



The Research and Innovation Ecosystem in Emilia-Romagna



Emilia-Romagna

The first region in Italy for the innovation – Scoreboard of the European Commission

This system is open, dynamic and accessible as a result of a strong collaboration among Educational and Training Institutions, Universities and Higher Artistic, Musical and Choreutics Education, Research Centres, Private Companies and Public Administration. All of them aimed at creating an environment supporting knowledge, innovation, attractiveness of investments and talents to support a sustainable and inclusive development.

Within this innovative environment, Emilia-Romagna Regional Administration - including *In-house Agencies and Foundations* - supports Research & Innovation and provides the strategic vision for the future.

Population

4.5 million

Enterprises

- 400,000 companies
- 42,000 manufacturing companies
- 4,000 multinational companies

Excellences

- Motor Valley
- Food Valley
- Wellness Valley
- Data Valley

Regional In-house Agencies and Foundations

- **ART-ER** – Attractiveness, Research, Territory - Consortium for innovation and technology transfer
- **Lepida** - Public operator for information and communications technology
- **Arpae** - Regional Agency for Prevention, Environment and Energy
- **ITL** – Transport and Logistics Institute
- **Regional Agency for Employment**
- **ER.GO** – Regional Agency to promote higher education
- **Apt** - Regional tourism promotion company

First Region in Italy for

- EU Regional Innovation Scoreboard
- Patents per capita
- Exports per capita
- Essential health services

International and National Agencies in Emilia-Romagna

- **EFSA** - European Food Safety Authority
- **ECMWF** - European Centre for Medium Range Weather Forecasts
- **ItaliaMeteo** - National agency for meteorology and climatology

Education System

The regional education system is spread throughout the territory, providing highly qualified human resources and talents. Universities and training centres are the key players enhancing high competences and skills related with the regional research and innovation ecosystem.



Universities and Training Centres

Regional Universities and AFAM

- **6 Universities** + Johns Hopkins University
- **Bologna Business School** (Master/Mba)
- **Fooder** - School of advanced studies in Food safety
- **Muner** (Motor vehicle University of Emilia-Romagna)
- **14 AFAM** - 9 conservatories, 3 academies, 2 artistic and music schools
- **400** courses (three-year and master degrees)
- **153** masters
- **126** specialisation courses
- **169,162** students
- **4,419** PhDs and **5,988** specializing doctors
- **5,456** AFAM students
- **Erasmus and exchange students** - 5,295 incoming, 6,181 outgoing

Higher Education and Training System

- **7 ITS** - Higher Technical Institutes Foundations with 58 courses
- **163 accredited training centres**
- **Super** - University School for Technical Professions Emilia-Romagna
- **Association of Higher Education Technical Institutes Emilia-Romagna**

Attractiveness of Investments and Talents

The Regional Law 14/2014 "Promotion of investments in Emilia-Romagna" supports innovative investments, research structures and laboratories of the companies and promotes sustainable innovation of the regional ecosystem.

In parallel, the Regional Law 2/2023 "Attraction, retention and enhancement of highly specialised talents in Emilia-Romagna" offers with its "Manifesto" a coordinated framework for policies, programmes and services to increase the talent attraction of Emilia-Romagna and its R&I ecosystem.



**Talents
Emilia-Romagna**

Moving forward
together



Research and Innovation System

Research and innovation system in Emilia-Romagna is a highly dynamic community where key players are opened to enhance partnerships with Institutions, companies and other research centres. Thanks to Regional Laws n. 7/2002 and 7/2019, Emilia-Romagna Region has created new Labs, innovation Centres and foundations to increase research and innovation capacities of the regional system.

National and International Research Centres, Technopoles, Laboratories and Infrastructures

Research Centres

- **CINECA** – National leading hub for HPC and digital innovation services.
- **CNR** – National Research Council
- **INFN** – National Institute for Nuclear Physics
- **ENEA** – National Agency for New Technologies, Energy and Sustainable Economic Development
- **5 IRCCSs** – Scientific Institute for Research, Hospitalization and Healthcare and 3 University Hospitals
- **CICLOPE** Wind Tunnel
- **65** Research infrastructures on ESFRI domains
- **104** Industrial research Laboratories and Innovation Centres of High Technology Network
- **INAF** – National Institute for Astrophysics
- **CMCC** Euro-Mediterranean Centre on Climate Change
- **INGV** – National Institute of Geophysics and Volcanology
- **Cineteca Bologna** – one of the most important European film library, specialized in film restoration

Clust-ER Associations

Smart Specialisation Strategy Clust-ERs, where research centres, companies and professional training institutes share ideas, skills, tools and projects.

- **9 Clust-ERs**
- **Big Data Association**
- **Muner** – Motor vehicle University of Emilia-Romagna

New Players

- **IFAB** - Big Data and AI for Human Development International Foundation
- **ICSC** – National Research Centre on High Performance Computing, Big Data and Quantum Computing
- **Ecosister** – Emilia-Romagna Territorial Innovation Ecosystem
- **UNU** – Institute on Big data and Artificial intelligence

Technopoles and Infrastructures

- **12** Technopoles and more than 20 locations: DAMA Emilia-Romagna Data Manufacturing Technopole, Bologna CNR, Bologna-Ozzano, Forlì-Cesena, Ferrara, Modena, Parma, Piacenza-LEAP, Piacenza-MUSP, Ravenna, Reggio Emilia, Rimini
- **INAF Radio Telescopes**
- **ENEA Brasimone**



Networks and Open Innovation

Incubators and Accelerators

- **32** Incubators and Accelerators – In-ER Network
 - **43** Private Structures
 - **Incredibol** – Creative Innovation in Bologna
-

Network for the Digital Transition

- Technical Assistance Centres
 - Innovation Centres
 - Digital Innovation Hubs
 - Bi-Rex Competence Centre
 - ER2Digit, the European Digital Innovation Hub of the Emilia-Romagna Region
 - Pid – Digital Info Points
-

Partnerships and Networks

- **50** European and International Partnerships and Networks
-

ART-ER Member of:

- APRE - Agency for the Promotion of European Research
- Asvis
- EIT - European Institute of Innovation and Technology KICs
- Enterprise Europe Network
- EPSI – The European Platform for Sport Innovation
- ERRIN - European Regions Research and Innovation Network
- Eurada - European Association of Development Agencies
- Hub of Apre Agency
- ICC – Innovation Community for Cultural and Creative Industry
- Innovation Country Centre for KIC
- National Technological Clusters
- New European Bauhaus
- Science|Business
- TCI - The Competitiveness Institute Network
- Vanguard Initiative

Open Innovation

The Region supports open innovation in digital and physical form to promote connections between the regional innovation system and the international innovation community.

- **Match-ER** – Data Driven Innovation International program
- **EROI** – Emilia-Romagna Open Innovation digital platform
- **R2B** – Research to Business International exhibition
- **Digital Open Laboratories** for smart cities and citizens



For information
www.regione.emilia-romagna.it

