

# INTEGRATING PRIMARY PRODUCERS INTO BIOBASED VALUE CHAINS

## SESSION #1: PRODUCTION OF BIOMASS FROM FARMERS AND FORESTERS

09 November 2023



# Integrating Primary Producers into BioBased Value Chains

## Session #1: Production of biomass from Farmers and Foresters

### AGENDA SESSION #1

Thursday 09 November 2023 from 9:00 am to 12:00 pm CEST

<b>09:00 – 09:15</b>	<b>Main room – Presentations in English/French</b> Warm-up: Where are we located? Introduction to the SCALE-UP project, Zoritz Kiresiewa	<b>10:20 – 11:20</b>	<b>Break-out rooms</b> Moderated in your language by a facilitator in your region. Collective discussions. See page 2
<b>09:15 – 09:35</b>	<b>Successful project consultation for soil and water protection - knowledge transfer from theory to agricultural practice</b> Patrick Falkensteiner, Chamber of Agriculture Upper Austria	<b>11:20 – 11:30</b>	<b>Short break</b>
<b>09:35 – 09:50</b>	<b>Involving producers in the setup of a new value chain</b> Guillaume Mesnildrey, Chamber of Agriculture of Normandy (France)	<b>11:30 – 12:00</b>	<b>Main room – Presentations in English</b> Feedback on the key outcomes and questions from the breakout rooms Conclusions and how to move forward.
<b>09:50 – 10:10</b>	<b>Sustainability and Circular Economy Potentials in terms of Food Waste</b> Prof. dr Jana Klopchevska , Faculty of Technology and Metalurgy (North Macedonia)	<b>Short survey: give your feedback on the training</b>	
<b>10:10 – 10:20</b>	<b>Short break</b>		





# INTRODUCTION TO SCALE-UP

Zoritzia Kiresiewa  
Ecologic Institute

21 November 2023

SCALE<sup>UP</sup>  
community-driven  
bioeconomy development



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101060264.

# THE SCALE-UP PROJECT

A three-year EU-funded project, aiming to achieve:

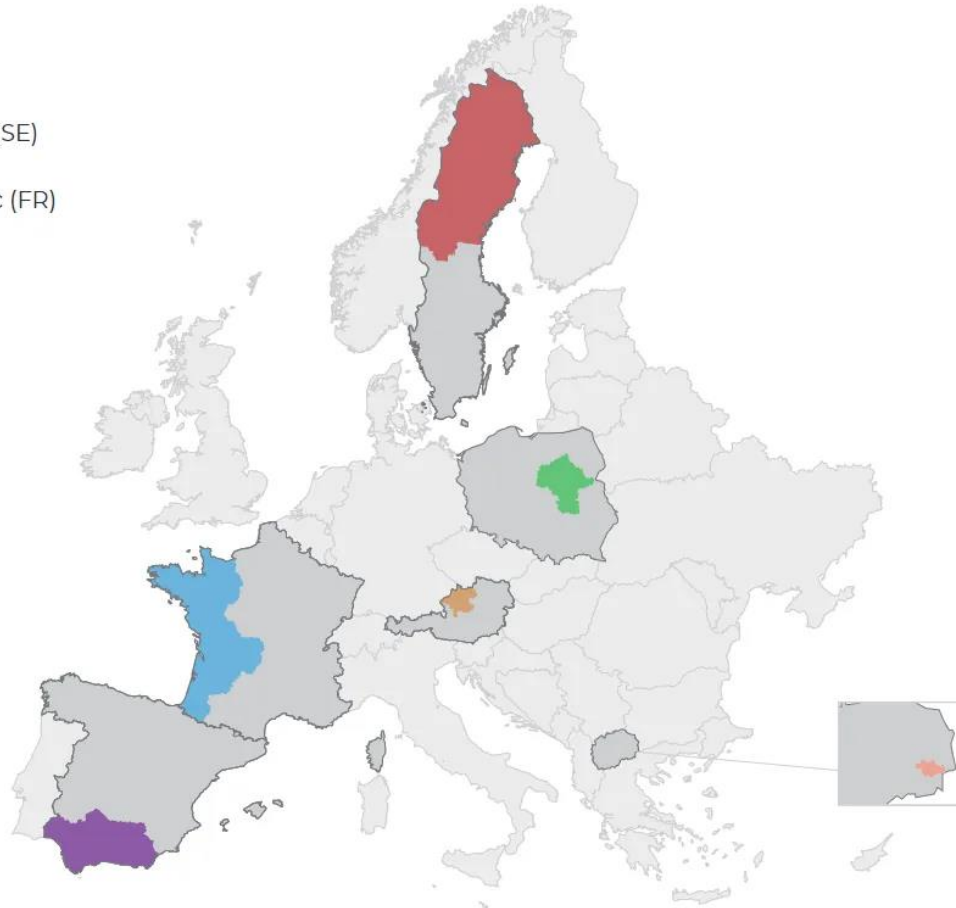
- Increased capacity of regional multi-actor partnerships to accelerate the development of marketable bio-based products and services.
- Strengthened collaboration between **primary producers**, SMEs, clusters, social actors, and policymakers.
- Improved knowledge about nutrient recycling potentials in regional bioeconomies.
- High level of awareness and understanding of the bioeconomy and its impacts on local communities.
- Promotion of a sustainable, inclusive and just regional bioeconomy.



