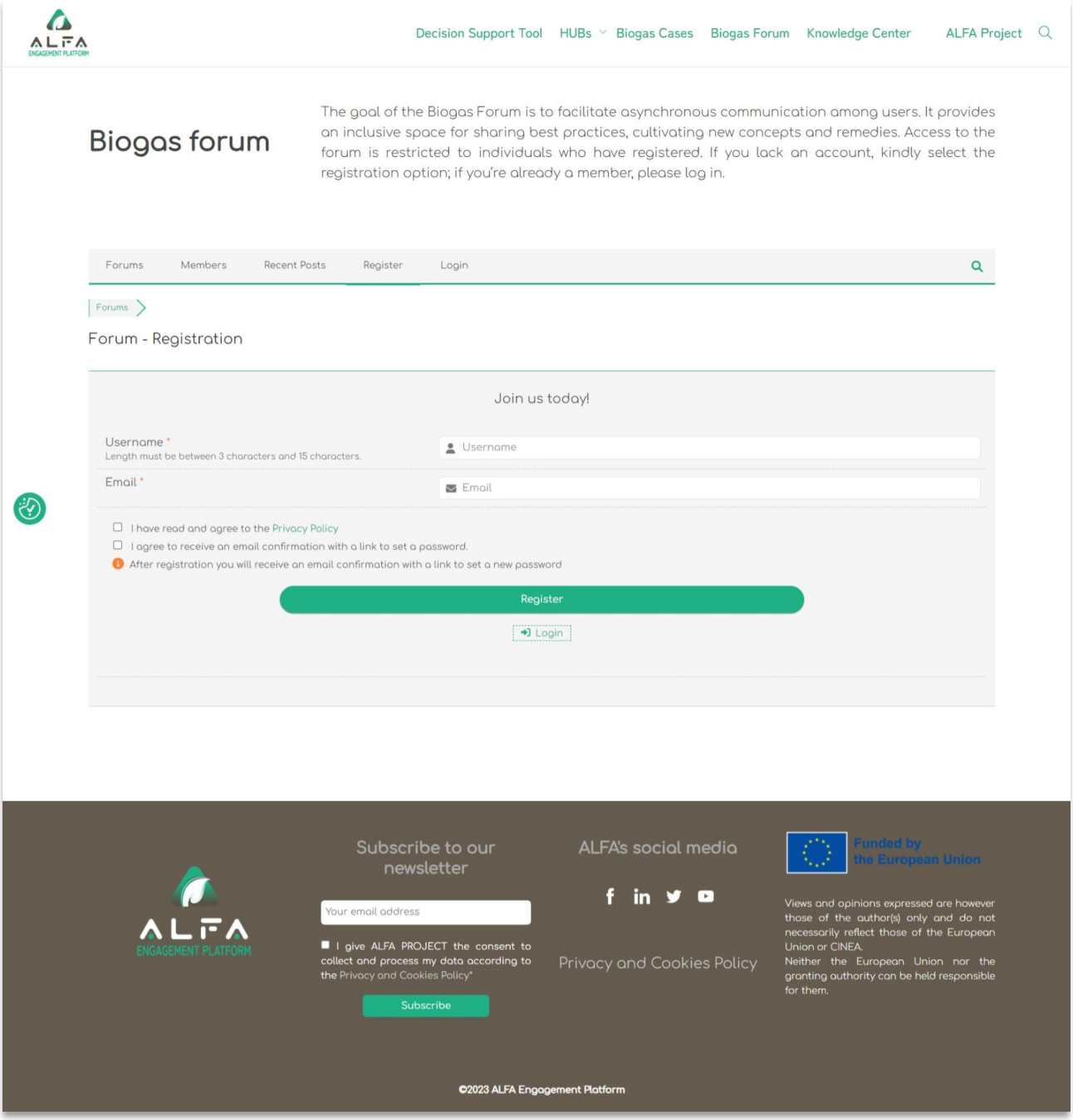

Figure 22. Biogas Forum Registration - 1st step

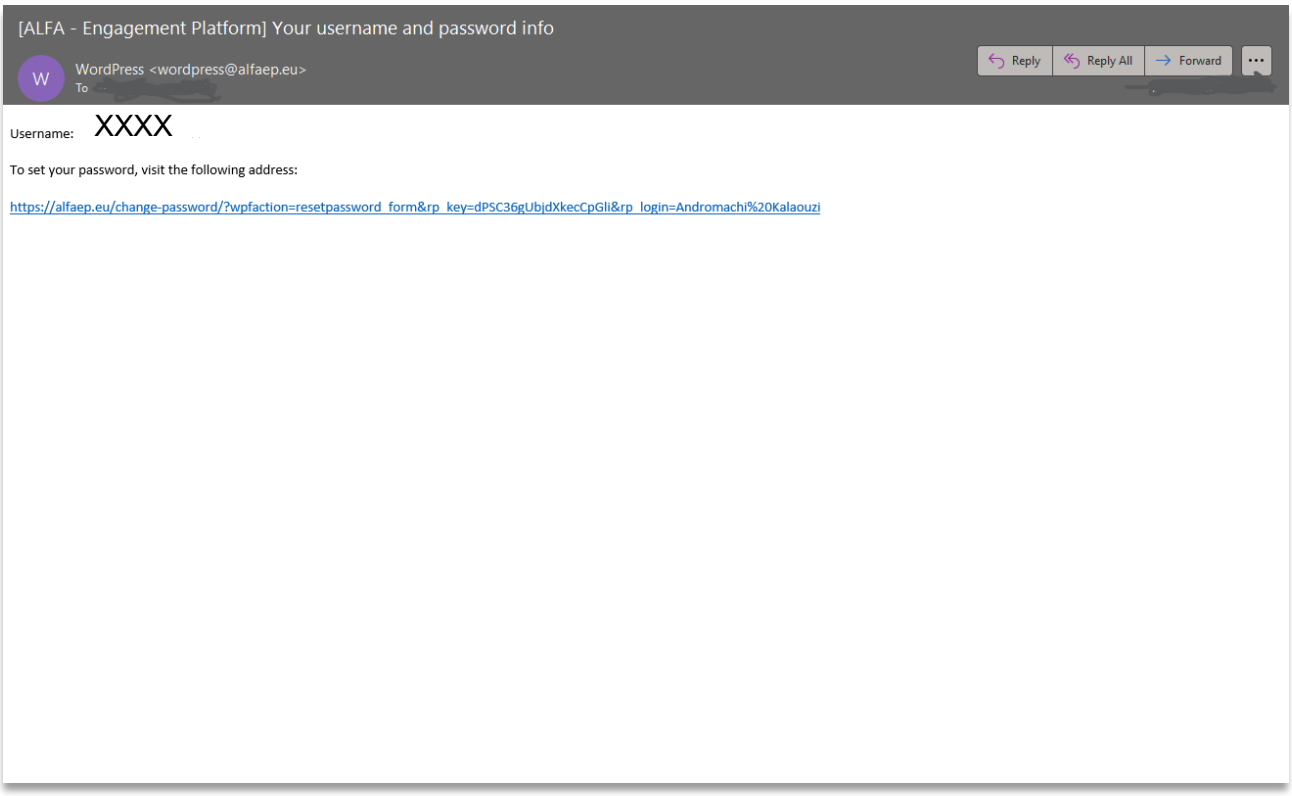

Figure 23. Biogas Forum Registration - 2nd Step

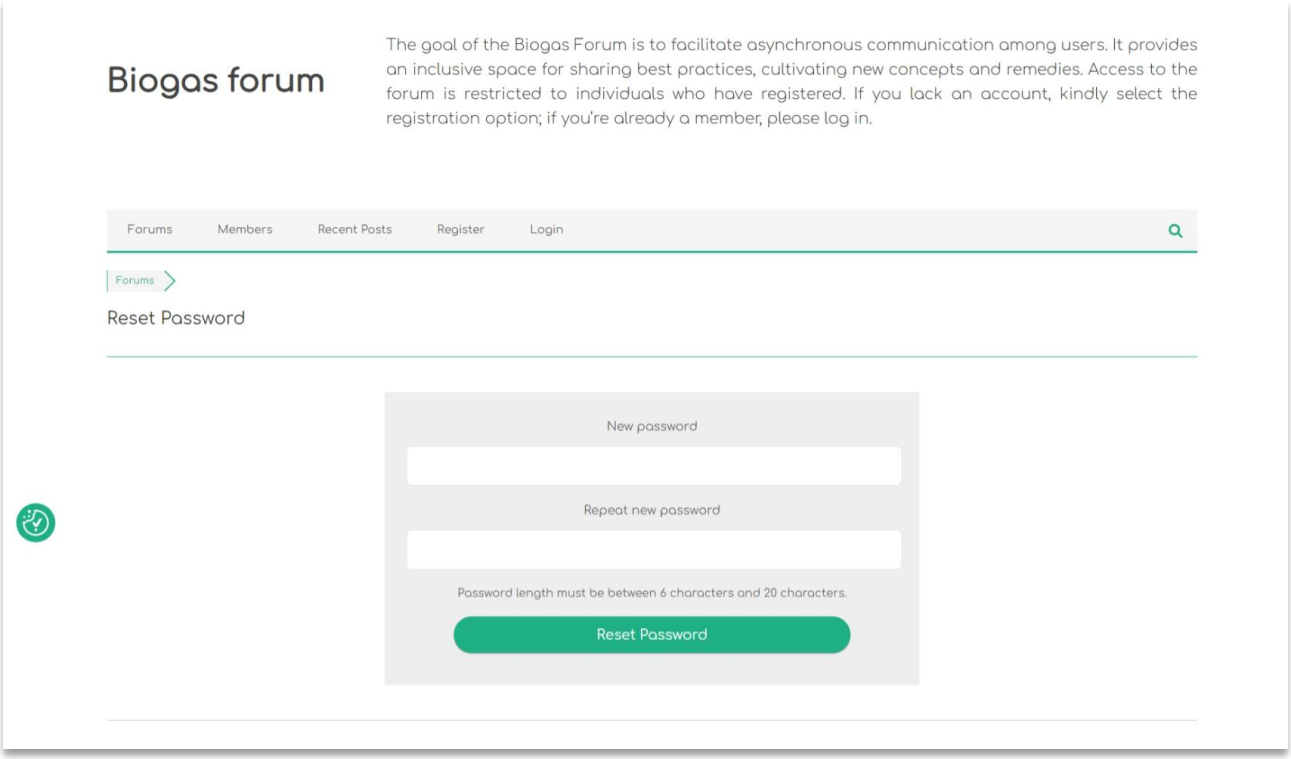

Figure 24. Biogas Forum Registration - 3rd step

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ALFA
UNLOCKING THE BIOGAS POTENTIAL OF LIVESTOCK FARMING

The project

ALFA has the objective to help unlock the EU's biogas production potential by fostering the adoption of technologies using manure to produce biogas, thus helping increase the adoption of renewable energy sources in the EU and helping reduce emissions from untreated animal waste. The project will identify drivers and barriers for the uptake