

D7.1 Clustering activities with sister projects [1]

Global 2000

30/03/2023



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List of Abbreviations & Definitions

Abbreviation	Definition
AGROINS	Agroinsider
AGROVAST	AGROVÄST LIVSMEDEL AB
AI	Artificial Intelligence
AKIS	Agricultural Knowledge and Innovation Systems
AOP	Agroecological and Organic Practices
APEMETA	Portuguese Association of Environmental Technologies Companies
CAP	Common Agricultural Policy
CDTA	Centro de demostración y transferencia agraria El Mirador
CERTH	Centre for Research and Technology Hellas
D	Deliverable
DSS	Decision support system
DST	Digital and Space Based Technologies
EU	European Union
F2F	Farm-to-Fork
Fertinagro	Fertinagro Biotech S.L.
FLW	Food Loss and Waste
GD	Green Deal
GD-SO	Green Deal Support Office
GLOBAL	Global 2000 Environmental Research Institute
H2020	Horizon 2020
IKH	IknowHow
loT	Internet of Things
LCA	Life Cycle Analysis
М	Month
Neoalgae	Neoalgae Micro Seaweed Products SLNE
SEVT	Federation of Hellenic Food Industries
SID	Sidroco Holdings LTD
STAM	STAM SRL
STRATA	Stratagem Energy LTD
Т	Task
TelLab	T.E. Laboratories Limited
Tilamur	Jardinería y Viveros la Noria S.L.
TRI	Trilateral Research LTD
UTH	Panepistimio Thessalias - Department of Agriculture Crop Production
	and Rural Environment of the University of Thessaly
WG	Working Group
WP	Work Package

Executive Summary

The present document constitutes Deliverable (D) 7.1, showing the efforts of Global 2000 and the PestNu consortium members to cluster and collaborate with other relevant projects. This deliverable includes, among others, the organisation and participation in collaborative activities with projects of the same Horizon 2020 (H2020) call, as well as with other similar and complementary EU and national projects and within the Food Working Group (WG) in support of the Green Deal Support Office (GD-SO).

PestNu follows the aim to join forces with other projects and stakeholders, to support a sustainable transition of the food sector, while avoiding duplication of effort. Therefore collaboration with other related projects is of great importance. PestNu currently has 19 collaboration contracts signed with similar and complementary European Union (EU) and national projects, while being in close contact with their representatives. PestNu organised several clustering meetings in person and online, participated in other projects' and common events and initiated bilateral collaborative actions, such as common demonstration activities and dissemination work.

Task (T) 7.1 leaders are in close contact with sister projects from the same Horizon call (LC-GD-6-1-2020). PestNu, as part of the Food Working Group (WG), participated in the meetings and activities of the Green Deal Support Office, as well as in the creation and execution of a common Action Plan. PestNu successfully led the activity of *Mapping common drivers and barriers during project implementation*, by developing a methodology and organising meetings with the involved projects. Further PestNu is taking part in the activities of *Mapping common stakeholders* and *Mapping future events* until the next Food WG meeting in May 2023.

The first PestNu clustering event with 27 EU and national projects took place in Thessaloniki, Greece in July 2022. Building upon that, a PestNu organised another clustering workshop specifically on biopesticide and Integrated Pest Management (IPM) took place in February 2023, where 18 representatives of eight different projects took part in discussing common drivers and barriers and defining future activities for enhancing biocontrol and IPM. For the following project term (M19-36), PestNu will specifically focus on project synergies based on demonstration activities, in order to widen the individual project outreach and demonstrate its innovations under diverse conditions.

This deliverable is a living document associated with Task 7.1 and it will be updated on M36 of the project's duration, and submitted by GLOBAL2000 as D7.1.

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1.Introduction

1.1 PestNu Project Overview

<u>PestNu</u> is an EU funded Horizon 2020 Green Deal project, running from October 2021 until September 2024, aiming to reduce the dependence on hazardous pesticides and the losses of nutrients of the fertilisers, towards zero pollution of water, soil and air and ultimately fertiliser use, and increase food safety and affordability for all.

The project targets the field-testing and demonstration of Digital and space-based technologies (DST) and Agro-ecological and organic practices (AOP) under a systemic approach to reduce the pesticides and fertilisers use, and loss of nutrients. All the DST will be interconnected to a user-centric cloud-based farm management system, which features a robust Decision support system (DSS) integrated with a blockchain based system for DST data evidence, and Artificial Intelligence (AI) models verification and with a cybersecurity platform to prevent cyber-attacks and Internet of Things (IoT) vulnerabilities. The showcase systemic DST & AOP solutions will be demonstrated and tested in aquaponic and hydroponic greenhouse and open-field vegetable cultivation in Greece and Spain. A pesticide reduction program will evaluate the maximum residue and acceptable daily intake levels to ensure vegetable's food safety and Life Cycle Analysis (LCA) activities will be performed. All these systemic approaches will be performed under a strong collaboration among all the Farm to Fork stakeholders and European Commission services.

Work package (WP) 7 targets the Cooperation with European Commission services, other EU and national projects, as well as the coordination with policy makers and operational groups. WP7 creates a relevant basis for effective policy recommendations, communication, dissemination and exploitation of project results and therefore allows to make the most out of the work and effort of the consortia and the investment in the project. For a project like PestNu, aiming at the development of useful tools to contribute to the EU Green Deal and the Farm2Fork Strategy, collaborative activities are very important, since they will influence the potential exploitation of results and the success of project activities. Collaborative activities with other thematically relevant projects, agencies, platforms and collaboration in regards to relevant policies, strongly increase the range of influence of individual projects. An exchange regarding new innovations and research is essential to avoid duplication of work and learn from each other. Also barriers are more effectively tackled in collaboration with stakeholders and other projects facing similar issues.

1.2 Purpose and scope of this deliverable

This deliverable resumes the work done under T7.1. This task's aim is to identify synergies with other projects funded under the same Horizon 2020 call: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (LC-GD-6-1-2020) with different subtopics all aiming to accelerate the transition to sustainable food systems. Further, it is of relevance to collaborate with projects working towards the same Green Deal goals in regards to the reduction of hazardous pesticides and fertiliser use, in order to coordinate efforts and reach the maximum uptake of sustainable solutions. Through the creation of collaboration channels for sharing information and creating a basis for developing common policy recommendations, communication and dissemination activities are essential to the project

success. This kind of collaboration will enable more easy approach to stakeholders, such as potential users and investors.

1.3 Structure of this document

This document is structured in an "Introduction" which encompasses a brief PestNu project overview, the purpose of this deliverable and a document structure. Further under Section 2 *Collaboration with projects from the same Horizon call (LC-GD-6-1-2020)* all meetings and clustering activities, as well as the GD-SO action plan are described. Under Section 3 *Collaboration with other EU and national projects,* the communication and events organised with other thematically relevant projects is evaluated. This section includes the PestNu organised hybrid clustering workshop in Greece as well as the online clustering workshop on biopesticides and IPM. Next, Section 4 resumes *PestNu's partners contributions.* Lastly, further steps and a conclusion are given in Sections 5 and 6, respectively.

2. Collaboration with same Horizon call (LC-GD-6-1-2020) projects and within the Food Working Group

PestNu has been in close collaboration with sister projects from the same Horizon 2020 call: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (<u>LC-GD-6-1-2020</u>), under different subtopics. The seven sister projects focus on different sectors and aspects of the food value chain, with the common aim of reshaping the food sector to support a sustainable transition towards a climate resilient, low-carbon, zero waste future.

PestNu Sister projects are the following:

1. ClieNFarms (Climate Neutral Farms)

This project works towards supporting the transition to climate resilient agriculture and aims to contribute to achieving climate-neutrality of EU agriculture by 2050, through demonstrating, evaluating and improving organisational, technical, and financial innovative solutions at farm level.

2. NeoGiant (The power of grape extracts)

NeoGiant develops natural antimicrobial and antioxidant products from extracts of white grape marc, to be used for all kinds of livestock and fish, supporting the reduction of antibiotics in farmed animals.

3. <u>SchoolFood4Change</u> (Shifting school meals and schools into a new paradigm by addressing public health and territorial, social and environmental resilience)

This project aims to make school meals more environmentally sustainable and healthy for the children through the whole school food approach, namely more vegetables, lentils, nuts and diversity on the plate.

4. <u>SISTERS</u> (Systemic Innovations for a Sustainable Reduction of European Food Wastage)

SISTERS aims to reduce food loss and food waste along the different stages of the food value chain in Europe, promoting more direct sales, new technological innovations and awareness campaigns for consumers and retailers, among others.

5. ZeroW (Systemic innovations towards a zero food waste supply chain)

This project also tackles food loss and waste by developing and testing innovative solutions through living labs at the different stages from post-harvest to consumption. Commercial and digital instruments are developed to contribute to food waste reduction targets.

6. ENOUGH (European food chain supply to reduce GHG emissions by 2050)

ENOUGH project works towards demonstrating promising technological solutions for reducing greenhouse gas emissions and achieving climate neutrality for food businesses within the main areas of the food chain from harvest to consumption, such as processing, transport and retail.

2.1. PestNu organised Kick-off meetings with same call projects

PestNu initiated and organised several clustering meetings inviting all sister projects, as well as bilateral meetings with some of the sister projects, such as ZeroW and ENOUGH. PestNu suggested collaboration in different areas, although it was difficult to find common ground and most projects did initially not express any interest or did not reply to the request. This could be due to most of them still being in an early project stage, there might be more chances for collaboration in later project stages. Collaboration with some of these projects was later enhanced by the creation of the Food Working Group (WG), supported by the Green Deal Support Office (GD-SO). PestNu actively participated in the meetings, activities and Action Plan of the Food WG. All these meetings and activities are described in detail below and an overview can be found under **Table 1**.

Meeting date	Participating projects	Aim of the meeting
May 16th, 2022	<u>ClieNFarms,NeoGiant,</u> <u>SchoolFood4Change,</u> <u>SISTERS, ZeroW</u> PestNu	getting to know each other
May 16th, 2022	<u>ENOUGH, PestNu</u>	getting to know each other, common demonstration activities and dissemination
July 19th, 2022	ZeroW PestNu	exploring collaboration possibilities regarding digital vision/ AI satellite imaging for crop monitoring

Table 1: PestNu initiated Kick-off meetings with projects from the same Horizon call

2.1.1. Kick-off meeting May 16th, 2022

Scope

The first meeting of sister projects took place online on May 16th 2022 and was initiated by PestNu with the intent to get to know other projects of the same Green Deal call: *Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (LC-GD-6-1-2020)*. The agenda of the meeting was prepared in collaboration with SchoolFood4Change and ZeroW. The aim was for projects to present themselves and identify potential areas of collaboration that are of interest to each project, in order to find common ground for collaboration. All seven sister projects, namely <u>ClieNFarms</u>, <u>NeoGiant</u>, <u>SchoolFood4Change</u>, <u>SISTERS</u>, <u>ZeroW</u>, <u>ENOUGH</u> and <u>PestNu</u>, were invited and, except for ENOUGH, representatives of each project were able to join, as it can be seen in **Table 2**. Therefore PestNu and ENOUGH agreed on a bilateral meeting later that day.

	Table 2: A	le 2: Attendees of sister projects kick-off meeting (16th of May 2022)		
	Proje	ct Name	Project Representatives	
ClieNEarm	c		le envee Erie, Deniel Zimmer, Levrene Lehelt	

•	
<u>ClieNFarms</u>	Jacques Eric, Daniel Zimmer, Laurene Lebelt
<u>NeoGiant</u>	Marta Lores, Nuria Valdes
SchoolFood4Change	Ambre de Simone
<u>SISTERS</u>	Carolina Penalva, Frederica Grassi
PestNu	Ria Pechlivani, Katharina Hoisl, Hanna Zamernik, Maria Zafiropoulou
ZeroW	Anna George, Angele Tasse

Outcomes

<u>ClieNFarms</u> expressed an interest in creating joint policy recommendations as well as sharing data from LCA. Additionally an emphasis was put on working together regarding the integration of different environmental aspects, connecting different sectors of the value chain and raising awareness and supporting social valorization in agriculture. Potential collaboration areas with <u>NeoGiant</u> from PestNu side was in food safety. <u>SchoolFood4Change</u> mentioned interest in joint dissemination activities, policy briefs and social media campaigns. With the <u>SISTERS</u> project a collaboration opportunity in the field of organic farming and potentially aquaponics was mentioned. <u>ZeroW</u> mentioned an area of collaboration in digital vision/ remote sensors/ AI satellite imaging for agricultural anomalies monitoring. ZeroW shared that they have a living lab focusing on novel remote sensing solutions for accurate crop monitoring, fruit ripeness assessment & yield estimation and their openness to collaborate in demonstration sites. The importance of mapping the right stakeholders was additionally stated.

PestNu put emphasis on the collaboration possibility and creation of synergies through its digital platform for agro advisory and business services, aiming in the maximization of its overall impact. This tool could be used by sister projects for uploading best practices and training material. Overall it was agreed that all projects see possibilities for collaboration and are interested in following up on it.

2.1.2. PestNu bilateral meetings with Sister projects

PestNu followed up with requests for bilateral collaboration with some of the sister. It was attempted to find commonalities and overlapping themes, such as the use of each other's innovations during field trials, comparison of products, common communication and dissemination activities and participation to events. Ideally both projects can benefit from such a bilateral collaboration, by increasing its outreach or testing an innovation under different conditions for instance.

• ZeroW and PestNu meeting

Scope

On 19th of July 2022 PestNu partners Global 2000, CERTH and Agroinsider had a first bilateral collaboration meeting with ZeroW partner ALF (Agrifood Lithuania DHI), with the aim to brainstorm collaboration possibilities regarding digital vision/ AI satellite imaging for crop monitoring through exchange of knowledge and the use of each others demonstration sites.

Outcomes

It turned out that in the scope of the project ZeroW technologies will be used in greenhouses but could potentially also be applied in open fields (at least an area bigger than one ha), while in PestNu, AgroInsider technologies can exclusively be used in open fields. Still, the possibility was left open for Tilamur/ UTH greenhouses to be used as a demonstration site for ZeroW SILL3. Demonstrations of technologies could be at the end of 2023/ beginning of 2024.

• ENOUGH and PestNu meeting

Scope

On 16th of May 2022, after the first getting to know with all other Sister projects, PestNu had a separate meeting with ENOUGH, where ENOUGH and PestNu representatives presented themselves and their projects and spoke about collaboration opportunities regarding integrated energy sensors and smart data systems. Projects also discussed collaboration in regards to policy briefs and creating a common website for all sister projects.

Outcomes

The idea of PestNu Partner Masoutis, as a retailer, becoming a demonstrator of the GHG emission reduction technologies of ENOUGH was elaborated, although it was not a priority for ENOUGH to find more demonstrators at this point of the project. The possibility was left open for future collaboration in this regard. The possibility of doing a workshop on technology roadmaps for retailers, as well as participating in relevant events together was elaborated, such as the ICR 2023 in Paris.

2.2. Participation in sister projects and GD-SO workshops and events

2.2.1. SISTERS webinar series

PestNu has been actively participating in the workshop series on Food loss and food waste (FLW) organised by <u>SAFE Food Advocacy Europe</u>, as part of <u>SISTERS</u> project. Three workshops have happened so far, as can be seen in **table 3**, two of them on primary production. Twelve more webinars are to follow in the next few years.

W	orkshop date	Торіс	Participating organisations	Content
Ju	ıly 13th, 2022	Introduction	SAFE, Global 2000, CETENMA, KTH, Innovarum Archa, ENCO	Presentation of projects, relevant EU legislation on FLW
Oct	ober 6th, 2022	Primary production	SAFE, AITIIP, Innovarum, KTH, ENCO, BMS, FEM, ARCHA, Coldiretti, Legacoop, ICLEI, IFOAM, CETENMA, Global 2000, CTIC-CITA, STRATAGEM, IIFIIR	Discussion of different approaches to tackle FLW at production level and EU level
Jan	uary 31st 2023	Primary production	SAFE, Global 2000, KTH, Innovarum, Q Plan, Ypard Albania,	Sister Project updates, project presentations and discussion on short value chains

Table 3: Sisters webinar series on FLW

2.2.2. ClieNFarms workshop

On **8th of July 2022** PestNu participated in a workshop organised by ClieNFarms, with the topic of climate neutral farming while ensuring food security in the context of the war in Ukraine.