# SCALE-UP'S FOCAL REGIONS

## SCALE-UP regions

- Northern Sweden (SE)
- Mazovia (PL)
- French Atlantic Arc (FR)
- Upper Austria (AT)
- Strumica (MK)
- Andalusia (ES)



Region	Biomass streams
<b>Northern Sweden</b>	needles and tops, bark, sawdust, shavings...
<b>Mazovia</b>	apple prunings and apple pomace
<b>French Atlantic Arc</b>	flax, hemp and miscanthus
<b>Upper Austria</b>	beer & bakery production (grains), fruit production, sunflower oil
<b>Strumica</b>	agricultural residues, by-products of food processing
<b>Andalusia</b>	olive prunings, pomace and wastewater

Source: SCALE-UP project



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# CONSULTATION FOR SOIL AND WATER PROTECTION KNOWLEDGE TRANSFER FROM THEORY TO AGRICULTURAL PRACTICE

Patrick Falkensteiner,  
Chamber of Agriculture Upper Austria

PRESENTATION 





# PUTTING PRODUCTION AT THE HEART OF THE SUPPLY CHAIN

Guillaume Mesnildrey  
Regional Chamber of Agriculture of Normandy





# PRODUCERS REGULARLY ISOLATED FROM DISCUSSIONS ON THE DISTRIBUTION OF VALUE

- A market price that applies to everyone
  - Decision-making power delegated to structures disconnected from the field
  - Strong national and international competition
  - A lack of involvement by producers in the future of their production
- ➔ Recreate a space for dialogue, giving a voice to every player: producer, processor, distributor, etc.
- ➔ Rebalancing the balance of power



## 2 EXAMPLES IN NORMANDY

- A new sector: Hops
- A historic industry: beef





# EMERGENCE OF HOPS IN NORMANDY

A new sector:

- No technical and economic references
- Little knowledge of the potential market
- No suppliers, no advice, no technical support

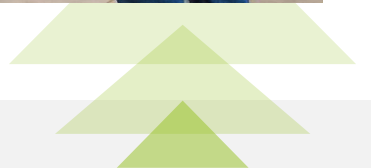
A blank page in 2019!



# EMERGENCE OF HOPS IN NORMANDY

Creation of the "Houblons de Normandie" association, bringing together all the hop growers under a common banner:

- Hop growers
- Brewers, hop users
- Everyone can have their say on the construction of the sector
- Neutral coordination by the Chamber of Agriculture





# EMERGENCE OF HOPS IN NORMANDY

Starting from scratch, the players were able to work together to create the conditions for success:

- Variety trials by brewers
- Market research
- Visits to hop farms and breweries to find out more about the business and the constraints specific to each profession
- Collective promotion of the sector
- A climate of trust between producers and buyers

➔ Balanced relationship, easier to discuss price under these conditions



# PROMOTING NORMANDY BEEF

A historic, traditional sector:

- Many technical and economic references
- Known market
- All the players are present in the region
- Often conflicting relations between production and downstream

A history hard to forget





## PROMOTING NORMANDY BEEF

Creation of a working group that meets every month and brings people together:

- Breeders
- Slaughterers
- The distributor

Neutral coordination by the Chamber of Agriculture



# PROMOTING NORMANDY BEEF

The programme:

- Visits to farms and slaughter houses
- Sensory analysis of meat in the laboratory
- Definition of production rules (no GMOs, no antibiotics, grass rearing, etc.)
- Establishing a price that is remunerative for the farmer and secure for everyone.
- In-store promotion





# SUSTAINABILITY AND CIRCULAR ECONOMY POTENTIALS IN TERMS OF FOOD WASTE

Dr. Jana Klopcevska, Ph.D.

