

Deliverable

Project Acronym: FERTIMANURE

Project full name: Innovative nutrient recovery from secondary sources – Production of high-added value FERTIlisers from animal MANURE

Grant Agreement No. 862849

D7.2. Project Website

Project start date	January 1 st , 2020
Duration in months	48
Deliverable due date	April 30 th , 2020
Actual submission date	April 30 th , 2020
Work package concerned	7
Deliverable Lead	GreenWin
Author	Rodrigo Arandi-Klee (GreenWin)
Contributors	GreenWin, UVIC-UCC
Communication Level	Public (PU)

Disclaimer: This deliverable a. Reflects only the authors view; and b. Exempts the Commission from any use that may be made of the information it contains.

Document History

Date	Author	Action	Status
April 28 th , 2020	Rodrigo Arandi-Klee (GreenWin)	1 st draft revision	Draft
April 29 th , 2020	Laia Llenas (UVIC-UCC)	1 st draft revision	Draft
April 30 th 2020	Evan Marks (UVIC-UCC)	1 st draft revision	Draft
April 30 th 2020	Rodrigo Arandi-Klee (GreenWin)	2 nd draft revision	Draft
April 30 th 2020	Laia Llenas (UVIC-UCC)	Final Revision	Final version Submitted to EC

Summary

The main objective of the FERTIMANURE website, www.fertimanure.eu, is to act as the main communication and dissemination platform for the project. Its main objective is to increase the project's awareness and to keep all the stakeholders up to date with the advancements and progress of the project through different publications that will be posted and displayed in the website.

The website will be monitored continuously as well as content will be added in a regular basis to make sure that it is really the main channel used to communicate with the different audiences involved in the project. Through the website, which is the most important communication channel, we will build a brand that will be recognized by the different stakeholders and that will be used as well in the other communication materials like the video, the leaflets, the logo, the poster. This brand will represent FERTIMANURE in all the communication channels, from which the website will be the most important.

The aim of this document is to briefly explain the strategy behind the creation of website, the way it was designed and the different sections that will be an integral part of it.

The project website will be published and available on-line the 8th of May 2020.



Index

Document History	1
Summary	2
1. Description of the FERTIMANURE Website.....	4

1. Description of the FERTIMANURE Website

The strategy behind FERTIMANURE’s website is not centered on just publishing information, but on showcasing information about the project and about communicating in a specific, clear, and persuasive way with the stakeholders related to the project’s thematic. The website was designed in a way that we think will arise interest for those visiting it for the first time and those who do not know about the project because we address both, the scientific and the broad audiences, by using clear and simple text that is very easy to understand. As stated before, the colours that were used to create the website, are the ones that will give the branding to the project and that will be used as well in all the communication and dissemination material that will be available in the website.

Below, there is described the different main sections included in the website and the aims that these different sections have.



Figure 1. FERTIMANURE website main sections

When we go to the FERTIMANURE website the first thing that we see is a big picture that showcases what the FERTIMANURE project is about.

In order to make it easier to the visitors of the website, we created on top the following sections:

1. **Contact us:** in this area we will provide a form like the one below so that we receive the information on the e-mail address created for that purpose: info@fertimanure.eu. This e-mail address is managed by the project coordinators and WP7 leaders, and they are the ones in charge of redirecting the questions and information required to the concerned partner.



FERTIMANURE



Contact us

Name	
E-mail	
Subject	
Message	

- 2. Stay tuned (blog):** In this section we will show the FERTIMANURE news, the news that are related to the project but not produced by FERTIMANURE, and the events in which the different FERTIMANURE partners will participate. For now, we are now going to show anything related to the events due to COVID-19. . As soon as this crisis starts improving and the events start being a possibility, we will upload this area with the events that the partners will attend.
- 3. Social networks:** Social networks are a very important part of the communication and dissemination activities, and this is why we decided to put the widgets on top of the webpage to make it more visible to the visitors that would like to go to the different social networks.