The Horizon 2020 project ClieNFarms is running since January 2022 and has been testing solutions for climate neutral farms. IFOAM Organics Europe is a project partner, by whom the workshop was organised.

Participants

Speakers

- Jacques-Eric Bergez, INRAE, ClieNFarms coordinator
- Alexander Müller, TMG Think Tank for Sustainability
- Nathalie Bolduc, Research Fellow, IDDRI

Panelists in the policy debate

- Herwig Ranner, Unit Environmental Sustainability, DG Agriculture and Rural
 Development
- Eric Gall, Deputy Director, IFOAM Organics Europe
- Patrick Pagani, Senior Policy Advisor, COPA-COGECA
- Célia Nyssens, Senior Policy Officer for Agriculture and Food systems, EEB

Moderators

- Daniel Zimmer, Climate-KIC
- Bram Moeskops, Research & Innovation Manager, IFOAM Organics Europe

Outcomes

Fertiliser import from Russia is very high and fossil fuel based fertiliser production is not sustainable. Short term solutions need to be integrated in transformation strategy. We need to share food and machinery and move away from meat consumption. Further we need a change to agroecological practises. Productivity will certainly decrease in business as usual. Agroecology can foster resiliency and productivity. Food security is about distribution!

Our food system is full of interests, also involved in the CAP! We need to provide a comprehensive solution. The EU has to make a strong call for an integrated comprehensive solution.

2.2.3 Webinar on the Network of Multipliers

On **December 19th, 2022** PestNu participated in a webinar on the network of multipliers, organised by Matthew Collings.

Outcomes

Updates on most recent GDSO activities, communications, materials and website and current status of the network.

- Overview of work carried out by the different working groups during the first year and the main conclusions emerging from their action plans.
- Mapping the networks' interests and priorities.
- Updates on planned future activities.

2.2.4 GD-SO Non-Public Online Workshop - Dialogue on selected European Green Deal Policy Priorities

The online workshop **Dialogue on selected European Green Deal Policy Priorities** took place on **12**th **January 2023 from 9:30 to 13:00** (CET time). It was organised by the Green Deal Support Office (GDSO) in collaboration with DG RTD and other European Commission's services.

Objective

The main objective of the workshop is to provide information about the Commission's policy priorities related to the implementation of the European Green Deal and to outline the ways in which projects funded by the Green Deal Call can contribute to the implementation of these policies. Further aim is to enable project coordinators to have an open discussion with the policy officers and to gain a better understanding of the possible ways their project results can feed into the Commission's policy

processes. Projects were welcome to join different breakout rooms depending on their interest and relevance for their project. PestNu actively participated in the roundtables on Food, Climate and Health.

2.3. Food Working Group Meetings

2.3.1. First meeting on May 31st 2022

Scope

The first Food WG meeting on 31st of May 2022 (9.00-12.00 CET) was promoted by the Green Deal Support Office (GD-SO). The Food WG includes nine projects from two different Green Deal Calls: *Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (LC-GD-6-1-2020)* and *Demonstration of systemic solutions for the territorial deployment of the circular economy (LC-GD-3-2-2020)*. These H2020 projects have in common the focus on reshaping the food sector through supporting a sustainable transition and circular economy towards a climate resilient, low-carbon, zero waste future through research and innovation.

The Food WG has the aim to increase collaboration, create synergies and enhance the impact of projects, through promoting exchange, networking and common actions among WG members. Before the first WG meeting, a Microsoft Teams channel was created by the GD-SO in order to share information between projects and to store useful information for communication and dissemination activities.

Structure

This clustering meeting started with an introduction to the work of the GD-SO and how they will support the Food WG in their collaborative activities. Afterwards, a representative of each project (Agro2Circular, ClieNFarms, ENOUGH, NeoGiANT, PestNu, SchoolFood4Change, and ZeroW) held a short presentation, describing their project objectives, the different WP and potential interesting areas of collaboration. Commonalities between projects WPs were identified, with a focus on finding synergies in the area of policy recommendations. The meeting was followed up with two parallel sessions named "Policy" and "Dissemination and exploitation of project results".

Outcomes

PestNu participated in the "Policy" parallel session, where an effort was made to map and identify different EU policy initiatives to which different projects are expected to contribute to and which are of interest to various projects in order to be able to provide common policy recommendations. A clear timeline and milestones still needed to be defined.

In the parallel session on dissemination and exploitation of project results, maximising synergies by finding ways to stay updated about each other's activities were discussed, as well as ways to share results among stakeholders. The GD-SO offered to help by preparing an excel template with information about social media/ events/ websites of the Food working groups projects, as well as a list with contact details from project coordinators and WP leaders.

After the parallel sessions, everyone returned to the plenary session and the outputs of the parallel sessions were presented and discussed, further steps and the action plan to be developed were briefly discussed.

2.3.2. Second Food WG Meeting (Nov 15th, 2022) and the GD-SO Action Plan

Scope

On November 15th, 2022 a second Food WG meeting took place, where representatives of the GD-SO gave updates and all projects commonly agreed on specifications for the Action plan and actions happening March 2023.

The Action Plan is a living document aiming to record the WG members' collaboration activities and actions implemented in different areas, such as policy recommendations, communication, dissemination and exploitation activities, among others. The Action Plan is meant to be monitored by the Food WG facilitators and updated during WG meetings, taking place biannually. The Action Plan was developed and first shared by the GDSO in August 2022, based on the outcomes and discussions of the first Food WG meeting on May 31st 2022 and the Board of Coordinators meeting on June 22nd 2022.

In parallel to the Action Plan, a survey was shared with all Food WG members and other project partners in order to identify focus areas and actions of interest among the projects in the Food WG. The results were shared and included in the Action Plan. On the second Food WG meeting the Action Plan was specified and three actions were commonly decided upon between the projects which were present.

Outcomes

The focus on the following three action was commonly decided during the WG meeting.

- Action 1.1. Monitoring policy updates and developments
- Action 2.1 Mapping of commonalities
 - activity of mapping common stakeholders (PestNU participation)
 - activity of mapping common drivers and barriers (PestNu lead)
- Action 3.1 Participation in Future Events
 - activity of mapping future events (PestNu participation)

PestNu had the lead in the activity of **Mapping common drivers and barriers** during project implementation, which will further be elaborated under section **2.4.1** of this document. Further PestNu participated in the activity of **Mapping common stakeholders** and **Mapping future events**, by attending meeting and contributing to the shared templates on the Teams channel.

2.4.1. Action Plan - Activity of Mapping common drivers and barriers (PestNu Lead)

Aim & Scope of this action

Mapping of common drivers and barriers is part of the Action 2.1. Mapping of commonalities between projects. For the purpose of this mapping an excel sheet was created, where each project was able to fill in and categorise identified topics, drivers and barriers within their project implementation. Afterwards a worksheet was created, where common drivers and barriers were listed. A previous meeting took place where the structure of the mapping and questions by projects were discussed. During the meeting on February 23rd, 2023 identified common drivers and barriers were discussed more in detail. Some screenshots of the meeting shown Figure 1 and Figure 2. are in

Participants

Table 4 shows all participating projects and their representatives in the meeting on February 23rd, 2023.

Table 4: Attendees on meeting for mapping common drivers and barriers

Attending projects	Names of project representatives
PestNu	Katharina Hoisl, Franziska Nittinger, Rita Silva, Maria Zafeiropoulou, Ria Pechlivani
NeoGiant	Iciar Serrano
ENOUGH	Hanne Dalsvag
Agro2Circular	Jerome Friedrichs, Fuensanta Monzo
ZeroW	Vivien Frank, Antoine D'haese
ClieNFarms	Laurene Lebelt
SISTERS	Frederica Grassi, Antoine D'haese

(Excused for this meeting: Ilsa Phillips and Ulrika Backlund from SchoolFood4Change)



Figure 1: Online meeting on February 23rd, 2023 for mapping common drivers and barriers

Figure 1 Online meeting on February 23rd, 2023 for mapping common drivers and barriers

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is Mapping should reflect drivers and barriers during proj					ears).	5				~				🔏 Rita Barros Silva (
							_			_				B.C. S. See Market Street
Identified topics, drivers and barriers during project implementation	Driver/ Barrier	Thematic area	Political Level	Further comments/ specification	s PestNu	ClieNFarms	ENOUGH	ZeroW	SF4C	NeoGiant	Agro2Circular			
				Policy makers, farmers, agricultural										
Difficulty to reach certain stakeholders	BARRER	Adoption of products/ tools	Local/User level	workers, vulnerable groups, International stakeholders,	×				×	x	x			
Training programmes and labelling for circular economy products	DRIVER	Training & Knowledge Exchange	European level		×						x			🔏 Laurène Lebelt - I
Farmers sceptisism regarding benefits and economic advantages of														
new upcycled/ recycled products from food waste	BARRER	Adoption of products/ tools	Logar User level		×						×			35
ack of regulations supporting the enhancement of more sustainable circular economy products	BARRER	Business & Economy	European level		×						×			100
EU Next Generation Funds for sustainable digital technologies	DRIVER	Business & Economy	European level		×		×							
Missing economic feasibility of alternative FLW valorisation process	DARRER	Business & Economy	European Jevel	Difficulty fitting into current supply chains, scalability and				v						🔏 Vivien Franck
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	Change NeoG	ant Agro2Circular Comm	on drivers & barrier	+										

Figure 2: Online meeting on February 23rd, 2023 for common drivers and barriers in shared Excel

Figure 2 Online meeting on February 23rd, 2023 for common drivers and barriers in shared Excel

Outcomes/ identified drivers and barriers

1. *Difficulty to reach certain stakeholders (eg. policy makers)* (BARRIER)

Most relevant barrier identified by most projects is the "difficulty of reaching certain stakeholders", including policy makers, international stakeholders, farmers, agricultural workers, vulnerable groups etc. Projects are interested in commonly defining possible pathways to overcome this barrier. One idea was to ask GD-SO for support in reaching policy makers through the Food WG.

Next steps could be building common policy recommendations and organising workshops where such policy recommendations are shared with DG officers for instance.

Further, the involvement of stakeholders such as industry through the identification of best actors & initiatives for cooperating with, such as with the promoters of activities (ex. annual meetings) of the <u>EU code of conduct</u>, as a voluntary commitment, was discussed.

2. Exploring new (common) ways of dissemination of results to actually create an impact (such as digital repositories, EU farm book,...) (DRIVER)

This driver was identified during the meeting as relevant for most projects.

3. Farmers scepticism regarding benefits and economic advantages of new upcycled/ recycled products from food waste (BARRIER)

Agro2Circular project mentioned problems with policy makers at regional and national level regarding waste management in Spain. There is no clear definition of a waste product /secondary raw material, which represents a problem, since waste management constitutes a highly regulated activity and, as far as some can perceive, it can be considered a source of risk to human health. Some regulations could then be tree-mapped as well as the way they impact our projects and events could be prepared, dedicated to regional or European stakeholders regarding this topic.

Identified topics, drivers and barriers during project implementation	Driver/ Barrier	Thematic area	Political Level	Further comments/ specifications	PestNu	ClieNF arms	NOUG	ZeroW	SF4C		Agro2 Circul ar
Difficulty to reach certain stakeholders	BARRIER	Adoption of products/ tools	Local/ User level	Policy makers, farmers, agricultural workers, vulnerable groups, international stakeholders, (ask GDSO for support to reach policy makers)	x	x		x	x	x	x
Training programmes and labelling for circular economy products	DRIVER	iining & Knowledge Exchar	European level		x						x
Farmers sceptisism regarding benefits and economic advantages of new upcycled/ recycled products from food waste	BARRIER	Adoption of products/ tools	Local/ User level		x						x
Lack of regulations supporting the enhancement of more sustainable circular economy products	BARRIER	Business & Economy	European level	New food initiative identified need for labelling sustainable food productswait and see if it meets our expectations	x						x
EU Next Generation Funds for sustainable digital technologies	DRIVER	Business & Economy	European level		x		x				
Missing economic feasibility of alternative FLW valorisation process	BARRIER	Business & Economy	European level	Difficulty fitting into current supply chains, scalability and competitiveness of new circular economy innovations is an issue				x			x
Exploring new ways of dissemination of results to actually create an impact (such as digital repositories, EU farm book,)	DRIVER	ining & Knowledge Exchar	European level	Common format for delivering results?	x	x					
Involvement with EU code of conduct (eg. their meetings,)	DRIVER	Business & Economy	European level	ask GDSO for support							

Figure 3: Shared template of common drivers and barriers with projects stating their involvement in each of them

Identified topics, drivers and barriers during project implementation	Driver/ Barrier	Thematic area	Political Level	Further comments/ specifications
Difficulty to reach certain stakeholders	BARRIER	Adoption of products/ tools	Local/ User level	Policy makers, farmers, agricultural workers, vulnerable groups, international stakeholders, (ask GDSO for support to reach policy makers)
Training programmes and labelling for circular economy products	DRIVER	Training & Knowledge Exchange	European level	
Farmers sceptisism regarding benefits and economic advantages of new upcycled/ recycled products from food waste	BARRIER	Adoption of products/ tools	Local/ User level	
Lack of regulations supporting the enhancement of more sustainable circular economy products	BARRIER	Business & Economy	European level	New food initiative identified need for labelling sustainable food productswait and see if it meets our expectations
EU Next Generation Funds for sustainable digital technologies	DRIVER	Business & Economy	European level	
Missing economic feasibility of alternative FLW valorisation process	BARRIER	Business & Economy	European level	Difficulty fitting into current supply chains, scalability and competitiveness of new circular economy innovations is an issue
Exploring new ways of dissemination of results to actually create an impact (such as digital repositories, EU farm book,)	DRIVER	Training & Knowledge Exchange	European level	Common format for delivering results?
Involvement with EU code of conduct (eg. their meetings,)	DRIVER	Business & Economy	European level	ask GDSO for support

Figure 4: Shared excel with identified common drivers and barriers

Next steps

• all involved projects will revise the common excel document and the tab of **common drivers** and barriers and make adaptations if needed

- barriers and drivers will be grouped and most relevant ones chosen
- potentially another meeting in the following weeks together with GDSO should take place to discuss how they can support us
- EU Next Generation Funds ENOUGH can share more information on this with PestNu and the other projects

3. Collaboration with other EU and national projects

3.1 PestNu collaboration contract

The **PestNu Clustering Form** has been sent to more than 30 relevant EU Projects and so far it has been signed by 19 projects with whom a close exchange has taken place. Those projects are shown in **table 5**.

