The Research and Innovation Ecosystem in Emilia-Romagna





Co-funded by the European Union





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.

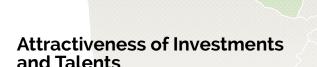
Universities and Training Centres

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



MODENA

University

of Modena and

BOLOGNA University

of Bologna

Reggio Emilia

FERRARA

University

of Ferrara

John Hopkins

CESENA

Campus

RAVENNA

Campus

RIMINI

Campus

BOI OGNA

University

FORLÌ Campus

PIACENZA Catholic

University

REGGIO

EMILIA

University

of Modena and

Reggio Emilia

PARMA

of Parma

Jniversity

PIACENZA

Polytechnic University of Milan

> 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.



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

- 11 Technopoles and 22 locations: Tecnopolo Manifattura – Data Valley Hub, Bologna CNR, Bologna-Ozzano, Forlì-Cesena, Ferrara, Modena, Parma, Piacenza, 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 informations www.regione.emilia-romagna.it

