



Bio-based Industries  
Joint Undertaking

# BE-Rural Capacity building Workshop

Ana CUADRADO GALVÁN

BBI JU Project Officer

25/10/2021

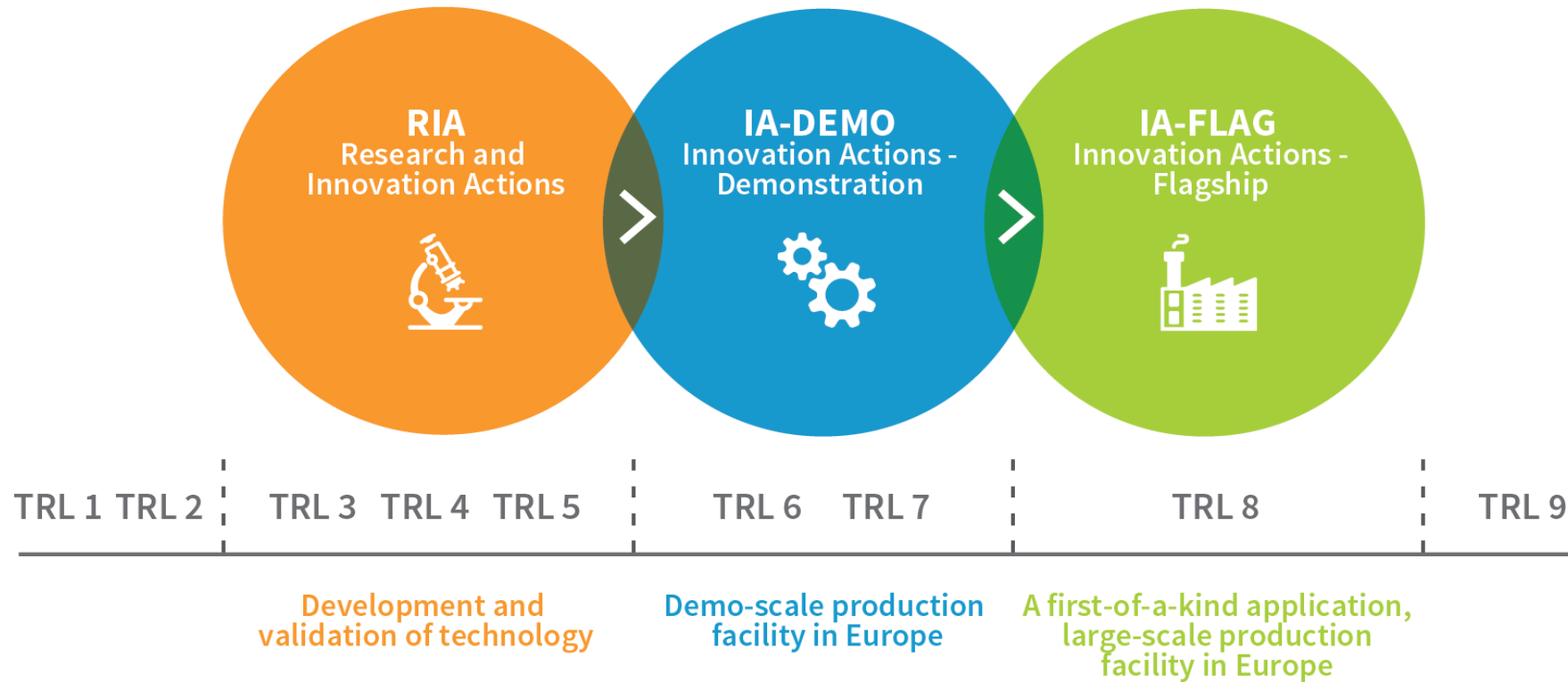


# About BBI JU (2014 – 2020)

- Public-Private Partnership (PPP) between European Union & Bio-based Industries Consortium (BIC)
- EU body operating under Horizon 2020 rules
- Funding R&I projects from technology development to full scale



# BBi JU types of actions



**CSA**

Coordination and Support Actions

-

no link to TRLs\*

\*TRL = Technology Readiness Levels





# BBI JU Governance



## Bio-based Industries Joint Undertaking (BBIJU)

### Governing Board (10 seats)

Responsible for the strategic orientation and the operations of the BBI JU and for the supervision of its activities



### Executive Director

Responsible for day-to-day management of the BBI JU in accordance with the decisions of the Governing Board



### Programme Office

Responsible for the management of the grant management lifecycle and for the implementation of specific activities to further consolidate BBI JU's vision and mission

### States Representatives Group

(28 Member States + 10 Associated Countries)  
Advisory body of the BBI JU, responsible for providing advice to the Governing Board on the programme progress and achievement of its targets



### Scientific Committee

(15 seats)

Advisory body of the BBI JU, responsible for providing scientific advice to the BBI JU, such as scientific priorities to be addressed

# BBI JU implementation



**Strategic level: SIRA**  
 Strategic Innovation and Research Agenda:  
 guiding document developed by BIC



**Operational Level**  
 Annual Work Plan

Drafting – Approval – Supporting



**Consultation:**

BBI JU Scientific Committee and States Representatives Group

Call for proposals  
 (RIAs, IAs, CSAs)



