# AEROSPACE IN LOMBARDY

**POWERED BY** 

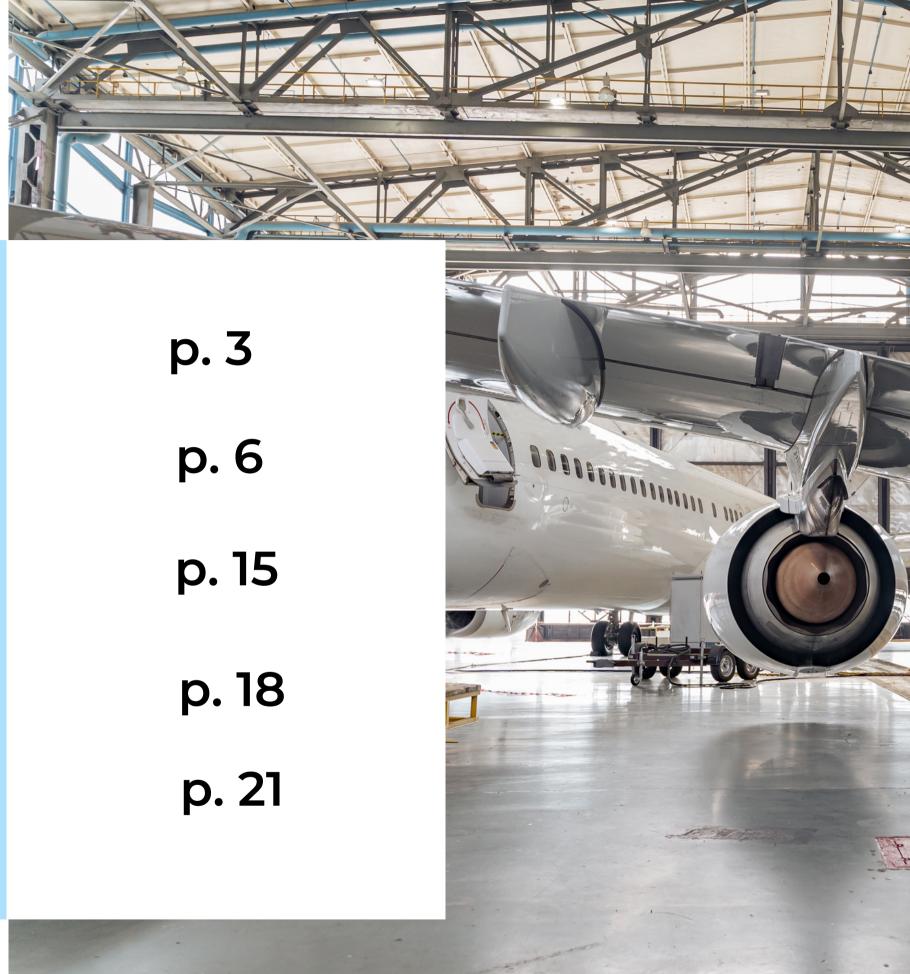








# INDEX



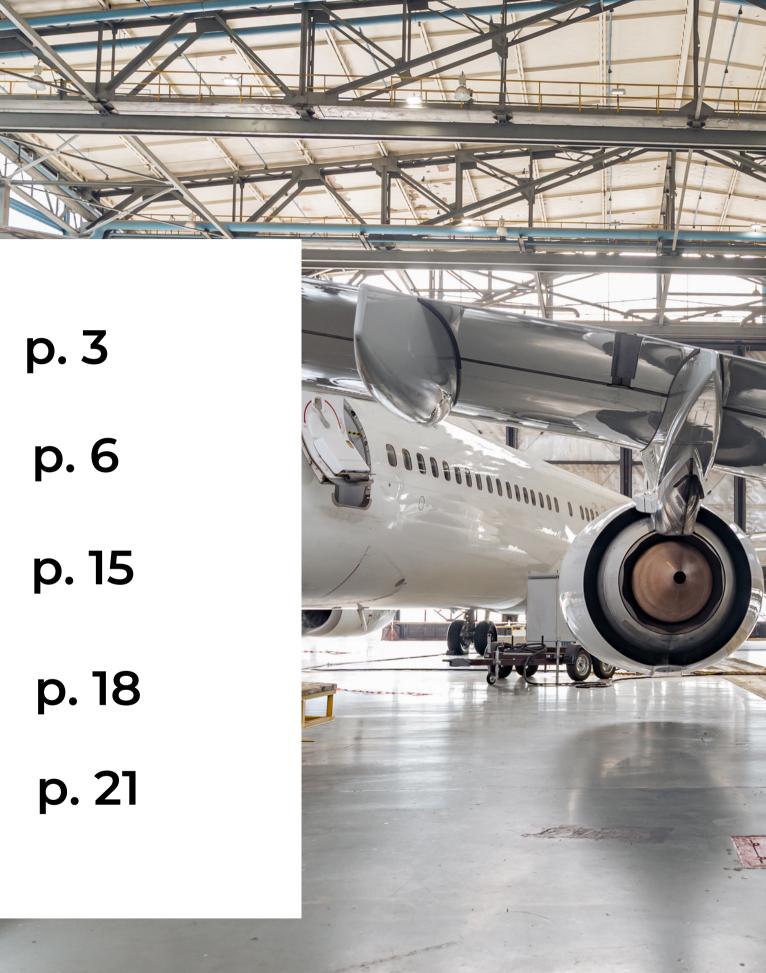