Associate Professor

Ss. Cyril and Methodius University in Skopje,  
FTM - Department of Food and Biotechnology

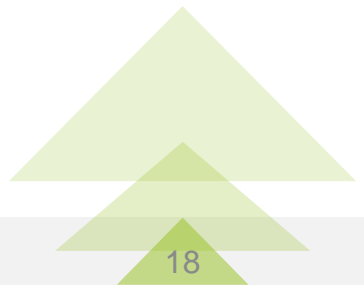
Skopje, 21.11.23





## SUSTAINABILITY

SUSTAINABILITY MEETS THE NEEDS OF THE PRESENT  
WITHOUT JEOPARDIZING FUTURE GENERATION

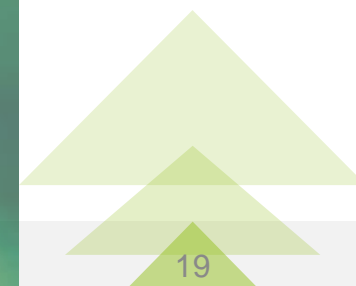




# SUBSTANTIAL OPPORTUNITY FOR BUSINESSES READY TO SEIZE IT

Market size \$2.6 Trillion      -220,000 t CO<sub>2</sub> / year

Global market for new circular  
agrifood products by 2030