Project management  
 Reporting - Monitoring



- ✓ Publication
- ✓ Evaluation
- ✓ GAP



# BBI JU key figures Call 2014-20



142 projects



1055 beneficiaries

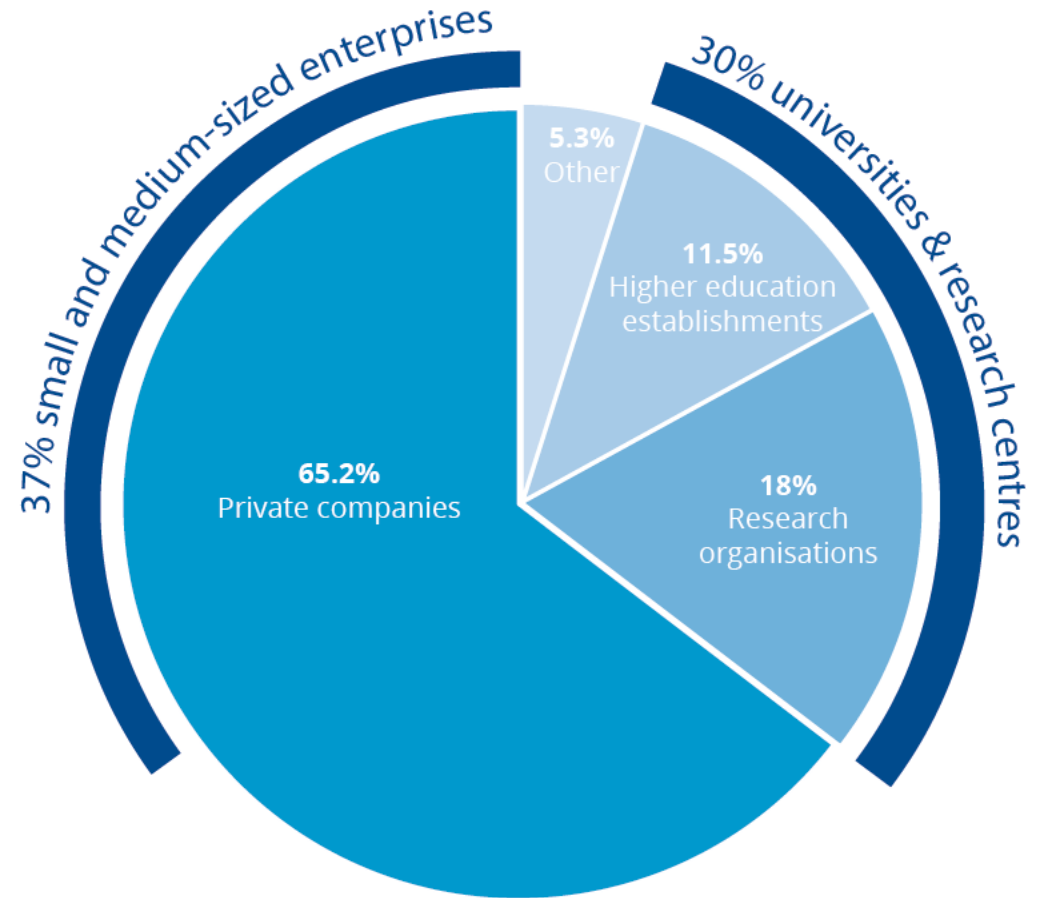


€822 million BBI JU funding



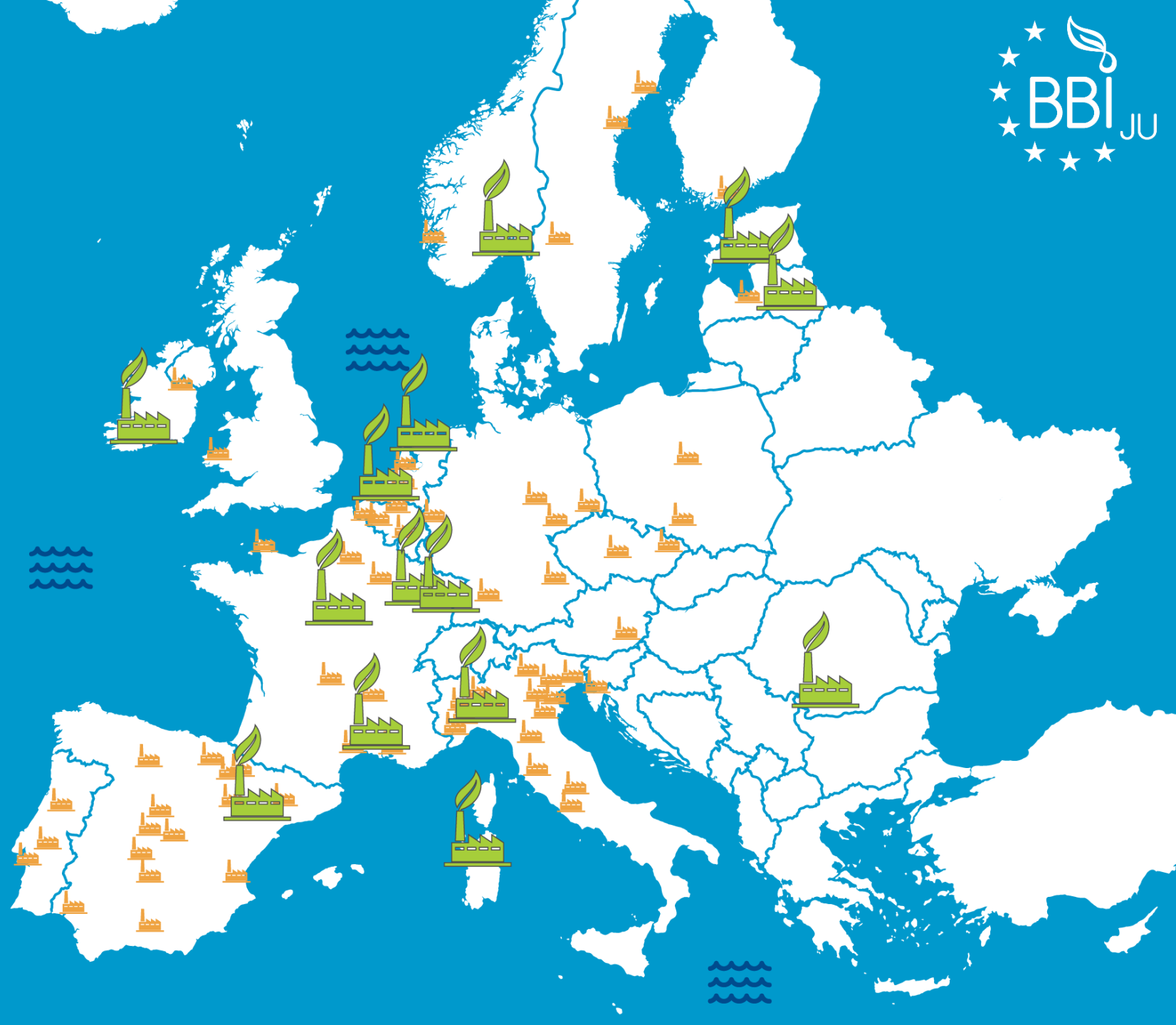
39 countries

BBI JU funding per type of beneficiary



Demonstration plants are represented by the locations that receive the main investment in the project.

-  Flagship biorefinery
-  Demonstration plant



# BBI JU flagship projects



Sas van Gent  
the Netherlands



Co. Tipperary  
Ireland



AgriChemWhey

Saint-Avold  
France



Amiens  
France



Saint-Avold  
France



Porto Torres  
Italy



Flagship biorefinery



New flagship biorefinery  
Call 2020



Delfzijl  
the Netherlands



Sarpsborg  
Norway



SWEETWOODS

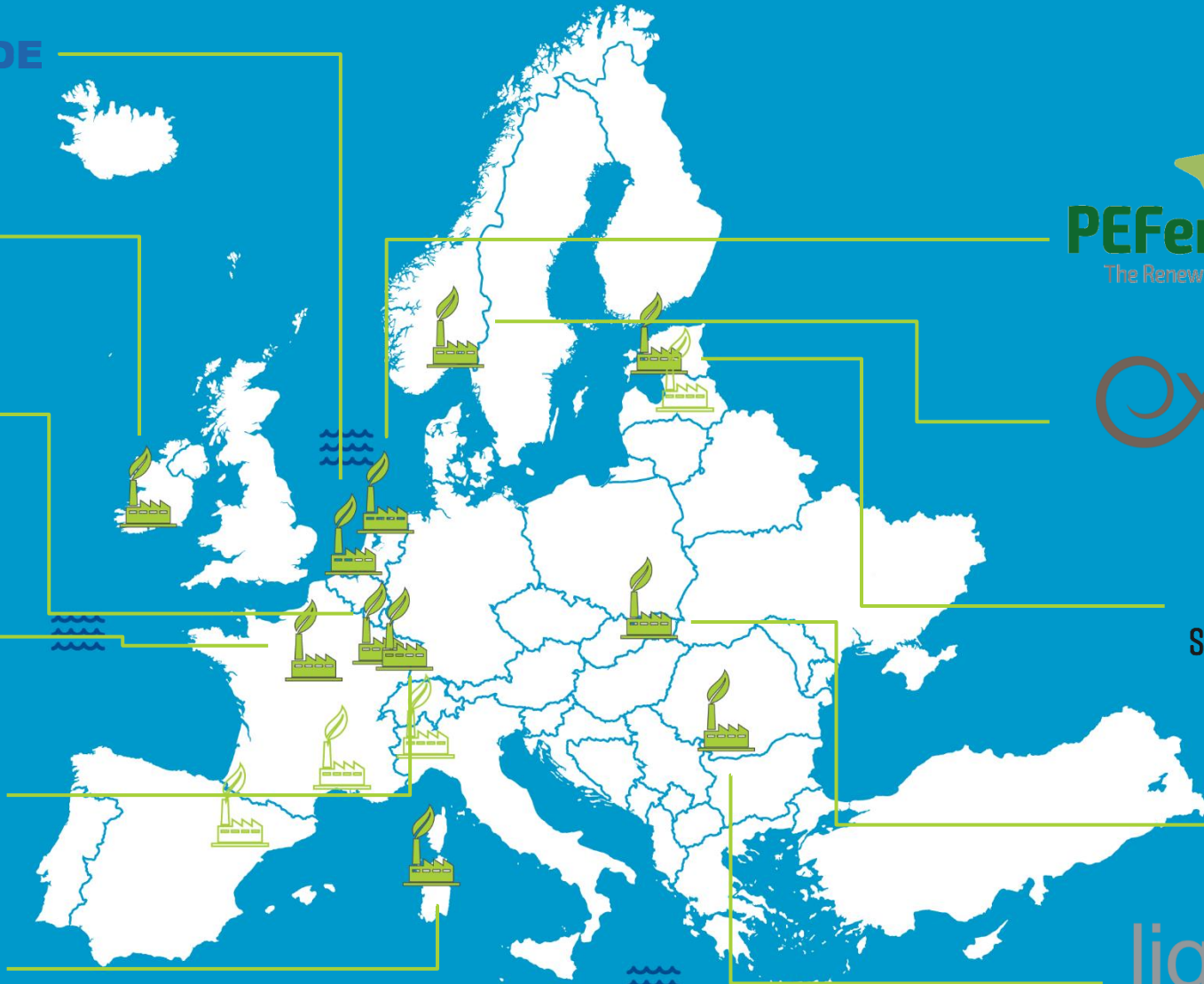
Imavere  
Estonia



Strážske  
Slovakia



Podari  
Romania







# From BBI JU to CBE JU

**BBI JU**  
2014-2020

- Bio-Based Industries Joint Undertaking
- Part of Horizon 2020 programme
- €3.7 billion public-private initiative
- 142 projects, 1000+ unique beneficiaries across Europe & beyond
- Last BBI JU call for project proposals in 2020
- Horizon Europe: new EU R&I funding programme (2021-2027)

