



MAGIC

Marginal lands for Growing Industrial Crops

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Type

R Document, report

DEM Demonstrator, pilot, prototype

DEC Websites, patent filings, videos, etc.

OTHER

Dissemination Level

PU Public

CO Confidential, only for members of the consortium (including the Commission Services)



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1 Publishable executive summary

The MAGIC project aims to promote the sustainable development of efficient and beneficial industrial crops on marginal lands. A database and a crop support system have been developed, including detailed agricultural information to be of great use to farmers.

In addition, marginal lands in Europe have also been analysed and several optimal crops have been proposed with the aim of developing sustainable best practice options for industrial crops. The impact of MAGIC will be maximised by integrating the sustainability aspects (encompassing environment, society, and economy) of value chains.

Work Package 8- Dissemination and link establishment with EIP AGRI, seeks to propagate the project results, database, maps and DSS tool in order to enhance farmers' knowledge, plus creating strong links with EIP AGRI.

This deliverable aims to present the interaction held between MAGIC project, the European Innovation Partnership for Agricultural productivity and Sustainability (EIP-AGRI), and those Operational Groups (OGs) working on related activities. One of the main outcomes of the fruitful interaction among MAGIC partners and the EIP-AGRI was the creation of one Focus Group dedicated to industrial crops.

In this sense, Spanish Co-ops set the relation between MAGIC project and the EIP-AGRI through the Subgroup of Innovation for agricultural productivity and sustainability (Sol APS), in which this organisation participates representing COPA-COGECA. These interactions allowed to boost MAGIC project dissemination at EIP-AGRI website through the elaboration of a wide set of practice abstracts (PAs), but also to encourage MAGIC partners participation in EIP-AGRI events and activities such as workshops or Focus Groups.

2 Introduction

The Europe 2020 Strategy aimed to enhance a smart, sustainable and inclusive economy to improve EU citizens jobs and quality of life for 2014-2020 period. In this line, several objectives were set to be reached by 2020 in terms of employment, innovation, education, social inclusion and climate. To achieve them the importance of research and innovation was stressed.

For this reason, five European Innovation Partnerships (EIPs) were created focusing on societal benefits and fast modernisation while fostering collaboration among research and innovation partners. One of them was specifically dedicated to support agriculture and forestry sectors to tackle challenges, the European Innovation Partnership for agricultural productivity and sustainability (EIP-AGRI). The EIP-AGRI brings together stakeholders with different backgrounds to share ideas and experience through Operational Groups and Focus Groups. That means, boosting collaboration to enhance an earlier and more efficient achievement of results.

A Focus Group is a qualitative study method that assembles participants in a meeting, in which they express their opinions about products or services. In particular, EIP-AGRI Focus Groups are discussion forums of experts dealing with specific subjects, exchanging knowledge and experiences.

Additionally, Operational Groups gather a variety of professional profiles from different areas to implement innovation in the agricultural and forestry sectors.

The EIP-AGRI is linked with the European Network for Rural Development (ENRD) through the European Rural Networks' Assembly. To coordinate actions, a platform was created including several subgroups. One of these subgroups is specifically focused on EIP-AGRI network activities, the permanent Subgroup on Innovation for agricultural productivity and sustainability (SoI APS), which work together with the EIP-AGRI Service Point (EIP-AGRI SP).

The EIP-AGRI network is run by the European Commission (DG Agriculture and Rural Development-DG AGRI) with the help of the EIP-AGRI SP. The EIP-AGRI SP is formed by a professional team that acts as a catalyser of innovation and promotes the interaction among all EIP-AGRI network members connecting them and sharing knowledge. It also organises events all over Europe such as workshops, conferences or focus groups, etc.

The EIP-AGRI website is a tool for users to express their research work, find funding for projects and find partners to interact with. All this is possible thanks to the design and content of the site, which allows users to view and download the results of other projects and access additional information, including the one from thematic networks and multi-actor projects from H2020 programme.

These actions are financed by European funds channelled through the European Rural Development Programme (RDP), the old EU research and innovation programme Horizon 2020 and its successor Horizon Europe. Additionally, the EU Regional Policy, the European Social Fund, COSME SME, Eurostars, the Education Policy (Erasmus) and the Environment and Climate Action program LIFE+ add value to these proposals.

3 EIP-AGRI collaboration

Since MAGIC project inception, several interactions were performed with EIP-AGRI network. Spanish Co-ops, as a member of the Sol APS representing COPA-COGECA's interests had a privileged position to establish contact and channelise information.

Consequently, the first interaction took place on April 11, 2018, in Brussels, when Spanish Co-ops staff, on behalf of MAGIC consortium, presented the project to an EIP-AGRI SP member. On this first contact the main expected outcomes of the project were highlighted and discussed. Dissemination material was also provided. In the same line, the EIP-AGRI was informed about MAGIC consortium intention of promoting a specific focus group on industrial crops grown in marginal lands, as there was detected a gap of knowledge in this area. Finally, MAGIC project expectations of preparing and publish a large set of practice abstracts (PAs) with the main practical outcomes for end users at EIP-AGRI website were also communicated.

As a result, approximately fifty PAs were produced and uploaded on the EIP-AGRI website at the end of the project life. [They will be accesible through the EIP-AGRI website](#) or in the MAGIC public deliverable "D8.6- Final list with the practice abstracts following the EIP AGRI common format" soon after the project conclusion.

On February 2019, the MAGIC coordinator, Mrs. Efthymia Alexopoulou (CRES), was invited to an EIP-AGRI workshop held in Vilnius titled "Opportunities for farm diversification in the circular bioeconomy" (see *Figure 1*). Mrs. Alexopoulou was interviewed about MAGIC and PANACEA projects and had the chance to share with the audience the purpose and expected outcomes.



The poster features a top image of hands holding small green plants in soil. To the right is the EIP-AGRI logo, a stylized sunburst with the text 'eip-agri AGRICULTURE & INNOVATION'. Below the logo is the text 'funded by' followed by the European Union flag and 'European Commission'.