N	Acronym	Project name	Coordinating Organisation	Duration
1	<u>AgriHUB</u>	Establishment of a National Agriculture Research and Innovation Hub	Ministry for Agriculture, Fisheries, Food and Animal Rights, Malta	2020 -2023
2	<u>AgroBridges</u>	Building bridges between consumers and producers by supporting short food supply chains through a systemic, holistic, multi-actor approach based Toolbox	Q-PLAN INTERNATIONAL ADVISORS PC, Greece	2021- 2023
3	<u>AgROBOfood</u>	Business-Oriented Support to the European Robotics and Agri-food Sector, towards a network of Digital Innovation Hubs in Robotics	STICHTING WAGENINGEN RESEARCH, Netherlands	2019 - 2023
4	BACCHUS	Smart robotic system for automated harvesting in agriculture	ARISTOTELIO PANEPISTIMIO THESSALONIKIS, Greece	2020- 2023
5	<u>BIOVEXO</u>	Biocontrol of Xylella and its vector in olive trees for integrated pest management	RTDS - VEREIN ZUR FORDERUNG DER KOMMUNIKATION UND VERMITTLUNG VON FORSCHUNG, TECHNOLOGIE UND INNOVATION, Austria	2020 - 2025
6	<u>DIG_IT</u>	A Human-centred Internet of Things	INSTITUTO TECNOLOGICO DE ARAGON, Spain	2020 - 2024

Table 5: Projects who signed the PestNu clustering form/ collaboration contract

		Platform for the Sustainable Digital Mine of the Future		
7	Greensprayer			
8	IPM Decisions	Stepping-up IPM decision support for crop protection	RSK ENVIRONMENT LIMITED, United Kingdom	2019 - 2024
9	<u>NeoGiant</u>	The power of grape extracts: antimicrobial and antioxidant properties to prevent the use of antibiotics in farmed animals	CRETUS - Cross Research in Environmental Technologies	2021 - 2025
10	<u>Novaterra</u>	INTEGRATED NOVEL STRATEGIES FOR REDUCING THE USE AND IMPACT OF PESTICIDES, TOWARDS SUSTAINABLE MEDITERRANEAN VINEYARDS AND OLIVE GROVES	NSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTARIES, Spain	2020 - 2024
11	<u>Ploutos</u>	Data-driven sustainable agri-food value chains	GAIA EPICHEIREIN ANONYMI ETAIREIA PSIFIAKON YPIRESION, Greece	2020 - 2023
12	<u>QuantiFarm</u>	Assessing the impact of digital technology solutions in agriculture in real-life conditions	GAIA EPICHEIREIN ANONYMI ETAIREIA PSIFIAKON YPIRESION, Greece	2022 - 2025
13	<u>SchoolFood4Chan</u> ge	Shifting school meals and schools into a new paradigm by addressing public health and territorial, social and environmental resilience	ICLEI EUROPEAN SECRETARIAT GMBH (ICLEI EUROPASEKRETARIAT GMBH)	2022 - 2025
14	<u>SmartProtect</u>	SMART agriculture for innovative vegetable crop PROTECTion:	INAGRO, PROVINCIAAL EXTERN VERZELFSTANDIGD AGENTSCHAP IN	2020 - 2023

		harnessing advanced methodologies and technologies	PRIVAATRECHTELIJKE VORM VZW, Belgium	
15	<u>SOMIRO</u>	Soft Milli-robots	Soft Milli-robots UPPSALA UNIVERSITET, Sweden	
16	<u>SPRINT</u>	SUSTAINABLE PLANT PROTECTION TRANSITION: A GLOBAL HEALTH APPROACH	WAGENINGEN UNIVERSITY, Netherlands	2020 - 2025
17	<u>SUSFERT</u>	Sustainable multifunctional fertilizer – combining bio- coatings, probiotics and struvite for phosphorus and iron supply	RTDS - VEREIN ZUR FORDERUNG DER KOMMUNIKATION UND VERMITTLUNG VON FORSCHUNG, TECHNOLOGIE UND INNOVATION, Austria	2018 - 2023
18	<u>Virtigation</u>	EMERGING VIRAL DISEASES IN TOMATOES AND CUCURBITS: IMPLEMENTATION OF MITIGATION STRATEGIES FOR DURABLE DISEASE MANAGEMENT	KATHOLIEKE UNIVERSITEIT LEUVEN, Belgium	2021 - 2025
19	Waste4Green	SUSTAINABLE AND GREEN AGRI-WASTE BASED BIOPESTICIDE	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC), Spain	2018 - 2023

An example of a filled out collaboration contract can be seen in **Figure 5** below. All clustering forms are represented in the **Appendix**, at the end of this document. This clustering form has been useful to identify commonalities between projects, areas of interest as well as particular collaborative activities of interest. Depending on the indicated activities, PestNu is putting effort in establishing synergies with the respective project. Overall, most interest has been indicated in terms of:

- Participation in (each other's) workshops/ events
- Organisation of common workshops/ round tables on relevant thematic areas
- Joint policy recommendations
- Joint social media activities for cross dissemination
- Collaboration on projects demonstration sites
- Benchmarking or actions to compare products/ services
- Knowledge exchange/ technical assistance



NETWORKING QUESTIONNAIRE

Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	Date 24.01.2023.	\$\$ Pest∩u
Organisation/Company:	RTDS Group		
Contact person:	Berina Porca,	Phone No.:	068184197029
	D&C Manager	Email:	porca@rtds-group.com
Project name:			
	BIOVEXO Project		
Project web link:	https://biovexo.eu	1/	

1- Do you think that the H2020 Green Deal PestNu project shares any aspect with the project/activity being carried out by your organisation?
✓Yes No
2 If so, indicate the aspects that are common to both projects:
It is a H2020 project
It is related to the same topic: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy
It is related to digital and space based technologies
✓ It is related to agro-ecological practices/ organic farming
It is based on circular economy
\swarrow It aims for chemical pesticide reduction and/or substitution with biopesticides
It aims for reducing loss of nutrients and fertiliser use
□ Other:
3 Which aspect(s) do you find most interesting for establishing an active contact between projects in order to create and develop a partnership?
General outcome of the project and the proposed solutions
Methaodological guides (extraction, environmental risk assessment, formulation)
Field test validations
Environmental awareness raising activities (demonstration activities)
Registration protocols for basic substances
Visits to the experimental fields
Sharing of results and comparing the solutions proposed in your project
Other:

Page 1 of 2

Figure 5: Example of filled out PestNu Clustering Form (page 1)

Pestfu
 4 What future actions do you think the partners of both projects/companies could implement? Participation in (each other's) workshops/ events Organisation of common workshops/ round tables on relevant thematic areas Joint policy recommendations Joint social media activities for cross dissemination Joint press releases Publication of scientific articles Collaboration on projects demonstration sites Benchmarking or actions to compare products/ services Knowledge exchange/ technical assistance Extended training courses Other:
5 Only for projects: Do you authorise us to publish your project logo and web link on the PestNu website and social media?
6 If so, please insert the project logo: BIOVEXO
7. Stamp and signature of authorised person:

Data protection clause:

In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in connection with the H2020 Green Deal PestNu project and our informative work in relation to the activities of the aforementioned project, have been included in an automated file owned by the consortium of the aforementioned project for the purpose of sending information to users requesting information and to participants in the project's activities. The coordinator of the project and its partners guarantee the exercise of the rights of access, rectification, cancellation, and opposition in the terms set out in current legislation, which may be exercised by means of a formal communication to the e-mail address info@pestnu.eu, where you may also withdraw your consent to receiving information on the activities and other services of the H2020 Green Deal PestNu project.

www.pestnu.eu

Page 2 of 2

Figure 6: Example of filled out PestNu Clustering Form (page 2)

3.2 PestNu bilateral collaboration

PestNu has linked many projects we have been in close contact with on its <u>website</u>. During the first 18 months PestNu has had bilateral online and in person meetings, among others with <u>SUSFERT</u>, <u>Virtigation</u>, <u>Ploutos</u>, <u>SmartProtect</u>, <u>Quantifarm</u> and <u>Waste4Green</u>.

Main outcomes of some these meetings are listed below.

• <u>SUSFERT</u>

- common participation to events
- Green Week in May more projects can present themselves under one topic
- organizing a workshop with projects under a specific thematic and having a panel discussion
- invitation to national workshops
- structured communication and dissemination activities (press release, linking on websites..)

<u>Virtigation</u>

- VIRTIGATION possibly testing JOPI in its trials in 2023, pending agreement with industrial project partner Corteva that this doesn't create any commercial issues
- PestNu possibly testing VIRTIGATION products in late 2023/early 2024 in greenhouse (Tilamur) or in open fields (CDTA) in Spain.
- Joint event between both projects in summer 2023, online or possibly in person in Spain/Italy
- Promotion of each other's contents on website/social media channels

• Ploutos/ Quantifarm

- First policy event organised by Ploutos in early June 2023 will take place in Brussels
- Another policy focused event planned together with sister projects at the end of June 2023 in Rome
- Training Greek farmers/ farmers associations: Next Open day of Ploutos in Thessaloniki in May 2023 - main goal: Knowledge sharing and demonstration (disseminating the actual solutions and how this looks in practice to the different actors of the value chain in the region). Possibility to combine forces there with PestNu and bring more people.
- National PestNu workshops
- Exchange regarding policy recommendations
- Masoutis could join Cestquile Patron (<u>https://cestquilepatron.com/</u>) as a real life initiative about a consumer-powered food brand focusing on the sustainability of the agrifood producers - nice business model and involving consumer
- Share logos and link each other on the websites and communicate common activities

SmartProtect

- Upload Smart Protect on the PestNu website on a sister project section
- Invite to PestNu's Workshops
- Common organisation of an event on IPM/ organic farming
- AGENSO sent us some information from their meetings in Portugal and Denmark

Waste4Green

- most interesting topics: promote joint dissemination and training
- o organisation of round tables on registration process (joint position)
- PestNu workshop en of June in Murcia & other PestNu trainings in Spain
- invitation to W4G final event
- holistic approach for solutions for plants global strategy for nutrition, biostimulants and bioprotection taking into account specificity of territory

4. PestNu organised clustering workshops

4.1. PestNu Hybrid Clustering workshop in Thessaloniki, Greece

On July 7th, 2022 from 9.00-17.00 (CET) the first hybrid PestNu Workshop on Clustering Activities was hosted by PestNu coordinating organisation CERTH in Thessaloniki, Greece. 27 different H2020 and other EU projects were presented and/or their representatives took part in one of the three roundtables. An overview of participating projects and their representatives can be seen below in **Table 6**.

Project name	Representing participants name	Organisation
AGREMSO3IL	Fulgencio Contreras	CARM
AGRICORE	Konstantinos Mattas	AUTH
Agro2Circular	Ángel Martínez, Ana Morales	CTNC
agROBOfood	Dimitra Perperidou	WUR
AgroSatAdapt	Patricia Lourenco Diogo Alagador	AgroInsider UEVORA
Algae4Fuel&Aqua	Nikolaos Katsoulas	UTH
AURORAL	Paula Peiró García	Alentejo
BACCHUS	Dimitrios Giakoumis Zoi Doulgeri	CERTH AUTH
<u>CasH</u>	Nikolaos Katsoulas	UTH
<u>ClieNFarms</u>	Laurene Lebelt	Climate-KIC
DIAS	Prof. Sarigiannidis	UOWM
ENOUGH	Ianna Dantas	Uni Göttingen
FoodOASIS	Nikolaos Katsoulas	UTH
<u>Greenspayer</u>	Nikos Frangakis	IKH
MARS	Prof. Sarigiannidis	UOWM
<u>Oenolytics</u>	Nikos Frangakis	IKH
Organic PLUS	Nikolaos Katsoulas	UTH
Precimed	Maria Fernanda Ortuño Gallud	CSIC
SCORPION	Filipe Neves dos Santos	INESCTEC
<u>SISTERS</u>	Carolina Peñalva Lapuente	Fundación AITIIP
<u>SMART</u>	Prof. Sarigiannidis	UOWM
<u>SMARTROOT</u>	Prof. Sarigiannidis	UOWM
<u>TERMINET</u>	Prof. Sarigiannidis	UOWM
<u>VIRTIGATION</u>	Hervé Vanderschuren Kumar Vasudevan	KULEUVEN

Table 6: Projects with their representing participants and organisations in alphabetical order

Project name	Representing participants name	Organisation
WASTE4GREEN	Azucena González Coloma, ICA	CSIS
<u>ZeroW</u>	Angele Tasse, Anna George	ICLEI, Inlecom Systems

The Greek Benaki Pathology Institute (BPI), which has been quite involved in PestNu activities and is a member of the Advisory Board (IAB), presented several other EU projects during their presentation. Some of these running projects, such as <u>FF-IPM</u>, <u>PLANT_B</u>, <u>ZEROPARASITIC</u>, <u>BENEFIT-Med</u>, <u>Clima-Med</u>, <u>Pure AgroH20</u> are thematically relevant for PestNu and show further potential for clustering.

4.1.1 Workshop aims

This clustering workshop was meant to promote exchanges and identify potential synergies of participating European projects, in order to contribute to achieving the Green Deal objectives, such as reducing hazardous pesticide use and nutrient losses from fertilisers.

The aim was also to discuss a broader policy framework regarding the legislations around digital technologies, IPM, INM, organic farming and sustainable product labelling.

4.1.2. Workshop structure

The workshop started with PestNu Project Coordinator Dr. Eleftheria Maria Pechlivani, from CERTH welcoming the participants and giving a short presentation on the Green Deal objectives regarding pesticide and fertiliser use. Afterwards, presentations by PestNu partners and IAB members aimed to give a common framework on the opportunities and challenges throughout the whole F2F stakeholder value chain. Aside from Dr. Pechlivanis' presentation, a few more PestNu consortium partners gave thematic presentations at the workshop.

Dr. Fotini Salta from SEVT of the Greek Cluster presented the European Farm to Fork Strategy and the challenges for the Greek Food Industry.

Austrian Cluster partner representatives Hanna Zamernik and Katharina Hoisl gave a presentation about GLOBAL 2000's fields of work and the connection to the work within PestNu and the Green Deal objectives.

Different running H2020 and other EU project coordinators and task leaders presented their work and afterwards took part in one of the three different roundtables (RT):

- RT1: Agriculture 4.0 (regarding the reduction of pesticides/fertilisers
- RT2: Pesticides free agriculture & Organic Farming
- RT3: Food Wastes

The roundtables focused on the identification of barriers in EU policy for the success of project innovations, commonalities, opportunities in collaboration and possible joint activities for enhancing solutions. A guided tour in the CERTH facilities was also part of the workshop for all participants, who were present in person.

4.1.3. Participants and Presentations

There were 20 representatives from 12 PestNu partner organisations from 6 Country Clusters present at the workshop, as it can be seen in **Table 5**. In the Workshop a total of 21 presentations were given, which are listed in **Table 7**.

Name of organisation	Country Cluster	Name of participant		
Agroinsider	Portugal	Patricia Lourenco		
APEMETA	Portugal	Rita Silva		
APEMETA	Portugal	Leonor Cardoso		
CDTA	Spain	Joaquin Castejon		
CERTH	Greece	Eleftheria Maria Pechlivani		
CERTH	Greece	Christos Zisis		
CERTH	Greece	George Gogos		
CERTH	Greece	Nikolaos Giakoumoglou		
CERTH	Greece	Georgia Lamponikou		
GLOBAL 2000	Austria	Hanna Zamernik		
GLOBAL 2000	Austria	Katharina Hoisl		
ІКН	Greece	Nikos Frangakis		
ІКН	Greece	Spyros Garifallidis		
Masoutis S.A.	Greece	Augustina Gkalitsopoulou		
Neoalgae	Spain	Mario Blanco		
SEVT	Greece	Fotini Salta		
Stamtech	Italy	Giorgia Eranio		
Trilateral Research	England	Irma Poder		
UTH	Greece	Nikolaos Katsoulas,		
UTH	Greece	Sofia Faliagka		

Table 8: Title of presentations in an alphabetical order

Presentation title	Name of presenter	Project / Organisation		
Actions of Benaki Phytopathological	Emilia Markellou	BPI		

Presentation title	Name of presenter	Project / Organisation		
Institute in the frame of the European Green Deal				
AGREMSO3IL - LIFE (2018-2022)	Fulgencio Contrrera	Agremoso3il		
AGRICORE - H2020 (2019-2024)	Konstantinos Mattas	AGRICORE		
Agro2Circular - H2020 (2020-2024)	Angel Martinez	Agro2Circular		
agROBOfood - H2020 (2019-2023)	Dimitra Perperidou Anna Tourtoura	agROBOfood		
AgroSatAdapt – LaCaixa (2018-2022)	Diogo Alagador, Patricia Lourenco	AgroSatAdapt		
AURORAL - H2020 (2021-2024)	Paula Peiro Garcia	AURORAL		
BACCHUS - H2020 (2020-2023)	Dimitrios Giakumis Zoi Doulgeri, AUTH	BACCHUS		
CasH - GR NSRF Greece - Germany bilateral project (2018-2021) FoodOASIS - GR NSRF (2018-2021) Algae4Fuel&Aqua - GR NSRF (2018- 2021) Organic PLUS - H2020 (2018-2022)	Nikolaos Katsoulas	CasH, FoodOASIS, Algae4Fuel&Aqua, Organic PLUS		
Demands, Challenges and Sustainability Goals for the Fertilizer Industry	Agapi Katsoulieri, Dr. Giannakopoulou Fotini	SPEL		
Food market: policy and regulations on residues end customer behavior	Augustina Gkalitsopoulou	Masoutis		
For a world without toxins - 40 years of dedicated work towards a healthy environment	Hanna Zamernik Katharina Hoisl	GLOBAL 2000		
Green Deal objectives on Pesticides and Fertilizers PestNu - H2020 (2021-2024)	Eleftheria Maria Pechlivani	CERTH		
<u>Greenspayer</u> - H2020 (2019-2023), Oenolytics - GR EPAnEK (2021-2023)	Nikos Frangakis	ІКН		
LANDMARC -H2020 (2020-2024)	Jenny Lieu	LANDMARC		
Oenolytics - GR EPAnEK (2021-2023)	Panagiotis Radoglou Grammatikis	TERMINET, SMARTROOT, MAR, DIAS, SMART		
Precimed - PRIMA (2019-2022)	Maria Fernanda Ortuno Gallud	Precimed		
<u>SCORPION</u> - H2020 (2021-2023)	Filipe Neves dos Santos	SCORPION		