**CBE JU\***  
2021-2027

\*legislative proposal

- **CBE JU** - **C**ircular **B**io-based **E**urope **J**oint **U**ndertaking
- Part of Horizon Europe - new EU R&I funding programme
- €2 billion public-private initiative building on the success of BBI JU
- Green light from the Commission in February 2021
- In legislative process at the European Parliament & Council
- **Expected entry into force before end 2021**

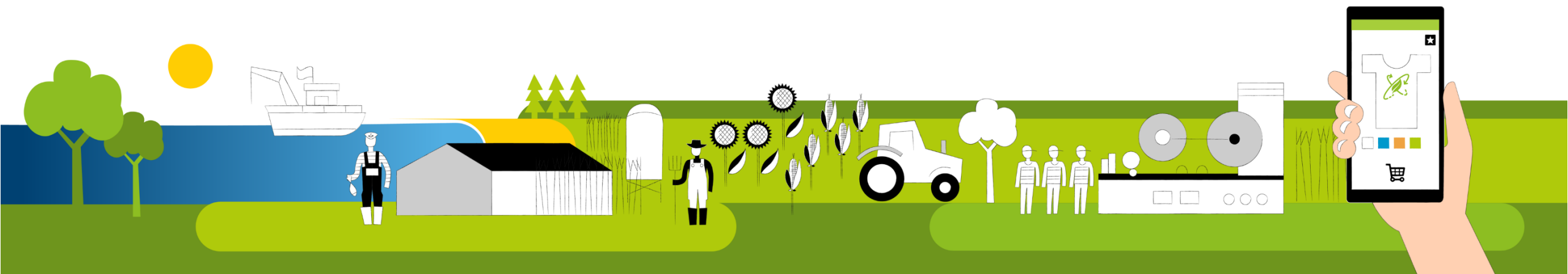


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# BBI JU projects in Latvia

# Participation in BBI JU

Latvian beneficiaries are maximising the country's immense potential for the sustainable exploitation of forestry. For example, a first-of-its-kind biorefinery will be built in the country to produce green chemicals on an industrial scale. They will substitute hazardous fossil-based substances using the pulp industry's sidestreams.





# BBI JU funding in Latvia



**€9 million**

BBI JU contribution



**2%**  
of the country  
funding goes  
to SMEs



**9%**  
of the country  
funding goes  
to universities  
and research  
centres

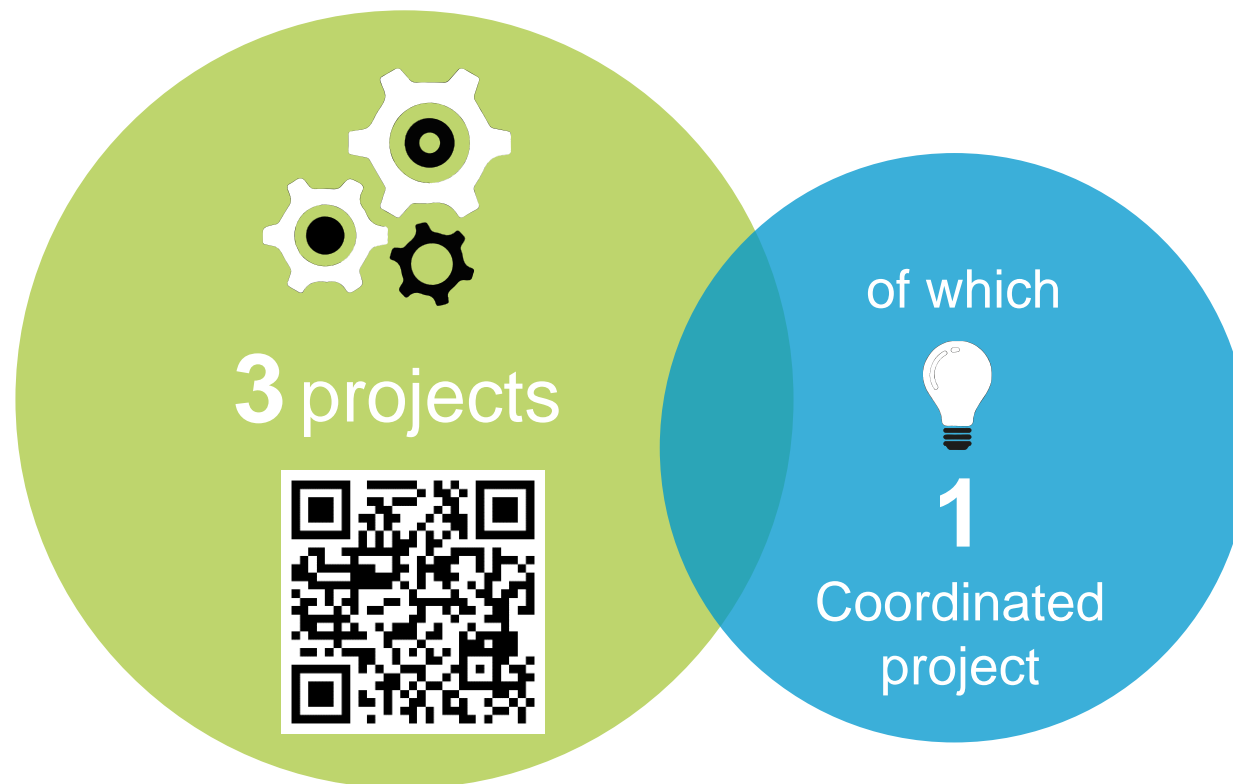


Latvia is coordinating one of the largest and most recent flagship projects: VIOBOND

