

# AGRIFOOD TECH IN LOMBARDY



invest in  
**Lombardy**

POWERED BY





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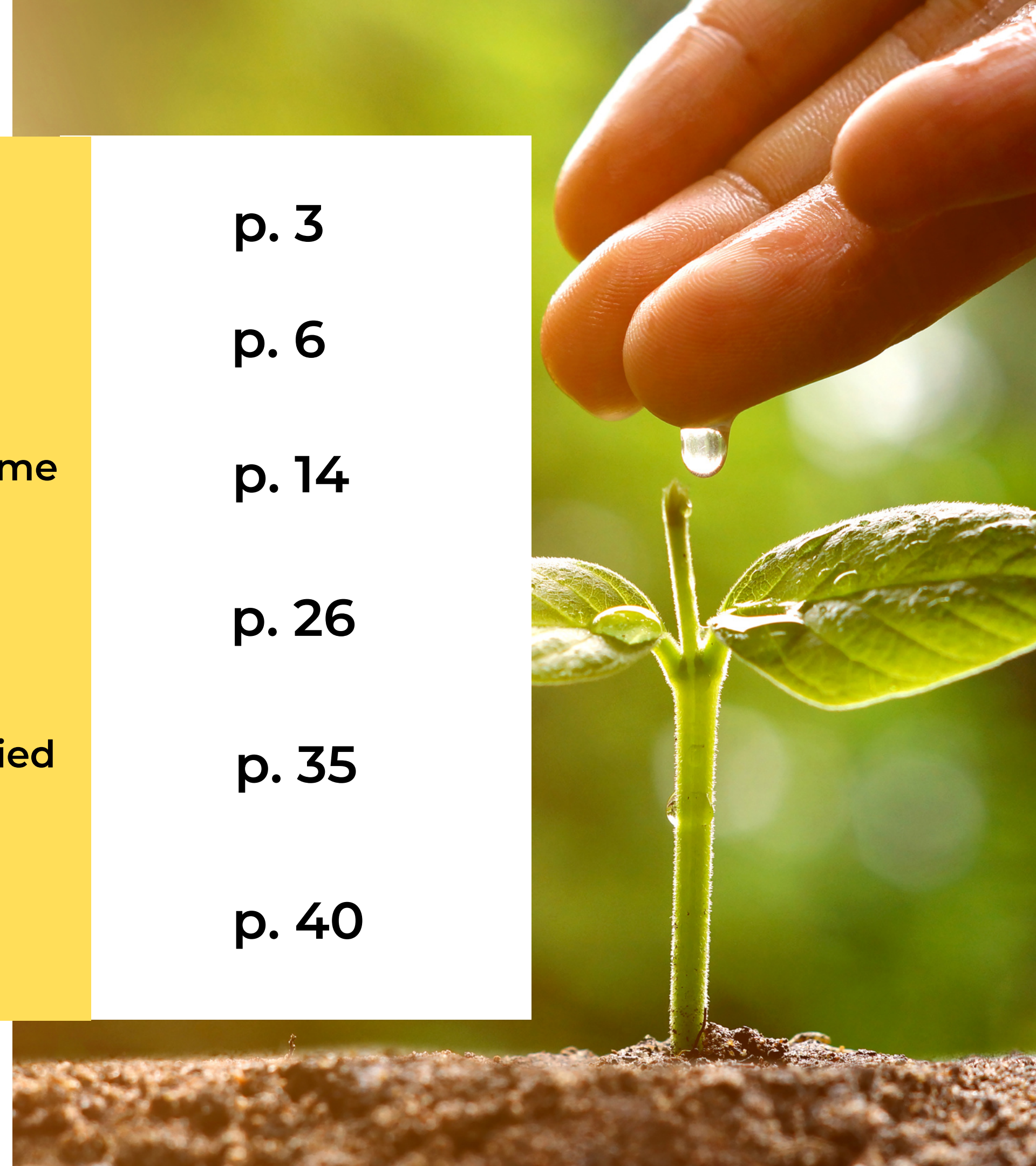
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# WHY LOMBARDY



# LOMBARDY IN A SNAPSHOT

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## AMONG THE TOP EUROPEAN REGIONS



- **2nd** EU Region for GDP
- **Among the 67** out of 240 European **Strong Innovator** Regions

## THE MOST ATTRACTIVE REGION IN ITALY:

### FDI



- **€ 11** billion (from 2012 to date)
- **24,7 %** of 44.4 bln € Italy's FDI



## 1ST REGION FOR:



### GDP

- **€ 368** billion
- **22%** of Italy's GDP



### NUMBER OF COMPANIES

- About **816K** companies
- **6,300** multinational companies
- **4,2 million** employees



### HUBS SUPPORTING INNOVATION

- **26%** of certified national incubators
- **18%** of national fablab



# INFRASTRUCTURES & CONNECTIONS



**1,920 km**  
of railway networks



**700 km**  
of highways



**11,000 km**  
of provincial roads



**4**  
international airports

Lombardy offers a wide range of direct flights to the main European and global destinations



10 h to Beijing



8 h to New York



6 h to Dubai



1h. 50 to London



1h. 30 to Paris



A woman wearing a grey baseball cap and a red and black plaid shirt is standing in a field of tall, golden wheat. She is holding a tablet in her left hand and pointing at it with her right hand. The background is a soft, golden sunset with trees in the distance. The text "LOMBARDY AGRIFOOD ECOSYSTEM" is overlaid in white, bold, sans-serif font.

# LOMBARDY AGRIFOOD ECOSYSTEM



# WHAT MAKES LOMBARDY DIFFERENT

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## ENVIRONMENT

Lombardy's territory and its **diversification** represent a perfect field for the Agrifood Tech sector. In fact, there are both **plains** and **hills** as well as **mountains** all in one region making it the **perfect destination** for any agrifood-related business

## TECHNOLOGICAL DEVELOPMENT

In Lombardy, **agriculture is growing smarter** and **new models** of production, distribution, and consumption are being designed and tested

## ECOSYSTEMS INTERSECTION

A region where **different ecosystems intertwine**, and where all sectors such as energy, health, and nutrition go hand in hand and work together creating **strategic synergies**

## SUSTAINABILITY

Lombardy **develops** and uses **frontier technologies** for the benefit of all with a view to **sustainability**, transparency, security, and resilience, combining **process and product innovation** with environmental enhancement from the perspective of full circularity

## FOOD SAFETY

Lombardy developed a deep expertise in **Food Safety** both in terms of **traceability** and **surveillance** of production and distribution. The aim is to ensure the highest level of **protection** to customers by making the product history accessible throughout its supply chain, certified immutably through **blockchain** technologies



# A GREAT ENVIRONMENT

Lombardy has a vastly diversified territory, specifically:



**900**

Alpine pastures



**20**

Regional woods



**40,000 km**

Water channels for  
irrigation and  
reclamation use



**1,560**

Farmhouses:  
50% authorized for  
accommodation and  
70% for restaurant services