Presentation title	Name of presenter	Project / Organisation		
<u>TERMINET</u> - H2020 (2020-2023) <u>SMARTROOT</u> - Erasmus KA2 (2020- 2023) <u>MARS</u> - GR NSRF (2018-2021) DIAS - GR NSRF (2018-2021) <u>SMART</u> - GR NSRF (2020-2023)	Prof. Sarigiannidis	TERMINET, SMARTROOT, MAR, DIAS, SMART		
The European Strategy Farm to Fork and the challenges for the Greek Food Industry	Fotini Salta	SEVT		
<u>VIRTIGATION</u> - H2020 (2021-2025)	Herve Vanderschuren and Kumar Vasudvan	Virtigation		
WASTE4GREEN - LIFE3 (2018-2022)	Azucena Gonzalez Coloma	WASTE4GREEN		

4.1.4. Key findings of the roundtables

RT1: Agriculture 4.0

Participants

- 1. Nikolaos Giakoumoglou (CERTH)
- 2. Dimitra Perperidou (agROBOfood)
- 3. Anna Tourtoura (agROBOfood)
- 4. Sofia Faliagka (UTH)
- 5. Christos Staboulis (Industry)
- 6. Dimitris Natos (AUTh)
- 7. Patricia Lourenco (AgroInsider)

Participants identified the most effective ways for knowledge sharing, such as conferences, papers, publications, common projects, media articles etc. Reported collaboration areas of interest were research, interaction with citizens and stakeholders, as well as demonstration activities and common projects. Participation in AKIS and CAP advisory actions were stated as current activities. Participants agreed that it would be useful to further develop collaboration in terms of tools and knowledge sharing, as well as common training workshops, although often in reality barriers come up, such as a lack of a common framework for collaboration. It could therefore be useful to increase design thinking.

For increasing the inclusion of small and medium-sized farms, the involvement of associations, open calls, events, financial networks, initiatives for ICT democratisation were discussed, among others. For making technical tools generally more available and facilitating their introduction to the market, the following ideas were mentioned: multi stakeholder approaches, consultation and feedback of stakeholders, dissemination between partners, further research to enhance market reach, as well as free pilots, showing results, addressing real problems and empathising with end users.

The tools for training the advisors and farmers were stated by all participants to be free and open. In regards to prices of technologies, a wide range and a difficulty in pricing was concluded. It was agreed by all that mass production can help lower the costs of precision farming innovations.

RT2: Pesticides free agriculture & Organic Farming

Pa	rticipants
1.	Ria Pechlivani (CERTH)
2.	Georgia Lamponikou (CERTH)
3.	Juan José Alarcon (CEBAS-CSIC)
4.	Agapi Katsoulieri (SPEL)
5.	Emilia Markellou (BPI)
6.	Nikolaos (Nikos) Katsoulas (UTH)
7.	Maria Fernanda Ortuno Gallud (CSIC)
8.	Fulgencio Contreras (CARM)
9.	Giorgia Eranio (Stamtech)
10.	Katharina Hoisl (GLOBAL2000)
11.	Mario Blanco (Neoalgae)

EU	Organ	ics	legislation	on	plant	s ha	ving to	grow	on	soil
discuss	ion	by	PestNu	Coordi	nator	and	discussed	by	partic	ipants:
Round	Table 2	2 on p	esticide reducti	on and	organic	farming,	the following	topics w	ere broug	ht into

The EU organics legislation states the condition of plants having to grow in soil to be eligible to be certified as organic. This was mentioned as a barrier for labelling aquaponic and hydroponic vegetables as organic food, which was argued to hinder the lowering of costs. As aquaponic farmers for instance do not use chemical pesticides, the question was raised on what could be done for these regulations to become more flexible and benefit aquaponic and hydroponic farmers. It was mentioned that in regards to aquaponics, different aspects need to be considered for an organic certification, such as fish feed and animal welfare.

The basis of the organics legislation was discussed, namely that healthy soil supports healthy plant development and more resiliency to pathogens. Also the issue with pesticide residues in soil was pointed out as a topic which no one really speaks about and which is not covered by EU legislation. Although there are thresholds for acceptable levels of pesticide residues in water, there are no such rules for pesticide residues in soil. Modelling is used to calculate expected residue levels and compare to actual ones. Pesticide residues and active substances in soil do not necessarily get absorbed by the plants growing in the soil, but its consequences are not well known yet and therefore it is an important issue to consider and look more into.

Many participants highlighted the EU Organic legislation on plants having to grow on soil as a relevant barrier for PestNu innovations, aquaponics and hydroponic growers, and supported the idea of policy recommendations proposing changes in this legislation. It was proposed to work together on this topic with different stakeholders, collecting justifications from a technical and economic perspective, on why soil is not needed, and what procedures can be used in such modern food systems to be certified as organic. Also stressing the argument of what industries producing bio-products could gain from such a change in regulations and presenting a reasonable recommendation at the end of PestNu project. The need to elaborate conditions under which organic organisations, like IFOAM and Copa Cogeca, would be willing to work together on this topic and promoting synergies with them was stated as being vital.

Sustainable

labelling

The lack of labels expressing the overall sustainability of food products was identified as missing. Sustainability encompasses many aspects and therefore the dots from farm to store need to be connected, information combined and the whole process monitored. One project cannot achieve this, it would instead need to be done in collaboration with other projects.

The need to protect regional and national specifications and working on a member state level was highlighted as important, because there are large differences between northern and southern countries.

AKIS and CAP network

RT Participants stated their experience with AKIS and CAP systems and the importance of knowledge transfer and training. A multi-actor approach and early stakeholders' involvement was stressed as being vital for successful innovations.

A qualified transfer service, such as extension services, were mentioned as a good way for knowledge transfer. It was mentioned that the new CAP will give subsidies to growers who can prove that they do something more in regards to sustainability, which will therefore be a motive for farmers to take up IPM (Integrated Pest Management) for instance.

Decreasing organic food prices

Some participants stated that subsidies are useful but shouldn't be the only policy tool in the EU to decrease organic food prices through projects technologies and increasing dissemination of sustainable practices. It would be important to have tools encouraging knowledge transfer, demonstration and training.

Best approaches identified were demonstration sites, workshops in living labs, open days and training activities on the new technologies use. Agricultural consultants and advisers for companies should also be trained for being able to disseminate the information.

It would be important to have a shared database for having access to what is done between the related projects. The possibility of using the digital platform of PestNu for this purpose was mentioned.

Another barrier mentioned in this roundtable was the relatively long and expensive procedures at EU level to put new products on the market, even for bioproducts falling under the category of plant protection products.

RT3: Food Waste

Participants

- 1. Rita Barros Silva (APEMETA, PestNu)
- 2. Leonor Cardoso (APEMETA, PestNu)
- 3. Hanna Zamernik (GLOBAL, PestNu)
- 4. Chris Czisis (CERTH, PestNu)
- 5. Ines Pacheco (GD-SO)
- 6. Laurene Lebelt (ClieNFarms)
- 7. Carolina Penalva (SISTERS)
- 8. Anna George (ZeroW)
- 9. Ana Morales (Agro2Circular)
- 10. Sofía Martnez (Agro2Circular)
- 11. Ianna Dantas (ENOUGH)
- 12. Azucena Gonzales Coloma (WASTE4GREEN)

Most RT3 participants were sister projects from the same call as PestNu and had already met, which allowed for continued and in depth discussion on collaboration possibilities. Present in the roundtable discussion were representatives from the projects ClieNFarms, SISTERS, Agro2Circular, ZeroW, ENOUGH and PestNu. Additionally a representative from the Green Deal Support Office (GD-SO) was taking part, as listed above.

New common barriers identified during the round table were a lack of standardisation of new organic ingredients and extracts, the logistics for sourcing food waste, the lack of business models incorporating waste usage, the length and complexity of the registration of new products produced from waste sources, and the limitations by existing regulations which don't allow for recovering certain types of wastes even though actual technology allows to avoid hazardous molecules and others (eg. the one for animal by-products, not intended for human consumption).

Projects spoke about connecting to AKIS and EIP-AGRI networks, for identifying information needs for a more effective sharing of activities and results. Despite the differences in project topics and goals, many ways of collaboration were identified, such as joint training activities and knowledge transfer on technology use, and the development of joint policy recommendations. Collaboration on demonstration sites/ living labs, new products, guidelines for sustainable labelling etc. Continuing clustering activities, sharing and updating between projects were agreed to be vital.

4.2. PestNu Clustering workshop on Biopesticides and IPM (February 2023)

4.2.1. Workshop scope

The workshop took place on **February 28th 2023, from 13.00 to 16.00 CET**, Online. It aimed to bring together related projects in the area of biopesticides and IPM adoption. Projects got to know each other and discussed already identified common drivers and barriers during project implementation in detail.

4.2.2. Workshop structure

The workshop started with an introduction and six project presentations, followed by a roundtable discussion on relevant, previously identified drivers and barriers, a summary and definition of next steps.

Agenda:	
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	13:00	Welcome & short introduction		
ł	Project presentations			
	13:10	SmartProtect, Sabien Pollet (Inagro)		
	13:25	i <mark>rtigation</mark> , Jasmine Zorrilla (KU Leuven)		
	13:40	PM Decisions & IPM Works, Mark Ramsden (RSK ADAS Ltd)		
	13:55	Vaste4Green, Lucia Martín (ICA-CSIC)		
	14:10	NOVEXO, Stéphane Compant (Austrian Institute of Technology)		
	14:25	5 <u>PestNu</u> , Katharina Hoisl (Global 2000)		
	Round table discussion on identified common barriers			
	14:45	 Topics of discussion Producers lack of trust in new bioproducts and digital tools Need for IT trainings and awareness raising Lack of efficient and organised (national) advisory services Relatively long registration procedures for biopesticides Financial difficulties to adopt new tools/ low willingness to pay for innovations 		
	15:45	Summary and next steps		
	16:00	End of event		

Figure 7: Agenda of the IPM and biopesticide clustering event

4.2.3. Participants and presentations

18 representatives from eight EU projects (<u>PestNu</u>, <u>SmartProtect</u>, <u>Virtigation</u>, <u>Waste4Green</u>, <u>IPM</u> <u>decisions</u>, <u>IPM works</u>, <u>Biovexo</u>, <u>SPRINT</u>) working in the area of biocontrol and integrated pest management actively took part in this workshop. The names and organisations of the participants are shown in **table 9**.

N	Participating project	Duration	Project representative	Organisation
1	<u>PestNu</u>	2021 - 2024	Katharina Hoisl Rita Silva Maria Zafiropoulou	Global 2000 Apemeta Stratagem
2	SmartProtect	2020 - 2023	Sabien Pollet (PCo) Mike Kaminiaris	Inagro Agenso
3	<u>Virtigation</u>	2021 -2025	Jasmine Zorrilla David Donnerer Berina Porca Kumar Vasudevan Carmelo Rapisarda	KU Leuven RTDS Group RTDS Group KU Leuven UNICT
4	<u>Waste4Green</u>	2018 - 2023	Lucía Martín Azucena (PCo) Ana Espejo Maria Fe Andres	ICA-CSIC ICA-CSIC CTAEX ICA-CSIC
5	IPM decisions	2019 - 2024	Mark Ramsden	RSK ADAS Ltd
6	IPM works	2020 - 2024	Mark Ramsden	RSK ADAS Ltd
7	<u>Biovexo</u>	2020 -2025	Mikkael Muegge (PCo) Stéphane Compant	RTDS Group AIT
8	<u>SPRINT</u>	2020 - 2025	Ana Frelih Larsen	Ecologic Institute

Table 9: Participants in clustering workshop on IPM and biopesticides

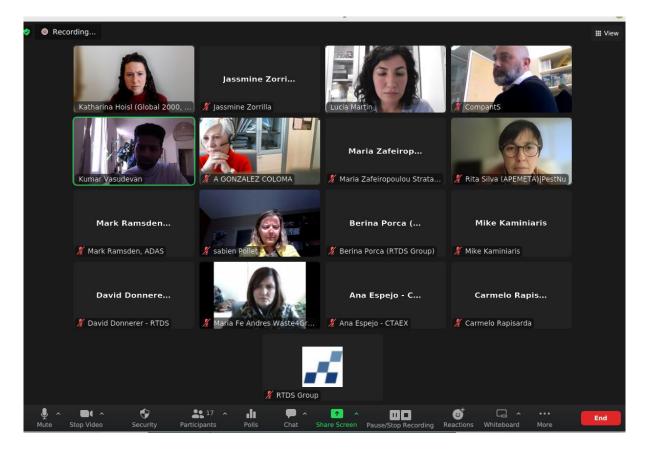


Figure 8: Online clustering event with IPM and biopesticide related projects

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Project overview of <i>Nytello</i> targeting biopesticides with biopesticides combatting the insect vectors, and makes them available for ready use in integrated pest management.		DD David Donnerer - RTDS	<i>₩ 52</i> ¢
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	🖉 Lucía Martín	KV Kumar Vasudevan	<i>₩</i> 🕬
		Lucía Martín	<i>¥</i> □¤
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Figure 9: Online clustering event with IPM and biopesticide related projects (Biovexo presentation)

4.2.4. Key Findings - Common drivers and barriers discussed

- 1. Producers scepticism/ lack of trust in new bioproducts & digital tools (BARRIER)
- Building of trust through demonstrations is important
- slow transition: it takes a long time to demonstrate solutions under different conditions and we need to make sure that in the end there are real solutions people have faith in (advertising is not very effective; we need to move away from polarized attitudes)
- people are risk averse -how can we set up conditions which buffer risks for farmers, in order to make it easier for them to try out new technologies/ tools?
- many farmers are open to new solutions but have high expectations for improvements
- often language barriers exist and content translation for local audience is time consuming but very useful
- Limited internet access in the field is a barrier and a wider infrastructure support should be a priority
- 2. Producers financial difficulties to adopt new tools/ low willingness to pay for innovations (eg. DSS) (BARRIER)
- although there is a general low willingness to pay for innovations, people are simultaneously more likely to trust systems, they are paying for
- Products are often too expensive
- Segmentation of land represents a barrier to technology adoption (eg. Greece). Large farms are more likely to adopt tools.
- 3. Need for more IT trainings and awareness raising, as well as lack of efficient and organised (national) advisory services (BARRIER)
- Good advisory and demonstrations play an important role, since there is still existing lack of knowledge for alternative products and practises
- Public vs. private advisory services (often private and sometimes public ones are dominated by productive and conventional driven advisors, who are not open for alternatives.)
- Bottlenecks to advisory starts in technical schools, where there is a general lack of attention to alternatives to chemicals in the curricula
- In the EU Farm book all project outputs will be collected and the uploaded innovations will hopefully be useful for advisors (It would be great if this became a permanent feature adopted by the EC). Still it will happen later on this decade and for some projects, for sure in their afterlife.

4.	Relatively long	(and expensive)	registration p	procedures for biopes	sticides according to
	Regulation	(EU)	No	1107/2009	(BARRIER)

- Cost of registration for biopesticides are often too high for SMEs; it is the same long process for biopesticides as for chemical products
- IBMA (International biocontrol manufacturers) & DG Sante are working on making registration procedures for biopesticides easier

- 5. Potential increased support from EU directives/ regulations (eg. regulation on Sustainable Use of Plant Protection Products (2021/2115)) (DRIVER)
- It is not clear yet if the EC is going to propose a Sustainable food law
- Important to strengthen farmers' negotiating position in the market & this needs changes in market conditions (eg. shorter supply chains, public procurement for organic...