# WHAT IS SUSTAINABILITY?

## INTERDEPENDENCIES BETWEEN 3 BIG THINGS



### ENVIRONMENT

- Air
- Water
- Soil
- Energy



### ECONOMY

- Managing scarce resources
- Profit instead of costs

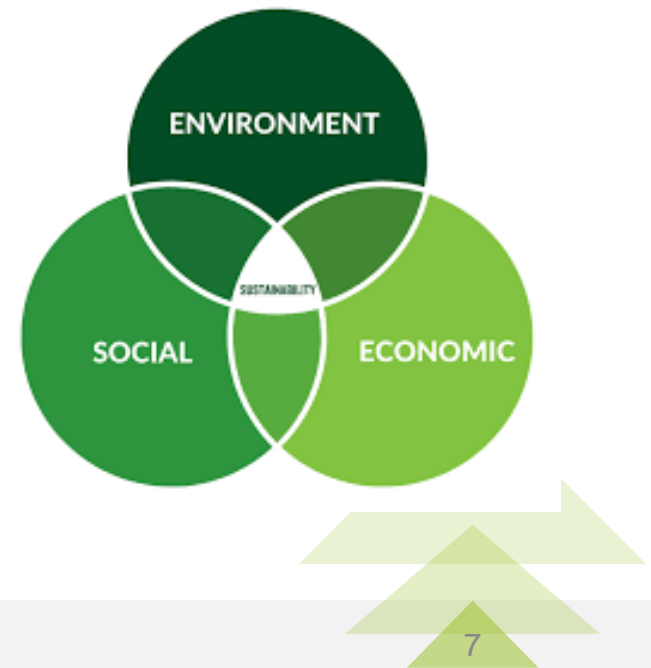


### SOCIETY

- Interaction among individuals
- Interactions among communities

# WHY TO FOCUS ON SUSTAINABILITY?

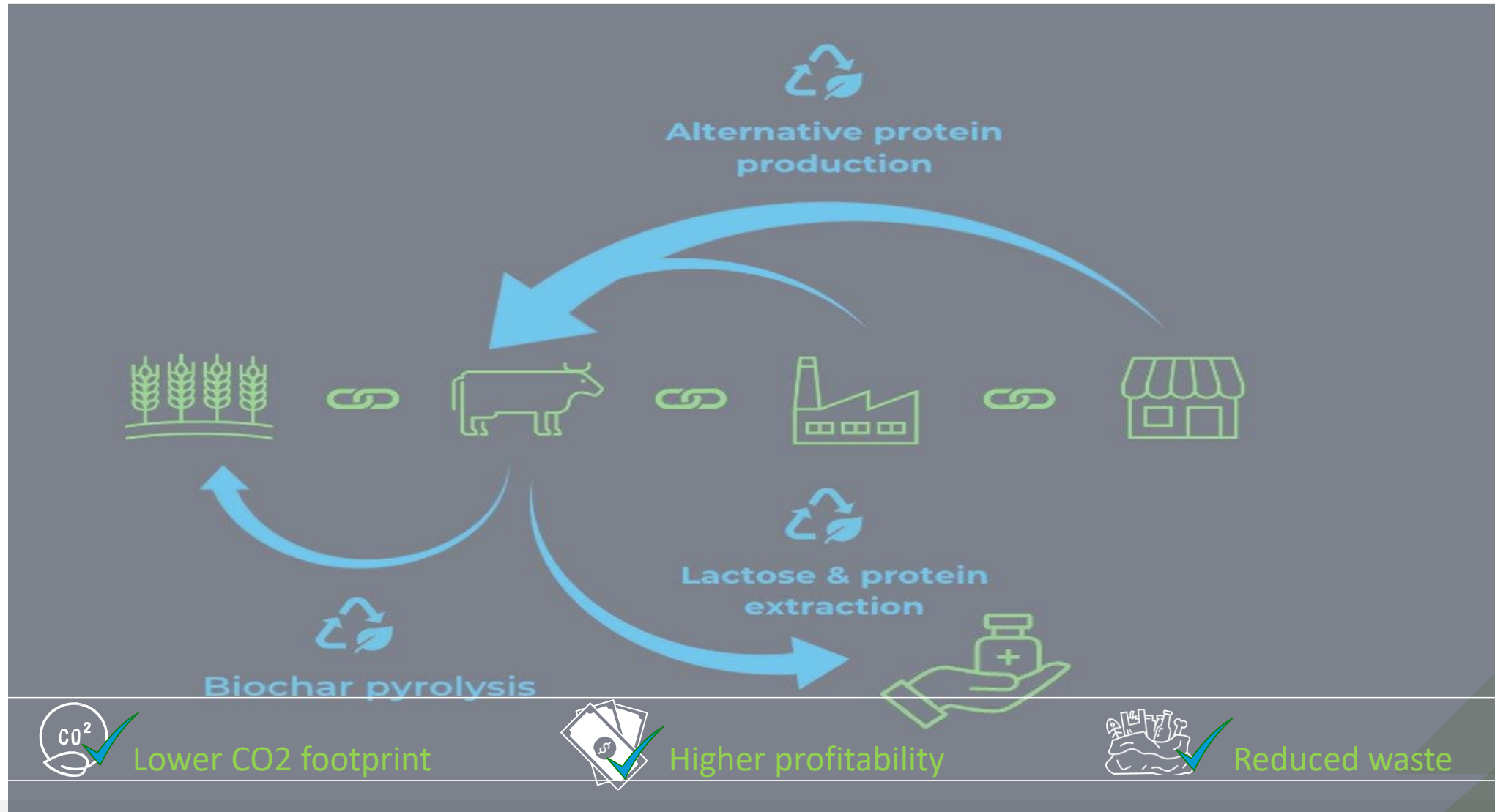
- To increase competitiveness by saving energy and material
- To respond to buyers' requests / EU regulations
- To develop sustainable products for an increasing market demand
- As part of the corporate strategy