EIP-AGRI WORKSHOP OPPORTUNITIES FOR FARM DIVERSIFICATION IN THE CIRCULAR BIOECONOMY
6-7 FEBRUARY 2019- VILNIUS, LITHUANIA

PROGRAMME

EIP-AGRI Workshop: Opportunities for farm diversification in the circular bioeconomy

6-7 February 2019
Vilnius, Lithuania

Day 1: Wednesday 6 February 2019

12:00 – 12:30 Welcome lunch - Restaurant Riverside (in the hotel)

12:30 – 13:00 Registration

13:00 – 13:50 Welcome & introduction

- **Ms. Sarah Watson**, *Lead facilitator*. Warm up: who is in the room?
- **Mr. Darius Liutikas**, *Vice-minister - Ministry of Agriculture of Lithuania*. Welcome to Lithuania
- **Mr. Alberto D'Avino**, *European Commission DG AGRI*. Introduction to DG AGRI and EIP-AGRI activities
- Interviews with:
 - **Mr. Paolo Mantovi**, *EIP-AGRI Operational Group representative*
 - **Ms. Efthymia Alexopoulou**, *Researcher*
 - **Mr. James Gaffey**, *BBI project representative*
- Introducing the event programme and the Open Space opportunity, **Ms. Sarah Watson**

13:50 – 14:20 Presentations

- **Mr. Liutauras Guobys**, *European Commission DG RTD*. Introduction to the EU bio-economy strategy,
- **Mr. Jose Ruiz ESPI**, *European Commission DG AGRI*. Feedback on a workshop for policy makers on the integration of primary producers in the bio-economy,
- **Ms. Laura Jalasjoki**, *ENRD Contact Point*. State of play on the ENRD Thematic Group on the bio-economy,

Figure 1. EIP-AGRI workshop programme. Source: EIP-AGRI, 2019.

All the information regarding this workshop, including the brief summary of Mrs. Alexopoulou interview (see Figure 2), can be read at the [EIP-AGRI website](#), where the [list of participants](#) and the [final report](#) are available for public access.



Setting the scene

After an engaging welcome to Lithuania and Vilnius from Darius Liutikas, the Vice-minister from the Ministry of Agriculture of Lithuania, Alberto D'Avino (DG AGRI) provided an overview of the DG AGRI and EIP-AGRI activities relating to the circular bio-economy. He explored EIP-AGRI's role in using partnership working to close the gap between research and practice to develop solution-based knowledge sharing. The EIP-AGRI network was explained in further detail, including the number and focus of OGs and the nature of H2020 multi-actor groups. This included highlighting the work of the EIP-AGRI Focus Group on 'Enhancing production and use of renewable energy on the farm' and two previous workshops; one on the circular economy and another focused on building new biomass supply chains.

To understand the different types of projects further and how they operate in practice, short interviews were held with representatives from each:

- ▶ **Operational Group - Digestate_100%: Paolo Mantovi** briefly explained the OG he is involved in, which is developing an integrated system that maximises the efficient use of nutrients of the digestate from biogas plants, reducing the need for mineral fertilisers to zero. Paolo was looking to connect with people throughout the event to share his project and learn more about other people's activities.
- ▶ **Horizon 2020 - MAGIC & PANACEA: Efthymia Alexopoulou** is involved in two H2020 projects. MAGIC aims to support the successful cultivation of industrial crops on marginal lands and PANACEA seeks to design pathways to ensure the successful adoption of non-food crops by EU farmers. Efi was really excited to be participating in the workshop and expressed her desire to discuss and collaborate with as many participants as possible.
- ▶ **Bio-based Industries Joint Undertaking as part of H2020 - ICT-BIOCHAIN: James Gaffey** is the Scientific Coordinator of this project focused on developing efficient biomass supply chains for sustainable chemical bio-economy regions, creating the EU's first Digital Innovation Hubs for a Circular Bio-economy. He was looking to the workshop to challenge some of his ideas and explore more deeply with participants the other projects and activities which were happening.

All three representatives wanted to learn more about how to mainstream the ideas and innovations which were being piloted by the participants and to look for ways of continuing to work with each other after the event.

Figure 2. Extract from EIP-AGRI workshop final report. *Source: EIP-AGRI, 2019.*

Furthermore, during the whole project life Spanish Co-ops attended several Sol APS meetings where, among other proposals, one was promoted and supported pursuing the creation of a specific focus group on industrial crops grown on marginal lands. These meetings were an outstanding forum for MAGIC project to discuss the necessity of creating this focus group, not only with EIP-AGRI SP staff, but also with other Sol APS member organisations. As a relevant outcome of this enriching interaction, it was finally agreed by DG AGRI and EIP-AGRI SP the launch of a call for a focus group on industrial crops, which main features are described over the next section.

Finally, an invitation to the EIP-AGRI network staff was sent with a proposal to join the MAGIC project final meeting, held in Lisbon on December 2, 2021.

4 Focus Group on industrial crops

As previously mentioned, EIP-AGRI Focus Groups are discussion forums of experts dealing with specific subjects while exchanging knowledge and experiences. These groups are usually one year time limited and meet twice. They are meant to find opportunities and solutions to field problems within an innovative approach, producing public reports with recommendations and practical outputs.

Emphasizing the previously mentioned information, the interaction between MAGIC and EIP-AGRI network sought, among other things, the formation of a specific focus group on industrial crops grown in marginal lands. About five focus groups meet annually and are launched after the evaluation of the Sol APS and approval from DG AGRI and EIP-AGRI SP.

On 2019, after pulling proposals and ideas, from the Sol APS members, Focus Groups experts, DG AGRI and EIP-AGRI SP staff and EIP-AGRI website, these were gathered in four clusters with a total of twenty-five subclusters.

All of them were presented on 14 June 2019 over the [14th meeting of the Sol APS](#), where Spanish Co-ops staff was present. In particular, within Cluster 3, titled "Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)", a proposal over Subcluster 3.4: "Bio Economy" raised discussions over "new non-food crops on marginal lands or new alternative crops on marginal lands, with an emphasis on all stages of the process and not just one part (plastics) avoiding competition with food production", and also about the relevance of creating a Focus Group on this issue (see *Figure 3*).