of biogas in the EU livestock farming industry and will support farmers from 6 EU countries (Italy, Denmark, Belgium, Slovakia, Greece and Spain) through its own co-created solutions, including financial, business, and technical support services as well as capacity-building seminars. In parallel, the project will develop an Engagement Platform to host tools that facilitate collaboration and knowledge exchange among industry actors and provide credible estimations of each farm's biogas potential, prospect profits, and environmental and social impacts. Moreover, ALFA will inform all relevant stakeholders via awareness-raising campaigns and policy recommendations and will provide guidelines for replication of its results in other regions.

Coordinator: **Q-PLAN**

PARTNER		SHORT NAME
Q-PLAN INTERNATIONAL	Q-PLAN INTERNATIONAL ADVISORS PC	QPL
APRE	AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA	APRE
AzzeroCO2 climate in our hands	AZZERO CO2 SRL	A0CO2
CERTH CENTRE FOR RESEARCH & TECHNOLOGY HELLAS	CENTRE FOR RESEARCH & TECHNOLOGY HELLAS	CERTH
Food & Bio Cluster Denmark	FBCD AS	FBCD
Sustainable INNOVATIONS	SUSTAINABLE INNOVATIONS EUROPE SL	SIE
WHITE	WHITE RESEARCH SRL	WR
PEDAL CONSULTING	PEDAL CONSULTING SRO	PED
EUROPEAN DAIRY FARMERS	EUROPEAN DAIRY FARMERS E.V.	EDF
EBA European Biogas Association	EUROPEAN BIOGAS ASSOCIATION AISBL	EBA

CONTACT US: info@alfa-res.eu **VISIT: www.alfa-res.eu**

ALFA Project @alfa_euproject alfa-euproject @alfaprojectHE