**209**

Educational Farms



# LOMBARDY IN THE ITALIAN AGRIFOOD SYSTEM



## 1ST REGION IN ITALY FOR

area dedicated to agriculture, whose activities cover **69%** of the territory



## 1ST REGION IN ITALY FOR AGRICULTURAL PRODUCTION:

**42%** of the Italian Rice  
**40%** of Italian pig products



## 1ST REGION IN ITALY FOR IV RANGE PRODUCTS

**30%** of the national surface of IV range products



## SECTOR VALUE ADDED

**€41 BLN**  
in Italy

**11%**  
generated by  
Lombardy



## INCLINATION TO INVEST

**29%**  
in Italy

**41 %**  
in Lombardy



## N. OF PEOPLE EMPLOYED IN AGRICULTURE

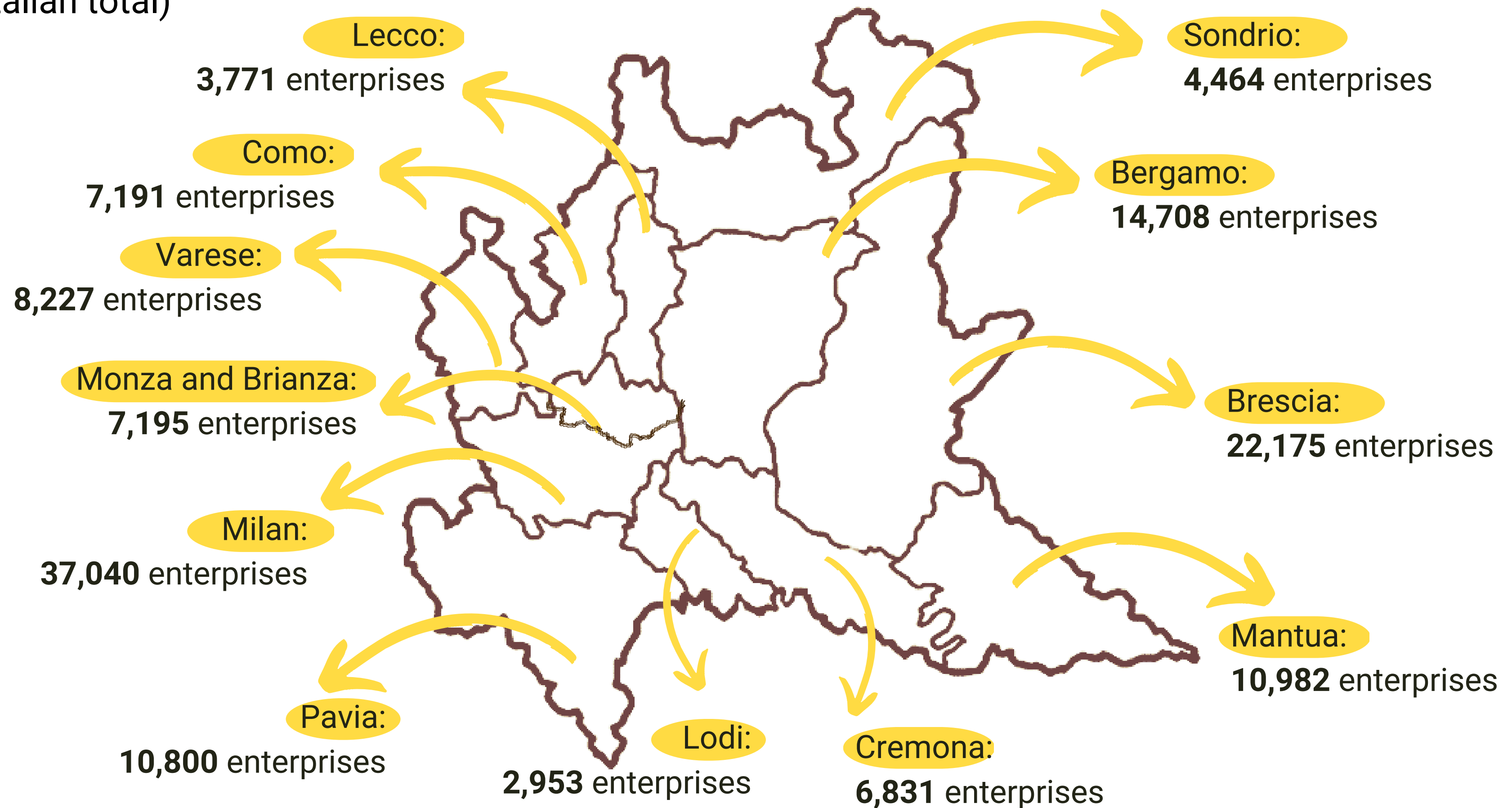
**912,000**  
in Italy

**71,000**  
in Lombardy



# NUMBER OF ENTERPRISES AND THEIR DISTRIBUTION

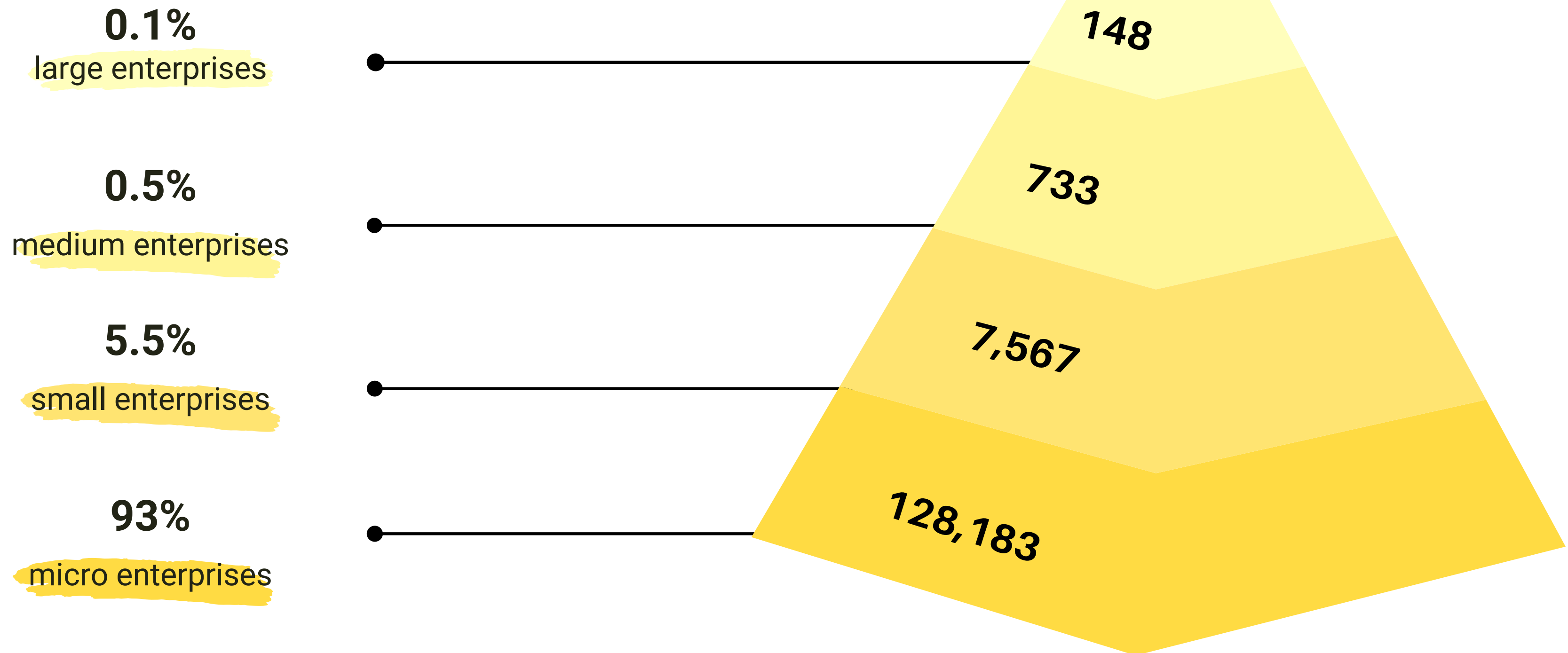
Of 1.406.645 Agrifood enterprises in Italy in 2022, **136,337** are in **Lombardy** (almost 10% of the Italian total)





# FIRMS BY SIZE

The majority of Lombardy's companies in the Agrifood sector are **micro and small businesses**





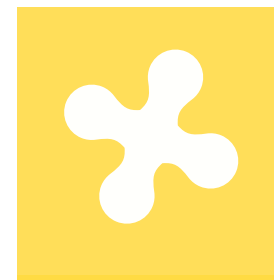
# VOLUMES OF EXPORT IN ITALY AND LOMBARDY