Cluster 3: Value chains/competitiveness (incl. bioeconomy, circular economy and food loss)	
SUBCLUSTER 3.4 BIO ECONOMY	
SHORT DESCRIPTION	A broad spectrum of proposals have been submitted ranging from the use of plant residues and industrial crops to raising awareness on the use of plastic.
WHY	Especially plastic is a relevant issue. There's a need for innovation, particularly for packaging. There is a need to look for alternatives to plastic which are competitive.
FOR WHOM	This was not discussed by the Sol members.
WHAT	<p>This subcluster was discussed in three breakout groups. The importance of the topic is growing, as is the knowledge about it. The topic is very broad and came with 7 proposals with a broad range.</p> <p>'Plastics' is currently a relevant theme. One group focused specifically on this topic and on the importance of reducing the use of plastics. There is a need for innovation, particularly for packaging. There is a need to look for alternatives which are competitive. There's an opportunity to use the sub products/by-products from agriculture and forestry to replace plastic.</p> <p>Another group mentioned that the focus for future activities should be on the whole process, i.e. the complete value chains and not only the production side or the consumption side or an intermediary step. One of the ideas mentioned in the group was 'new non-food crops on marginal lands' or 'new alternative crops on marginal lands' with an emphasis on all stages of the process and not just one part and also avoiding competition with food production.</p> <p>One group focused the discussion on new industrial crops and their use in the bio economy and discussed whether it is relevant to organise a Focus Group that could give an overview of all types of industrial crops: should they be grown only in marginal lands? What do they need in terms of climate, soil? Do they fit in multi/intercropping systems? What is the use/application of the product and residues?</p>

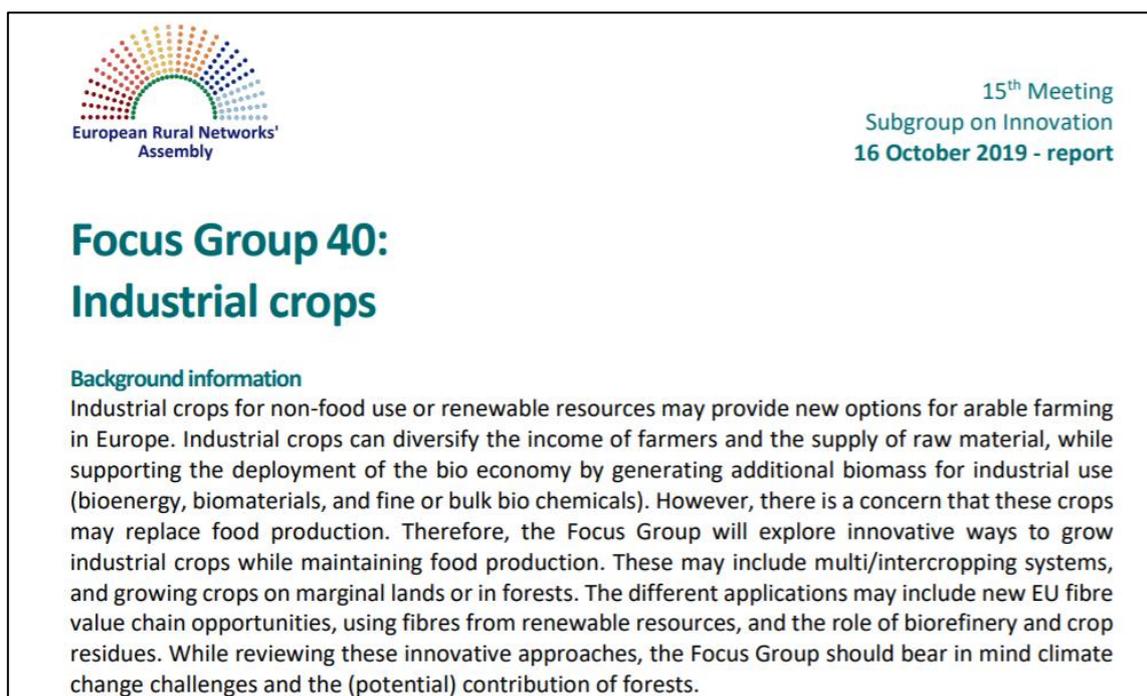
Figure 3: Extract from Sol APS discussions outcomes notes. *Source: EIP-AGRI, 2019.*

All the outcomes from Sol APS 14th meeting were assessed by DG AGRI and EIP-AGRI SP. After taking several considerations into account such as the relevance for EU Member States, added value of the activity, interest for ongoing Operational Groups, current policy context and future challenges (new CAP, Horizon Europe, ...), etc., several priority topics were selected. One of them was the creation of a Focus Group (FG 40) dedicated to industrial crops on marginal lands (see *Figure 4*).

- As a final output of this process, the following priority topics were selected:
- **Seminars:**
 - Topic 1: AKIS
 - Topic 2: Soil
 - **Workshops:** both prioritised topics are connected with climate change:
 - Topic 1: Interactive innovation for the challenges of the forestry sector
 - Topic 2: New strategies towards carbon neutral agriculture
 - **Focus Groups:**
 - FG 39: How to combine wildlife with improving agricultural production
 - FG 40: Industrial crops on marginal lands
 - FG 41: Reducing the use of plastics in EU agriculture
 - FG 42: Innovative practices for sustainable beef production
 - FG 43: Climate smart tropical crops in the EU

Figure 4. Priority topics selected by DG AGRI & EIP-AGRI SP. *Source: EIP-AGRI, 2019.*

All the priority topics were discussed at the [15th meeting of the Sol APS](#) in breakout groups on October 16, 2019. Among them, the topic of industrial crops received special support by Spanish Co-ops staff, but also from all Sol APS members in order to be dealt with under a focus group scheme (see *Figure 5*).

The slide features a logo for "European Rural Networks' Assembly" on the top left, which consists of a semi-circle of colorful dots. On the top right, it says "15th Meeting Subgroup on Innovation 16 October 2019 - report". The main title is "Focus Group 40: Industrial crops". Below this is a section titled "Background information" with a paragraph of text discussing the benefits and challenges of industrial crops for non-food use in Europe, such as diversifying farmer income and supporting the bio economy, while also noting concerns about replacing food production and the need to explore innovative growing methods like multi-cropping and marginal lands.

European Rural Networks' Assembly

15th Meeting
Subgroup on Innovation
16 October 2019 - report

Focus Group 40: Industrial crops

Background information

Industrial crops for non-food use or renewable resources may provide new options for arable farming in Europe. Industrial crops can diversify the income of farmers and the supply of raw material, while supporting the deployment of the bio economy by generating additional biomass for industrial use (bioenergy, biomaterials, and fine or bulk bio chemicals). However, there is a concern that these crops may replace food production. Therefore, the Focus Group will explore innovative ways to grow industrial crops while maintaining food production. These may include multi/intercropping systems, and growing crops on marginal lands or in forests. The different applications may include new EU fibre value chain opportunities, using fibres from renewable resources, and the role of biorefinery and crop residues. While reviewing these innovative approaches, the Focus Group should bear in mind climate change challenges and the (potential) contribution of forests.