4.2.5 Next steps and potential activities

Table 10: Potential activities and projects involved

Activity	Specifications	Activity lead	Interested projects
Sharing our tools and platforms internally	Projects like SmartProtect and IPM decisions can show other projects how to best engage with their tools and platforms. Another meeting specifically on this could be organised in April 2023.		SmartProtect, IPM decisions, PestNu
A common event on scientific level with different EU projects on IPM transition	Common target; what is working and what is failing?	BIOVEX O?	PestNu
Collaboration on the registration process of biopesticides	Online meeting to discuss how to collaborate with IBMA and DG Sante on making registration procedures easier/ more efficient for biopesticides	PestNu	PestNu, Biovexo, Waste4Green

Apart from these specified three activities, project events will be shared and other projects invited, as well as linking each other to the website and other dissemination activities.

5. PestNu partner's contributions

Table 11: CERTH PestNu relevant and running projects

Project name Project scope and link to PestNu		Contact Person in PestNu
AURORAL H2020 H2020 DT-2020-1 (2021-2024)	AURORAL focuses on increasing connectivity and delivering a digital environment of smart objects interoperable services platforms able to trigger dynamic rural ecosystems of innovation chains, applications and services. AURORAL adopt a co-design and co- development approach with the intention to deliver a dense network of Smart Communities under a common multi- interoperability framework aimed at succeeding the just, fair and open digital transformation. The AURORAL innovation is demonstrated at large-scale, considering targeted-domain and cross-domain pilots.	CERTH Anastasios Drosou <drosou@iti.gr> Τηλ.: +30 2311 257732</drosou@iti.gr>
BACCHUS H2020 ICT-10-2019 (2020-2023)	Development of modular robotic platform, Robot navigation with quality performance guarantee to inspect the crops and collect data from the agricultural area through embedded sensorial system, additive manufacturing for adjusting the robot parts. Bacchus can assist in auto navigating robots.	CERTH Dimitrios Giakoumis <dgiakoum@iti.gr> Tηλ.: +30 2311 257707 CERTH Dimitrios Tzovaras <dimitrios.tzovaras@iti.gr> Tηλ.: +30 2311 257777</dimitrios.tzovaras@iti.gr></dgiakoum@iti.gr>
SnapEarth H2020 DT-SPACE- 01-EO-2018-2020 (2019-2022)	The SnapEarth project aims to highlight new values through large-scale land-use data services and anticipate future priorities by leveraging artificial intelligence technologies and tools and cloud computing. SnapEarth's major innovation lies in a new data analysis service, EarthSignature, which aims to automatically extract semantic information from satellite imagery. The exported semantic information will be indexed by the QWANT search engine and then made easily accessible to a wide range of user communities. SnapEarth is proposing many pilot projects. The following pilot projects are associated with many land-related markets such as EarthClimate, Agri and Food.	CERTH Anastasios Drosou <drosou@iti.gr> Tηλ.: +30 2311 257732 CERTH Dimitrios Tzovaras <dimitrios.tzovaras@iti.gr> Tηλ.: +30 2311 257777</dimitrios.tzovaras@iti.gr></drosou@iti.gr>

Table 12: APEMETA PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
Dinamizar and	Nationally funded Projects of Training –	APEMETA, Jose Costa,
Formação PME	Action for SMEs.	jose.costa@apemeta.pt
	Main goals are to help around 210 SME	
	from several areas (tourism, industry,	

Project name	Project scope and link to PestNu	Contact Person in PestNu
	Construction, Commerce, etc) to increase resilience and competitiveness. Through training actions on main areas such as Internationalisation, Digital Economy, Innovation, Sustainability and Environmental Responsibility, Management Systems or Industry 4.0, followed by individual SME consulting, entrepreneurs and employees are expected to reinforce their skills and be able to implement effective changes towards increasing competitiveness.	
<u>INJOVEM II -</u> <u>INovação, JOVem,</u> <u>EMpreendedorismo</u>	Nationally funded Project for Collective Support to Youth Eco Entrepreneurship. Main goals are to promote activities with VET students and University students and finalists focusing and addressing the development of soft skills and know-how needed to reinforce qualified entrepreneurship namely on areas such as eco-innovation, sustainability and digitalization in line with current societal challenges; and the incubation and acceleration of at least 30 entrepreneurial ideas throughout individual training and support to business plan development, aiming at the creation of new start-ups on technological and or cultural and creative areas based on knowledge intensive activities that address Green and or Digital challenges and or Sustainable Development Goals.	APEMETA, Jose Costa, jose.costa@apemeta.pt
<u>AMEX III - Ambiente</u> <u>e Exportação</u>	Nationally funded Project for Collective Support to the Internationalisation of the Environmental Sector. Main goals comprise international dissemination of Portuguese Environmental Sector skills and competences, the production of open access technical publications for suppressing knowledge gaps among sector on international environmental markets main characteristics and legislation, as well as the search and maintenance of cooperation protocols with similar entities worldwide for promotion and development of activities reinforcing detection and communication of business opportunities between Portugal and other countries, International contacts or/and the internationalisation of the companies, namely SME.	APEMETA, Jose Costa, jose.costa@apemeta.pt
AMBIPOR III – Ambiente em Portugal III (ongoing, 04/2020- 04/22, POCI-02- 0853-FEDER- 046396)	Nationally funded Project for Collective Support to the Capacitation of the Environmental Sector in Portugal. Main goals comprise the production of open access technical publications for suppressing knowledge gaps among sector, workshops for fostering cooperation and learning/sharing of knowledge on relevant themes and the upgrade of www.ambienteportugal.pt an open access	APEMETA, Jose Costa, jose.costa@apemeta.pt

Project name	Project scope and link to PestNu	Contact Person in PestNu
	directory of Portuguese companies' profiles,	
	projects and interests for fostering	
	cooperation and coopetition.	

Apemeta reached out to the Portuguese organisation <u>INESCTEC</u>, namely <u>TEC4AGRO</u> and talked about similar and complementary projects to PestNu to cluster with. At national level the following similar and complementary projects were identified: <u>InOlive</u>, <u>INFRAVINI</u>, <u>SMARTDRYING</u>, <u>SMART FERTILIZERS</u>.

Similar and complementary EU projects to PestNu identified by Apemeta were <u>SCORPION</u>, <u>NOVATERRA</u>, <u>agROBOfood</u> and <u>SusMedHouse</u>. These projects will further be mentioned under projects of interest for further collaboration.

Additionally, <u>Agrinupes</u> ERA-NET Cofund WaterWorks2015 was also emphasised as relevant, although this project had already ended.

All mentioned running projects were invited by Apemeta to participate in the clustering event in Greece and the projects SCORPION, NOVATERRA and AgROBOfood participated.

Project name	Project scope and link to PestNu	Contact Person in PestNu
CasH GR NSRF (2018-2022)	Cascade Hydroponics an integrated approach to increase productivity, resource use efficiency (water, fertiliser, light, energy) and sustainability of protected horticulture; studies on water scarcity or depletion index, acidification and eutrophication potentials. Synergies at Pilot Greenhouse or UTH facilities.	UTH Nikolaos Katsoulas <nkatsoul@uth.gr> +302421093249</nkatsoul@uth.gr>
<u>Organic PLUS</u> (H2020_SFS-08-2017, 2018-2022)	Pathways to phase-out contentious inputs from organic agriculture in Europe. Synergies at Pilot Greenhouses or UTH facilities.	UTH Nikolaos Katsoulas <nkatsoul@uth.gr> +302421093249</nkatsoul@uth.gr>
FoodOASIS GR NSRF (2018-2022)	Development and optimization of an aquaponic system to increase sustainability in food production. Synergies at Pilot Greenhouses or UTH facilities.	UTH Nikolaos Katsoulas <nkatsoul@uth.gr> +302421093249</nkatsoul@uth.gr>
Algae4Fuel&Aqua GR NSRF (2018-2022)	Exploitation of liquid wastes for microalgae cultivation and use for biodiesel and aquafeed production. Synergies at pilot sites/ UTH facilities.	UTH Nikolaos Katsoulas <nkatsoul@uth.gr> +302421093249</nkatsoul@uth.gr>
<u>Precimed</u>	The main objective of PRECIMED will be to build a data driven irrigation management system in order to improve Water and Nutrient Use Efficiency (WUE and NUE, respectively) in the Mediterranean Region, by integrating the knowledge about fertilisers and irrigation water management with Information Communication Technologies (ICTs), which will be respectful with the environment and socio economically profitable. Synergies at pilot sites/ UTH facilities.	UTH Nikolaos Katsoulas <nkatsoul@uth.gr> +302421093249</nkatsoul@uth.gr>

Table 13: UTH PestNu relevant and running projects

UTH has previously worked closely with some other EU projects at UTH facilities, namely CasH, Organic PLUS, FoodOASIS, Algae4Food&Aqua, and Precimed for the past few years. These projects were also presented during the clustering workshop in Thessaloniki, mentioned above. During these project collaborations, UTH shared and exchanged knowledge and expertise with project partners. Precisely this was done in the fields of precise irrigation and fertilisation management techniques, recirculation of water and nutrients in hydroponics, the utilisation of liquid waste for the cultivation of microalgae for the production of biodiesel and fish feed, as well as aquaponic practices and models for nutrient management.

UTH greenhouses and laboratory facilities were used for most projects trials and demonstrations. The deadline for the previously mentioned running projects is mostly in 2022, with the exception of the Precimed project which will be finalised in 2023.

Table 14: CDTA PestNu relevant and	running projects
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Project name	Project scope and link to PestNu	Contact Person in PestNu
<u>AGREMSO3IL</u> - LIFE	Agrochemical decontamination of farming soils combining in-situ solarisation and ozonisation.	CENTRO DE DEMOSTRACIÓN Y TRANSFERENCIA AGRARIA EL MIRADOR Pedro Mínguez Alcaraz cdtaelmirador@yahoo.es

Table 15:Tilamur PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
B-BLUE	 10 partners from 8 Mediterranean countries, and more than 300 stakeholders, working together, during 22 months, to create the community of actors on Blue Biotechnology in the Mediterranean. The goal is to increase the capacity for innovation and improve coordination in the Biotechnology sector Blue and the Blue Economy. For this, 5 territorial pilot actions will be carried out (Spain, France, Slovenia, Italy and Greece), through parM caNvas Mpo "Living Labs" actions, in order to create 5 territorial communities of actors called BBHubs (for its acronym in English, Blue Biotechnology Hubs) to seek joint solutions that can boost the sector of the Blue Biotechnology in the Mediterranean 	Mariano Vidal, Tilamur, mariano@tilamur.com
EASYTRAIN (2021/2025) Horizont 2020. Marie.Sklodowska- Curie	EASYTRAIN project tackles this challenge by developing innovative aquaculture systems based on the most modern techniques in the field of aquaponics using organic aquaculture feed formulas, which substitutes fishmeal by spirulina and quinoa as filler. EASYTRAIN combines the expertise of 2 academic and 4 industrial partners from Spain, Portugal, the Netherlands and Italy, with complementary expertise in the field of plant and fish farming, feed production, aquaculture	Mariano Vidal, Tilamur, mariano@tilamur.com

Project name	Project scope and link to PestNu	Contact Person in PestNu
	engineering and microalgae biotechnology.The outcome of EASYTRAIN will be 6 researchers with experimental and transferable skills ready to cope with the future challenges of the prospect aquaculture sector.	

Table 16: Agroinsider PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
<u>LANDMARC</u> H2020 (2020-2024)	Considering the land-climate-development interface, LANDMARC aims to assess the impacts of Land-use based MitigationTechnologies (LMTs) as net sinks for greenhouse gas (GHGs) by applying unique mixed-methods approach.	Patrícia Lourenço (patricia@agroinsider.com +351 910 95 22 51)
FORESTECH CO2 Junta de Extremadura, Spain (2021-2022)	Research of new technologies for the evaluation of the decarbonization potential of forests. Pilot line in pine forest, oak groves, bushes and Mediterranean pastures of Extremadura	AgroInsider (sub-contracted) Patrícia Lourenço (patricia@agroinsider.com +351 910 95 22 51)
AgroSatAdapt LaCaixa (2021-2023)	AgroSatAdapt will make use of models that operate multiple remote nature data (satellite and others), varied ecological, climatic, water and socioeconomic data for landscape and integrated characterization of regions dominated by agroforestry activities.	AgroInsider (partner) Vanessa Duarte (vanessa.duarte@agroinside r.com) Patrícia Lourenço (patricia@agroinsider.com +351 910 95 22 51)

Table 17: TRI PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
TechEthos	How can we prioritise ethics and societal values in the design, development and deployment of new and emerging technologies, particularly those with high socio-economic impact? TechEthos addresses the growing ethical challenges and expectations regarding new technologies by: Scanning the technology horizon to identify 3-4 emerging technologies carefully selected by our team for their potential socio- economic impact on our societies and challenging ethical issues; Analysing each of these technologies in terms of ethics, policy and legal implications and societal awareness and acceptance with academia, industry and the general public alike; Enhancing ethical and legal frameworks and operational guidelines to support the research community in integrating ethics concerns and societal values into research protocols and technology design	Irma Poder irma.poder@trilateralresearc h.com
RealDeal -	In a large co-creation exercise, REAL_DEAL	Irma Poder

Project name	Project scope and link to PestNu	Contact Person in PestNu
Reshaping European Advances towards green Leadership Through Deliberative Approaches and Learning	 will develop, test and validate innovative tools and formats to propel deliberative democracy to the next level. It will test its innovations at citizens assemblies for the transition in at least 13 countries. We will scrutinise pan-European formats ranging from digital deliberation through our online platform www.CitizensGreenDeal.eu to inperson processes such as an Assembly for a Gender-Just Green Deal and a pan-European Youth Climate Assembly. REAL_DEAL co-creates a comprehensive protocol for meaningful citizens? participation and deliberation to work towards the objectives of the EGD. It will validate recommendations on how to design such processes and how they can be applied by European institutions, Member States and civil society alike. Gender equality will be embedded into the project?s DNA. It pays specific attention to the leave-no-one-behind principle, fostering the engagement of disenfranchised groups that are disproportionately burdened by environmental damage. REAL_DEAL will develop a new model of environmental citizenship across Europe. 	irma.poder@trilateralresearc h.com
Enhancing Standardisation strategies to integrate innovative technologies for Safety and Security in existing water networks - https://aqua3s.eu/	Access to safe water is essential for human health and wellbeing. The management of drinking-water distribution systems is vital to prevent failures that could result in disease outbreaks and hazardous events. The EU- funded aqua3S project aims to standardise existing sensor technologies complemented by state-of-the-art detection mechanisms for drinking water networks. It will combine complex sensors with videos from unmanned aerial vehicles (UAVs), satellite images and social media observations from citizens reporting low-quality water. This will help create social awareness and promote interactive knowledge transfer. The proposed technical solution is an integrated platform designed to offer a standardised detection system.	Irma Poder irma.poder@trilateralresearc h.com

Table 18: Strata PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
<u>Dig_IT</u> <u>H2020 SC5 (2020-</u> <u>2023)</u>	A Human-centred Internet of Things Platform collects data from sensors at 3 levels: i) human, ii) assets, iii) environment and incorporates both market real time and historical data.	Maria Zafiropoulou <mz@stratagem.com.cy></mz@stratagem.com.cy>
NEFERTITI (H22020)	Innovative photocatalysts integrated in flow photoreactor systems for direct CO2 and H2O conversion into solar fuels.	Maria Zafiropoulou <mz@stratagem.com.cy></mz@stratagem.com.cy>

Project name	Project scope and link to PestNu	Contact Person in PestNu
BLUE FASMA (Interreg MED)	Empowering innovation capacity of SMEs, Maritime Clusters and Network in MED islands and Coastal Areas, to support blue circular economy growth in fishing and aquaculture	Maria Zafiropoulou mz@stratagem.com.cy

Table 19: STAM PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
AGRICORE H2020-RUR-2018-2 (2019-2023)	Agent-based support tool for the development of agriculture policies; Multi- actor approach - computational modelling to simulate farmers' actions as autonomous or collective entities, local to global scales; Al, Big Data, cloud services.	STAM