2021



64 bln €

The value of goods  
exported by Italy



21 bln €

The value of goods  
exported by Lombardy



Compared to other Italian regions, Lombardy is the one that **exported the most** in the first quarter of 2022 with **€5.6 bln**, followed by Lazio (€5 bln) Emilia Romagna (€4 bln), and Tuscany (€1 bln)





# LOMBARDY'S PRODUCTION FOR THE INTERNATIONAL MARKET

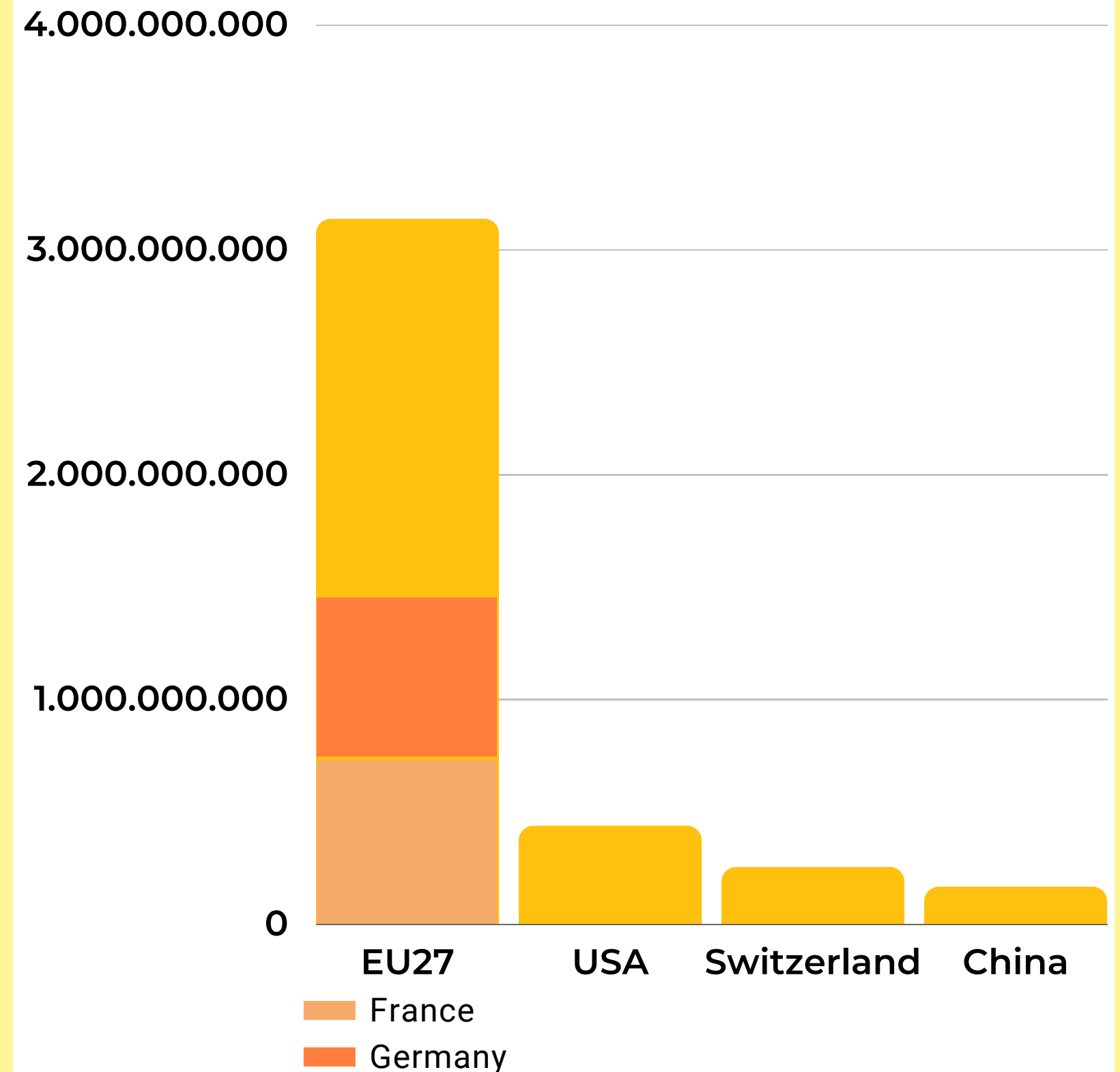
**The European Union** is the main destination for Lombardy export. In fact, in the first quarter of 2022, Lombardy exported **€3 bln** to the 27 EU countries. In particular:

- **Germany** €689 mln
- **France** €688 mln

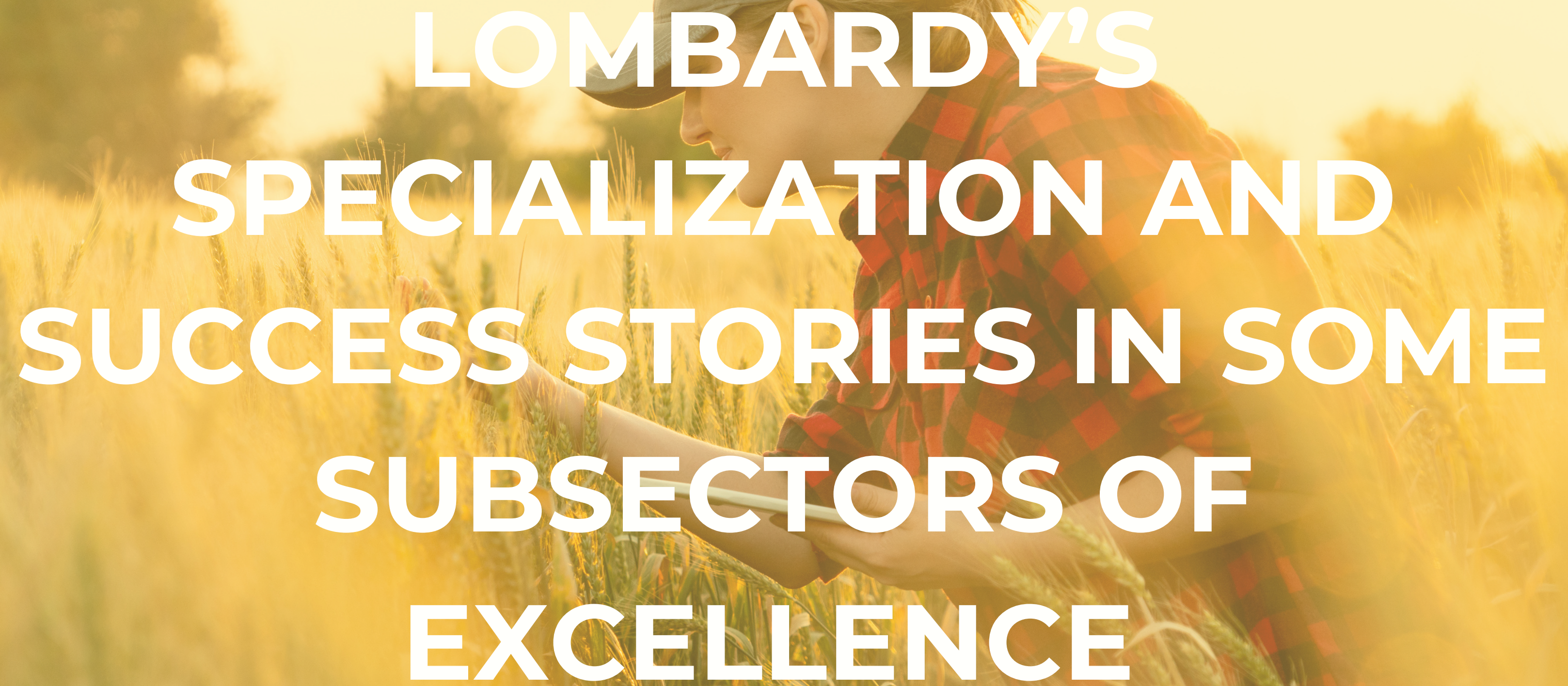
For **non-European countries**, the main destinations are:

- **USA** €436 mln
- **Switzerland** €253 mln
- **China** €165 mln

MAIN DESTINATIONS FOR LOMBARDY'S PRODUCTION





A person wearing a grey baseball cap and a red and black plaid shirt is shown in profile, looking down at a stalk of wheat in a field. The background is a warm, golden sunset over a field of tall wheat. The text is overlaid in large, white, bold, sans-serif capital letters.