Why Lombardy

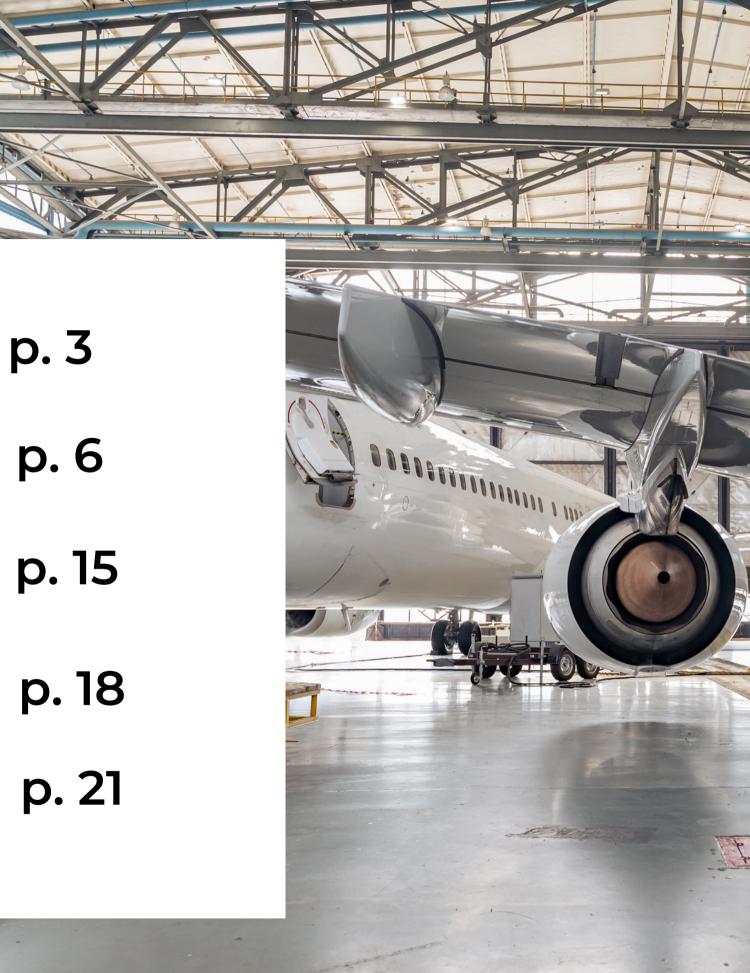
Lombardy's specialization and success stories in the Aerospace Industry