Figure 5. Extract from industrial crops Focus Group proposal. *Source: EIP-AGRI, 2019.*

Later, after an internal assessment of the EIP-AGRI network staff, on October 29, 2019, the EIP-AGRI launched a call for consultants to work for 2020 EIP-AGRI activities such as the Focus Groups. Among these activities one was dedicated to industrial crops, titled "Growing industrial crops for non-food use, while not replacing food crops" (see *Figure 6*).

Newsflash 38 | 29 October 2019 by the EIP-AGRI Service Point
[View this email in your browser](#)



NEWSFLASH

Call for interest: Would you like to contribute to the EIP-AGRI as a temporary consultant for the EIP-AGRI Service Point?

The EIP-AGRI Service Point is looking for coordinating experts for a number of workshops, seminars and Focus Groups, and main facilitators for workshops and seminars on a range of [topics](#).

If you are interested then [please complete this application form and submit your Europass CV](#).

The deadline for applications is 9 December 2019, 23:59 hrs Brussels time.

!!! IMPORTANT !!!!

Please note that you will need to apply separately for every specific topic. For those who have applied to the call for experts published last year, you will need to apply again to be sure that your CV will be taken into consideration. Your application will only be considered for EIP-AGRI Focus Groups and events to be held between February 2020 and February 2021. You may be invited to supply further information by the Service Point if needed, but there is no guarantee that you will be contacted. The final selection of coordinating experts and main facilitators will not be limited to the list resulting from this call.

Applicants for coordinating experts of EIP-AGRI Focus Groups are invited to also apply for the call for experts of the relevant Focus Group that will be published at the end of 2019.

Topics

The topics of the activities can cover a wide range of issues related to the agricultural productivity and sustainability.

In particular, topics envisaged for activities in 2020 include:

- Resource management:
 - Combining wildlife with improving agricultural production
 - Growing industrial crops for non-food use, while not replacing food crops
 - Reducing the use of plastics in agriculture
 - Interactive innovation for the challenges of the forestry sector
 - Sustainable management of soils for soil health and climate change

Figure 6: EIP-AGRI general call for consultants. *Source: EIP-AGRI, 2019.*

All the reports on the Sol APS meetings are published at EIP-AGRI website and can be accessed through the [following link](#).

On December 2019, the EIP-AGRI launched a new call specifically dedicated for 2020 Focus Groups. There, the Focus Group 40 took its final title: “Sustainable industrial crops in Europe: new market opportunities and business models which do not replace food production” (see *Figure 7*).

Call for expression of interest for experts participating in Focus Groups of the European Innovation Partnership on 'Agricultural Productivity and Sustainability'

The European Commission is launching a call for experts such as farmers, foresters, advisers, scientists and other relevant actors for five new EIP-AGRI Focus Groups. The Focus Groups will start working in March 2020 and are expected to present their results and recommendations by January 2021. Candidates for each of the Focus Groups below are invited to apply in accordance to the rules set out in this notice for the purpose specified.

Please note that the dates for the first meetings of the Focus Groups are indicated below for each Focus Group. All applicants must be available to travel to the Focus Group meeting on these dates. If selected experts fail to confirm their availability on these dates within one week of receiving the selection message, they may be replaced. Focus Group participants will also be requested to do some preparatory work before and in between the first and second meetings.

You will find the link to the application form after the calls below. Please read the entire call text carefully before applying.

Focus Group themes:

For the current call, farmers, foresters, advisers, scientists and others¹ are invited to apply for participation in Focus Groups on the following topics, noting that these Focus Groups will complement the work of previous Focus Groups:

39: Wildlife and agricultural production

[More information](#)

40: Sustainable industrial crops in Europe: new market opportunities and business models which do not replace food production

[More information](#)

41: Reducing the plastic footprint of agriculture

[More information](#)

42: Sustainable beef production systems

[More information](#)

43: Climate-smart (sub)tropical food crops in the EU

[More information](#)

Figure 7. EIP-AGRI call for interest for 2020 Focus Groups. *Source: EIP-AGRI, 2019.*

In order to obtain MAGIC representation in these groups, Spanish co-ops disseminated this need to MAGIC consortium members. As a result, the EIP-AGRI appointed five members from MAGIC consortium:

- Efthymia Alexopoulou (MAGIC's coordinator), Centre for Renewable Energy Sources and Saving Foundation (CRES, Greece).
- Luigi Pari, Council for Agricultural Research and Analysis of the Agricultural Economy (CREA, Italy).
- Ana Luisa Fernando, New University of Lisbon (FCT-UNL, Portugal).
- Eleni G. Papazoglou, Agricultural University of Athens (AUA, Greece).
- Vita Tilvikiene, Lithuanian Research Centre for Agriculture and Forestry (LAMMC, Lithuania).

The names, profession and country from all the members who participated can be consulted at EIP-AGRI website over the [Focus Group 40 \(Industrial crops\)](#) section. In addition, a link to MAGIC project website was directly placed over the "Related content" part, proving the successful collaboration between MAGIC partners and the EIP-AGRI network.

The launching of the EIP-AGRI Focus Group on Sustainable industrial crops aimed to answer the following question as a starting point: How can industrial crops contribute to new market opportunities, business models and sustainable farming systems which create value for farmers in the EU, while not replacing food production?

To answer this question the [final report](#) provides several examples of successful cases and good practices of industrial crops grown under different conditions, geographical areas and cultivating strategies. It also describes the final products that can be obtained from them, their potential markets, which ones are suitable for phytoremediation/phytomanagement of contaminated lands and the specific features of those, etc. It offers definitions for both marginal and contaminated lands together with possible innovative solutions for identified problems, risks and barriers or necessary actions to scale up industrial crops. Furthermore, environmental benefits of industrial crops are described in detail...these are only some examples of the many issues addressed within Focus Group 40, in which MAGIC project partners played a very relevant role.

The results from Focus Group 40 concerning Specialty crops were exposed at MAGIC and PANACEA joint working day "Value Chain Event on Carbohydrate and Specialty Industrial Crops. Opportunities for the agriculture sector" on January 20, 2021 (see *Figure 8*).