Table 20:TELLAB PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
Australian Research Council Linkage project LP200200394	Develop robust, sensitive and reliable methods for simultaneous detection of anions and cations post seperation and investigate use of novel materials and analytical column configurations for brackish and freshwater assessment.	TELLAB Dr. Eoin Murray <emurray@tellab.ie> Phone. no. 353599149072</emurray@tellab.ie>

Table 21: SEVT PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
CIRCforBIO / LIFE (2019-2023)	A circular economy system for multi-source biomass conversion to added value products.(https://circforbio.eu/)	PROJECT COORDINATOR: NTUA (www.uest.gr, www.ntua.gr), D.MALAMIS, info@circforbio.eu (SEVT)
NEWFEED / PRIMA (2021-2025)	Turn Food Industry By-products into secondary Feedstuffs via Circular-Economy Schemes (https://newfeed-prima.eu/)	PROJECT COORDINATOR: AZTI (https://www.azti.es/en/), DAVID SAN MARTIN, info@newfeed-prima.eu (SEVT)
FIELDS / ERASMUS+ (2020- 2024)	Addressing the current and Future skIll needs for sustainability, digitalization, and the bio-Economy in AgricuLture: European skills agenDa and Strategy (https://www.erasmus-fields.eu/home/)	PROJECT COORDINATOR: Università degli Studi di Torino, REMIGIO BERRUTO, remigio.berruto@unito.it, (SEVT)
AISkills4CircularTra nstion / ERASMUS+ (2021-2024)	Develop Artificial Intelligence knowledge and skills to support the Circular Transition of agri-food sector	PROJECT COORDINATOR: ASSOCIATION NATIONALE DES INDUSTRIES ALIMENTAIRES (ANIA), FRANCOISE GORGA, fgorga@ania.net, (SEVT)

Table 22: GLOBAL PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
Ökotox FFG (2020-2023)	Based on the ecotoxicological evaluation in Austrian ornamental plant and herb cultivation, alternative crop protection concepts will be developed and new technologies for crop protec-tion will be tested to reduce the use of toxic pesticides. An ecotox pesticide catalogue will be created, which can be used as a basis for future quality guidelines and standards.	GLOBAL 2000 dominik.linhart@global2000. at

Table 23: IKH PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
<u>Greenspayer</u> (Agrobofood) - H2020	GreenSprayer is a robotic solution for preventive 3D spot spraying, based on an autonomous ground robotic platform and an Ai-powered computer vision system attached to an open hardware co-bot arm. The purpose of GreenSprayer is to minimise the use of pesticides and maximise resource efficiency in agricultural production. Greensprayer focuses on autonomous AGV (not running on rails) for Tuta Absoluta detection and spraying. There is strong relation between Greensprayer and PestNu in a) robotics, b) detection, c) precision spraying	Michalis Logothetis (mlogothetis@iknowhow.co m) iKnowHow
Oenolytics "Precision Viticulture 2.0: Democratizing precision viticulture in the EU by providing beyond the state-of-the-art tools and techniques to small professional vinegrowers" (EPAnEK 2014-2020)	Oenolytics is a holistic Precision Viticulture solution including both proximal and UAV- based hyperspectral mapping that will retail at an order of magnitude lower price than its closest competitor, specifically targeting the small EU vineyards. Oenolytics is dealing with a multispectral camera for recognizing how healthy are vineyards. The MS camera knowhow can be transferred to PestNu	Nikos Frangakis (nfrangakis@iknowhow.com) iKnowHow

Table 24: Neoalgae PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
ALGAR-BBE	Microalgae with aromatic plants as	NEOALGAE
LIFE (2019-2023)	biostimulants and biofertilizers with biocide	María Alvarez
	effect; new, sustainable & economical	<malvarez@neoalgae.es></malvarez@neoalgae.es>
	extraction processes; enzymatic biocatalytic	Telefono: +34 984041266
	processes	

Project name	Project scope and link to PestNu	Contact Person in PestNu
SEA2LAND	Producing advanced bio-based fertilisers	Herminia De La Varga
H2020-EU.3.2	from fisheries wastes, based on circular	<herminia.delavarga@tervali< th=""></herminia.delavarga@tervali<>
<u>(2021-2024)</u>	economy model. (H2020-RUR-2020-1)	s.com>
BIOSCHAMP H2020-	Producing advanced bio-based fertilisers	Herminia De La Varga
EU.3.2.1.1	from fisheries wastes, based on circular	<herminia.delavarga@tervali< th=""></herminia.delavarga@tervali<>
<u>(2020-2024)</u>	economy model. (H2020-RUR-2020-1)	s.com>
FERTIMANURE	Innovative nutrient recovery from secondary	Herminia De La Varga
H2020-EU.3.2	sources – Production of high-added value	<herminia.delavarga@tervali< th=""></herminia.delavarga@tervali<>
<u>(2020-2023)</u>	FERTIlisers from animal MANURE	s.com>
EMBRACED	Establishing a Multi-purpose Biorefinery for	Herminia De La Varga
H2020-EU3.2.6	the Recycling of the organic content of AHP	<herminia.delavarga@tervali< th=""></herminia.delavarga@tervali<>
<u>(2017-2023)</u>	waste in a Circular Economy Domain	s.com>

Table 25: Fertinagro PestNu relevant and running projects

Table 26: SID PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
<u>TERMINET</u> H2020 ICT-56-2020 (2020 – 2023)	Develop a novel Next Generation Smart Interconnected IoT-driven decentralised and distributed blockchain framework to simplify the connection of a vast number of different devices through a flexible SDN-enabled middleware layer for smart farming etc	SID
SMARTROOT Erasmus KA2 (KA203) (2020 - 2023)	The aim of the SmartROOT (Smart faRming innOvatiOn Training) project is to prepare a new Joint Master Degree program in the field of Mixed Farming Systems (MFS) by introducing user-friendly ICT tools to improve the resilience of agriculture to climate change. The objectives include the cultivation of a network between Europe's Higher Education Institutes (HEIs) and the agricultural sector and the familiarisation of farmers and stakeholders with ICT tools that can greatly enhance their business.	SID

Table 27: Agrovast PestNu relevant and running projects

Project name	Project scope and link to PestNu	Contact Person in PestNu
SmartAgriHubs H2020 (2018-2022)	Connecting the dots to unleash the innovation potential for digital transformation of the European agri-food sector (H2020- RUR-2018-1)	AGROVAST
Site specific weed control - EIP-Agri (2018-2022)	The aim of the project is to develop tools for site specific application of herbicides in cereals using images captured by UAVs.	AGROVAST
Oper8	Promotion of alternative weed control measures to ensure reduction in herbicide use.	AGROVAST

7. Conclusion and next steps

In the first 18 months PestNu has been in close contact with projects from the same Horizon call: *Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy (LC-GD-6-1-2020)* and participated in many activities of the GD-SO. The specific tasks of the Green Deal Support Office (GD-SO) Action plan have been worked on together with the other involved project representatives. PestNu joined common events, kickoff-meetings and efforts were made to establish bilateral collaboration with same call projects and other similar and complementary projects to PestNu, in particular the ones where PestNu partners or IAB members are participating in or have connections to.

Two larger clustering workshops organised by PestNu have taken place with the aim to enhance exchange between thematically relevant projects and create a promising base for further activities. A clustering event organised by PestNu took place in Thessaloniki, Greece, where 27 different projects were presented and representatives of those projects took part in one of the three round table discussions. This event successfully enabled a basis for collaboration with other thematically relevant projects. Building on this first clustering event, another event with 8 relevant projects in the area of IPM and biopesticides took place in February 2023 with the aim to elaborate common drivers and barriers, as well as defining further collaborative activities to enhance IPM and biopesticide adoption.

Many pathways for future collaboration were found, covering some of the main areas in PestNu: DST, AOP, demonstration sites, joint policy recommendations and joint communication and dissemination activities. So far many clustering possibilities have been discussed and PestNu will further invite and participate in other projects events as well as commonly participate in public ones. Actions have been specified with some related projects, such as participation in each other's events, training activities, and working on policy recommendations. The next project period will be used for carrying out activities that were agreed on, as well as intensifying collaboration and defining common drivers and barriers and policy recommendations with other projects. There is a big potential to use PestNu's rich network with all the already identified projects, as well as consortium partners and LOI members connections with other relevant projects. In the coming project term, PestNu will focus on collaboration on demonstration sites in order to widen the individual project outreach and demonstrate its innovations under diverse conditions.

In the next term Global 2000 will assist consortium partners in establishing useful synergies and collaboration activities with projects they are already linked with. Global 2000 as Task 7.1 leader, will further work on elaborating and acting upon common drivers and barriers together with the other projects in the area of IPM and biopesticides, which can further be translated into common policy recommendations. Further effort within the Action plan of the Food WG will be put in. There will be an emphasis on planning follow up clustering workshops, as well as bilateral collaboration with projects in terms of training activities and collaboration on demonstration sites, together with related PestNu project partners.

Appendices

	Pestfu	anding overline	• • •
	NETWORKING QUESTIONNAI	RE	Other: Exploring the real-world applications of PestNu R&I within the local small hold small scale farming scenario.
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Date Clustering Activities 15/02/202:	B Pest∩u	4What future actions do you think the partners of both projects/companies could implement Varticipation in (each other's) workshops/ events
Organisation/Company:	Agriculture Directorate – Minis Animal rights, Malta	try for Agriculture, Fisheries and	Organisation of common workshops/ round tables on relevant thematic areas
Contact person:	Stephen Joseph Phone No.: Giuliano Email:	22924112 3535 51, joseph dulians (1930, m)	Publication of scientific articles Collaboration on projects demonstration sites
Project name:	AgriHub Project		✓ Knowledge exchange/ technical assistance
Project web link:	https://agrikoltura.gov.mt/en/ag	ricultural_directorate/Pages/	Extended training courses
	agribub.aspx		✓ Other: <u>Future Consortia</u>
support of the Farr It is related to digit It is related to agro	same topic: Testing and demonstrati m-to-Fork Strategy (a) and space based technologies hecological practices/ organic farmin I pesticide reduction and/or substit	ng	Agriculture Research & Innovation Hub
	Pest Management and Precision Agr ou find most interesting for establ		
projects in order to create	and develop a partnership?		
✔ Methodological gu	of the project and the proposed solu ides (extraction, environmental risk areness raising activities (demonstra mental fields	assessment, formulation)	Data protection cluse: In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us connection with the H0200 Green Deal PestMu project and our informative work in relation to the activities aforementioned project, have been included in an automated file owned by the consortium of the aforementioned pro the purpose of sending information to users requesting information and to participants in the project's activity coordinator of the project and its partners guarantee the exercise of the rights of acces, rectification, cancellait opposition in the terms set unit normer legislation, which may be exercised by means of a formal communication to the
			address introfficeptiques, where you may also withdraw your consent to receiving information on the activities an services of the H2020 Green Deal PestNa project.

Appendix 1: Collaboration contract with AgriHub Project

Appendix 2: Collaboration contract with AgROBOfood project

	NETWORKI	NG QUESTIONNA	IRE	_
Project: H2020 LC-GD-6-1-2020 (subtonic C), GA no. 101037128	Activity Clustering Activities	Date 20.01.23	Pest∩u	
Arganisation/Company:		DR	AXIS	
Contact person:	Dimitra Perperidoy	Phone No.: Email:	dperperid ou@dravis.gr	
Project pame:		50.90		
Project web link:	agROBOfood https://agrobo	food.ev/		
 It is a H2020 project It is related to the sisupport of the Farm It is related to digita It is related to agro- 	ame topic: Testi + to-Fork Strateg al and space bas ecological pract	y ed technologies	ng systemic innovations in	
 It is a H2020 project It is related to the si support of the Farm It is related to digita 	ame topic: Testi + to-Fork Strateg al and space bas ecological pract ar economy pesticide reduct	ng and demonstrati Sy ed technologies ices/ organic farmii tion and/or substiti	ng systemic innovations in ng	

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ê și și e sectifică Pest/fui e sectifică
4 What future actions do you think the partners of both projects/companies could implement? Participation in (each other s) workshops/ events Using policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint policy recommon workshops/ round tables on relevant thematic areas Joint social media activities for cross dissemination Joint press releases Publication of scientific articles Sept0034Ubs of 3000 to compare products/ services Joovleade sectores/ tables assesse Joovleade sectores/ tables assesse Joovleade sectores/ tables assesse Zept04: Setter:
5 Only for projects Do you authorize us to publish your project logo and web link on the PestNuwebste and social media? No 6 If so, please insert the project logo: agRO BO food
7. Stamp and signature of <u>supportsed</u> person: <u>Dipitre Berpetidey</u>
Data protection clause : In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in connection with the H2020 Green Deal PestNa protect and our informative work in relation to the activities of the aforementioned protect. have been included in an automated file owned by the consortium of the aforementioned project for the purpose of sending information to users requesting information and to participants in the project's activities. The conditional of the project and the partners guarantee the exercise of the information consolitation, cancellation, and opposition in the term set out in current legislation, which may be exercised by means of a formal communication to the e-mail datases <u>information</u> , where you may also withdraw your consent to receiving information on the activities and other services of the H2020 Green Deal PestNa project.

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Appendix 4: Collaboration contract with BACCHUS project

1	\$ PestΩu NETWORKIN	Reserve Ven Long	Æ	L	4 What future actions do you think the partners of both projects/companies could implement? Participation in death other?) workshops/ revents Grangiaging of common workshops/ round tables on relevant them atic areas
Bojet: H2020 LC-GD-6-1-20; (subtopic C), GA no. 101037128 Drabistion/Sources; Sortest person:	Activities	Date Sity of Lhessaloriki Phone No.:	+30 2310 996377		Joint policy recommendations Joint policy recommendations Joint social media activities for cross dissemination <u>Jeint press releases</u> Publication of scientific articles <u>Collaboration on points demonstration sites</u> Sectorosticities statistics <u>Sectorosticities statistics</u> <u>Konvoledies exchanges (scholic) assistance</u> Extended statistics googles
Project name:	BACCHUS	Email:	dimeast@ece.auth.gr	-	
Project web link:	bacchus-proied	.eu			5 - Only for projects: Do you gutgotise us to publish your project logo and web link on the PestMuwebste and social media? Yes $N_{\rm D}$
It is related to display the second of th	to-ecological praction iular economy cal pesticide reduction ng loss of nutrients :	tes/organic famin	a on with biopesticides		7. Stamp and signature of subgriggd person:
projects in order to creat	e and develop a par of the project and guides (extraction, e	tnership? the proposed solut	ning an active contact betweer ions issessment, formulation)		Exils Dimens
Environmental as Registration prot Visits to the expe Sharing of results Query:	vareness raising acti ocols for basic subst rimental fields and comparing the	ances			The percent with the provisions of the D&B Protection Act, we inform you that the personal data you have provided us with in connection with the HO2D2 Green Deal Percentar project and our informative work in relation to the activities of the documentioned project, have then included in an automated the owned by the consortium of the adversemitioned project for the purpose of sending information to are requesting information and to perturbation in the project's schedule. The conditionation of the project and its particulars in the project's schedule. The conditional of the project and the provide greater the exercise the rights of access, reschedules, cancellation, and oparition in the term as do in current legislation, which may be exercised by means of formal communication to the email address support greaters and activities and other services of the H2D20 Green Deal PestNa project.
			Page 1 of 2		Rage 2 of 2