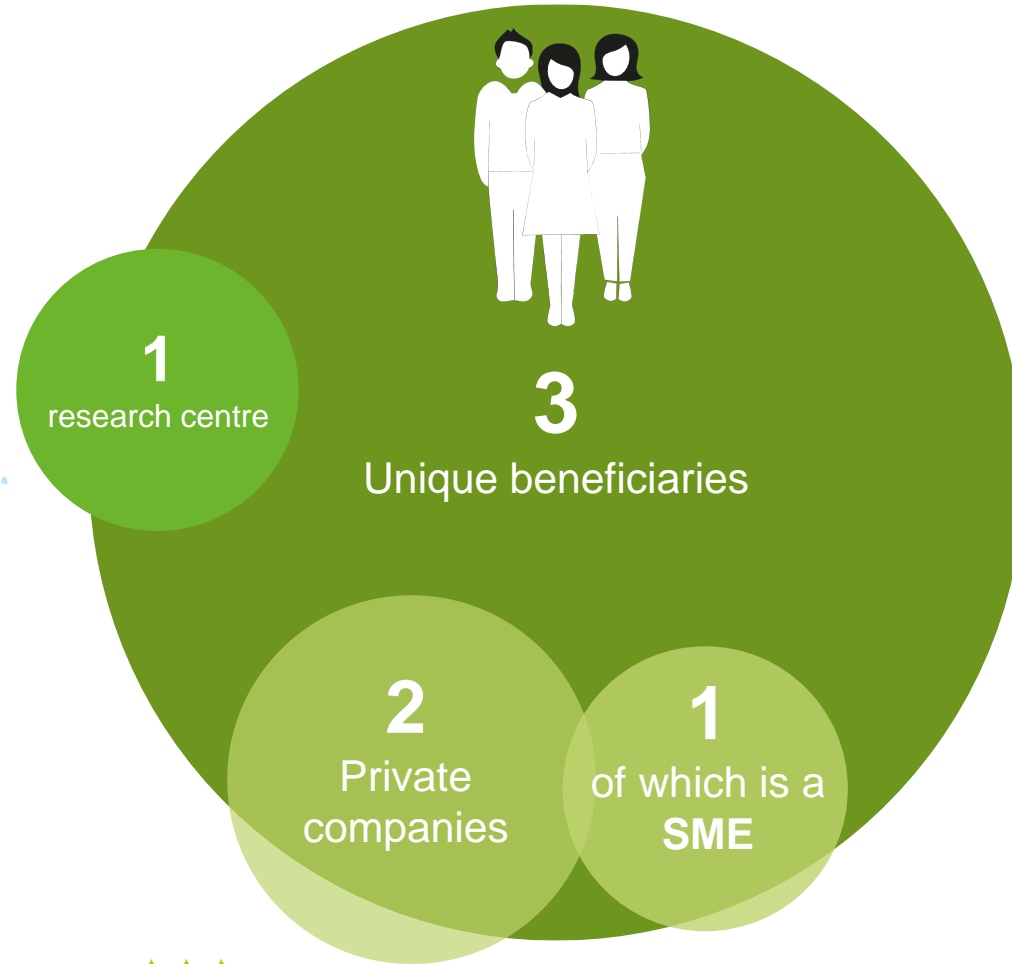




# BBI JU-funded projects in Latvia



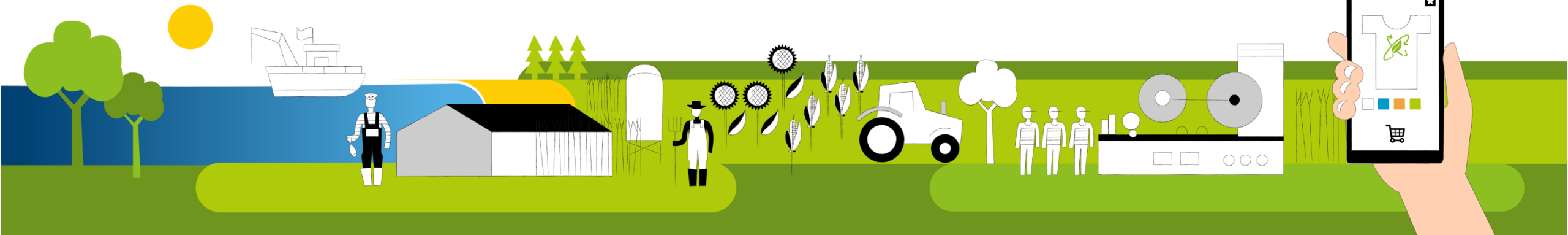
# Participation



All beneficiaries in Latvia work in projects that exploit biomass from forestry



# Applicants per call for proposals





# Examples of BBI JU projects in Latvia



**ReInvent** aims to develop sustainable and low-cost bio-based materials and fibres with enhanced properties and performance. These can replace the petroleum-based insulation and structural materials used in buildings and vehicles.



**US4GREENCHEM** developed a biorefinery concept to completely valorise lignocellulose, which is energy and cost-efficient and based solely on green technologies. The project combined enzyme treatment methods with effective ultrasound pre-treatment. The bio-based chemical industry then uses the substrate obtained from the lignocellulosic feedstock.



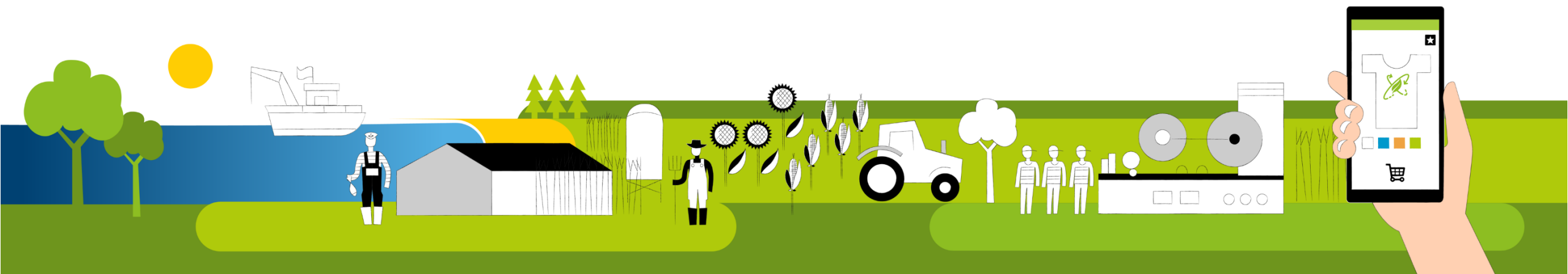


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# BBI JU projects in Romania

# Participation in BBI JU

Romania offers enormous potential for valorising agricultural sidestreams, an opportunity for the primary sector to benefit from the bioeconomy. The BBI JU-funded LIGNOFLAG first-of-its-kind biorefinery in Podari is an example of how the bio-based industries boost rural infrastructure, create new green jobs, and diversify the income of farmers, thus revitalising rural areas with sustainable industries.





# BBI JU funding in Romania



**€21.3 million**

BBI JU contribution



**2%**

of the country  
funding goes  
to SMEs

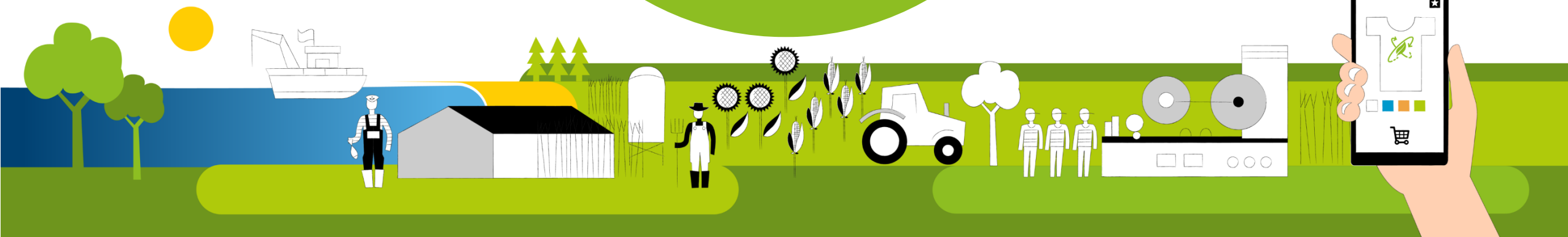


**4%**

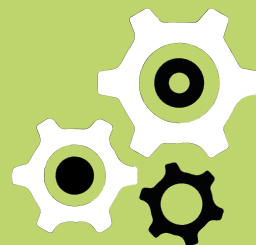
of the country  
funding goes  
to universities  
and research  
centres



Romanian beneficiaries  
successfully attract  
a significant amount  
of BBI JU funding



# BBI JU-funded projects in Romania



7 projects

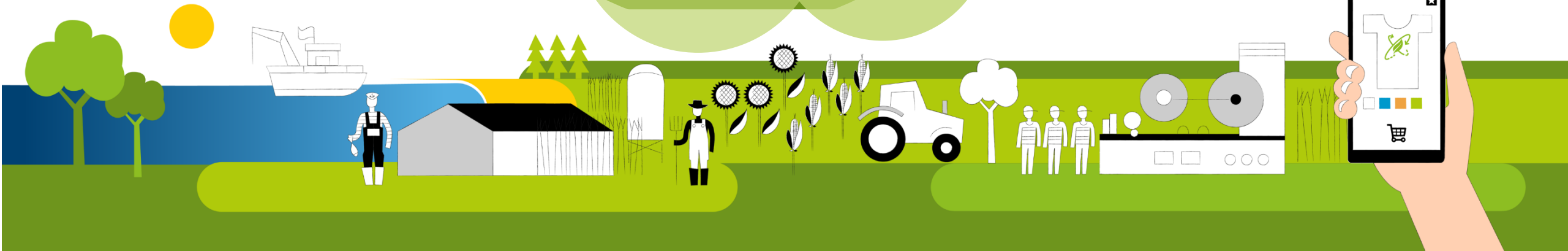
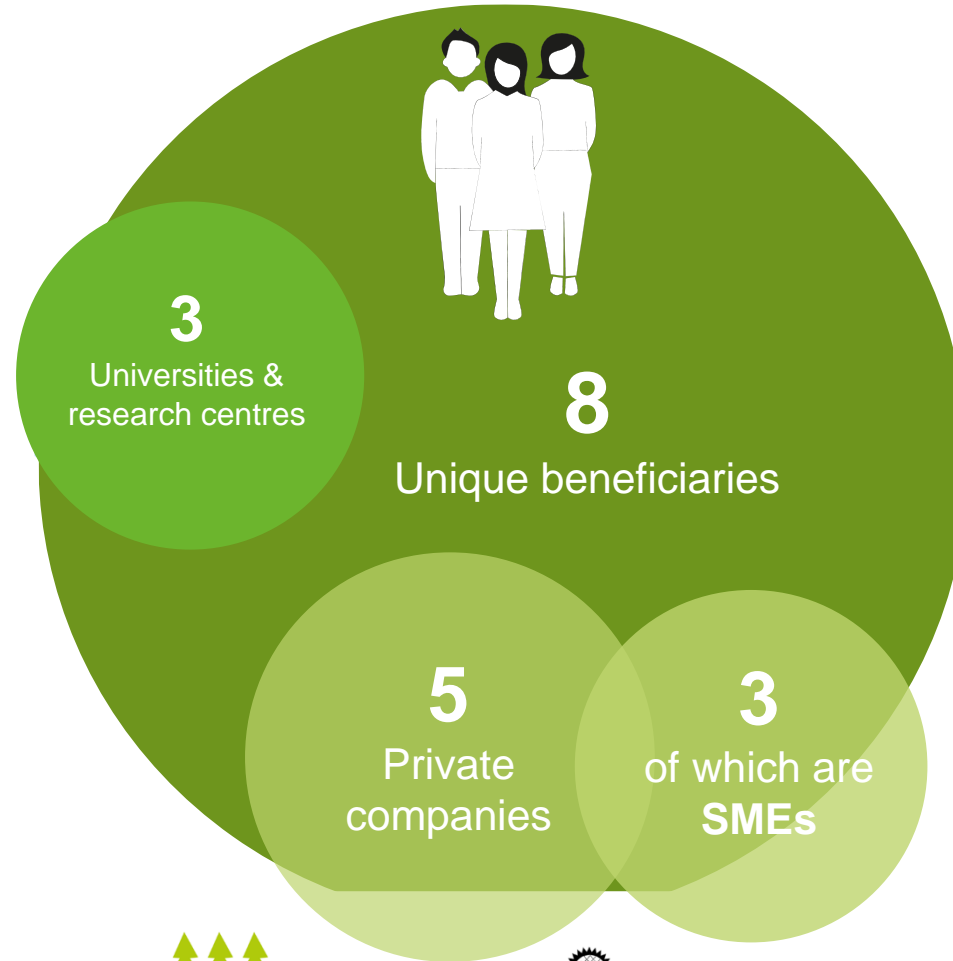