 	
<p>Value Chain Event on Carbohydrate and Specialty Industrial Crops <i>Opportunities for the agriculture sector</i></p> <p>20th of January 2021</p>	
13:50	Get connected
14:00	<p>Welcome</p> <p><i>Set the scene of the today workshop & presentation of PANACEA platform and MAGIC tools</i></p>
	<p>Dr. Efi Alexopoulou (CRES) Mr. Panayiotis Stamatelopoulos (AUA)</p>
14:20	<p>The ADAPT project: Using molecular understanding of stress acclimation to develop stress tolerant potatoes</p>
	<p>Dr. Markus Teige (University of Vienna)</p>
14:35	<p>UNTWIST – Uncover and promote tolerance and water stress in camelina sativa</p>
14:50	<p>The Medi Opuntia project – Promoting cactus plantation on large scale in marginal lands of Mediterranean countries</p>
	<p>Dr. Claudia Jonak (Austrian Institute of Technology) Prof. Ana Luisa Fernando (FCT UNL)</p>
15:10	<p>Towards innovative medicinal plant value chains (Results of EIP-AGRI Focus Group 35)</p>
	<p>Prof. Dimitrios Argyropoulos (UCD)</p>
15:40	<p>Sustainable Industrial Crops (Focus group 40): The situation of specialty crops</p>
	<p>Dr. Juliana Navarro Rocha (CITA)</p>
16:10	<p><i>Discussion on the value-chain of carbohydrate and specialty industrial crops</i></p>
16:45	End of the webinar
<p><i>Supported by the projects</i></p>    	

Figure 8. MAGIC & PANACEA event programme. *Source: Spanish Co-ops, 2021.*

In addition, the overall results were presented by the coordinator of Focus Group 40, Isabella Donnelly, at PANACEA’s final event on February 22, 2021, in which most MAGIC project partners were highly involved as speakers or audience due to the similarities of MAGIC and PANACEA working topics and the strong collaboration held (see *Figure 9*).

 PANACEA Non Food Crops for a EU Bioeconomy		
Final PANACEA Event 22 nd of February 2021		
13:00	Get connected (Teams)	
13:10	Welcome <i>Set the scene of the final PANACEA event</i>	Dr. Efthymia Alexopoulou, CRES
1st session: PANACEA achievements, limitations and opportunities		
13:20	<i>Non-food crops near-to-practice</i>	Dr. Federica Zanetti, University of Bologna
13:35	<i>The role of non-food crops in the renaissance of the rural areas</i>	Dr. John Verhoeven, Wagenigen Research
13:50	<i>PANACEA roadmap for the successful penetration of non-food crops the near-to-practice</i>	Dr. Calliope Panoutsou, Imperial College London
14:05	<i>Training of the practitioners on the near-to-practice non-food crops</i>	Mr. Sylvain Marsac, ARVALIS
14:20	<i>PANACEA Platform</i>	Mr. Panayiotis Stamatelopoulos, Agricultural University of Athens
14:35	Questions	
14:50	Break	
2nd session: Experts groups and projects on non-food/industrial crops		
15:05	<i>Focus group 40: Industrial Crops</i>	Dr. Isabella Donnelly, ORS
15:30	<i>MAGIC project: Growing industrial crops on marginal lands</i>	Dr. Efthymia Alexopoulou, CRES
15:45	<i>Research projects on camelina: 4CE-MED & UNTWIST</i>	Prof. Andrea Monti, University of Bologna Dr. Claudia Jonak, Austrian Institute of Technology
16:15	<i>Thematic networks on agriculture: EURAKNOS & EUREKA</i>	Prof. Pieter Spanoghe, Gent University
16:45	Questions	
17:00	Close of the event	
Supported by (EIP AGRI: FOCUS GROUPS 40, MAGIC, 4CE-MED, UNTWIST, EUREKA, EURAKNOS)		
		

Figure 9. PANACEA's final event programme. *Source: Spanish Co-ops, 2021.*

5 MAGIC's linked Operational Groups

Operational Groups (OGs) are working groups at local level (spread all over European regions) where a variety of professional profiles from different areas are gathered to implement innovation in the agricultural and forestry sectors. They are expected to bring together numerous actors such as farmers, scientists, consultants, businesses, environmental groups, consumer interest groups or NGOs to find an innovative solution to a shared problem or to test an innovative idea in practice. The results and knowledge developed by an OG must be shared via the EIP-AGRI network so it can benefit the entire sector.

Despite the initial funding was estimated for over 3,000 OGs across Europe, as of December 2021 only about 2,150 OGs have been included in the EIP-AGRI OGs database. The information presented on OGs varies depending on the geographical location, but the EIP-AGRI database helps to address these shortcomings with useful search tools.

In this regard, MAGIC has conducted an in-depth desk research through different databases and documentary repositories from different countries. The information of more than 2,000 OGs was examined, identifying 56 OGs with close objectives and purposes to those of MAGIC. Although the complete list of the identified projects with their characteristics is presented at the end of the document in "Annex I: List of identified Operational Groups related with MAGIC's project concept", some examples are presented below:

- **DIVAGRICOBIOETHA**: "*Diversification agricole collective dans la production de biométhane*" (Collective agricultural diversification in biomethane production).
- **AGRIFORVALOR**: "*Bringing added value to agriculture and forest sectors by closing the research and innovation divide*" (Bringing added value to agriculture and forest sectors by closing the research and innovation divide).
- **Biorefinery Glas**: "*Small-scale Farmer-led Green Biorefineries*" (Small-scale Farmer-led Green Biorefineries).
- **FOODRIDE**: "*La filiera per l'innovazione agrifood di nicchia - diversificazione agricola, logistica, commercio di prossimità*" (The supply chain for niche agrifood innovation - agricultural diversification, logistics, proximity trade).
- **SCARABEO**: "*Scarti di Canapa - riutilizzi alimentari e biovalorizzazione energetica degli oli*" (Hemp residues - reuse for food and energy recovery with oils).

Most of the topics from these OGs are directly linked with the promotion or use of non-food crops for the obtaining of bio-based products, including bioenergy and bio-commodities production purposes. The majority of the OGs aligned with MAGIC's interests were identified in Italy (23), Spain (12), Germany (10) and France (6), though there were some others present in United Kingdom (1), Netherlands (1), Latvia (1), Slovenia (1) and Ireland (1).

All the OGs were invited to participate at MAGIC's final meeting and were contacted every six months during the project life. In all these contacts MAGIC's leaflet, newsletter, website, description and other details were shared. There was a remarkable interaction maintained with three representatives from the subsequent operational groups:

- I. **Guayul-LR:** CIRAD's staff (French research centre) were often involved in many MAGIC project activities and events. They shared a video of the OG and were also present at MAGIC's project final event.
- II. **Alternative forage systems for marginal land:** The coordinator expressed his interest in MAGIC's project activities and shared updates about the OG. He provided a [link](#) with public information on the OG and offered to stay in touch in the future.
- III. **CARD:** Partners from this OG got in contact with MAGIC consortium and distributed updates and data about the operational group: [GO-CARD – Operational Group \(go-card.eu\)](http://go-card.eu). They also shared a report describing the aim of the OG (testing the cardoon productivity and sustainability, cultivating it in some farms in the Tuscany region), the expected results of the project, the project actions and the project partners.