# LOMBARDY'S SPECIALIZATION AND SUCCESS STORIES IN SOME SUBSECTORS OF EXCELLENCE



# THE DAIRY INDUSTRY IN A SNAPSHOT

Lombardy is the **leading area** for animal husbandry. In particular, the farming and dairy industries represent regional excellencies



of Italian cow's milk companies are **in Lombardy**



of Italian dairy cattle breeders are **in Lombardy**

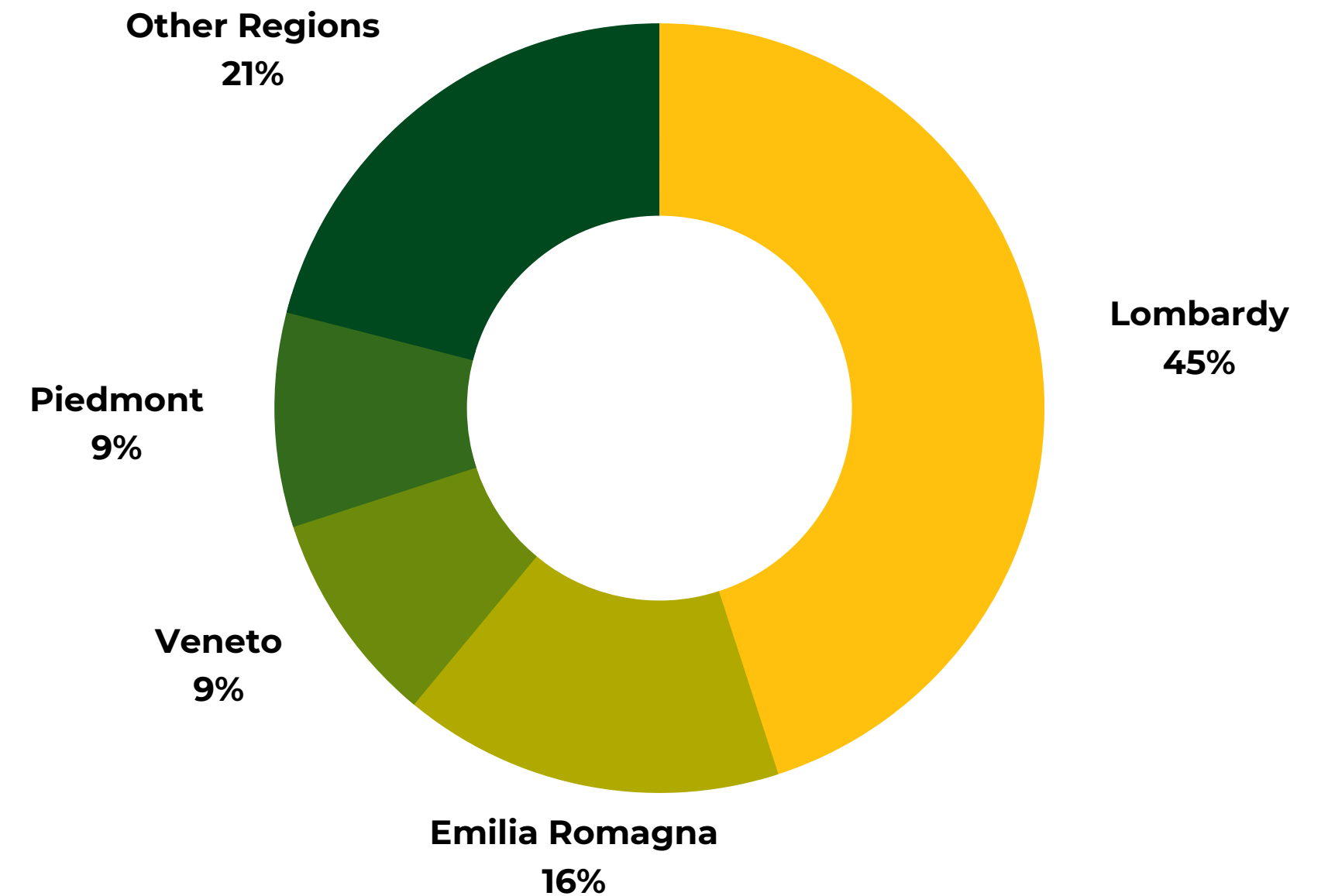


of Italian milk comes from **Lombardy**



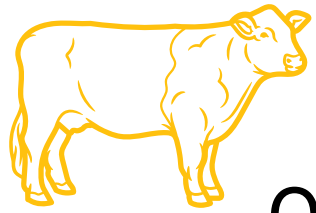
of Italian milk processing plants are **in Lombardy**

Lombardy ranks **first in Italy** for dairy products **delivery in 2021**





# THE STRENGTH OF LOMBARD BREEDING FARMS



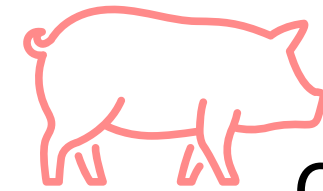
Of 5,9 mln bovines bred in Italy in 2020, **1,5 mln** were in Lombardy

**26%**

of the national  
total

**€650  
mln**

value of production  
in Lombardy



Of 8,5 mln pigs bred in Italy in 2020, **4,4 mln** were in Lombardy

**51%**

of the national  
total

**€1.08  
bln**

value of production  
in Lombardy





# PROCESSING AND COMMERCIALIZATION INDUSTRY OF AGRICULTURAL PRODUCTS

In terms of **commercialization\***, Lombardy is confirmed as one of the leading regions nationwide:

## N. of enterprises

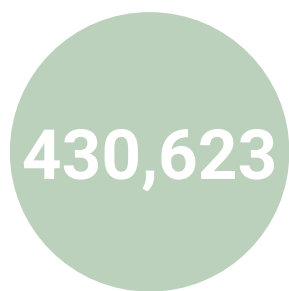


In Italy



In Lombardy

## N. of employees



In Italy



In Lombardy

For what concerns the **food processing\*\*** industry Lombardy is still one of the leading regions with:

## N. of enterprises



In Italy



In Lombardy

## N. of employees



In Italy



In Lombardy

\*Data refers to Ateco codes 46.2, 46.3, 47.2, 47.81

\*\*Data refers to Ateco code 10



# LOMBARDY'S TASTE: PDO AND PGI PRODUCTS 1/2

Lombardy is the **3rd region** in Italy for the value impact of **PDO** and **PGI\*** products. These trademarks guarantee to the consumer that a specific product comes from a **precise geographic area** and that the entire production process is carried out according to a **specific methodology**