The LIGNOFLAG flagship project is building an industrial-scale biorefinery in Podari, Dolj County

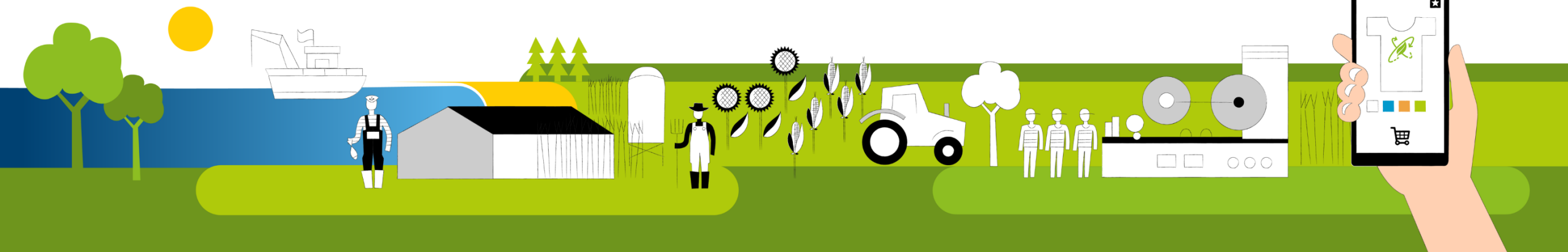




# Participation



# Applicants per call for proposals





# Examples of BBI JU projects in Romania



**LIGNOFLAG** is creating an integrated biorefinery that will transform agricultural residues provided by local farmers into liquid transportation fuel, heating power and fertiliser. The plant will generate green jobs and economic growth in rural areas without using agricultural land for production.



**EXCornsEED** is developing an innovative, environmental-friendly approach for extracting and using the proteins and bioactive compounds from bioethanol and biodiesel refinery sidestreams and turning them into high-value commercial products, thus contributing to green and sustainable economic growth.



# Examples of BBI JU projects in Romania



By using non-GMO European-grown lupin beans to produce high value-added food, animal feed, and many consumer products, **LIBBIO** showed how to strengthen the European bioeconomy and reduce dependency on lupin import.



**NeoCel** has developed innovative processes for producing high-quality bio-based textiles. The project helped reduce the environmental impact and occupational health issues related to cellulose fibre production and promoted sustainable, good quality cellulosic fibres for the textile and fashion industries.





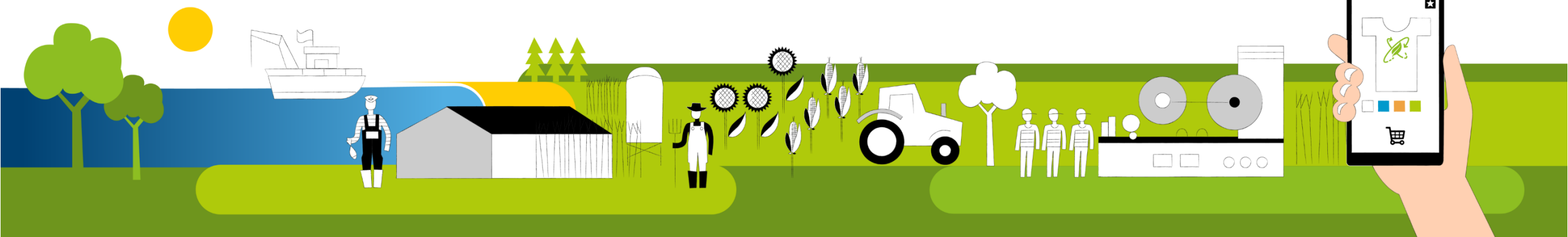
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# BBI JU projects in Poland



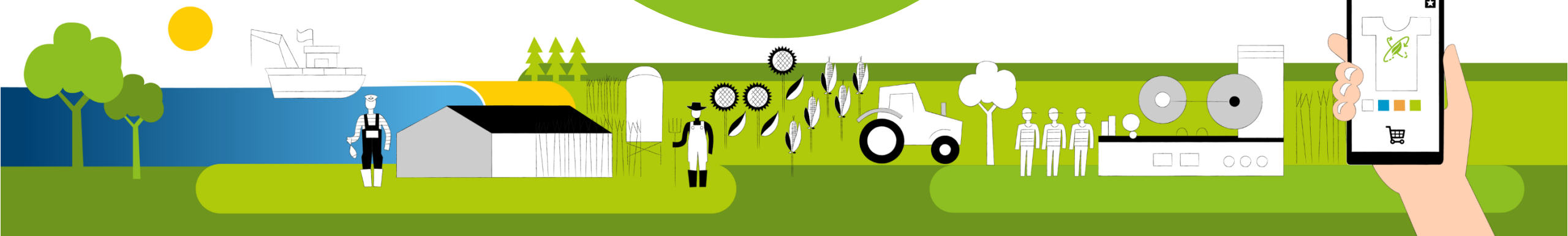
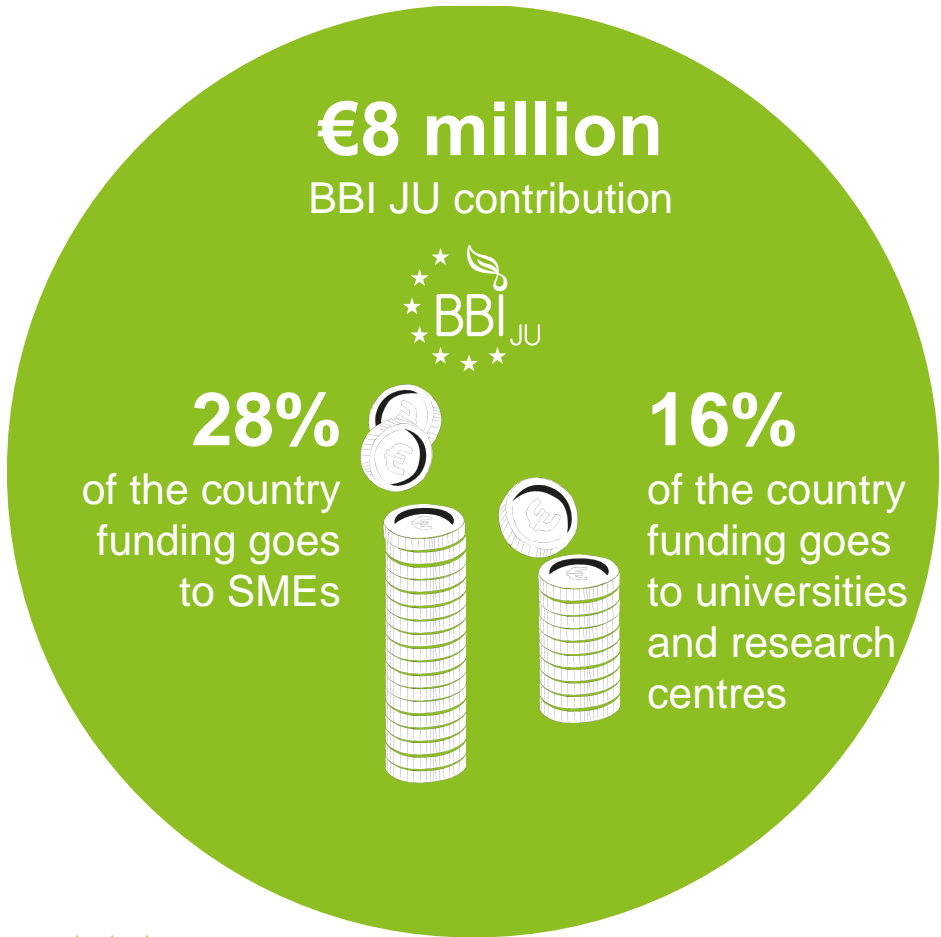
# Participation in BBI JU