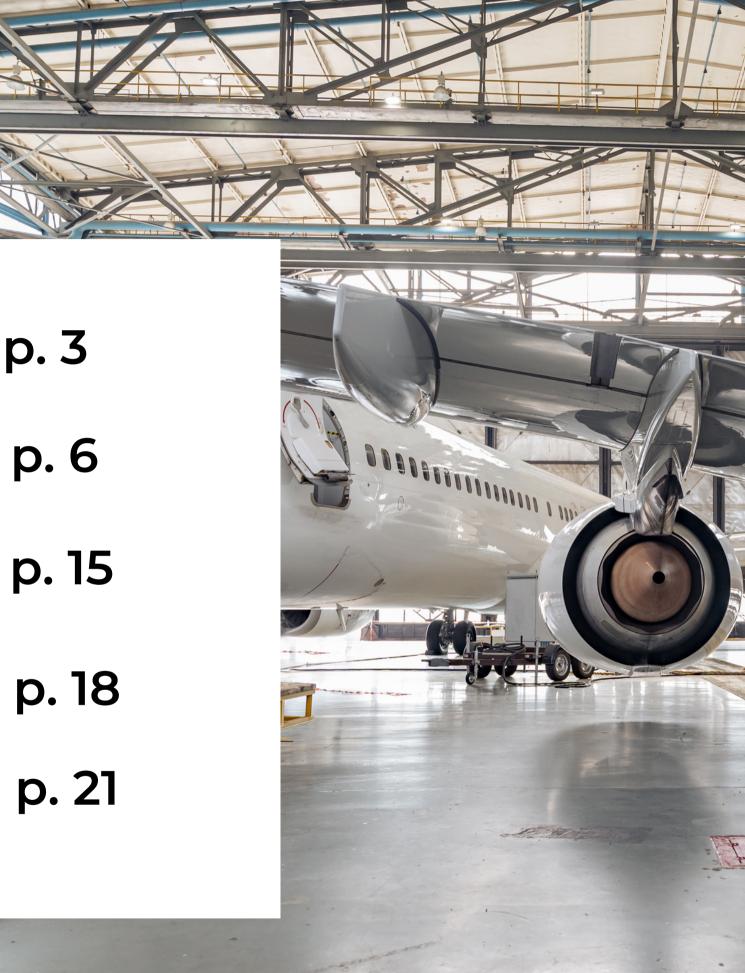
Education, research and innovation

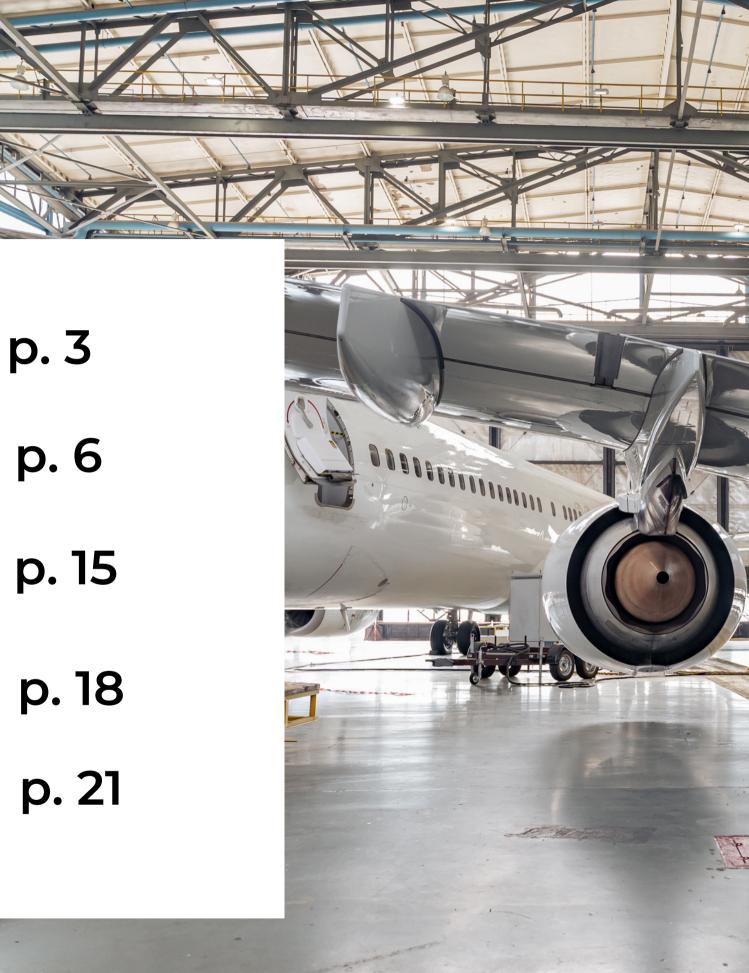
**Cluster and Districts** 

How Invest in Lombardy can help you











# WHY LOMBARDY



20

## LOMBARDY IN A SNAPSHOT

#### AMONG THE TOP EUROPEAN REGIONS

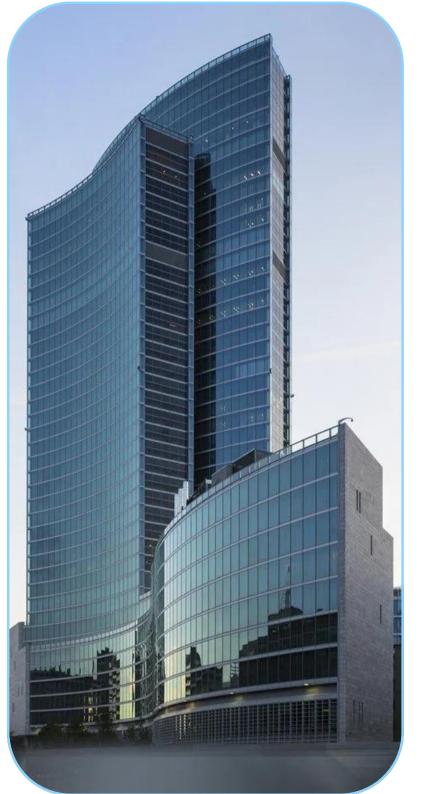


- 2nd EU Region for GDP
- Among the 67 out of 240 European Strong Innovator Regions

## 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:**



- € 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

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## **INFRASTRUCTURES & CONNECTIONS**





1,920 km

#### of railway networks

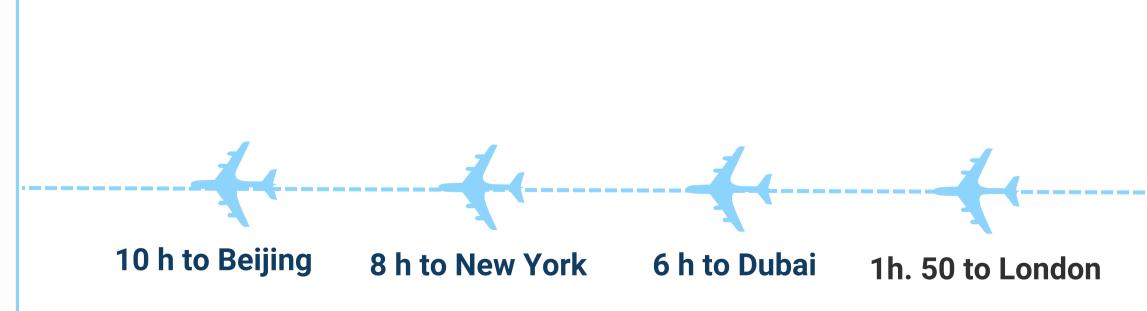
**700 km** 

#### of highways



11,000 km

of provincial roads







#### international airports

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

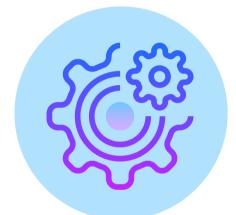
1h. 30 to Paris

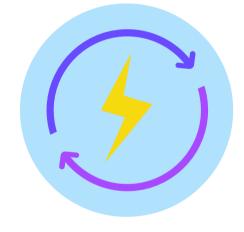
LOMBARDY'S SPECIALIZATION AND SUCCESS STORIES IN THE **AEROSPACE INDUSTRY** 

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## **AEROSPACE TRENDS**

The aerospace industry has historically been a pioneer in the development of new technologies. In recent years **important new trends are emerging**. Some of the most interesting include **digitalization**, and **automation**, but also new solutions in terms of **urban air mobility** and **electric airplane to reduce emissions** 







The implementation of new technology and the related **process of optimization** and **automation of aircraft**  The rising development of **commercial electric aircraft**,

powered by renewable energy The growing importance of **Urban Air Mobility (UAM)**:

aircraft set capable of short-range, lowaltitude travel-both in urban and suburban spaces





The return of supersonic jets

able to fly faster than the speed of sound The increasing application of **innovative products** with the aim to make **aircraft materials lighter** 