## Foods in 2021:



**20** PDO

**14** PGI



## Wines in 2021



**26** PDO

**15** PGI

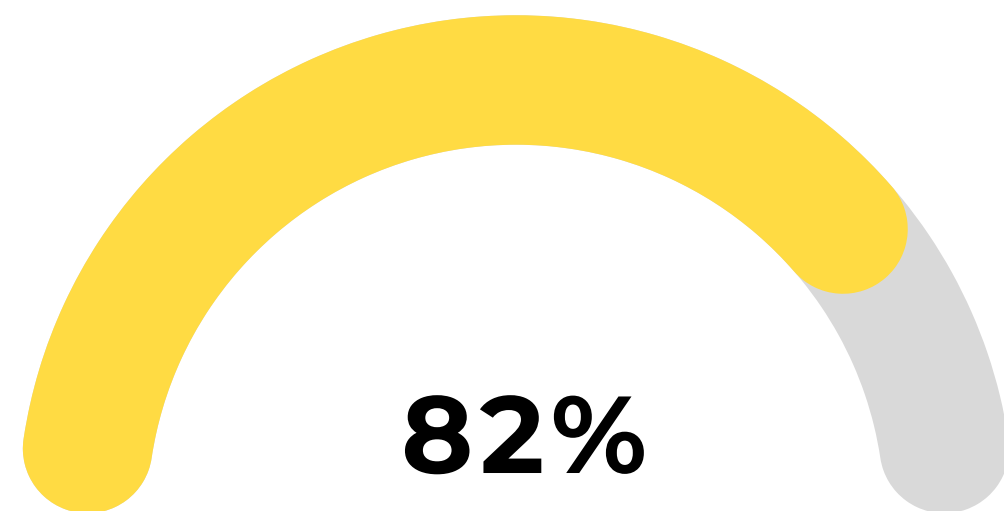
\***PDO**: Protected Designation of Origin

**PGI**: Protected Geographical Indication

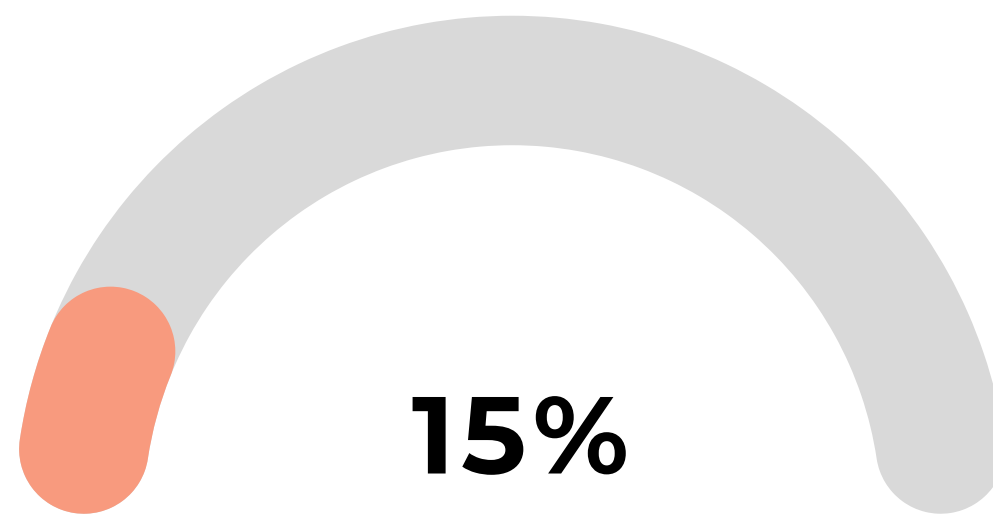


# LOMBARDY'S TASTE: PDO AND PGI PRODUCTS 2/2

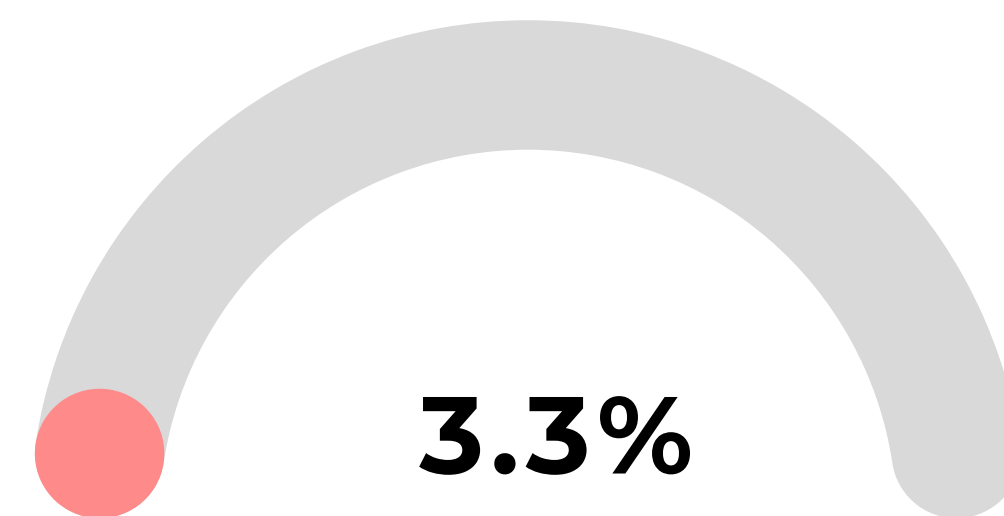
With **9,598** people employed, PDO and PGI turnover in Lombardy amounted to **€1.77 bln** in **2020**. This value can be divided as follows:



**dairy products**



**cold cuts products**



**other products**



# PACKAGING INDUSTRY IN LOMBARDY

Lombardy is one of the best European regions in the **manufacturing sector** being part of the so-called "**Packaging Valley**". Specifically, the packaging industry counts:

## ITALY

**2,800**

enterprises\*

**33 bln €**

turnover

**59,100**

employees\*

## LOMBARDY

**721**

enterprises\*

**7.85 bln €**

turnover

**20,926**

employees\*



\*Data refers to Ateco codes 17.21 and 22.22



# CEREALS AND HORTICULTURAL INDUSTRY IN LOMBARDY



**10.8% of national cultivated area of cereals**



**17.1% of national production harvested cereals**



**30% of regional UAA\* used for growing fresh  
vegetables and fruits**



\*Utilized Agricultural Area



# SILK INDUSTRY

Lombardy maintains its position as a **leading silk producer** especially thanks to Como

**Como's silk culture** dates back to the **1400s** when **Ludovico Sforza** forced farmers to cultivate mulberry trees, nourishment for the silkworm. This led silk production to become **industrial** already in the **18th Century**

**80%**

of silk production  
in Europe

**70%**

of production is  
exported abroad





# SOME NATIONAL AND INTERNATIONAL COMPANIES IN LOMBARDY



Cargill



vetropack



Nestlé



Mondelēz  
International



LIDL



Elaisian



MARCHESINA



getir



syngenta



GOGLIO



hexagro  
URBAN FARMING



verallia



EUROGERM  
INGREDIENTS & SOLUTIONS



X FARM



Qualidade



ALIA Insect Farm



RATU



Eco Packaging  
BOTTA



BARONE PIZZINI  
1870



AGRITECH



# SOME OF LOMBARDY'S INTERNATIONAL SUCCESS STORIES

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- **VETROPACK**

The Swiss glass packaging manufacturer has invested in a new super industrial hub in Boffalora Ticino (Milan). This new factory was officially opened in October 2021. The investment committed was about **200 mln €**. In 2022, the company launched a hiring plan for around **300 people**



- **NESTLÉ**

Nestle has expanded the production capacity at its water and soft drinks factory in San Pellegrino Terme, Italy. The company has invested **90 mln €** in a new bottling line as well as restructuring work of the facility in 2021. The expansion forms part of the San Pellegrino Group's plan to increase its total production capacity by 25% by 2023



- **EUROGERM**

Founded in 1989 in France and in Milan since 2017, EUROGERM specializes in research, development, mixing, and marketing of milling correctors, baking improvers, technological products, and processing aids intended for **milling and baking sectors** using technical and nutritional **cereal products**. The company counts **553 employees** around the world



- **VERALLIA**

France-based glass company has expanded operations in Villa Poma, Bergamo. The **60 mln €** investment includes the addition of a new furnace at its existing site, which has created **80 new jobs**. This will serve the domestic market



# INTERNATIONAL FAIRS



Cremona periodically hosts the International Livestock Exhibition which plays a leading role in Italy and Europe as one of the most influential fairs in the **breeding sector**. Every year, it provides interesting solutions for sector professionals thanks to the involvement of the **best international brands** of equipment and services



Taking place in Milan, Myplant & Garden has given a new impetus to the Italian horticulture and gardening sectors, helping them gain more recognition on an **international level**. Every element of the process that makes up the gardening industry is present at the fair: research, construction, seeds, forestation, production, innovation, components, and distribution



HostMilano is an international exhibition dedicated to the **world of food service and hospitality**. Taking place every two years, it offers everything needed to build a successful business, with one eye firmly focused on **trends, technologies, and innovation**



TUTTOFOOD is the B2B exhibition for the entire **agri-food ecosystem**. Global and innovative, it gathers producers and distributors of **quality products** from the whole food and beverage supply chain. A national and international point of reference for sector development and the identification, planning, and steering of a **food sector relaunch**





A woman wearing a grey baseball cap and a red and black plaid shirt is shown in profile, looking down at a tablet device she is holding. She is standing in a field of tall, golden wheat. The background is a soft, hazy sunset with warm orange and yellow light. The text "AN INNOVATIVE REGION: LOMBARDY'S TECH APPROACH" is overlaid in large, white, sans-serif capital letters across the center of the image.