Below the big picture, that showcases the project in a very visual and easy to understand way, we decided to add the following sections:

- 1. What is at stake:** In this section we wanted to give a global overview of the current situation regarding fertilisers, the main streams with most potential to be valorised to bio-base fertilisers, the problems that need to be solved, and the challenges that manure management faces. The text in this section is the one that follows:

The *current dependency of EU agriculture on fossil-based mineral fertilisers* can only be regarded as an extremely serious threat to future food security. Not only does the present linear economy rely on scarce resources, such as natural gas, limited phosphate reserves and fresh water for its agricultural production, the import of feed from outside the EU and the production of fertilisers are causing an imbalance in many EU regions. There is therefore now a need to reutilise valuable components from all types of waste streams in order to enable a move towards a circular economy.

A number of studies have already identified the three principal waste streams that are the most promising in terms of their potential for valorisation into BBF: (1) **Manure**, (2) sewage sludge and (3) food chain waste. Of these, manure is by far the largest nutrient-rich residual



FERTIMANURE



biomass stream, representing more than 70% of the nutrients from these three waste streams. The **EU livestock sector is the largest in the world**, and as such is one of the heaviest utilisers and suppliers of nutrients.

On the one hand, **the livestock sector** needs to address the regional **problems that are associated with nutrient excesses (pollution control, odour nuisance, etc.), and needs do so at affordable costs**. On the other hand, **the agricultural sector**, that currently relies on external sources of mineral nutrients for improved plant production, **requires novel fertilising products that (1) match crop requirements, (2) are homogeneous, predictable and reliable, (3) are safe, (4) have a high Nutrient Use Efficiency (NUE), and (5) are cost-effective and easy to apply**.

Current **manure management** practices are facing a certain number of **challenges**:

1. Uncertainty about macro, meso and micro nutrient content
2. Nutrient ratios that do not match crop requirements
3. Difficulty in the ability to plan usage and application
4. Health and safety issues
5. Farmer acceptance

2. **The project's response:** In this section we wanted to give an overview regarding the mission of the FERTIMANURE project related to the solutions that it aims to provide, the technological and nutrient management approaches that will be covered, the expected impacts, and the long-term contribution regarding new business developments. We also added the definition of two important terms that are and will be used during the entire duration of the project, bio-based fertilisers and tailor-made fertilisers, since it is important that FERTIMANURE's stakeholders understand the difference between these two. The text will go as follows:

The mission of the FERTIMANURE project is to provide **innovative solutions (technology, end-products, and business models) that solve real issues, ie the manure challenge, and help farmers with the challenges that they are currently facing**. FERTIMANURE will **develop, integrate, test and validate innovative nutrient management strategies so as to efficiently recover and reuse nutrients and other products with agronomic value from manure**, to ultimately obtain **reliable and safe fertilisers that can compete in the EU fertiliser market**. FERTIMANURE focuses on "how to improve the agronomic use of recycled nutrients from livestock manure" to reconnect nutrient flows between crop production and the rearing of livestock.

The FERTIMANURE project will cover **both technological and nutrient management approaches**: The technological side will be addressed with the implementation of **5 innovative & integrated on-farm experimental pilots for nutrient recovery** in the most relevant European countries in terms of livestock production (Spain, France, Germany, Belgium, The Netherlands), whereas **nutrient management will be**



FERTIMANURE



addressed through 3 different strategies adapted to mixed and specialised farming systems: **Strategy #1** with on-farm production and use of bio-based fertilisers (BBF)⁽¹⁾, **Strategy #2** with on-farm BBF production and centralised tailor-made fertilisers (TMF)⁽²⁾ production, and **Strategy #3** with on-farm TMF production and use.

(1) Bio-based fertilisers (BBF): Fertiliser products derived from renewable biomass-related resources. FERTIMANURE BBF products are fertilisers obtained directly on-farm from the innovative technologies for treating animal slurries and manures.

(2) Tailor-made fertilisers (TMF): Customised fertiliser formulations adapted to specific crop/soil needs. FERTIMANURE TMF will be produced by combining (i) FERTIMANURE BBF and, if necessary, (ii) supplementary products (mineral nutrients, micro and macro elements, biostimulants, etc.) directly provided by the fertiliser companies.