Bio-based industries have great potential in Poland, mostly linked to the exploitation of a wide variety of biomass. Polish beneficiaries in BBI JU projects focus mainly on innovation and demonstration of technologies and products. For example, the BIOMOTIVE project, coordinated by a Polish SME, processes forestry and agricultural residues into new sustainable materials for the automotive sector.

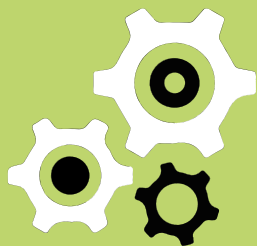




# BBI JU funding in Poland



# BBI JU-funded projects in Poland



18 projects



of which



1

Coordinated  
project





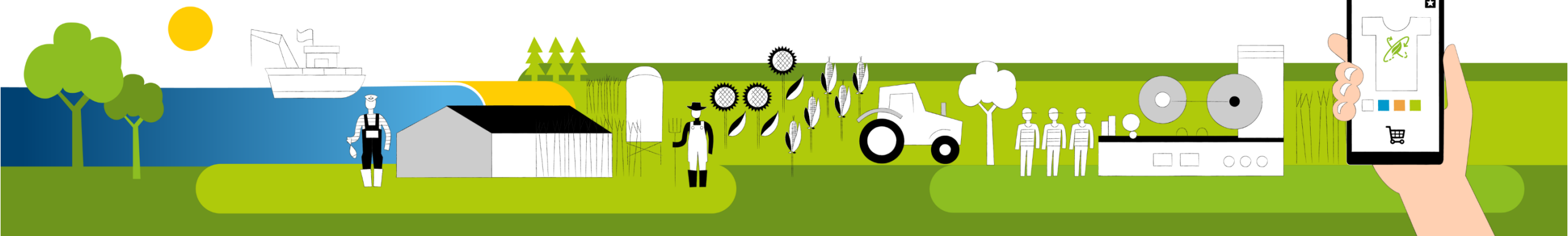
# Participation



Poland has the highest number of beneficiaries in Central and Eastern Europe



# Applicants per call for proposals





# Examples of BBI JU projects in Poland



**BIOMOTIVE** demonstrated the production of innovative and advanced bio-based materials for the automotive industry. Its demonstration plant has created new jobs while paving the way for additional investments in the bio-based economy in Eastern European countries.



**REFUCOAT** developed fully recyclable food packaging with enhanced properties and new functionalities. The new bio-based packaging improves fresh food preservation, reduces landfill waste, and has a more competitive process.



# Examples of BBI JU projects in Poland



## HyperBioCoat

**HYPERBIOCOAT** has examined existing technologies to develop biodegradable, low carbon footprint and healthy packaging derived from food processing by-products. This packaging meets consumer expectations and requirements of the demanding areas of food, cosmetic and medical device packaging.



**BIOPEN** has driven a collaborative knowledge sharing programme within the bio-based industry by setting up an open innovation platform addressing strategic cross-cutting challenges. They brought together the expertise and promoted industry, researchers, and academia at the European and national levels.





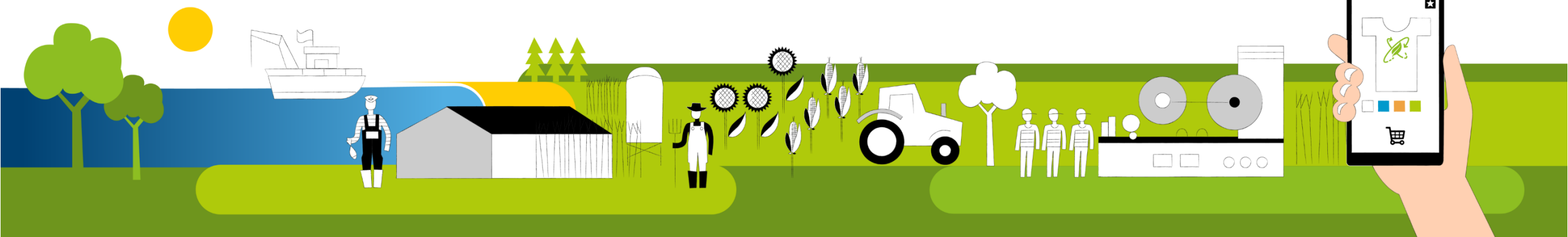
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# BBI JU projects in Bulgaria



# Participation in BBI JU

The bio-based industries have the potential to revitalise regions and diversify farmers' income. Bulgarian partners in BBI JU projects mainly focus on dissemination and raising awareness about the bioeconomy. Bulgarian interest in BBI JU calls for proposals has steadily increased over the years and marked a record-high in Call 2020 with 29 participants.





# BBI JU funding in Bulgaria

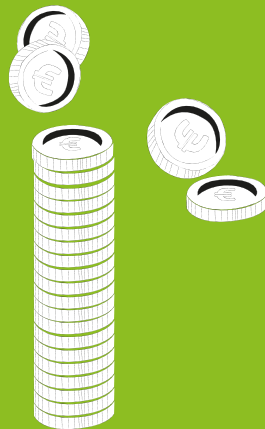


**€515 000**

BBI JU contribution



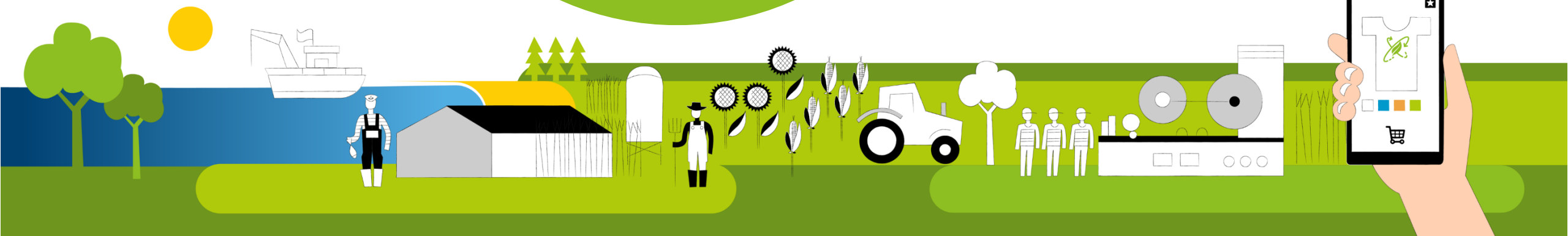
**76%**  
of the country  
funding goes  
to SMEs