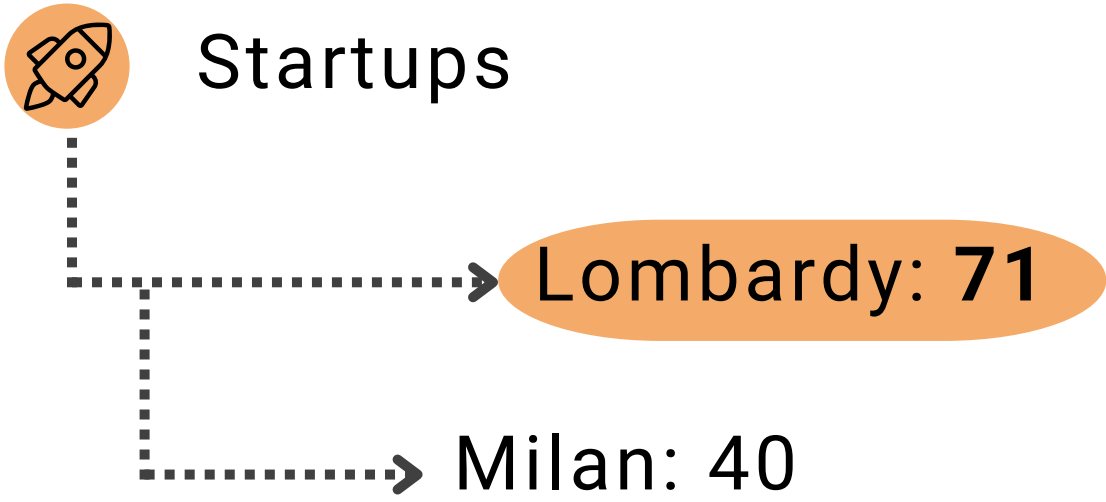
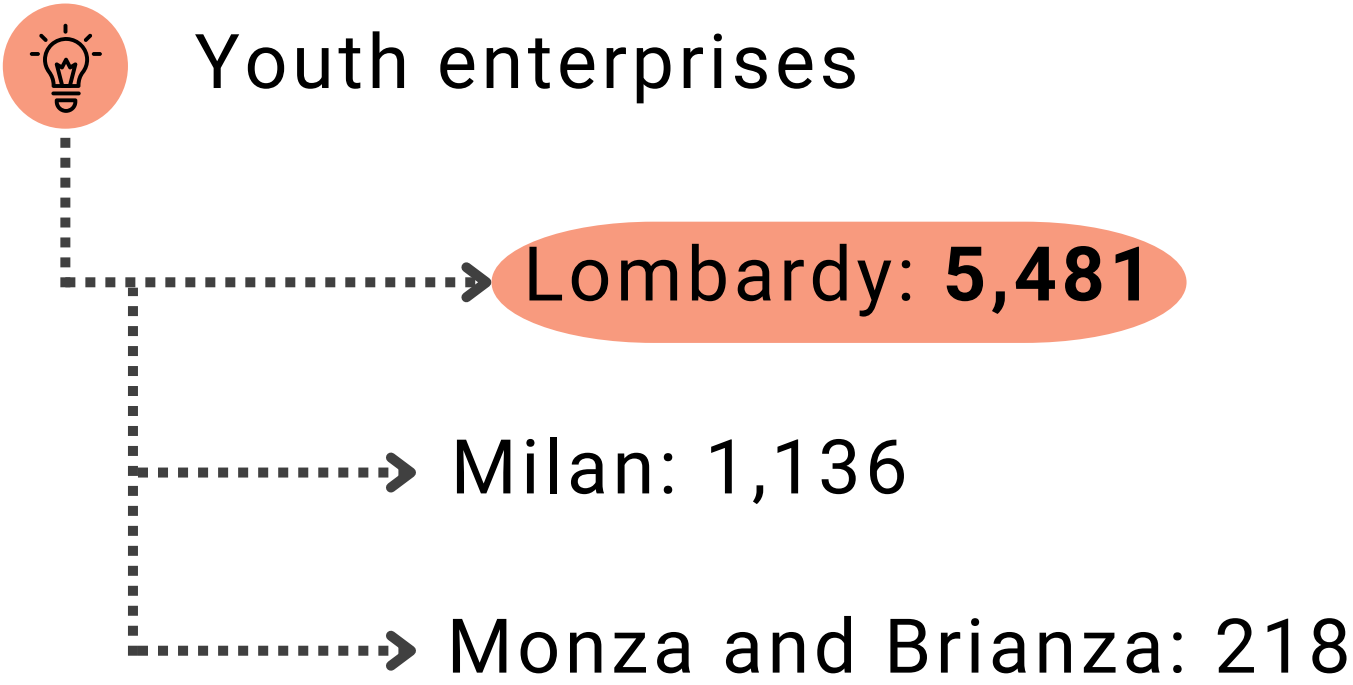
# AN INNOVATIVE REGION: LOMBARDY'S TECH APPROACH



# AGRIFOOD TECH YOUNG ENTREPRENEURSHIP

Businesses led by **young entrepreneurs** are constantly growing in Lombardy employing almost **3,000 people** in 2021 only in the Agrifood Tech sector.

For what concerns **innovative startups**, Lombardy alone hosts **22%** of the national total. Specifically for the Agrifood Tech sector, there are:





# INCUBATORS AND ACCELERATORS

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## PLUGANDPLAY

Plug and Play built a **unique ecosystem** that connects change-makers and leading organizations. Their network consists of 50,000 startups, 500+ world-leading corporations, and hundreds of venture capital firms, universities, and government agencies across multiple industries. They work as a bridge between Silicon Valley and 35+ locations around the world. They chose Milan to expand their Food, Fintech and Sustainability programs



Located in Pavia, the Neorurale Hub founded the **Giulio Natta Innovation Center** to support ambitious entrepreneurs to build their companies to success. The center was created to be the cradle of **Nature-Based Solutions** (NBS) and aims at helping societies address critical environmental, social, and related economic challenges in a **sustainable way**



Powered by Deloitte the Foodtech Acceleration Platform is the first global Foodtech Acceleration Platform in Italy. They help promising startups and innovative companies in their **development journey**, transforming ideas into businesses and accelerating their **growth**



Inside MIND Milano Innovation district it raises MIND FoodS Hub a project that integrates multidisciplinary skills with the aim of promoting the vision of **agri-food research** as an engine of innovation. The general objective is the creation of an **infrastructure and skills hub** for the development of an innovative concept aimed at the identification, production, and **sustainable transformation** of plant products and derivatives with an excellent nutritional profile, assessed through functional validation



# LOMBARDY REGION

## "RURAL DEVELOPMENT PLAN"

Funding program that stems from the European Regulation

### 3 cross-cutting Objectives

#### INNOVATION



#### ENVIRONMENT



#### CLIMATE MITIGATION AND ADAPTATION



The Objectives pursued with rural development support are divided into 6 Priorities for Action:

- training and innovation;
- competitiveness and income;
- agribusiness chain and risk management;
- ecosystems;
- resource efficiency use and climate change;
- economic and social development of rural areas



# AN INNOVATIVE REGION 1/3

## Blockchain



Lombardy region experimented with a **web app** dedicated to the consumer to access the history of food. The web app aims at:

- Collecting **certified data** and information from different databases of entities involved in ensuring **product quality**;
- Using a blockchain to **record the information** captured;
- Giving consumers access to the **entire history of the product**

## Riccagioia Agri 5.0



Creation of an **Innovation Hub** characterized by the participation of major industry and technology companies and the public presence of **ERSAF**, the Lombardy Region Authority for Services to Agriculture and Forestry.