Expected Impacts:

1. Development of new technological approaches for **a new generation of commercial, sustainable and safe fertilisers** from livestock waste.
2. **Replacement of conventional, non-renewable mineral fertilisers**, reducing the high dependence that the EU currently has on external sources for the supply of key fertilisers used in agriculture, including natural gas and rock phosphate.
3. **Reduction in the environmental impacts linked to the emissions and dispersion of nutrients** present in waste flows, and/or to the production of fossil-based fertilisers.
4. **Replication of the 5 experimental pilots in different contexts** at the EU level, but also internationally, with the consequent expectation of encouraging new policies and initiatives in nutrient recycling and manure management.

In the long-term, FERTIMANURE will contribute to the development of new business models that are synergetic with other economic sectors and will, therefore, create wealth and high-quality jobs in rural areas.

3. Partners involved: In this section we wanted to give a quick overview of each partner involved in the project. We will do so by showing a short description of each enterprise and its role in the project as the example below*:

1. UVIC [Barcelona – Spain]

About:

The Technological Centre for Biodiversity, Ecology and Environmental Technology (BETA Tech Centre) at the University of Vic – Central University of Catalonia (UVIC-UCC), aims to improve competitiveness and technological development in companies through R&D projects at local, state, European and international levels by developing and transferring innovative and competitive technology with sustainable criteria to the food, waste, and environmental sectors. <http://betatechcenter.com/>

Role:



UVIC is the coordinator of the project and the lead in its day-to-day management. As such, it insures the liaison between the consortium and the EC. UVIC is also the Sustainability Assessment (WP5) lead under which environmental, techno-economic and social assessment will be carried out. In addition UVIC is highly involved in WP2, being the body responsible for the Spanish pilot study, and in WP4, managing one of the field demo sites.

*this is just one example, but the same was done for the rest of the partners.

4. **News and Documentation:** In this section we want to publish the different communication and dissemination material that will be created during the duration of the project like:
- Press releases
 - Project leaflet(s)
 - Posters
 - Videos
 - Deliverables – the ones that are public
 - Related papers

We are still in the stage of developing some of the material mentioned previously, so none of these will be available for now on the website.

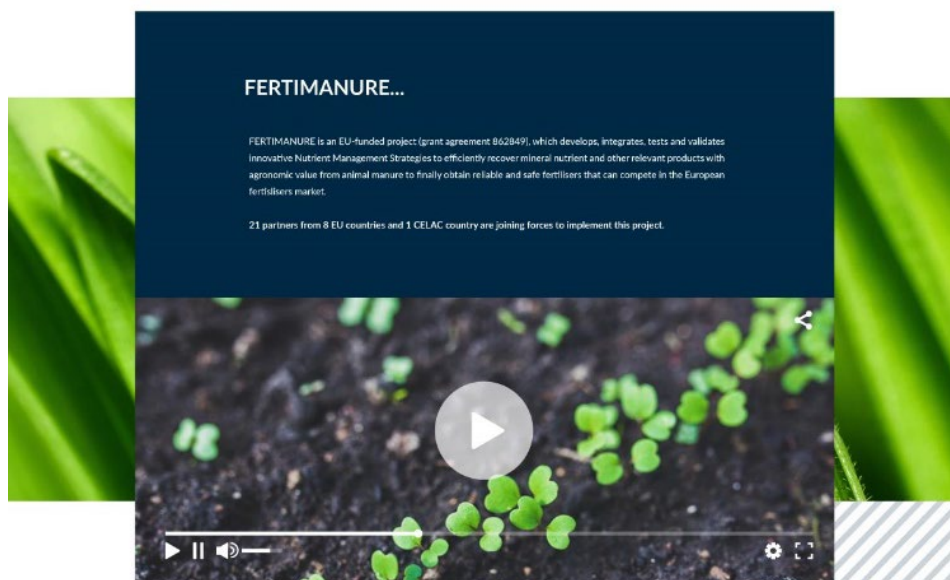


Figure 2. FERTIMANURE website video

On the main page of the website there is a short explanation regarding what the project is about, the number of partners and the grant agreement number. Also, there will be a vulgarising short video showcasing FERTIMANURE. This video will be developed in English with Spanish subtitles during the first year of the project.