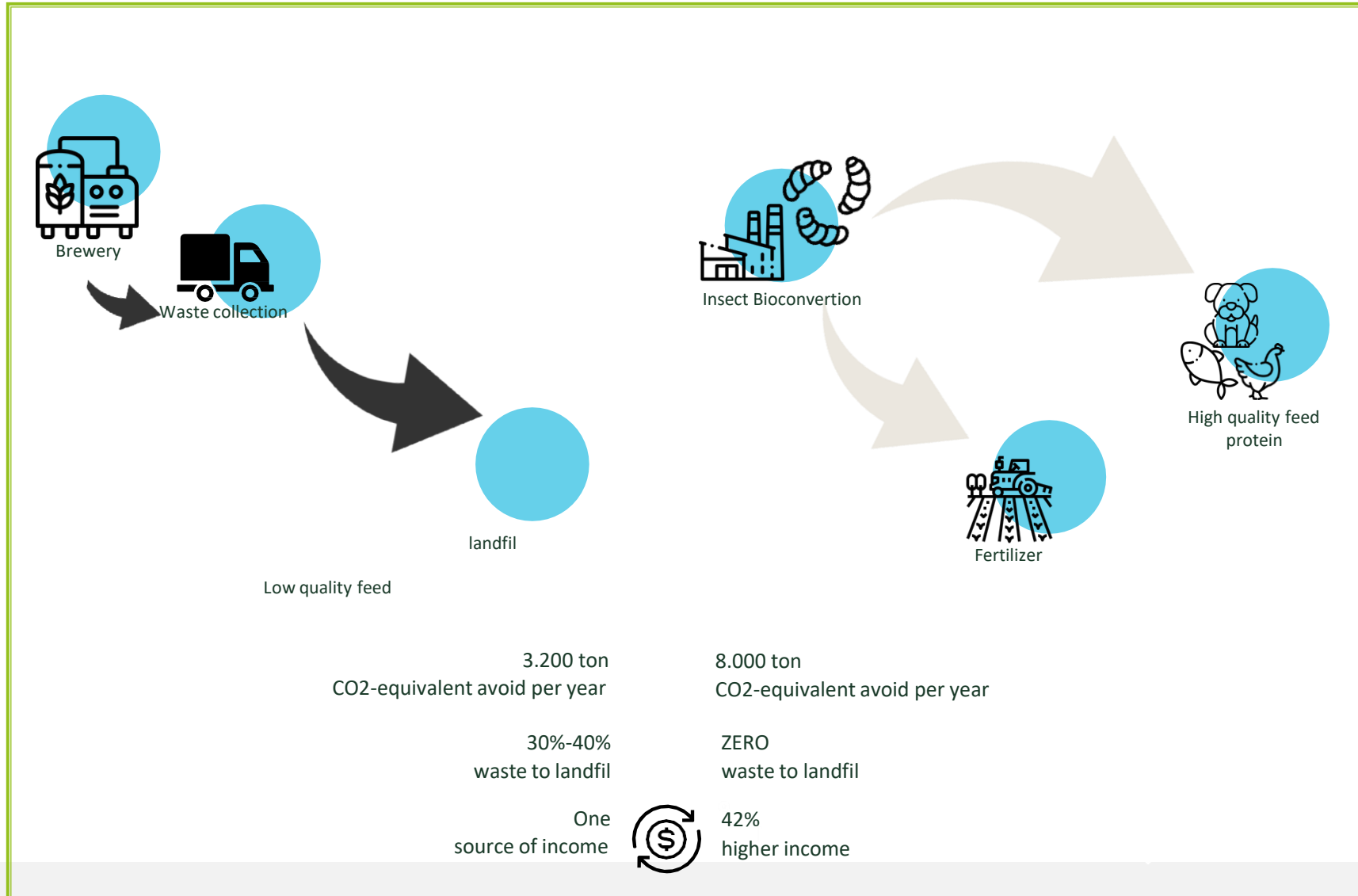


# SUSTAINABILITY AND CIRCULARITY IN AGRICULTURE, FOOD AND BEVERAGES INDUSTRY

→ Circular high-value-added products



## Brewery Example Circular Business model



A brewery company produce 50,000 ton of Brewery spent grain (BSG) annually. BSG is a by-product of the brewing process. Currently, a third party buys the BSG for EUR 3.5 per ton to be used as livestock feed without further treatment. Untreated BSG ended up at the landfill.

VCG.AI deploys circular technology VCG.AI identified insect bioconversion as the most appropriate solution to treat BSG. Black soldier fly larvae consume BSG as feedstock. Every two weeks, we harvest protein from larvae and organic fertilizers.

Example case study developed by VCG.AI, 2023



# SUSTAINABLE PRACTICES

## Reduce

Energy, waste,  
water,  
resources

## New Products

Sustainable  
products for the  
same market

## New Opportunities

Create value from  
residuals /waste

Reduce dependency on virgin material  
Cost reduction, waste reduction, new income,  
higher profit





# UN-ACTION PLAN: THE TRANSFORMATION OF OUR PLANET 2030



Established 2015

World's suggested best plan to build a better world for people and our planet by 2030



# TEAM



Igor  
Izotov



Dr. Jana  
Klopchevska



Aleksandar  
Kuzinakov



# BIOCHAKING LABORATORY

**SCALE**UP  
community-driven  
bioeconomy development

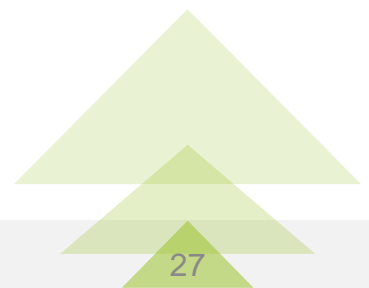


 THE RECURSIVE

[THERECURSIVE.COM](https://therecursive.com)

**Skopje's New Biotech Lab Takes a Biohacking Approach to Biowaste**

In an era where science and technology are pushi...