6 Conclusion

The strong collaboration held between MAGIC project and the EIP-AGRI network, mainly channelised through Spanish Co-ops and its participation on the Sol APS, has allowed to perform several joint actions such as feeding the EIP-AGRI web page with the main outputs of MAGIC project in the form of practice abstracts, to promote and support a Focus Group on industrial crops with a relevant involvement of MAGIC project partners, to participate at EIP-AGRI network workshops on bioeconomy, and to the identification and constant exchange of information with more than fifty OGs related with MAGIC project activities.

In addition, the participation of MAGIC partners over the multiple Sol APS meetings has provided a useful network of contacts to the project and led to common positions with other members that permitted to jointly support specific EIP-AGRI activities of interest.

References

- EC – European Commission, 2010. *Communication from the Commission «Europe 2020 a strategy for smart, sustainable and inclusive growth»*
- EC – European Commission, 2011. *Europe 2020 Flagship Initiative Innovation Union*
- EC – European Commission, 2012. *Communication from the Commission to the European Parliament and the Council on the European Innovation Partnership “Agricultural Productivity and Sustainability”*
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability.
<https://ec.europa.eu/eip/agriculture/>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability. *EU funding opportunities related to innovation in agriculture, food and forestry*
<https://ec.europa.eu/eip/agriculture/en/find-connect/funding-opportunities>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability. *Innovation support services*
<https://ec.europa.eu/eip/agriculture/en/innovation-support-services-including-advisors>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *Operational Groups*
<https://ec.europa.eu/eip/agriculture/en/about/operational-groups>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *Sustainable industrial crops in Europe: new market opportunities and business models which do not replace food production*
<https://ec.europa.eu/eip/agriculture/en/focus-groups/sustainable-industrial-crops-europe-new-market>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *EIP-AGRI Focus Group Sustainable industrial crops: Final report*
<https://ec.europa.eu/eip/agriculture/en/publications/eip-agri-focus-group-sustainable-industrial-crops>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *The permanent Subgroup on Innovation for agricultural productivity and sustainability*
<https://ec.europa.eu/eip/agriculture/en/about/permanent-subgroup-innovation-agricultural>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *14th meeting of the permanent Subgroup on Innovation for agricultural productivity and sustainability*
<https://ec.europa.eu/eip/agriculture/en/event/14th-meeting-permanent-subgroup-innovation>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *15th meeting of the permanent Subgroup on Innovation for agricultural productivity and sustainability*
<https://ec.europa.eu/eip/agriculture/en/event/15th-meeting-permanent-subgroup-innovation>
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *EIP-AGRI Focus Group Sustainable industrial crops final report*
[eip-agri_fg_industrial_crops_final_report_2021_en.pdf \(europa.eu\)](https://ec.europa.eu/eip/agriculture/en/publications/eip-agri-fg-industrial-crops-final-report-2021-en.pdf)
- EIP-Agri – European Innovation Partnership for Agricultural productivity and Sustainability, 2016. *PANACEA - A thematic network to design the penetration PAth of Non-food Agricultural Crops into European Agriculture*
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/panacea-thematic-network-design-penetration-path>
- ENRD – European Network for Rural Development.
<https://enrd.ec.europa.eu/>
- ENRD – European Network for Rural Development, 2016. *RDP analysis: Measure 16 ‘Cooperation’*
- MAGIC – A thematic network to design the penetration PAth of Non-food Agricultural Crops into European Agriculture

7 Annex I: List of identified Operational Groups related with MAGIC's project concept

Nº	Country	Acronym	Title	Additional information
1	Spain	CÁÑAMO	Normalización del cáñamo industrial en España, cultivo y transformaciones (Normalisation of the industrial hemp in Spain, cultivation and transformations)	https://www.ctaex.com/transferecia-tecnologica/GOS-canamo-industrial
2	France	GUAYUL-LR	Implantation de parcelles de démonstration de culture de guayule (<i>Parthenium Argentatum</i>) en Languedoc-Roussillon (Implementation of guayule (<i>Parthenium Argentatum</i>) demonstration fields in Languedoc-Roussillon Region)	https://www.reseaurural.fr/centre-de-ressources/projets/implantation-de-parcelles-de-demonstration-de-culture-de-quayule
3	Italy	MACARENA	Mais, canapa, frumenti e ortive per la riduzione degli input esterni e dei nitrati nelle acque (Maize & vegetables using hemp as a trap crop, reduction of cropping inputs also with triticum spp)	http://agricoltura.regione.emilia-romagna.it/psr-2014-2020/doc/progetti-partenariato-europeo-per-innovazione-pei/progetti-focus-area-p4a_biodiversita/mais-canapa-frumenti-e-ortive-per-la-riduzione-degli-input-esterni-e-dei-nitrati-nelle-acque/view
4	Italy	CABIOS	Implementazione di tecniche di agricoltura conservativa e fasce tampone bioenergetiche per il miglioramento della qualità dell'acqua e del suolo (Conservation agriculture and bioenergy buffer strips for soil and water quality improvement)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/implementazione-di-tecniche-di-agricoltura
5	United Kingdom		Alternative forage systems for marginal land	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/alternative-forage-systems-marginal-land
6	Italy	CARD	Cardo, una coltura a basso impatto ambientale per la riqualificazione delle aree marginali (Cardoon: a low environmental impact cultivation to redevelopment of marginal areas)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/cardo-una-coltura-basso-impatto-ambientale-la
7	Latvia		Inovatīvi risinājumi industriālo kaņepju apstrādē un pārstrādē (Innovative solutions in treatment and processing of industrial hemp)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/innovat%C4%ABvi-risin%C4%81jumi-industri%C4%81lo-ka%C5%86epju-apstr%C4%81d%C4%93
8	Spain	CAMELINA	Valorización de la Camelina (Camelina valorisation)	http://www.redruralnacional.es/documents/10182/459569/Redacci%C3%B3n+GO+2015_88_L%27HEURA_CAST.pdf/ca112147-7d7b-4685-a277-7665784c3689
9	Spain		Identificación de nuevos cultivos de alto valor añadido y con elevada carga de trabajo manual adaptadas a la agroecología social (Identification of new crops with high added value and with	http://www.redruralnacional.es/documents/10182/459569/Redacci%C3%B3n+GO+2015_88_L%27HEURA_CAST.pdf/ca112147-7d7b-4685-a277-7665784c3689
10	Spain	FINAICONST	Fibra natural para la industria y la construcción (Natural fibre for industry and construction)	https://finaiconst.es/quienes-somos/ https://ec.europa.eu/eip/agriculture/en/find-connect/projects/finaiconst-fibra-natural-para-la-industria-y-la