A range of **services** will be provided covering all sector production chains:

- Management of a **laboratory** for testing and customizing **innovations**;
- Establishment of an **Innovation Training Center**;
- Development of innovative **operational projects**, thanks to the technologies and skills provided by private partners, to be replicated in the regional and national territory





# AN INNOVATIVE REGION 2/3

## The use of drones in agriculture

Lombardy developed a **plan to use drones** for the distribution of crop protection products, starting with experimentation on **olives, rice, and grapevines**.

### Rice in the Pavia Province



Lombardy produces **more than 40%** of Italian rice but the production is threatened by the considerable array of invasive weeds. The use of drones enables the **protection of crops** from pests and the protection of biodiversity

### Olives in the Brescia Province



The project objective is to test an **effective** and **innovative application strategy** for olive fly defense combining the usage of drones and licensed insecticide baits

### Grapevines in the Sondrio Province



**Grapevine cultivation** involves significant difficulties, mainly related to the impossibility of **accessing the vineyards** by mechanical means. The objective is to validate the **distribution** of plant protection products using drones





# AN INNOVATIVE REGION 3/3

Lombardy region approved a bill on Urban, peri-urban and metropolitan agriculture

The project has **three** specific goals:



- 1 Contribute to the achievement of the goals of environmental sustainability, urban regeneration, energy conservation, climate change resilience



- 2 Supporting agricultural production obtained by conventional or innovative cultivation techniques



- 3 Recognize the economic, social, environmental, and cultural role of peri-urban agricultural areas and the agriculture practiced within



The regulation aims to encourage settlement especially in urban centers. The goal is to enhance the capacity for self-supply of healthy, zero-mile food, while also fostering new job outlets



# SOME TECH EXCELLENCES IN LOMBARDY

**Heallo** is a startup researching **sustainable solutions** to naturally improve nourishment, conditioned today by incorrect models and processed foods. From **natural sources** and production surplus, they obtain ingredients and **super-nutrients** able to contrast problems caused by incorrect nourishment. With substances, fibers and molecules already present in nature they are able to **create innovative foods** and supplements, with a high nutraceutical value



Founded in 2018 **Planet farms** built its first Vertical Farm in Cavenago in Brianza, on the outskirts of Milan. It is **the largest in Europe** and among the most innovative in the world, with the most **advanced technology** available today. Their Vertical Farming model becomes a resource for traditional agriculture providing **solutions** to issues such as urbanization, food safety, and food access, and water scarcity



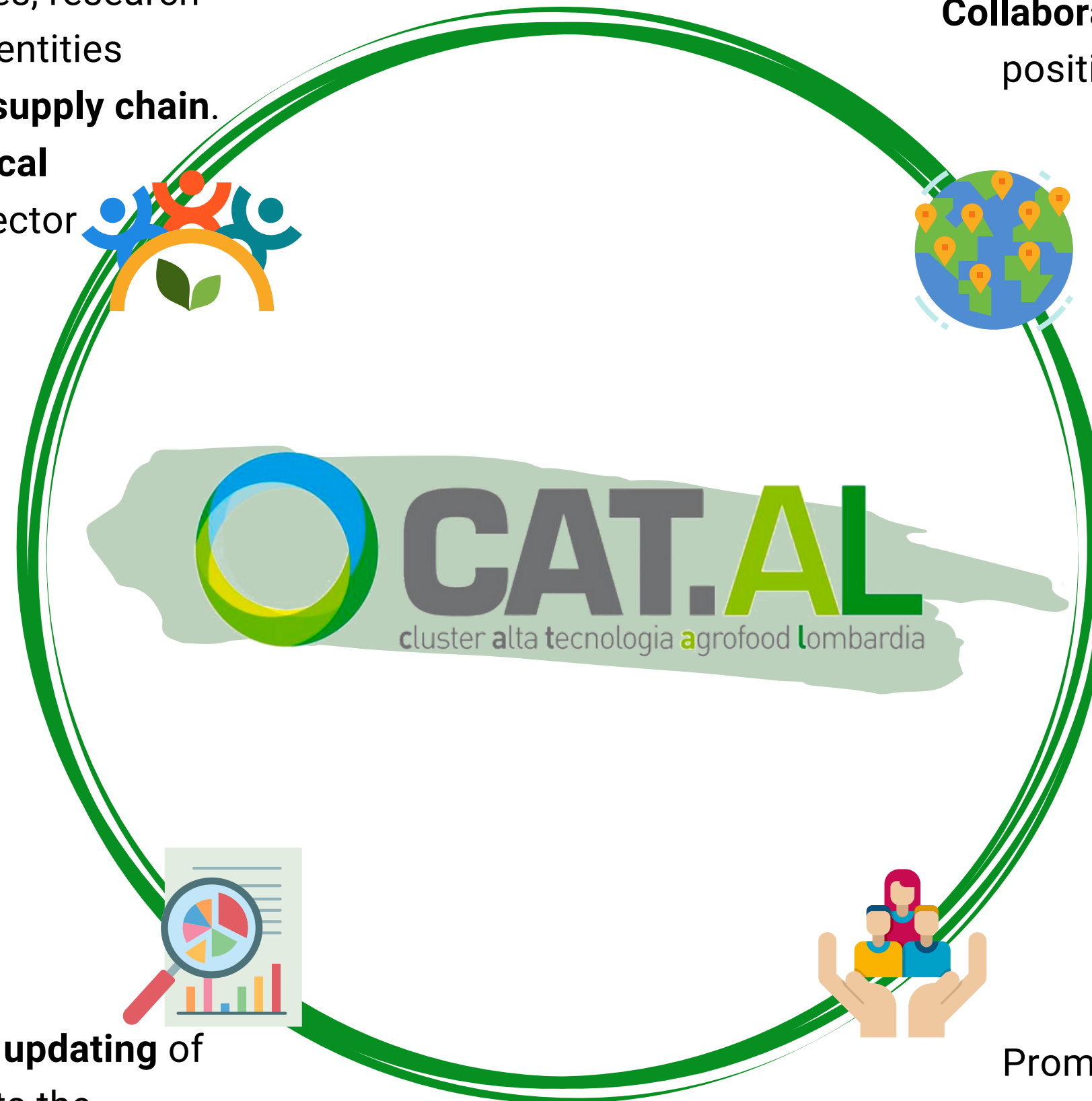


# A DEDICATED REGIONAL CLUSTER

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**Association** of businesses, universities, research centers, and other public and private entities belonging to the **Lombardy agrifood supply chain**.  
It promotes and improves **technological development** and **innovation** in the sector

**Collaborates** with peer entities to boost the positioning of the Cluster nationally and internationally



Contributes to the **definition and updating** of regional **R&I policies** and supports the development of **innovative projects**