# SUSTAINABILITY IN FOOD PRODUCTION

Food manufacturers can implement innovative practices to become more sustainable:

- Reduced usage of water
- Using renewable energy
- Reusing waste from food production, or
- Introduce sustainable packaging solutions





# COMPANIES THAT APPLIED SUSTAINABLE PRACTICES

## IGNEA

beauty of the skin is in simplicity

### ENVIRONMENT

- Substitutions of importing raw material from overseas
- Using organic practices for own production



# COMPANIES THAT APPLIED SUSTAINABLE PRACTICES

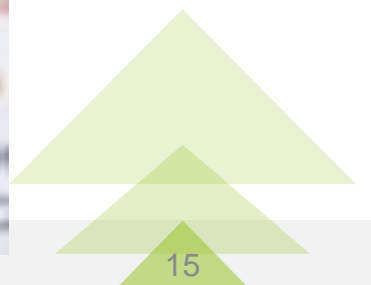
## SOCIETY + REDUCTION OF WASTE

### External

- Fair trade helps local farmers benefit
- Organic production supports the environment
- Local production reduces the use of energy for transportation

### Internal

- Sustainable packaging





# COMPANIES THAT APPLIED SUSTAINABLE PRACTICES

## ENVIRONMENT + ECONOMY + WASTE REDUCTION

- Match superfood is a unique concept for purpose-driven eco brands delivering products that are good for the planet
- Less than 25 Employees
- Strong growth after focusing on sustainability
- Innovative packaging
- By product used as a material for new product

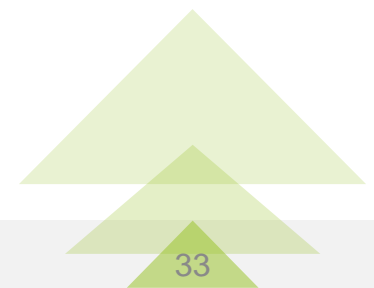


# SUSTAINABLE PRODUCTS



# SUSTAINABLE PRODUCTS

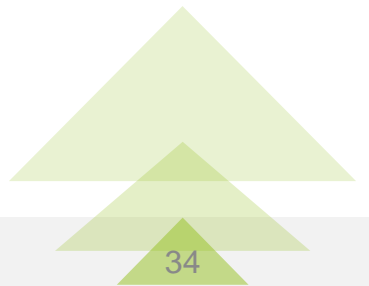
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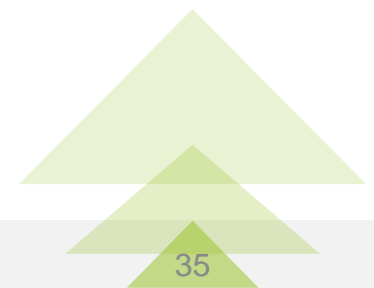
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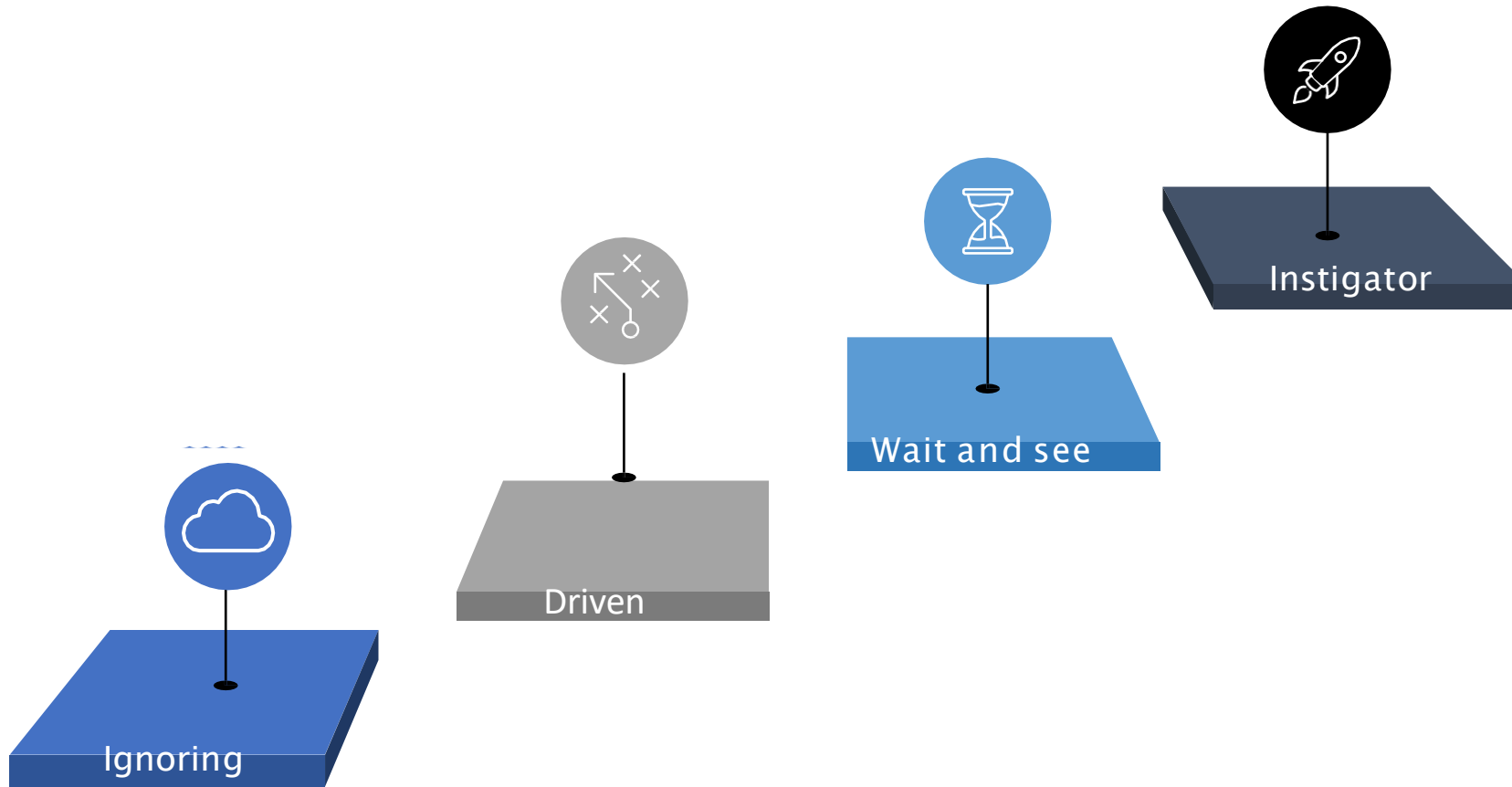
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bioeconomy development