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11	Spain		Planta piloto innovadora para obtención de goma de ládano y aceites esenciales de especies vegetales (Innovative pilot plant for obtaining lava gum and essential oils from plant species)	http://www.redruralnacional.es/documents/10182/464585/GOP2I-SE-16-0002.pdf/ee524f75-a7a8-43cb-95df-598097ec0d7b
12	Italy	COBRAf	Coprodotti per BioRAffinerie (By-Products for Biorefineries)	https://ec.europa.eu/eip/agriculture/en/mind-connect/projects/coprodotti-bioraffinerie-cobraf
13	Italy	FARM CO ₂ SINK	Stoccaggio del C e riduzione delle emissioni di gas serra climalteranti a livello di azienda agricola (C sequestration and GHG emissions reduction at farm level)	http://www.ebiscioverde.it/cobraf-coprodotti Farm CO ₂ Sink: Stoccaggio del C e riduzione delle emissioni di gas serra climalteranti a livello di azienda agricola - European Commission (europa.eu)
14	Germany		Lupi-Hirse-Huhn	Lupi-Hirse-Huhn - European Commission (europa.eu)
15	Netherlands		The Linen Project	The Linen Project - European Commission (europa.eu)
16	France	AGROECOLIF	Evaluation d'itinéraires AGRO-ECologiques applicables à la production de Lin Fibre (Evaluation of Fiber Flax agro-ecological crop managements)	Evaluation d'itinéraires AGRO-ECologiques applicables à la production de Lin Fibre (AgroEcoLif) - European Commission (europa.eu)
17	Germany		Anbau von Raps mit Begleitpflanzen im Anbausystem Einzelkornsaat und Weiter Reihe (Cultivation of rapeseed with companion plants in the cropping system precision drilling and wide row spacing)	Anbau von Raps mit Begleitpflanzen im Anbausystem Einzelkornsaat und Weiter Reihe - European Commission (europa.eu)
18	France		Les taillis à courte rotation sont-ils une solution dans les futures bioraffineries régionales? (Are short rotation coppice a solution in future regional biorefineries?)	Les taillis à courte rotation sont-ils une solution dans les futures bioraffineries régionales ? - European Commission (europa.eu)
19	Italy	CARTER	Biochar e nuove superfici forestali: binomio vincente per la conservazione e sequestro del carbonio nel terreno (Biochar and new forest surfaces: winning pair for the conservation and sequestration of carbon in the soil)	CARTER Biochar e nuove superfici forestali: binomio vincente per la conservazione e sequestro del carbonio nel terreno - European Commission (europa.eu)
20	Spain	VIVE ROMERO	Vivero de romero para fomento de la actividad agrícola en zonas de la Región de Murcia (The planting of rosemary clones selected for their high yield and quality is carried out to face the problem generated in the areas of the Region of Murcia)	VIVERO DE ROMERO PARA FOMENTO DE LA ACTIVIDAD AGRICOLA EN ZONAS DE LA - European Commission (europa.eu)

21	Germany	LAVENDEL	Lavendelanbau in der Oberlausitz (Lavender cultivation in Upper Lusatia)	Lavendelanbau in der Oberlausitz - European Commission (europa.eu)
22	Germany		Stoffliche Nutzung von Produktionsreststoffen aus der Hanfproduktion - Bereitstellung von Torfersatz und Alternativen (Utilisation of residues from hemp processing - supply of peat substitute and alternatives)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/stoffliche-nutzung-von-produktionsreststoffen-aus
23	Germany		Hanfbanbau-Hanfernte und Weiterverarbeitung von Hanfstroh und Hanfsamen (Cultivation, harvesting and processing of hemp straw and hemp seeds)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/hanfbanbau-hanfernte-und-weiterverarbeitung-von
24	Slovenia		Vloga industrijske konoplje pri prilagajanju podnebnim spremembam ter varovanju virov v kmetijstvu (The role of industrial hemp in adaptation to climate change and in protection of agricultural resources)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/vloga-industrijske-konoplje-pri-prilagajanju
25	Italy		Applicazioni multiuso per rilanciare la filiera della canapa (Multi-purpose applications to resume the hemp supply chain)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/applicazioni-multiuso-rilanciare-la-filiera-della
26	Italy	CANAPRO	Valorizzazione della filiera della canapa attraverso l'innovazione di prodotto e di processo (Enhancement of the hemp supply chain through product and process innovation)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/canapro-valorizzazione-della-filiera-della-canapa
27	Germany		Erhaltung des ursprünglichen, natürlichen CBD Gehalts der Hanfpflanze zur dauerhaften Lagerung durch Bewertung und Optimierung verschiedener Verfahren der Hanftrocknung (Preservation of the original, natural CBD content of the hemp plant for long-term storage by evaluation and optimization of various drying)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/erhaltung-des-urspr%C3%BCnglichen-nat%C3%BCrlichen-cbd
28	Italy	AGRICOLTURA BIOLOGICA	Valutazione di biopesticidi ottenuti da prodotti di scarto della canapa e valutazione della tossicità per l'operatore (Evaluation of biopesticides obtained from hemp's by-products and evaluation of toxicity for the operator)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/agricoltura-biologica-valutazione-di-biopesticidi
29	Italy		Canapa Campana in Fibra (Campania Hemp fiber)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/canapa-campana-fibra
30	Italy	CANAPA IN FILIERA	Produrre canapa nella filiera alimentare e agroindustriale (Produce hemp in the food and agroindustrial chain)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/canapa-filiera-produrre-canapa-nella-filiera