## **AEROSPACE ECOSYSTEM IN LOMBARDY**

The Region, also thanks to the presence of a Regional cluster, offers all the technologies and skills of the entire supply chain required to build fixed and mobilewing platforms and space frames: from the **mechanical components**, and subsystems, to satellites, helicopters, and trainer aircraft integrators



80

### and **export** of about





Lombardy counts for 1/3 of the total national export in this field



12% of revenues is spent on R&D

**50+** research projects as of July 2022



**255** patents in the last 15 years



85% out of the total are **SMEs Firms** 

characteristics:

- rotary wing aircraft and vertical flight
- fixed-wing aircraft and training systems
- management of air traffic
- space, satellites, and scientific payload
- avionic apparatus and systems, fuel systems, electromechanical and hydraulic motor units, wireless communication systems

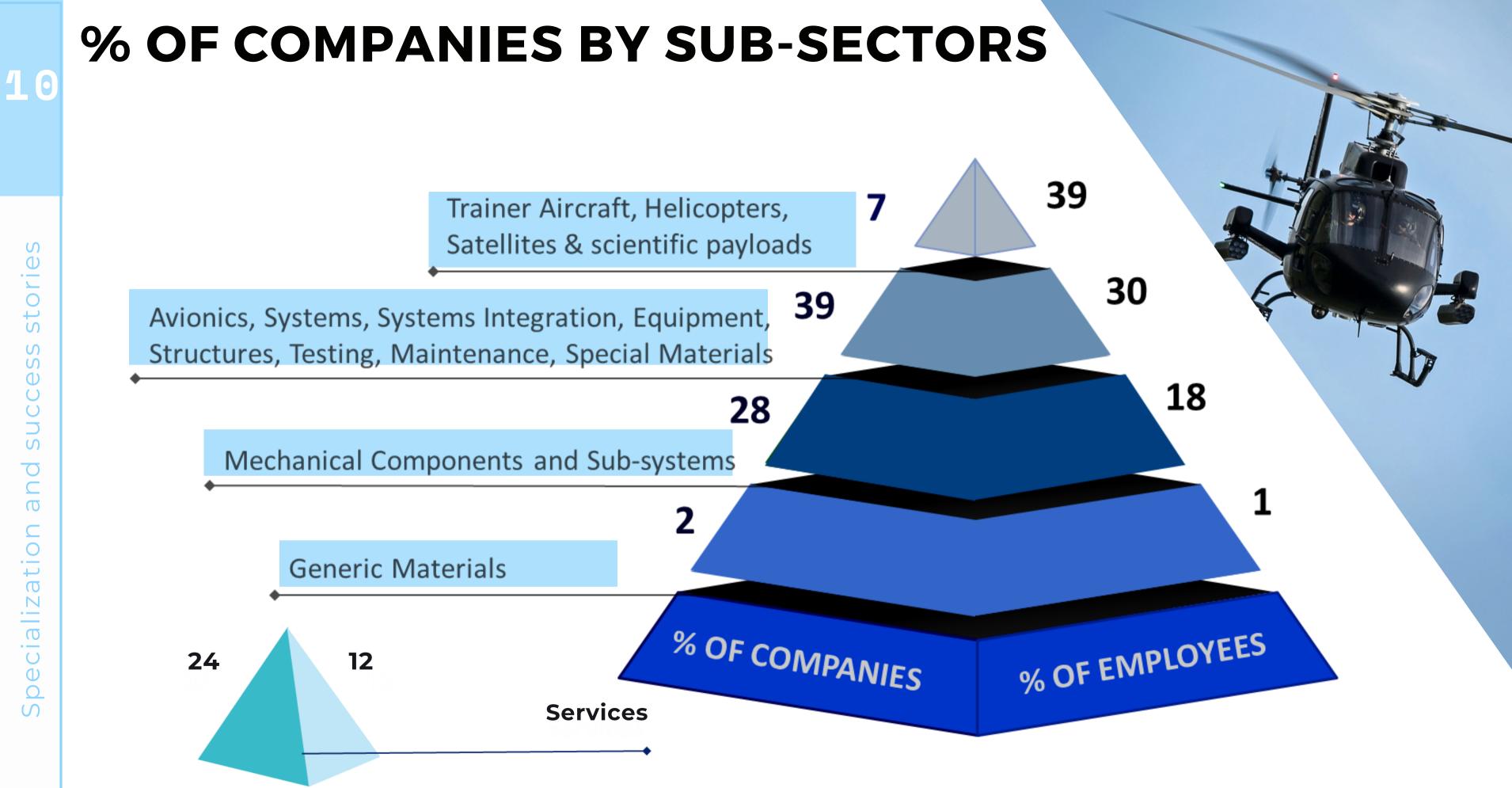
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stories