Appendix 5: Collaboration contract with Biovexo project

	<mark>ຮູ້ຮູ້ຮູ້</mark> Pestflu	z filma terrene Unio Funda for Reserve & Incention		\$ \$ \$ \$ \$ \$ PestDu PestDu PestDu
	NETWORKING	G QUESTIONNAIR	E	4 What future actions do you think the partners of both projects/companies could implement? Participation in (each other's) workshops/ events
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	Date 24.01.2023.	⋭ ⋭ Pest∩u	 Organisation of common workshops/round tables on relevant thematic areas Joint policy recommendations Joint to coll media activities for cross dissemination Joint press releases Publication of scientific articles
Organisation/Company:	RTDS Group			Collaboration on projects demonstration sites Benchmarking or actions to compare products/ services
Contact person:	Berina Porca, D&C Manager	Phone No.: Email:	068184197029 porca@rtds-group.com	Knowledge exchange/ technical assistance Extended training courses
Project name:	BIOVEXO Project			□ Other:
Project web link:	https://biovexo.	eu/		5 Only for projects: Do you authorise us to publish your project logo and web link on the PestNu website and social media? ✓ec = 100 km s
the Farm-to-Fork St tis related to digita tis related to agro- tis related to agro- tis based on circul tis based on circul tis ims for chemical tis tims for reducing	t ame topic: Testing rategy al and space based ecological practice ar economy pesticide reductio	and demonstrating technologies is/ organic farming n and/or substitutio	systemic innovations in support of on with biopesticides	BIOVEXO .
Other: 3 Which aspect(s) do you in order to create and deve GV General outcome o	lop a partnership?		an active contact between projects	Jores B.
	uides (extraction, e s reness raising activ ols for basic substa nental fields	nvironmental risk a rities (demonstratio inces	ssessment, formulation) n activities)	Data protection dawse: In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in accordance with the HXDXX Of each Data Practice protection act, we inform the work in indication to the activities of the adversembled project, have been included in an automated life active work by the consoling of the adversemble project for the pupped simplifying that are repeating information and up unitigates in the project's schröders. The conditions of the project and its purchase puscesses of the register access, we clicitation, consoling and public project schröders, and public public project and a pupped public public public access, we clicitation, consoling and public public the terms set out in convert lightation, which may be executed by provides of a formation communication to the evaluations on the activities and other services of the HXDXD former boar heating project.
	www	pestnu.eu	Page 1 of 2	Page 2 of 2 www.pestru.eu

Appendix 6: Collaboration contract with Dig_IT project

	Pest∩u	for Research & Innexation			Pest∩u		
	NETWORKING	G QUESTIONNAIRE	E		future actions do you think the p		anies could implement?
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	Date	Pest∩u	O X ol □	articipation in (each other's) wor rganisation of common works int policy recommendations int social media activities for cro int press releases	shops/ round tables on releva	ant thematic areas
Organisation/Company:	Institu	ito Tecnológico de /	Aragón (ITAINNOVA)		ublication of scientific articles ollaboration on projects demons	stration sites	
Contact person:	María García Camprubí	Phone No.: Email:	mmgarcia@itainnova.es	□ Be □ Kr	enchmarking or actions to comp nowledge exchange/ technical as	are products/ services	
Project name:	Dig_IT				ctended training courses ther:The field in	common_is digitalization	n of primary secto
Project web link:	https://digit-h202	20.eu/					
the Farm-to-Fork St	ect same topic: Testing a trategy	and demonstrating	systemic innovations in support of	Ξ Yes	please insert the project logo:		
X It is a H2020 proje It is related to the s the Farm-to-Fork St X It is related to dig It is related to agro It is based on circul It is based on circul It aims for chemical It aims for reducing Other:Digitaliza	ect same topic: Testing a trategy ital and space bass -ecological practices lar economy I pesticide reductior gloss of nutrients an	n to both projects: and demonstrating sed technologies s/ organic farming n and/or substitutic nd fertiliser use			blease insert the project logo:		
X It is a H2020 project It is related to the s the Farm-to-Fort XS X It is related to digi It is related to digi It is abad on circul It is abad on circul It is abad on circul It is not reducing Otherigitalias optimization 3 Which aspect() do you in order to create and deve General outcome o X Methodological up Field etx validation	ct iame topic: Testing i trategy Ital and space basi- ecclogical practices ar economy I pesticide reductior (loss of nutrients an tition of primary sect infind most interesting? if the project and the hiddes (extraction, en- ts	and to both projects: and demonstrating used technologies s/ organic farming an and/or substitutic dfertiliser use stor. Environmental ming for establishing ne proposed solution environmental risk	on with biopesticides i risk assessment, natural resource an active contact between projects ns « assessment, formulation)	6 If so, p 7. Stamp The Proje	and signature of authorised per Finado ect Coordinator	o por GARCIA CAMPRUBI MARIA MO 023 con un certificado emitido por AC I	ENMT Usuarios
X It is a H2020 project It is related to the s the Farm-to-FortS X X It is related to a fig It is related to a fig It is related to a fig Otherit for cheurica Otherit for cheurica 3 With aspect(s) do you In order to create and dev General outcome o X Methodological gy	ct ame topic: Testing <i>i</i> trategy tal and space base ecological practices ar economy l pesticid reduction (s loss of nutrients an tition of primary sect) find most interestit elop a partnership? find most interest find most interest the project and th uides (extraction, e s remess raising activi cols for basic substar mental fields	and to both projects: and demonstrating sed technologies y organic farming an and/or substitution of fortiliser use tore. Environmental ing for establishing environmental risk itties (demonstration necs	In with biopesticides I risk assessment, natural resource an active contact between project: ns assessment, formulation) n activities)	6 If so, p	and signature of authorised per Emails ext Coordinator	por GARCIA CAMPRUBI MARIA MO 223 con un certificado emitido por AC 1 , we inform you that the personal data y dive work in relation to the activities of 1 diorementioned enjoict for the purpose of coordinator of the project and its partner set do thi current legislation, which m	FNMT Usuarios ou have provided us with in connect the aforementioned project, have be sending information to users request s guarantee the exercise of the rights ray be exercised by means of a forr

Appendix 7: Collaboration contract with GreenSprayer project

the second	Image: Second
NETWORKING QUESTIONNAIRE	
ÉCOLECT: Activity Date: 1/2/20 1.CGD-6-1-2020 Ugsterjing: (subjeging) Ga ne. 101037128 Pestflu	4What future actions do you think the partners of both projects/companies could implement? Companies could implement? Company of commands and the could be active
Oreanisetico/Socoeany: IKponyHory SA	Joint social media activities for cross dissemination
Contact person: Anselik Plaitou Phone No.: 0030-2106041425 Email: aplaitou@iknowbox.com	 Problemation of sciencific analise Subsection of sciencific sciences sciences
Project parte:	Benchmarking or actions to compare products/ services
Project web link: -	Extended training courses Other:
Do you think that the H0000 Green Deal PestNu project shares any aspect with the project/activity being carried out by your gragitation? Yes No 2- If so, indicate the aspects that are common to both projects:	S. Only for projects: Do you <u>subjouts</u> us to publish your project logo and web link on the PestNuwebsite and social media? No Solution Solutio
It is a H2020 project It is related to digital and space based technologies It is related to aggregological practices/ organic farming It is based on circular economy It aims for reducing loss of nutrients and fortilizer use It aims for reducing loss of nutrients and fortilizer use It aims for reducing loss of nutrients and fortilizer use It aims for reducing loss of nutrients and fortilizer use	PROJECT LOGO TO BE UPLOADED TO H2020 GREEN DEAL PESTNU PROJECT WEBSITE
	7. Stamp and signature of <u>authorized</u> person:
3. Which expect(s) do you find most interesting for establishing an active contact between projects in order to create and develop a partnerstip? Methodological guides (extraction, environmental risk assessment, formulation) Registration protocols for basic substances Sharing of results and comparing the solutions proposed inyour project Other:	Data protection classe : In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in connection with the H2020 Green Deal Pachta project and our informative work in relation to the activities of the adversementioned project, have been included as a automated the owned by the constraint of the adversementioned project, the purpose of sending information to the requesting information and to participants in the project's activities. The coordinator of the project and the partners purpose the exercise of the regulation of access, restlication, cuncelation, and opposition in the terms of a out in current legistion, which may be exercised by means of a
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	Pest∩u	Herser203 Dispara Usus Finaling Ar Texas 1 & Incontor		Pest Nu	
	NETWORKIN	G QUESTIONNAIR	E	4 What future actions do you think the partners of both projects/companies could imple Participation in (each other's) workshops/ events X Organisation of common workshops/ round tables on relevant thematic areas	
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	-Date 8-2-2023	Pest∩u	X Joint policy recommendations X Joint social media activities for cross dissemination Joint press releases Publication of scientific articles Collaboration on projects demonstration sites	50
Organisation/Company:	Delphy			 Benchmarking or actions to compare products/ services Knowledge exchange/ technical assistance 	
Contact person:	Harm Brinks	Phone No.:	+31620423895	Extended training courses	
Project name:		Email:	h.brinks@delphy.nl	□ Other:	
Project web link:	IPM Decisions Ipmdecisons.net	t and		5 Only for projects: Do you authorise us to publish your project logo and web link on t	
riojeci web ank;	pinuecisons.net	t and		5 Unity for projects: Do you authorise us to publish your project logo and web link on t website and social media?	the PestNi
				Ξ Yes € No	
of the Farm-to-Fork S X It is related to digita	t me topic: Testing trategy I and space basi	ed technologies	g systemic innovations in suppor		
X It is related to the sa of the Farm-to-Fork S	t me topic: Testing trategy I and space basi ecological practice ir economy pesticide reduct	g and demonstratin ed technologies es/ organic farming ion and/or substitu		PAGE DECISIONS	
X It is related to the sa of the Farm-to-Fork S X It is related to digita It is related to agro- It is based on circula X It aims for chemical It aims for reducing Other:	t me topic: Testing trategy I and space bass ecological practice reconomy pesticide reduct loss of nutrients a pesticide reduct loss of nutrients a find most interest find most interest find most interest find most interest the project and les (extraction, en s eness raising activ Is for basic substa rental fields	a and demonstration ed technologies es/ organic farming ion and/or substitu nd fertiliser use ling for establishing. the proposed solut vironmental risk assi rities (demonstration nccs	ion with biopesticides		ject, have be users requesting of the rights ans of a form

Appendix 8: Collaboration contract with IPM Decisions project



	Pestfu	Hartsschte) Caspan Uran Lefing for Research & Innovation				Image: State	
	NETWORKING	QUESTIONNAIRE					
Project: H2020 LC-GD-6-1-2024 (subtopic C), GA no. 101037128	Activities	Date 07/03/2023 Jniversity of Santiaj Contacti				4 What future actions do you think the partners of both projects/companies could implement? ✓ Participation in (each other's) workshops/ events ✓ Organisation of common workshops/ round tables on relevant thematic areas ✓ Joint policy recommendations ✓ Joint solid media activities for cross dissemination	
Source person	Marta Lores Aguín (Coord.) ; Iciar Serrano (C&D) NeccióNI	Phone No.:	(+34) 686 913 781 (ldgr) Dataloce:Queces Icial:serrano@contactica.es	-		Volume preson releases Publication of scientific articles Collaboration on projects demonstration sites Sectingating or actions to compare products/ services Vope(edge scycharger (scholeg) Sections Extended tradings Sections	
Project web link:	https://www.neos	tiant.eu/		-			
	et same topic: Testing a m-to-Fork Strategy tal and space based to peoplogical practices, lar economy al pesticide reduction	nd demonstrating s echnologies / organic farming and/or substitutior	ystemic innovations in with biggesticides			7. Stamp and signature of subjectived person:	
3. Which aspect(s) do y projects in order to creats General outcome Methodological gy Field test validati Environmental aw Registration proto Visits to the exper	and develop a part n of the project and the ides (extraction, erwins ns areness raising activit cols for basic substan mental fields	ership? e proposed solution ironmental risk asse ies (demonstration ices	essment, formulation) activities)		In ac with Inclu requ the r	protection clause : containce with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in correction the H2DO2 Green Deal PestHa project and our informative work in relation to the excitities of the discrementioned project. They been eating information and its participants in the project's activities. The coordinator of the project and its partners guarantee the exercised primes of a dimensional data and the previous data prime and apparent in the reserve and the partner and the partner be exercised by means of a dimensional data and the end datases <u>subdecessory</u> , where you may also withdraw your cansent to receiving information on the	
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Appendix 10: Collaboration contract with Novaterra project

D7.1 Clustering activities with sister projects

NUVATE	RRA STAKEI	IOLI	DER NETV			
	General Stakehold	er 🖌		Stakeholde (**)	r Advisory	Committee member
Name	Dr. Eleftheria Maria	Pechliv	ani			
Position in the organisation	Researcher Grade C'					
Organisation	Information Technologies Institute (ITI) Centre of Research & Technology - Hellas (CERTH)					
	Grower/Producer Olive	Gro	wer/Producer Vine	Farmers Association	Research organisation	International Organisation Olive
	International Organisation Vine	go	maker/public/ vernmental ganisation	Denomination of Origin	Industry association	Consumers Association
	PPP Manufacturer		o machinery anufacturer	Agro tech company	Others (pleas	e specify):
Address / Country	6th km Harilaou	- Ther	mi, 57001, Ther	mi - Thessalonik	i, Greece	
Email	riapechl@iti.gr					
	+30 2311 257751					
Fields of interest in	Vineyards		Olive groves	Plant Protec	ction Products	Integrated Pest Management 🗸
relation to the NOVATERRA Project	Bio/alternative PPPs ✓		Smart Farming	g Soil Ma	inagement V	Regulation and EU Policy
by signing this document, i faccept that my data w I accept to be odded to signature and stamp:	ill be shared with othe the LinkedIn profession PestNu	r memb	ers of the NOVA			RRA.
G./	A. 10103712	8				
Place: Thessaloniki, Gre Date: 10/11/2022	ece					
rocedures for the protect he NOVATERRA consortiu as therefore developed a pro- wough a support letter or vi IOVATERRA communication iving each member a chance takcholders Metwork member onsortium, unjets stakcholder takcholders may exercise t upenic contu@vilagora.com:	m takes its responsibility codure to address ethics a this consent form are es. These lists may be to to participate in the proj rs' contact information rs have given their conse heir rights related to t	y to proto regardin added to ased by t ect. is to rem nt to sha	g the protection of the list of Stakel he NOVATERRA ain confidential ar re their contact info sonal data (access	personal data. All S iolder Network mer WP Leaders to inte id only accessible to prination amongst th	Stakeholders that nbers as well as ract with all the members of the ic NOVATERRA etion) by contain	registered their interest to the mailing lists for stakeholders subscribed, NOVATERRA Project A Stakeholders Network, thing NOVATERRA at

Appendix 11: Collaboration contract with Ploutos project

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Sordast person GALA EPICHEIREIN SA. Sordast person Dr. Millio Phone No.: +30 216 2009683 Erolest person Materia Sordast D	Otaboration og grafet gegogstede ster Devended grafet gegogstede ster Devended grafet gegogstede stere Devended grafet gegogstede stere Devended grafet gegogstede stere Devended grafet gegogstede stere
Bouge Hooon Event driven sustainable sprifood value chains Exel Event web light bittps://doutose.holoo.en/	S- Only for projects: Do you authorize us to publish your project logo and web link on the PestNuwebste and social media? ✓ Yes No
project/activity being carried out by your grzgolago? Ves No 2- If so, indicate the aspects that are common to both projects Viss Plate to the same topic Testing and demonstrating systemic innovations in support of the Faminto-Finit Strategy Viss related to digital and space based technologies Viss related to the digital and space based technologies Viss related to the digital and technologies Viss re	PLOUTOS
3 Which aspect(s) do you find most interesting for establishing an active contact between projects in order to create and develop a partnership? - General outcome of the project and the proposed solutions - Methodological guides (extraction, environmental fisk assessment, formulation) - Field test validations - Zenvironmental awareness raising activities (demonstration activities) - Registration protocols for basic substances - Visits to the experimental fields - Sharing of results and comparing the solutions proposed in your project - State - Stat	In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in connection with the H2020 Green Deal PestNu project and our informative work in relation to the activities of the abrementioned project. Have been included in an automated the owned by the constrained of the appropriate of sending information to users requesting information and to participants in the project's activities. The coordinator of the project and its partners guarantee the exercise of the influx of access, rectlications, cancellation, and opposition in the terms set out in current legislation, which may be exercised by means of a formal communication to the e-mail address <u>propagatograph</u> , where you may also withdraw your consent to receiving information on the activities and other sensities of the H2020 Green Deal PestNu project.
Page 1 of 2	Page 2 of 2