31	Italy	SCARABEO	Scarti di Canapa - riutilizzi alimentari e biovalorizzazione energetica degli oli (Hemp residues - reuse for food and energy recovery with oils)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/scarti-di-canapa-riutilizzi-alimentari-e
32	Germany		Von der ökologischen Winterzwischenfrucht zur feinen Faser (From ecological intercropping to fine fiber)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/von-der-%C3%B6kologischen-winterzwischenfrucht-zur
33	Italy	FILODOR	La filiera dell'ortica: riscoperta e valorizzazione per le produzioni agro-alimentari dell'areale emiliano-romagnolo (Stinging nettle supply chain: rediscovery and valorization for the agro-food production of the Emilia Romagna region)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/la-filiera-dell%E2%80%99ortica-riscoperta-e-valorizzazione
34	Spain	TURTOLIO	Uso integral de la colza, como alternativa sostenible, para la producción de queso bajo la Denominación de Origen Idiazabal (Integral use of rapeseed, as a sustainable alternative, for the production of cheese under the Idiazabal Designation of Origin)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/2016-001-turtolio-uso-integral-de-la-colza-como
35	Italy		Compostaggio in situ per la tutela, la valorizzazione e la gestione Ecosostenibile dei Castagneti (In situ composting for chestnut woods protection, valorization and eco-sustainable management)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/compostaggio-situ-la-tutela-la-valorizzazione-e-la
36	Italy	FORTE	Filiera delle oleaginose a recupero totale (Total recovery oilseed supply chain)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/filiera-delle-oleaginose-recupero-totale-forte
37	Italy	SAFFRONUTRAMED	Piano strategico di valorizzazione dello Zafferano (<i>Crocus sativus L.</i>) (Strategic Plan for enhancement of Saffron (<i>Crocus sativus L.</i>))	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/piano-strategico-di-valorizzazione-dello-zafferano
38	Italy		Giovani in Campo (Youth in the Field)	https://giovanicampo.it/ https://ec.europa.eu/eip/agriculture/en/find-connect/projects/giovani-campo
39	Spain		Nuevos escenarios de producción industrial de planta aromática y medicinal en los sistemas agrarios tradicionales de Catalunya (New scenarios for the industrial production of aromatic and medicinal plants in traditional agricultural systems in Catalonia)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/nuevos-escenarios-de-producci%C3%B3n-industrial-de
40	Spain	TiO de Camp	Torta y Aceite de Camelina prensado en frío (Oilseed meal and cold pressed camelina oil)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/tio-de-camp-torta-y-aceite-de-camelina-prensado-en

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41	Germany		Anbau und Veredelung von Iris germanica und Iris pallida in Bayern (Cultivation and grafting of Iris germanica and Iris pallida in Bavaria)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/anbau-und-veredelung-von-iris-germanica-und-iris
42	Italy		Innovazioni per miglioramento della produttività sostenibile delle aziende biologiche impegnate nel settore delle colture erbacee ed industriali pugliesi (Innovations to improve the sustainable productivity of organic farms engaged in herbaceous and industrial crops in Puglia)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/innovazioni-miglioramento-della-produttivit%C3%A0
43	France		Mise en œuvre de l'agriculture de conservation en Pays de Caux, dans des systèmes incluant des cultures industrielles (Implementation of conservation agriculture in Pays de Caux, in systems including industrial crops)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/giee-sol-en-caux-mise-en-%C5%93uvre-de-lagriculture-de
44	Italy		Produzione e valorizzazione di BIOprodotti vegetali per un impiego TOTale e CARatterizzante nuovi formulati alimentari ricchi in componenti funzionali (Production and enhancement of plant bioproducts for a total and characterising use of new nutritional formulations rich in functional components)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/produzione-e-valorizzazione-di-bioprodotti
45	Italy	CATERPILLAR	CAnapa TEssile peR la Produzione di aLimenti funzionali e di biomAssa pRoteiche per l'alimentazione animale (Fiber hemp industrial chain for the production of functional food and animal feed additives)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/canapa-tessile-la-produzione-di-alimenti
46	France	DIVAGRICOBIO METHA	Diversification agricole collective dans la production de biométhane (Collective agricultural diversification in biomethane production)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/divagricobiometha%C2%A0-diversification-agricole
47	Spain		Aplicación de herramientas innovadoras en el sector de la bioenergía (Application of innovative tools in the bioenergy sector)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/aplicaci%C3%B3n-de-herramientas-innovadoras-en-el
48	Spain		Producción, Transformación Y Comercialización De Biomasa Con Fines Energéticos Bajo Gestión Sostenible (Production, Transformation And Commercialization Of Biomass For Energy Purposes Under Sustainable Management)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/producci%C3%B3n-y-transformaci%C3%B3n-y-comercializaci%C3%B3n-de
49	Germany	AGRIFORVALOR	Bringing added value to agriculture and forest sectors by closing the research and innovation divide (Bringing added value to agriculture and forest sectors by closing the research and innovation divide)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/agriforvalor-bringing-added-value-agriculture-and
50	Germany		Optimierung der Ertragsleistung klimaresilienter sommerannueller Kulturpflanzen in Sachsen (Sonnenblumen) (Optimizing crop yields of climate resilient summer annual crops in Saxony (Sunflowers))	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/optimierung-der-ertragsleistung-klimaresilienter

51	France		Culture de diversification : le Grenadier, conduite au verger et valorisation des produits (Diversification crop: the pomegranate tree, orchard management and product development)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/culture-de-diversification%C2%A0-le-grenadier-conduite
52	Ireland	Biorefinery Glas	Small-scale Farmer-led Green Biorefineries (Small-scale Farmer-led Green Biorefineries)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/biorefinery-glas-small-scale-farmer-led-green
53	Italy	FOODRIDE	La filiera per l'innovazione agrifood di nicchia - diversificazione agricola, logistica, commercio di prossimità (The supply chain for niche agrifood innovation - agricultural diversification, logistics, proximity trade)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/foodride-la-filiera-innovazione-agrifood-di
54	Italy		Soluzioni per ridurre l'erosione in terreni collinari e montani mantenendo e incrementando le attività agricole attraverso l'utilizzo di pratiche di agricoltura conservativa (Solutions to reduce erosion in hilly and mountainous terrain by maintaining and increasing agricultural activities through the use of conservation agriculture practices)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/soluzioni-ridurre-lerosione-terreni-collinari-e http://www.soilution.it/
55	Italy		Valorizzazione di sottoprodotti di filiere vegetali tramite insetti: nuove soluzioni per impieghi alimentari, agronomici ed energetici (Valorisation of plant by-products by insects: new solutions for food, agronomic and energy uses)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/valorizzazione-di-sottoprodotti-di-filiere
56	Spain		Observatorio De Innovación Agroecologica Frente Al Cambio Climático (Observatory Of Agro-Ecological Innovation Against Climate Change)	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/observatorio-de-innovaci%C3%B3n-agroecologica-frente-al