**2%**  
of the country  
funding goes  
to universities  
and research  
centres

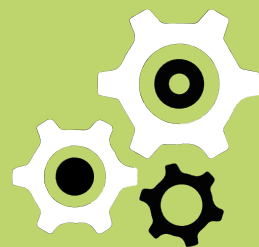


SMEs receive over  
3/4 of BBI JU funding  
in Bulgaria

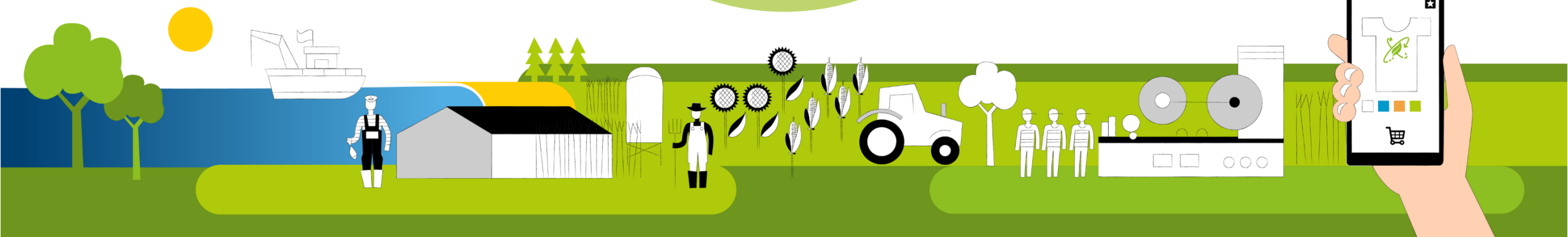




# BBI JU-funded projects in Bulgaria

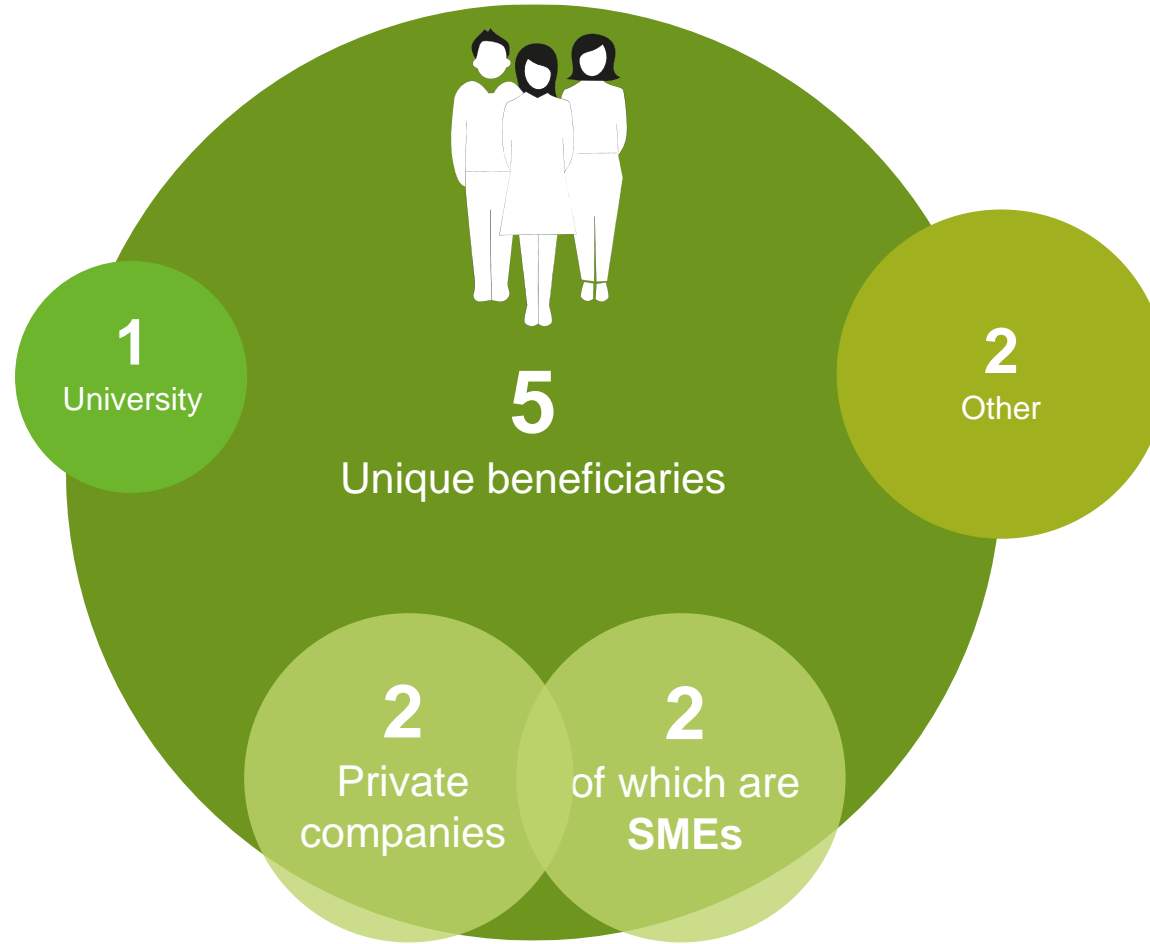


5 projects


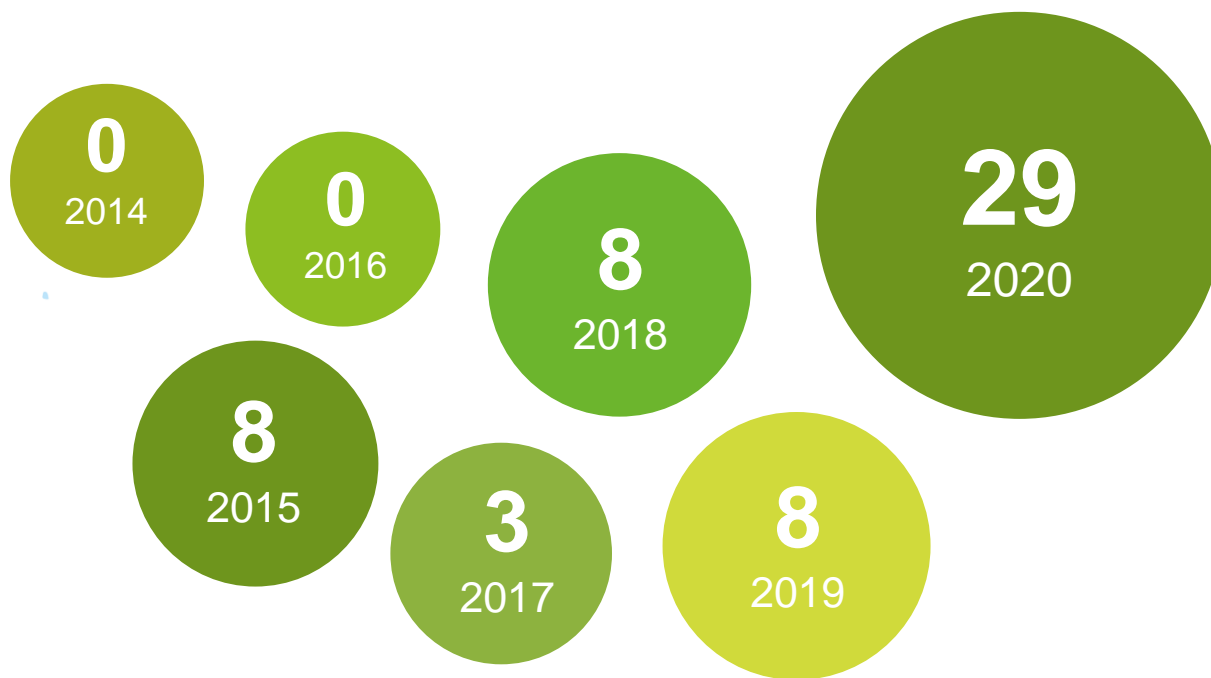




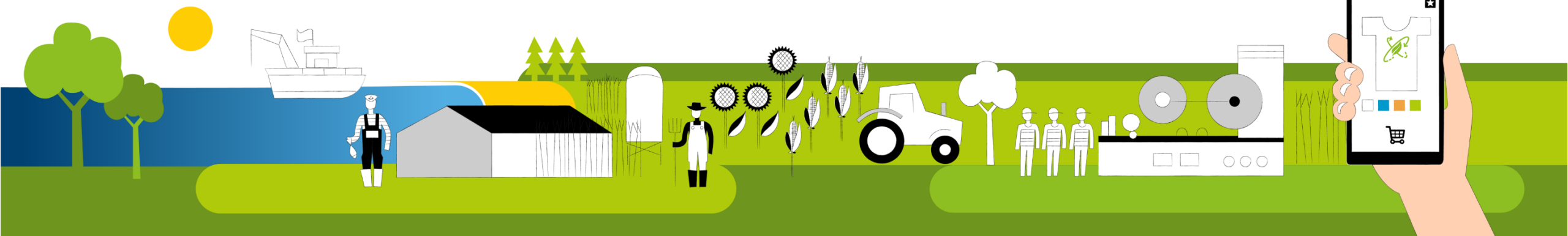
# Participation



# Applicants per call for proposals



Applications for Call 2020 tripled from the previous call





# Examples of BBI JU projects in Bulgaria



**AQUABIO  
PRO-FIT**



**AQUABIO PRO-FIT**'s main objective is to promote efficient utilisation of European aquaculture, fisheries and agriculture sidestreams in feeds and nutritional supplement products promoting fitness and health. To this end, the project will develop processing technologies to up-concentrate nutrients and bioactives and systematise existing knowledge and technologies on the field of organic nutritional supplements. The safety, bioactivity and acceptance of the developed ingredients and products will be documented through different studies.