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The **excellence** of the Lombardy Aerospace Cluster can be associated with these



## **COMPETITIVE ADVANTAGES OF THE AEROSPACE ECOSYSTEM**

#### CLUSTER

The cluster provides a system with a united, visible, and identifiable collective identity in the peculiar environment:

- fosters innovation
- strengthens companies' position in the global marketplace
- guarantees higher competitive advantage and stimulates the cluster companies' growth

#### **HIGH QUALITY EDUCATION SYSTEM**

- 15 Universities, including the Polytechnic of Milan (13th in the world for Engineering&Technology)
- 4 Universities and 2 Research centers specialized in topics related to the aeronautical industry
- roughly 9.000 students graduated in engineering subjects per year in Lombardy



#### **COMPLETE SUBCONTRACTING CHAIN**

Lombardy hosts 3 complete production chains:

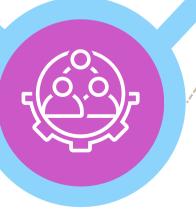
- Rotary Wing
- Fixed Wing
- Space

The 41,5% of subcontractors are directed to machine tools and a part of that is addressed to the aerospace industry

#### **FAVORABLE MARKET**

The region provides access to more than 800 million European consumers and creates a favorable commercial hub for the EMEA market while consolidating marketing and sales strategies





#### SKILLED WORKFORCE

The extraordinary geographic concentration of high-specialized firms allows the creation of in-depth know-how, which guarantees highly specialized employees - roughly 19.300 - such as:

- aerospace engineers
- aerospace designers
- structural engineers

## SOME NATIONAL AND INTERNATIONAL COMPANIES IN LOMBARDY

## 12

## AEREA SPA

- **EMPLOYEES**: 160
- LOCATION: Turate (CO)
- MAIN ACTIVITIES: high precision mechanics, components, training courses

#### **LEONARDO SPA**

- **EMPLOYEES**: 31.000
- **LOCATION**: sites in the Varese, Brescia, Milan and Como provinces
- MAIN ACTIVITIES: helicopters, space, R&D, cyber security

#### THALES

& LEONARDO

AEREA

- THALES ITALIA SPA
- **EMPLOYEES**: 450
- LOCATION: Milano and Varese
- MAIN ACTIVITIES: defence and security, aerospace, satellites, transportation

#### ASE SPA

- EMPLOYEES: N.A.
- LOCATION: San Giorgio su Legnano (MI)
- MAIN ACTIVITIES: electrical power generation systems for the aerospace and defence industry



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OGIC

#### **OHB ITALIA SPA**

- **EMPLOYEES**: 210
- LOCATION: Milano
- MAIN ACTIVITIES: satellites, scientific payloads, microgravity experiments

#### SECONDO MONA SPA

- EMPLOYEES: around 400
- LOCATION: Somma Lombardo (VA)
- MAIN ACTIVITIES: fuel systems, engine equipment, product design

#### THALES ALENIA SPACE SPA

- **EMPLOYEES**: 2.300
- LOCATION: Milano and Varese
- MAIN ACTIVITIES: security, transportation, aerospace, defence and space markets

#### LOGIC SPA

- **EMPLOYEES:** +100
- LOCATION: Cassina de' Pecchi (MI)
- MAIN ACTIVITIES: electronic applications for on-board products on fixed and rotary wings platforms



AIR FRANCE KLM

Cargo

Air France -KLM

## **SOME RECENT EXAMPLES OF** FOREIGN FIRMS **INVESTING IN** LOMBARDY







The company has inaugurated the new commercial offices in Milan, a strategic city given the proximity to the Linate airport and the well-connected public transport