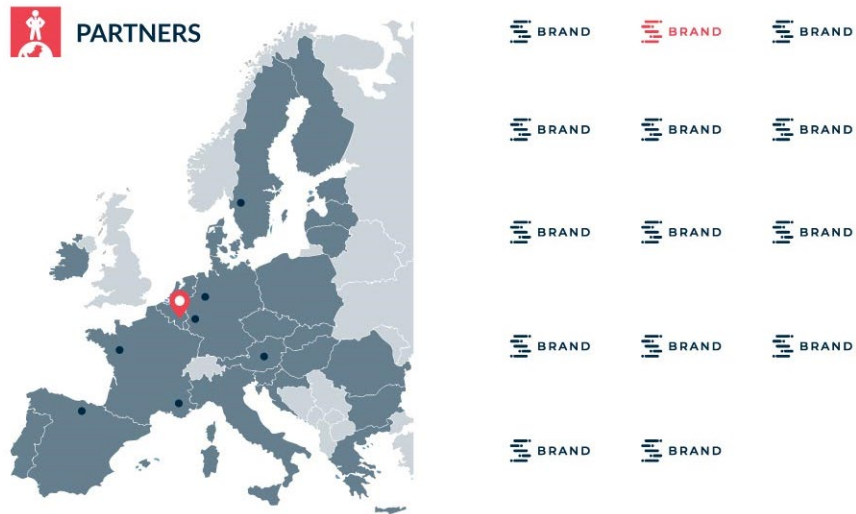


Figure 3. FERTIMANURE interactive map

The interactive map will display the location of each project partner as one clicks on its name, from the list on the right side of the map. Each partner will be briefly described (with logo displayed) as one clicks through its names.