# SUSTAINABLE PRODUCTS

SCALE<sup>UP</sup>  
community-driven  
bioeconomy development







# THANK YOU FOR YOUR ATTENTION

Dr. Jana Klopcevska, Ph.D.  
Associate Professor

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Website [www.tmf.ukim.edu.mk](http://www.tmf.ukim.edu.mk)

## PROJECT PARTNERS



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# BREAKOUT ROOMS DISCUSSION TOPICS

**1. What are the challenges in connecting upstream and downstream in a value chain ? How does the information from consumers or from businesses flow back to producers ?**

**2. How individual producers or groups of producers (cooperatives, informal collective) fit into a wider value chain ? How to better cluster producers when and where it is needed ?**

**3. What are the support structures for integrating producers: economical and regulatory framework, policies and local authorities, local facilitation ...**





# BREAK-OUT ROOMS

You will be sent automatically  
in a few seconds

BO Room starts with 10 minutes Coffee Break  
Please come back soon !





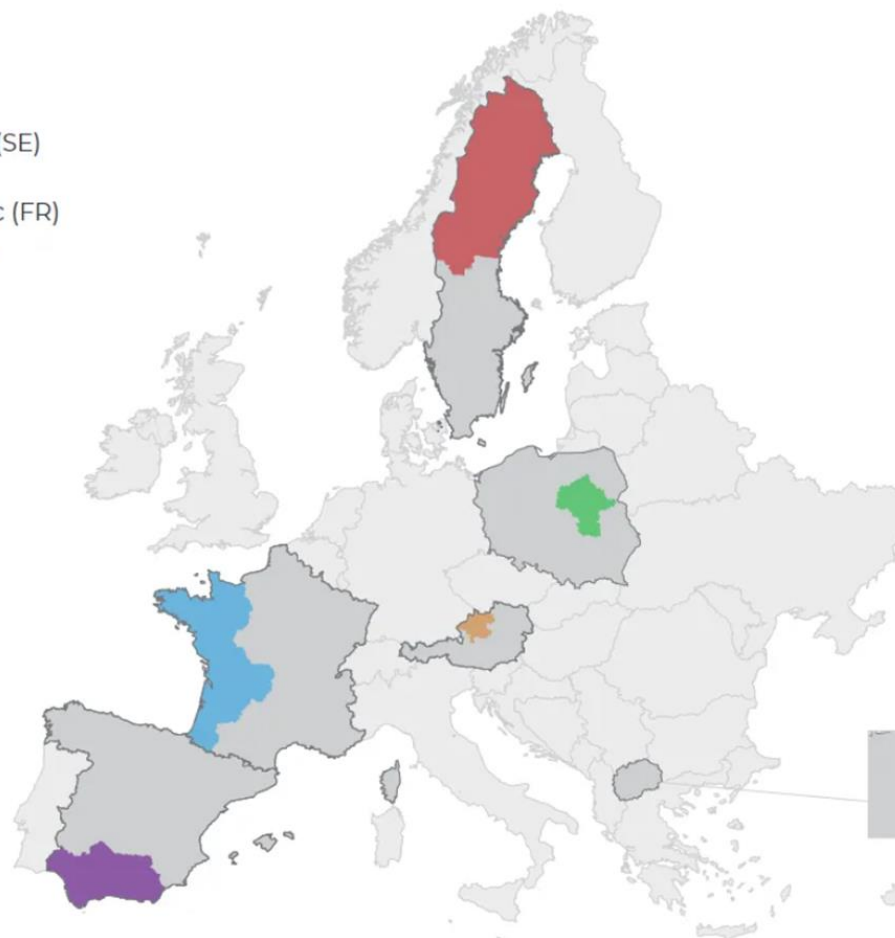
# FEEDBACK SESSION

Starts with 10 minutes Coffee Break  
Please come back soon !



**SCALE-UP regions**

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- Mazovia (PL)
- French Atlantic Arc (FR)
- Upper Austria (AT)
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- Andalusia (ES)



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# CLOSING WORDS

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community-driven  
bioeconomy development



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# THE **SCALE-UP** TRAINING PROGRAMME

A community-driven, needs-based training programme for bioeconomy development in European rural areas

**SAVE THE DATES !**

<p><b>EFFICIENT REGIONAL INFRASTRUCTURE &amp; BIOMASS LOGISTICS</b></p> <p><b>WS4</b> September &amp; October 2023 07.09.23 / 26.09.23 /19.10.23</p>	<p><b>INTEGRATING PRIMARY PRODUCERS INTO BIO-BASED VALUE CHAINS</b></p> <p><b>WS2</b> November &amp; December 2023 09.11.23 / 21.11.23 / 07.12.23</p>
<p><b>DIGITALISATION IN THE BIOECONOMY</b></p> <p><b>WS3</b> January &amp; February 2024 16.01.24 / 06.02.24 / 27.02.24</p>	<p><b>IMPROVED NUTRIENT RECYCLING</b></p> <p><b>WS1</b> March &amp; April 2024 12.03.24 / 04.04.24 / 23.04.24</p>
<p><b>PRACTICES OF „SOCIAL INNOVATIONS“ IN RURAL BIOECONOMIES</b></p> <p><b>WS5</b> May &amp; June 2024 14.05.24 / 04.06.24 / 25.06.24</p>	<p><b>GOVERNANCE OF REGIONAL BIO-BASED SYSTEMS</b></p> <p><b>WS6</b> September &amp; October 2024 05.09.24 / 26.09.24 /17.10.24</p>
<p><b>STRATEGIES TO ADDRESS SOCIAL, ECOLOGICAL AND ECONOMIC TRADE-OFFS IN REGIONAL BIOECONOMY DEVELOPMENT</b></p> <p><b>WS7</b> October, November &amp; December 2024 31.10.24 / 21.11.24 / 12.12.24</p>	

## WORK STREAM 2

### ***Integrating Primary Producers into Bio-Based Value Chains***

Link to Register :

<https://forms.gle/u7TQEAcC88ksRPSz6>

SESSION #1  
09 November 2023 – 9 am to 12 am CEST

Production of biomass  
from Farmers and Foresters

SESSION #2  
21 November 2023 – 9 am to 12 am CEST

Value chains and markets:  
linking producers and stakeholders

SESSION #3  
07 December 2023 – 9 am to 12 am CEST

Innovations and challenges in production and  
mobilisation of biomass

**SAVE THE DATE  
FOR THE NEXT  
SESSION !**



# SHORT SURVEY

*Links in the chat!*



French



Polish



German



Swedish



Macedonian



Spanish



THANK YOU !

SEE YOU IN THE  
NEXT SESSION ...

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