Appendix 12: Collaboration contract with QuantiFarm project

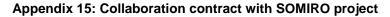
	<mark>₿₿₿</mark> Pest∩u	Horizor 2220 Enropean Dation Funding for Research & Innovation			È È È
	NETWORKING	QUESTI ONNAIRE			Sharing of results and comparing the solutions proposed in your project Other:
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	Date 18/11/2022	Pest∩u		What future actions do you think the partners of both projects/companies could implement? Participation in (each other's) workshops / vents
Organisation/Company:	GAIA EPICHEIREIN	421			Organisation of common workshops/ round tables on relevant thematic areas ✓ Joint policy recommendations
Contact person:		Phone No.: Email:	+ 30 216 2009883 n marianos@c-gaia.gr		✓ Joint social media activities for cross dissemination Joint press releases
Project name:	QuantiFarm	ing the impact of	digital technology solutions in	∷ Ф +	Publication of scientific articles Collaboration on projects demonstration sites Benchmarking or actions to compare products/ services Knowle dge exchange/ technical assistance Extended training courses
Project web link:	https://qu	uantifarm.eu/		-	Other:
of the Farm-to-Fork ✔ It is related to	t same topic: Testing a < Strategy digital and space bas agro-ecological prac ar economy I pesticide reduction ; loss of nutrients an	and demonstrating : sed technologies tices/ organic farm i and/or substitutio d fertiliser use	n with biopesticides		
projects in order to create General outcor Methodologica Field test validation Environmental	and develop a partr me of the project an al guides (extraction, 15 awareness raising a otocols for basic sub	tership? d the proposed solu , environmental risk ctivities (demonstra	assessment, formulation)	i con proj sen its p legi	conduce with the provisions of the Data Protection Act, we inform you that the personal data you howe provided us with in- rection with the 12000 Green Dael Festby project and our informative work in relation to the activities of the denomentioned must ext, have been included in an automated file owned by the connorthum of the aforementioned project for the purpose on automative set of the influence of the rights of access, restrictions, cancellators, and opposition in the reject at automated parameters the exercise of the rights of access, restrictions, cancellators, and opposition in the terms set out in currence datas, which may be exercised presames of formal communications to the e-mail address (<u>Rediscription</u> , and regional datas) adraw your consent to receiving information on the activities and other services of the 12020 Green Deal PestNu project.
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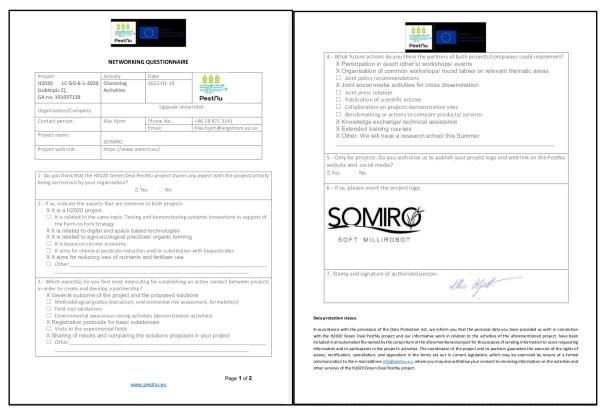
Appendix 13: Collaboration contract with SchoolFood4Change project

_	Pestfu	• • • • •
Ecclest: H2020 LC-GD-6-1-202 (subtonic C), GA no. 101037128	NETWORKING QUESTIONNAIRE	4What future actions do you think the partners of both projects/companies could implement? Participation in (each other's) workshops/ events Qradiestop of common workshops/ round tables on relevant thematic areas Joint social media activities for cross dissemination Joint social media activities for cross dissemination
Organisation/Company:		Publication of scientific articles
Soutad person	Amalia Ochoa Elogo No.: Ulrila Backlund Stoal: Amalia ochoa@ideLorg Ulrika Backlund@xxvf.se	Collaboration su projects demonstration sites Berchmarking or particular demonstration sites Exchanged large commare products/ services Exchanged traching services Extended tracing sources
Project name:	SchoolFood4Change	
Project web link:	https://schoolfood4change.eu/	
 It is a H2020 pro It is related to the support of the F It is related to di It is related to ag It is related to ag It is based on cir It aims for reduc It aims for reduc 	same topic. Testing and demonstrating systemic innovations in mrto-Fork Strategy gital and space based technologies top soldigical practices' organic faming ual economy cal pesticide reduction and/or substitution with <u>biogesticides</u> ng loss of nutrients and <u>regular</u> use	
3 Which aspect(s) do projects in order to crea General outcom Methodological Field test validat	the GF-SIO WGF.god indian most interesting for establishing an active contact between e and develop a partnership? of the project and the proposed solutions india (scattaction, environmertal risk assessment, formulation) ons wareness raising activities (demonstration activities)	7. Stamp and signature of <u>authorized</u> person:
 Registration pro Visits to the exp 	ocols for basic substances rimental fields s and comparing the solutions proposed in your project	Data protection classe: In accordance with the previous of the Data Protection Act, we inform you that the permand data you have perioded us with n connection, with the 10020 Direm Data Protection and our professional data with the period of the documentioned project included is an automated file sensel by the concentum of the documentional project for the purpose to doming information and to period to the project to and period professional data with the restricts of the project and the period to the sensitive of the encoded of the encod
	Eaux 1 of 2	Page 2 of 2

Appendix 14: Collaboration contract with SmartProtect project

	Pest∩u	e ^{4 − 4} ² − 5 ² − 5 ² − 7 ² − 7		Pestfu
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128 Organisation/Company: Contact person:	Activity	G QUESTIONNAIR Date 13/01/2023 I Phone No.:	ψ ΰ ΰ PestΠu 003251273304	- What future actions do you think the partners of both projects/companies could implement? - Participation in (each other's) workshops/vewts - Organisation of common workshops/round tables on relevant thematic areas - Joint policy recommendations - Joint press releases - Publication of scientific articles - Collaboration on projects demonstration sites - Benchmarking or actions to compare products/ services - Knowledge exchange/ technical assistance - Extended training courses
Project name: Project web link:	SmartProtect https://www.sm	Email: artprotect-h2020.e	Sabien.pollet@inagro.be	Other: Other: S Only for projects: Do you authorise us to publish your project logo and web link on the PestNu website and social media?
being carried out by your o 2If so, indicate the aspec It is a H2020 projec It is related to the s of the Fam-to-Fori It is related to digit It is related to agro It is based on circui It is more than the second to a second to a second It is more than the second to a s	rganisation?	res No n to both projects: g and demonstratin d technologies s/ organic farming on and/or substitut	any aspect with the project/activity g systemic innovations in support ion with biopesticides	6 - If so, please insert the project logo:
in order to create and deve General outcome of	find most interest lop a partnership f the project and 1	ing for establishing		7. Stamp and signature of authorised person: Sabien () opsilvings Polet () opsilvings Polet () opsilvings (Signature) () respinence (Signature) () respinence Data genetation clause:
Methodological gui Field test validation Environmental awa Registration protoco Visits to the experir Sharing of results a Other:	s reness raising activ ols for basic substa nental fields	rities (demonstratio Inces	n activities)	In accordance with the provisions of the Data Protection Act, we inform you that the personal data you have provided us with in connection with the 18220 Green Data Parally appear and our informative work in instance to activities of the aforementioned project, have been included in an automate Bit or early be construction of the adorementioned project to the appear and individual or user requiring instance of the approximation in the project, and the instance of the project and in partners guarantee the section of the rights of according to the project and the project and the project and the project and in partners guarantee the section of the rights of according to the project and the project and the project and the project and in partners guarantee the section of the rights of according to the section of the interconding information on the section of the project and in partners guarantee the section of the rights of according to the section of the interconding information on the section of the project and project and the project and project and the project and the project and project
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Appendix 16: Collaboration contract with SPRINT project

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Project: H2020 LC-GD-6-1-2020 (subtopic C),	Activity	NG QUESTIONNAI	°	What future actions do you think the partners of both projects/companies could implement? Participation in (acko ther's) workshops/ events Xorganisation of common workshops/round tables on relevant thematic areas Joint policy recommendations Xoluti social media activities for cross dissemination Joint press releases
GA no. 101037128 Organisation/Company:	CCRI		PestNu	Publication of scientific articles Collaboration on projects demonstration sites Benchmarking or actions to compare products/ services
Contact person: Project name:	Jane Mills SPRINT	Phone No.: Email:	jmills@glos.ac.uk	Knowledge exchange/ technical assistance Extended training courses Other:
Project web link:		print-h2020.eu/		5 Only for projects: Do you authorise us to publish your project logo and web link on the PestNu website and social media?
 It aims for reducing Other:It aims to sustainable use of p 	al and space base o-ecological prata ar economy al pesticide redu loss of nutrients highlight succes resticides	ctices/ organic farmi action and/or substit and fertiliser use ss stories/solutions esting for establishir	ng ution with biopesticides for achieving a transition towards a g an active contact between projects	7. Stamp and signature of authorised person:
X General outcome	of the project a des (extraction, e s reness raising ac ols for basic subs nental fields	nd the proposed sol environmental risk a tivities (demonstrat stances	ssessment, formulation) ion activities)	Data protection datase: In accordance with the provision of the Data Protection Act, we inform you that the parton data you have provided us with in connections with the VILDO Cores Data Prentix project and our informative work in relation to the activities of the advanced to project. These been included in an automated fits among by the concurration of the advanced project for the purpose of lending homemations do not provide the project and the project and the the concentration of the project and transmere proformation and to participants in the project advanced by the concentration of the project and transmere access, mactification, careelation, and opposition in the terms set out in correct legisticon, which may be serviced by means of a formal communication to the e-mail data instruction set project and the project and the project and transmere access, mactification to the e-mail data instruction set project and the project and the project and transmere access and the project a
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Appendix 17: Collaboration contract with SUSFERT project

	NETWORKING	G QUESTIONNAIR	E		Registration protocols for basic substances 🖌 Visits to the experimental fields
Project: H2020 LC-GD-6-1-2020 (subtopic C), GA no. 101037128	Activity Clustering Activities	Date 25.01.23	PestΩu		Sharing of results and comparing the solutions proposed in your project. <mark> </mark>
Organisation/Company:	RTDS				4 What future actions do you think the partners of both projects/companies could implement?
Contact person: Project name:	Philippa Webb-Muegge SUSFERT	Phone No.: Email:	philippa@rtds-group.com		Participation in (each other's) workshops/ events <mark>v</mark> Organisation of common workshops/ round tables on relevant thematic areas Joint policy recommendations
Project web link:	https:	//www.susfert.eu			Joint social me dia activities for cross dissemination 🖌 Joint press releases Publication of scientific articles
1- Do you think that to project/activity being carr		nisation?	ct shares any aspect with the		Collaboration on projects demonstration sites Benchmarking or actions to compare products/services Enowledge exchange/technical assistance Extended training courses
2- If so, indicate the aspe It is a H2020 proje It is related to the of the Farm-to-For It is related to digi	ct <mark>v</mark> same topic: Testing a k Strategy <mark>v</mark>	and demonstrating	systemic innovations in support	∷ ₽ +	Other 5. Only for projects: Do you <u>authorise</u> us to publish your project logo and web link on the PestNu website and social media?
It is related to agro It is based on circu It aims for chemic: It aims for reducin	llar economy 🖌 al pesticide reduction	n and/or substituti			6. If so, please insert the project logo.
Other:_In_terms_i \$U\$FERT is using s	of what PestNu is truvite as an alterna	doing in developi tive source of P.	ng fertilisers from wastewaters,		Our description paragraph: "SUSFERT is developing new bio-based <u>fertilisers</u> to reduce dependency on unsustainable phosphorus (P) imports into the EU using structure as a menevable source of P. The project combine bio-based, biodegradable costings and soli improvers from wood-based figuin for controlled release and new microbial
 Which aspect(s) do y projects in order to create General outcome 	and develop a parti	ne rship?	ning an active contact between		products to increase nutrient availability/iron supply to fit into existing EU production and agricultural processes."
Methodological gu	ides (extraction, en	vironmental risk as	sessment, formulation) 🖌		7. Stamp and signature of authorised person:
Field test validatio	ns <mark>e⁄</mark> are ne ss raising activi	ties (dem on stratio	n activities) 🖌		Philippa Webb-Muegge, Communication Manager, SUSFERT

Appendix 18: Collaboration contract with Virtigation project

	4 - What future actions do you think the partners of both projects/companies could implement? X Participation in (each other's) workshops/ events X <u>Suppliaging of common workshops</u> / round tables on relevant thematic areas
Project: Agrig: Date H02:00 LC-GD-S-1-202 Substrained graduatopic (), Gale 12/01/2023 GA no. 10/037128 Substrained Substrained Provide Substrained Substrained Broket Virtuation Broket Virtuation	Joint policy recommendations X Joint press releases Publication of scientific articles Gubication of scientific articles Benchmaking or actions to compare products/ services X Knowledge exchange (redninal assistance Extended solping sources Subject
Englist xxxxxxititisation.su 1- Do you think that the H2020 Green Deal PestNu project shares any aspect with the project/activity being carried out by your grappiceting? X Yes No	5 Only for projects: Do you <u>supportie</u> us to publish your project logo and web link on the PestNu website and social media? X Yes No 6[-if so, please insert the project logo] VIRTIGATION Logo already included on PestNu website
2- If so, indicate the aspects that are common to both projects: X is a h0x20 project It is a h0x20 project It is a h0x20 project It is related to the same topic. Testing and demonstrating systemic innovations in apport of the farm-to fork Strategy It is related to group and the same topic. Testing and demonstrating systemic innovations in apport of the farm-to fork Strategy It is related to group and practices/ organic farming It is based on acruate economy X it aims for chemical pesticider eduction and/or substitution with biogesticides It aims for chemical pesticider eduction and/or substitution with biogesticides It aims for chemical desting the same of explosing for establishing an active contact between projects in order to create and develop a partices/sing.	7. Stamp and signature of subplicity person. Detrocif Dominier
projects in order to create and develop a parthership: X General outcome of the project and the proposed solutions Methodological guides (extraction, environmental risk assessment, formulation) Field text validations X Environmental awareness raising activities (demonstration activities) Registration protocols for basic substances Visits to the experimental fields X Sharing of results and comparing the solutions proposed in your project Query	Data protection close: In accordance with the prostense of the data Protection Act, we inform you that the personal data you have provided as with in connection with the H2020 Green Deal Protika project and our informable work in relation to the attivities of the aforementioned project, have been included in an autometel the owned by the conserving of the datamentioned project for the propose of unding information to areas the data of the H2020 Green Deal Protika project. The the project is the transmitted project of the the provided project is the right of according to the data of the H2020 Green Deal Protika project.
Bage I of 2	Page 2 of 2

Appendix 19: Collaboration contract with Waste4Green project

	NETWORKING QUESTIONNAIRE	 4What future actions do you think the partners of both projects/companies could implement? R Participating in a congress/workshop/chat R Publishing an article in an academic/scientific journal
Project: LIFE17 ENV/ES/000192 Company: Contact person:	Addity Date NETWORKING 03/11/2022 CERTH (Centre for Research & Technology Hellas) Dr. Elefthesia Elefthesia Engen No.:	R Extended trajping course R Technical systeme R Technical systeme R Benchical systeme R Benchical for actions to compare products/services Ottoer
	Maria Pechlivani emai riapechl@iti.gr	
Braiest	PestNu - Field -testing and demonstration of digital and space based technologies with accessological and stratic practices in systemic innovation H2020 LC GD-61-2020 (suppop): C), GA no. 101037128	5 Only for projects: Do you authorize us to publish the project logo and your web link on the UFE WASTEAGREEN website and social media?
Project Web link	http://pestru.eu/	R Yes • No
 It is a LIFE project It is related to the Is related to agrof R It is a circular e R It aims to the s 	the second	Pest∩u
Projects in order to create RGeneral outcom RMethodologica	ou find most interesting for establishing an active contact between e and develop a partnership? e of the project and the proposed solution guides (extraction, environmental risk assessment, formulation) tions awarenees raking activities (Demonstration activities) tools for basic substances	Data protection clause: In accordance with the provisions of the Data Protection Act, we inform you that the perioral data you have pervised as connection with the UER MASTER/BEEK project and our informative work in relation to the activities of the aforement project, have been included in an automated file owned by the consortium of the aforementioned project for the party sending information to users requesting information and to participants in the project advises. The conditionar of the and its partners guarantee the exercise of the rights of access, rectification, cancelation, and opposition in the term set current legislation, when way be exercised by means of a formal communication to the e-mail as wastedgerevelgmail.com, where you may also withdraw your consent to receiving information on the activities and service of the LEF WASTERGEERPLoyout.



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