The company has been the first client for the new World Flight Center cargo area in the Malpensa airport, a new **warehouse that will allow an increase of the handling capabilities** 

The company has opened an office in Milan and planned 2 flights a week from Malpensa to Taipei

The company has inaugurated a new **training center** in Milan. A partnership was started with Easyjet chose CAE to train 1000 future pilots



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**ThalesAlenia** 

#### **DECEMBER 2022**

#### **APOGEO SPACE - D'ORBIT**

Apogeo Space of Brescia, an innovative SME focused on research activities, reached an agreement with D'orbit (CO) leading company for orbital logistics and transportation, to put its satellites into orbit. The launches are planned to start in 2023. The project will reinforce Italy's role in telecommunications and nanosatellite constellations.

### **APRIL 2021**

#### WINTER OLYMPICS 2026

The Winter Olympics 2026, which will take place in Milan-Cortina, represents an important innovation opportunity. The Aerospace sector, in particular, will be especially involved in opportunities concerning satellite or drone monitoring, and in those concerning the creation of a system of heliports and vertiports for integrated mobility.

#### **NOVEMBER 2020** LEONARDO S.P.A.

Recently Leonardo won a contract worth \$60 million from the European Union to design and develop a cutting-edge uncrewed helicopter.

### **JULY 2020**

#### THALES ALENIA SPACE

Thales Alenia Space won the largest share of prime contracts the European Space Agency awarded on July 1, for further development of six new Copernicus satellite missions. The company was awarded the lead development role for 3/6 planned Earth-observation missions, a contract haul totaling more than €1.4 bln. euros.

## **Recent Success Stories**

# EDUCATION, RESEARCH AND INNOVATION

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## 16

## Educational and Research System

Lombardy's educational system guarantees **excellent specialization and extraordinary expertise** in several aerospaces' fields.

### Specialized Research Centers of Milano Politecnico:

• Frame-Lab

- Amatech
  FMSLab
- ASCL
- AVLab
- RAL

• SIAMS

CrashLab

and satellites from st collaboration wit





### **Research Centers:**

- Consiglio Nazionale delle Ricerche
- Istituto Nazionale di Astrofisica

### Universities with dedicated courses:

- Milano Politecnico
  - 13th Engineering University in the world
- Università degli Studi Pavia
- Università Bicocca
- Università Liuc

## **Technical High School Education:**

- ITS (Istituti Tecnici Superiori)
- IFTS (Istituti di Formazione Tecnica Superiore)

The higly specialized company in the region produce **helicopters, airplanes and satellites** from start to finish. Also thanks to the continuous collaboration with **universities and research centres**.

# **Innovation System**

lombardia aerospace cluster

#### Lombardia Aerospace Cluster

Recognized association founded in 2009. Today it includes around 103 members including companies, Universities and R&D Centers specializing in the aerospace field



#### **Cluster Tecnologico Nazionale Aerospazio**

Acts as a single national reference among all the main actors of the Italian aerospace system: businesses, Research Centers, the Academic world, Institutions, National Agencies, Category Federations and Regional Districts

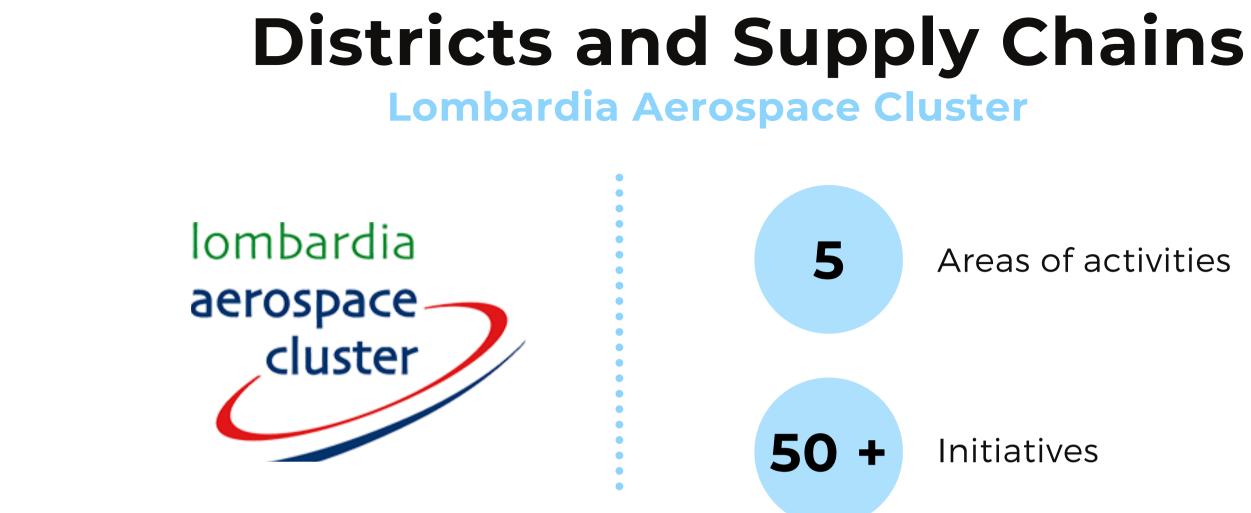
#### **European Aerospace Cluster Partnership**