[www.bbi.europa.eu/projects/aquabiopro-fit](http://www.bbi.europa.eu/projects/aquabiopro-fit)



# Examples of BBI JU projects in Bulgaria



**CELEBio** - Central Europe LEaders in Bioeconomy project strengthened the environment for bio-based businesses in eight countries of Central, Eastern and South-Eastern Europe that, according to the EU Innovation Scoreboard, are 'moderate or modest innovators' and that register scarcer interest for the activities and opportunities offered by BIC and BBI JU.



This goal was pursued by compiling and sharing fact-based information as well as by promoting networking among stakeholders in a broader regional and continental scope. Through the elaboration of evidence-based Action Plans for each of the targeted countries, as well as through the dissemination of information on the opportunities offered by BBI JU, the project team sets the grounds for further action in support of the uptake of bio-based technologies and facilitates matchmaking between stakeholders in research and industry.

[www.celebio.eu/](http://www.celebio.eu/)



# Examples of BBI JU projects in Bulgaria



**MPowerBIO** project seeks feedback from clusters, SMEs and investors on the challenges facing sourcing investments. It will build an online platform with digital tools for assessing investment readiness and provide training with ten 'train the trainer' events for 90 clusters across the bioeconomy, covering most of Europe, supported by an online platform. MPowerBIO will ensure that clusters become self-supporting, with the ability to maintain these skills within their own organisations. Ultimately, the project will be replicable to other areas.

Within this, it seeks to increase private investment in the bio-based sector by encouraging effective cooperation between SMEs and potential investors, enhance communication and dialogue between all stakeholders to help stimulate cooperation and partnerships, as well as to provide an economic boost for rural areas.

[www.bbi.europa.eu/projects/MPowerBIO](http://www.bbi.europa.eu/projects/MPowerBIO)





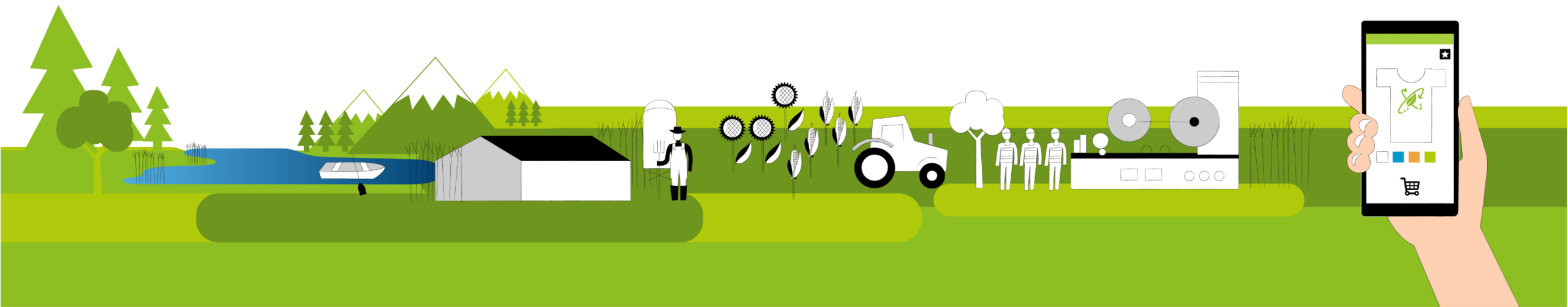


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# BBI JU projects in North Macedonia

# Participation in BBI JU

North Macedonia is represented in the BBI JU initiative by the SME AgFutura Technologies, a beneficiary in the B-FERST project. Through this project, the small business contributes to the development of new bio-based fertilisers and integrates the conversion of farming waste into agriculture management plans, thus making the sector more sustainable.





# BBI JU funding in North Macedonia



**€258,000**

BBI JU contribution



**100%**

of the country  
funding goes  
to SMEs

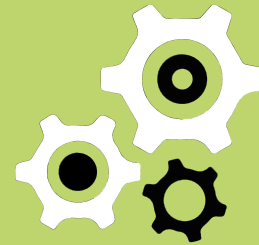


North Macedonia is  
represented by an SME  
involved in a  
demonstration  
project

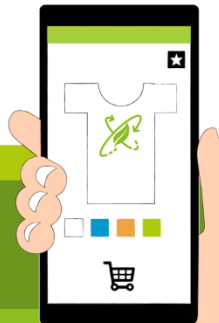




# BBI JU funding in North Macedonia

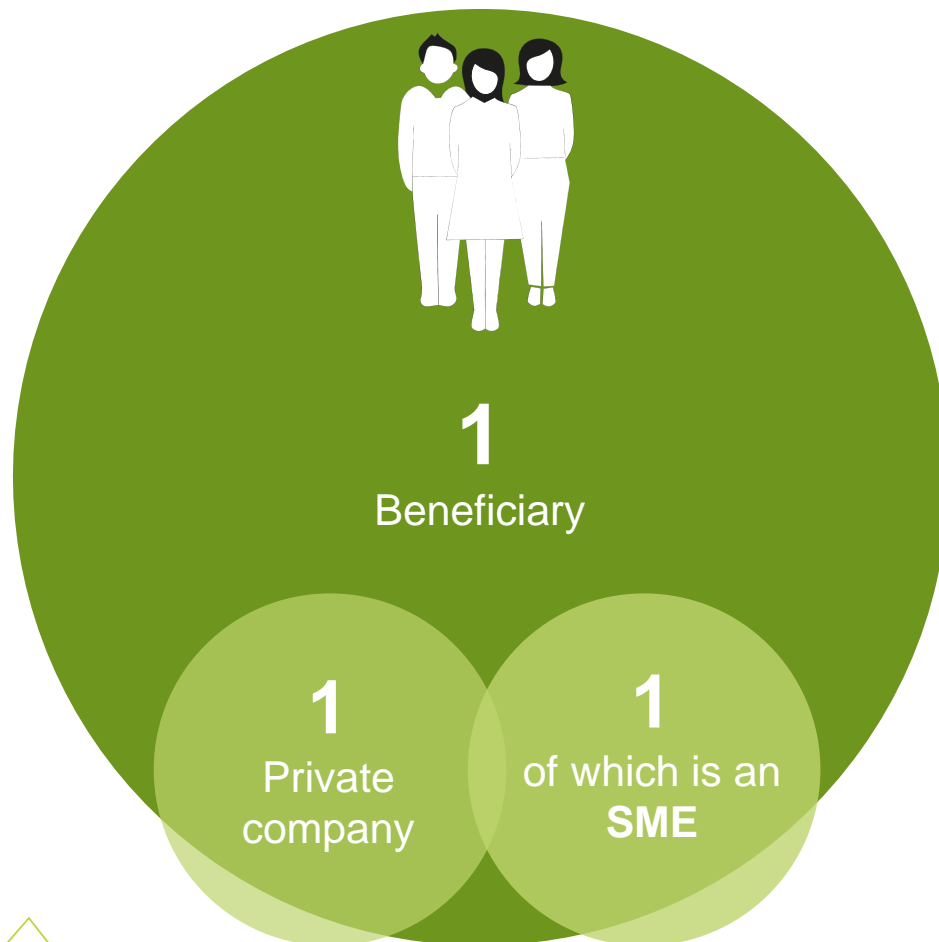


1 project





# Participation



The SME AgFutura is a beneficiary in a project making agriculture more sustainable





# Applicants per call for proposals





# Examples of BBI JU projects in North Macedonia



- The **B-FERST** project will address the challenges linked to sustainable agriculture. It will propose a more efficient and circular use of resources in the farming sector by developing tailor-made bio-based fertilisers to improve the quality and fertility of soils.




# Useful links


- [COUNTRY INFOGRAPHICS](#)
- [BBI JU PROJECTS](#)
- [BBI JU PARTNERING PLATFORM](#)



**Thank you!**


## Contact us

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 [www.bbi-europe.eu](http://www.bbi-europe.eu)

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