Promotion of **regional excellences** at international level



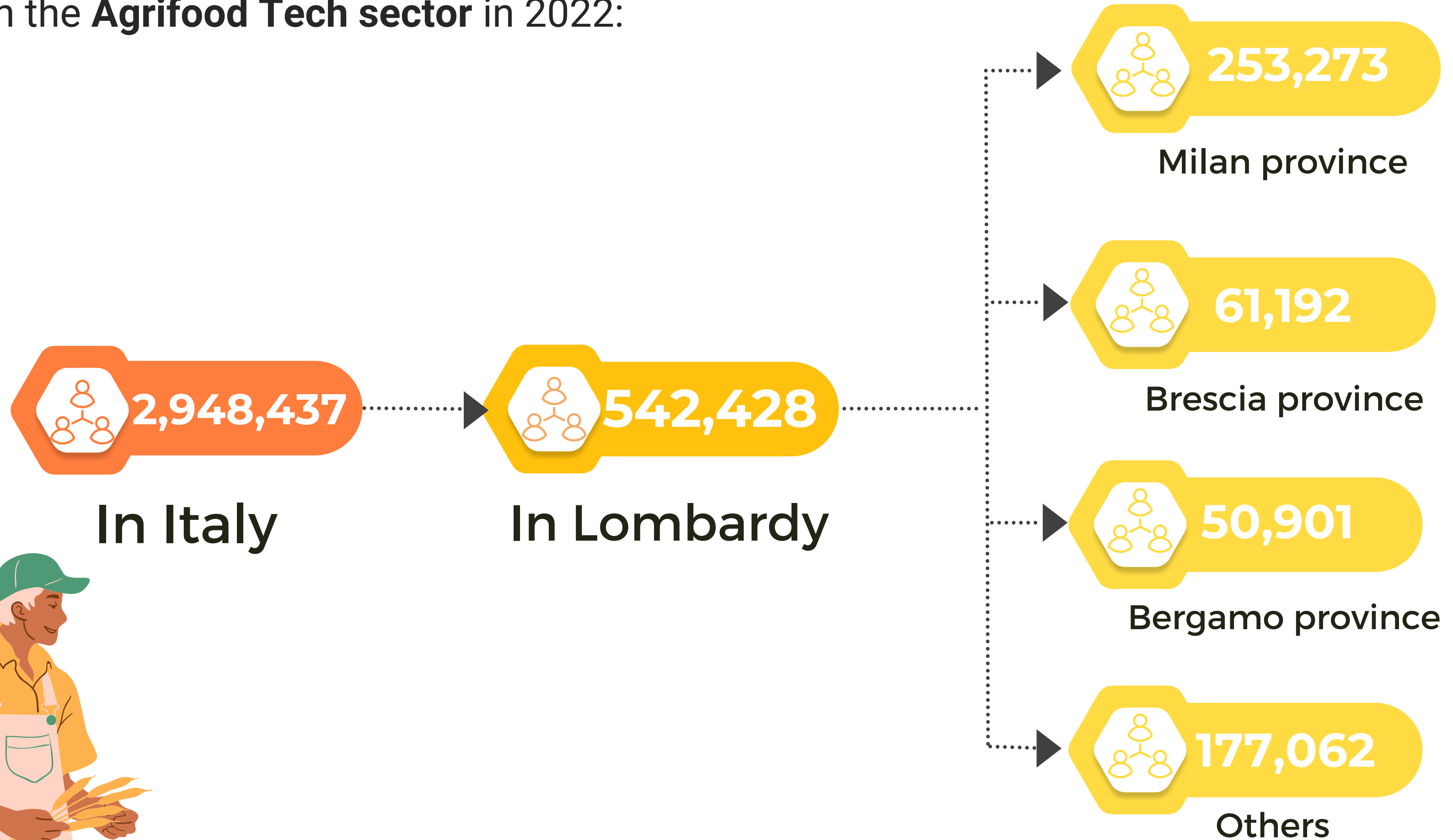
A person wearing a grey baseball cap and a red and black plaid shirt is standing in a field of tall, golden grass. They are holding a tablet computer and looking down at it. The background is a bright, hazy sunset or sunrise, with the sun low on the horizon, creating a warm, golden glow over the entire scene. The text is overlaid in white, bold, sans-serif capital letters.

# EDUCATIONAL AND RESEARCH EXCELLENCES FOR A QUALIFIED HUMAN CAPITAL



# NUMBER OF EMPLOYEES

in the Agrifood Tech sector in 2022:





# LOMBARDY EDUCATIONAL SYSTEM: AGRIFOOD EXCELLENCES

Lombardy's knowledge system is highly articulated. It is characterized by **specialization in different technical-scientific disciplines** and is composed of world-class expertise and research groups thanks to its **15 universities**

## Lombardy Universities with sector-relevant courses:

Milano Politecnico

University of Brescia

Bocconi University - Milan

Bicocca University - Milan

University of Pavia

"Cattolica" University

## Some examples of relevant courses:



**POLITECNICO**  
MILANO 1863

Agricultural engineering

Food engineering

Food Design



**UNIVERSITÀ  
CATTOLICA**  
del Sacro Cuore

**"Alta Scuola di Management ed Economia  
agro-alimentare" (SMEA)**

Agricultural and food economics

Master in Agri-food Business



# LOMBARDY EDUCATIONAL SYSTEM: NOT ONLY UNIVERSITIES

**ITS's courses (Istituti Tecnici Superiori)** offer young people in Lombardy access to high-level technical specialization, designed and implemented in collaboration with companies, universities, and the training system

- Lombardy offers the "**ITS Made in Italy Area courses - agribusiness system in Lombardy**"
- ITS courses in the Agribusiness area aim to provide **skills** to manage **artisanal** processes of production and processing, typical **local products**, and **food and wine** traditions, ensuring the eco-sustainability of the processes





# RESEARCH AND INNOVATION FOR AGRIFOOD TECH

## Digital Innovation observatories - Smart Agrifood



**osservatori.net**  
digital innovation

In 1999, the **Digital Innovation Observatories of the School of Management of Politecnico di Milano** were set up to raise cultural awareness in all the main areas of digital innovation. The Observatory's goal is to **convey research results** to decision-makers, initiate opportunities for stakeholders to meet and debate, promote **communication and value innovation**, and **develop culture** by spreading information and knowledge about digital innovation for the supply chain activity



A woman wearing a grey baseball cap and a red and black plaid shirt is standing in a field of tall, golden wheat. She is looking down at a tablet computer she is holding in her hands. The background is a soft, golden glow from the setting sun, with some trees visible in the distance. The overall mood is peaceful and contemplative.

# HOW INVEST IN LOMBARDY CAN HELP YOU



# INVEST IN LOMBARDY: ONE-STOP-SHOP DEDICATED SERVICES



## LOCATION SCOUTING

Find the best locations for your business through a dedicated network of local public institutions and private partners



## NETWORKING

We are a business integrator, facilitating the connection with private and public, local and national stakeholders



## BUSINESS INTELLIGENCE

Providing useful information on sectors/markets, supporting the evaluation of business opportunities in Lombardy



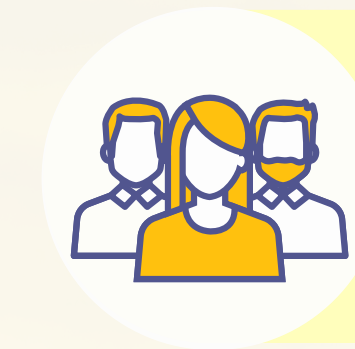
## INCENTIVES

Overview of the tax incentives, grants, loans, and applicable bilateral conventions with institutions



## PUBLIC ADMINISTRATION

We facilitate the dialogue with the public administration & support you in dealing with administrative procedures



## HUMAN RESOURCES

Assistance in choosing the most suitable staff recruitment channels for your business



## START OF THE OPERATIONS

Tailor-made technical support for the set-up of a new business



## EXPANSION & RELOCATION

General support to the expat workers in the relocation process



# CONTACT US

FOR QUESTIONS, COMMENTS,  
AND DEDICATED SUPPORT

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