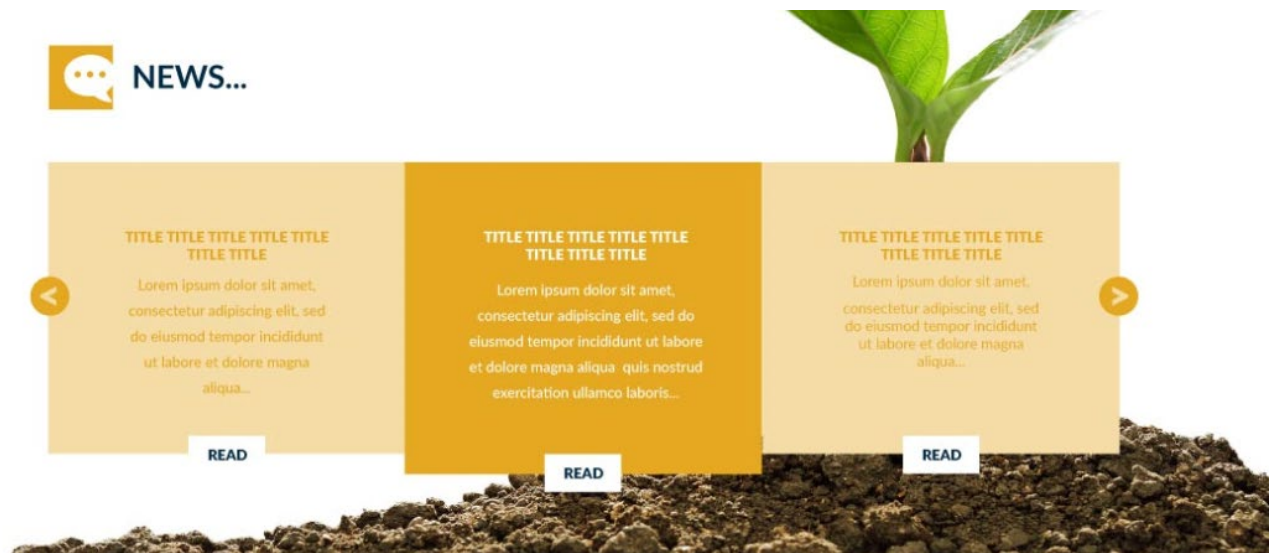


Figure 4. FERTIMANURE latest new roundabout

This part of the website will provide the visitors with a roundabout of the most recent and important news shared on the project website. This will allow the visitors of the website to interact more with it and to clearly identify some of the important news they might have missed.

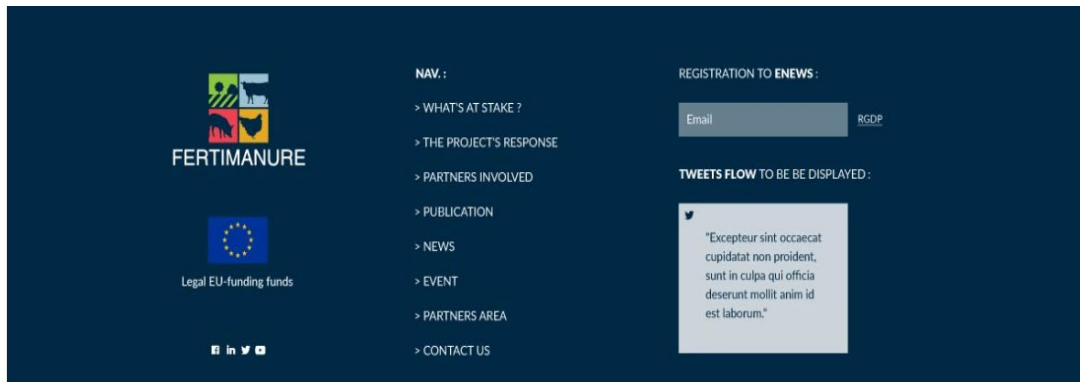
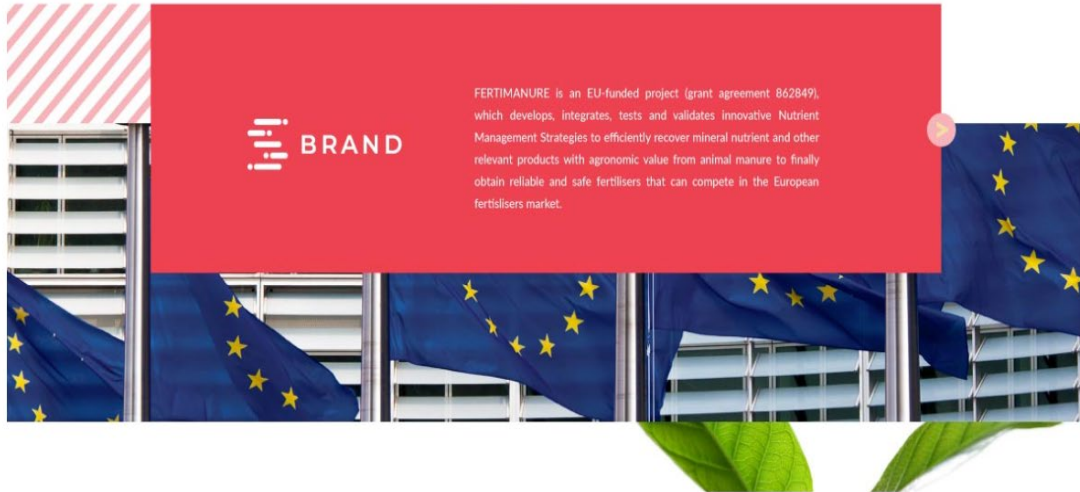


Figure 5. FERTIMANURE EU legal funding

At the end of the website we have the EU flag with the EU legal funding phrase: This project has received funding from the EU Horizon 2020 Research and Innovation Programme under grant agreement No. 862849.