A permanent partnership between collaborating European aerospace clusters. It currently comprises 45 clusters from 18 countries and was initiated in 2009 and co-funded by the European Commission

Lombardy's territory is full of innovation centers that guarantee the coordination of the aerospace networks and carry out relevant researches and development projects



# CLUSTER AND DISTRICTS



### **History of the Lombardy Cluster**

FEBRUARY 2009

Foundation of the Lombardia Aerospace Cluster, born on the initiative of 8 companies in the field JUNE 2010

The Cluster becomes part of the European **Aerospace Cluster** Partnership

SEPTEMBER 2012

The Cluster becomes part of the new born National **Aerospace Cluster**  OCT 2

The Cluste the Bro

certifica important at the European level

Source: Lombardia Aerospace Cluster

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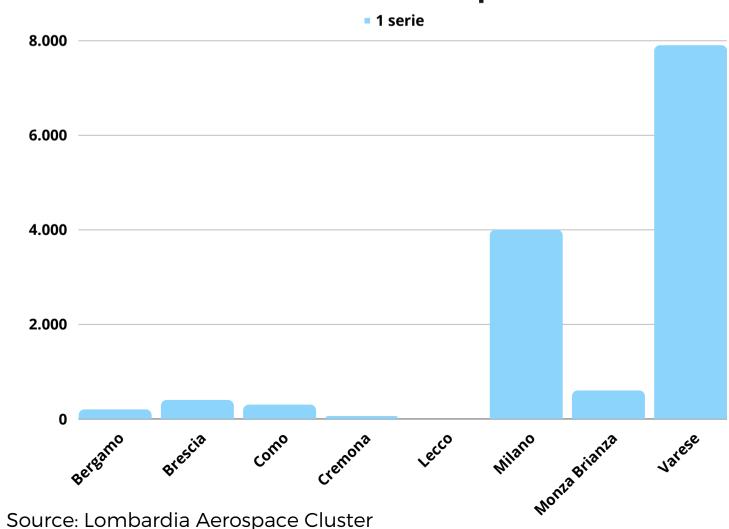
Areas of activities

OBER 014	2019	2021
<b>er obtained</b> <b>nze Label</b> cation, an certification	In 2019. the Cluster celebrated its 10th anniversary	Advanced Air Mobility (AAM) project development

# National and International companies in the cluster

Lombardy Aerospace Cluster includes **220 companies**. The vast majority of them are **small or medium Italian companies**, but there is also a significant number of **large multinational firms**. Varese and Milano provinces are the areas with the highest number of employees of Lombardy Aerospace Cluster (LAC) member companies.

#### Distribution by province of employees of LAC memeber companies





# HOW INVEST IN LOMBARDY CAN HELP YOU

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## **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





#### **BUSINESS INTELLIGENCE**

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





#### **PUBLIC ADMINISTRATION**

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





#### START OF THE OPERATIONS

Tailor-made technical support for the setup of a new business



#### NETWORKING

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

#### INCENTIVES

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

#### **HUMAN RESOURCES**

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

#### **EXPANSION & RELOCATION**

General support to the expat workers in the relocation process

## **CONTACT US** FOR QUESTIONS, COMMENTS AND SUPPORT



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