

Excellence

Innovation

Beauty

EMILIA-ROMAGNA
THE NEW ITALY



When you think of Italy, what comes to mind? The most beautiful cars in the world? The Red Ferrari? The most delicious food, like Parmigiano-Reggiano or balsamic vinegar? The films of Fellini and Antonioni? The voice of Luciano Pavarotti? Well, maybe you don't know it, but when you think of Italy, you're thinking of our region, Emilia-Romagna.

And there is much more to discover: Emilia-Romagna is the first region in Italy for innovation according to the European Scoreboard 2021, this is the result of our approach focused on future challenges. Sustainability is our priority and the Pact for Labour and Climate - signed in 2020 by the main regional stakeholders - shows our shared vision up to 2030. The region is renowned for its quality of life and services, with the most effective health system in Italy. In this land of natural beauties, you can admire Unesco sites such as our Apennines, the Po Delta and the Porticoes of Bologna – official World Heritage Site in 2021 - passing through historical cities and enjoying food and entertainment. Look at it on the map: we are the pivot that connects the crossroads of Northern and Southern Italy, where people and cultures, highways and railways meet. We are a land of cultural and commercial exchanges: look at our exports, well above the Italian average.

If our region were a car, we could say that it is powered by a very special engine: local collaborative institutions, cutting-edge research institutes and universities supported by a training system that works in close collaboration with companies. Brain and creativity, tradition and technology, taste and beauty: if you come to visit our companies, in mechanical engineering or in the biomedical sector, in the food industry or in fashion, you will find a special spirit in everything we do. Our transformation is always underway and now we are working hard to become a worldwide reference point for big data, aerospace and electric vehicles.

Spend a few days here with us and you will understand that this is a cutting-edge region, with its constant ability to amaze and inspire. I hope you will have the opportunity to see all this with your own eyes, this is happening in Italy here and now. You will fall in love.

Stefano Bonaccini
President of the Emilia-Romagna Region



02 INTRODUCTION

02 EMILIA-ROMAGNA: A EUROPEAN REGION

04 A REGION OF WELLBEING

04 EMPLOYMENT, INCLUSION AND QUALITY OF LIFE

06 BEAUTY, CULTURE AND NATURAL RESOURCES

08 A WELL CONNECTED REGION

08 TRANSPORT INFRASTRUCTURE

09 DIGITAL INFRASTRUCTURE

10 A REGION OF KNOWLEDGE AND RESEARCH

10 EDUCATION

12 RESEARCH AND INNOVATION

14 INNOVATION ECOSYSTEM

16 BIG DATA VALLEY

18 A SUSTAINABLE REGION

20 A COMPETITIVE AND INTERNATIONAL REGION

21 ECONOMY

22 INTERNATIONALISATION

24 REGIONAL TRADE FAIR SYSTEM

25 ATTRACTIVENESS

28 REGIONAL EXCELLENCES

30 ADVANCED MECHANICAL ENGINEERING

34 FOCUS: MOTOR INDUSTRY

36 FOCUS: PACKAGING

37 FOCUS: AEROSPACE

38 AGRICULTURE AND FOOD

44 HOUSING AND CONSTRUCTION INDUSTRY

46 HEALTH AND WELLNESS INDUSTRY

48 FASHION

50 CULTURAL AND CREATIVE INDUSTRIES

52 CONTACT POINT

INTRODUCTION

EMILIA-ROMAGNA: A EUROPEAN REGION



POPULATION
4.5
MILLION INHABITANTS

- 1** REGION
- 1** METROPOLITAN CITY
- BOLOGNA
- 8** PROVINCES:
- FERRARA
- FORLÌ-CESENA
- PARMA
- PIACENZA
- RAVENNA
- REGGIO EMILIA
- RIMINI
- 328** MUNICIPALITIES

EMILIA-ROMAGNA IS



A REGION OF WELLBEING

- **BEAUTY:** plenty of UNESCO Sites, with porticoes of Bologna awarded as new world heritage site in 2021
- **INCLUSION:** lower social exclusion rate than in Italy and Europe
- **QUALITY OF LIFE:** higher employment and GDP per capita than in Italy and Europe; top health system and services; strong cultural offer



A WELL CONNECTED REGION

- **TRANSPORT INFRASTRUCTURES** in strategic position connecting Northern Europe and Mediterranean area
- **DIGITAL INFRASTRUCTURES:** top smart cities, broadband connection and Digital Economy and Society Index (DESI) higher than the national average



A REGION OF KNOWLEDGE AND RESEARCH

- **RESEARCH AND INNOVATION:** 1st region in Italy for innovation according to the Regional Innovation Scoreboard 2021 (European Commission)
- **EDUCATION:** oldest University in Western Europe strongly oriented towards Industry 4.0 and innovation
- **INNOVATION ECOSYSTEM:** with a unique High Technology Network integrated in Clusters and Technopoles
- **BIG DATA VALLEY:** a top world hub for supercomputers and data centres



A SUSTAINABLE REGION

- **Regional Pact for Labour and Climate 2020:** a shared overall strategy up to 2030 for a regional sustainable development in the environmental, social and economic dimensions.



A COMPETITIVE AND INTERNATIONAL REGION

- **ECONOMY:** strong manufacturing sector with 26.9% of total employees, being 20.7% the Italian average and 18.4% the European one
- **INTERNATIONALISATION:** 1st Italian region for export per capita
- **ATTRACTIVENESS:** open region with strong incentives for new investments



A REGION OF EXCELLENCES

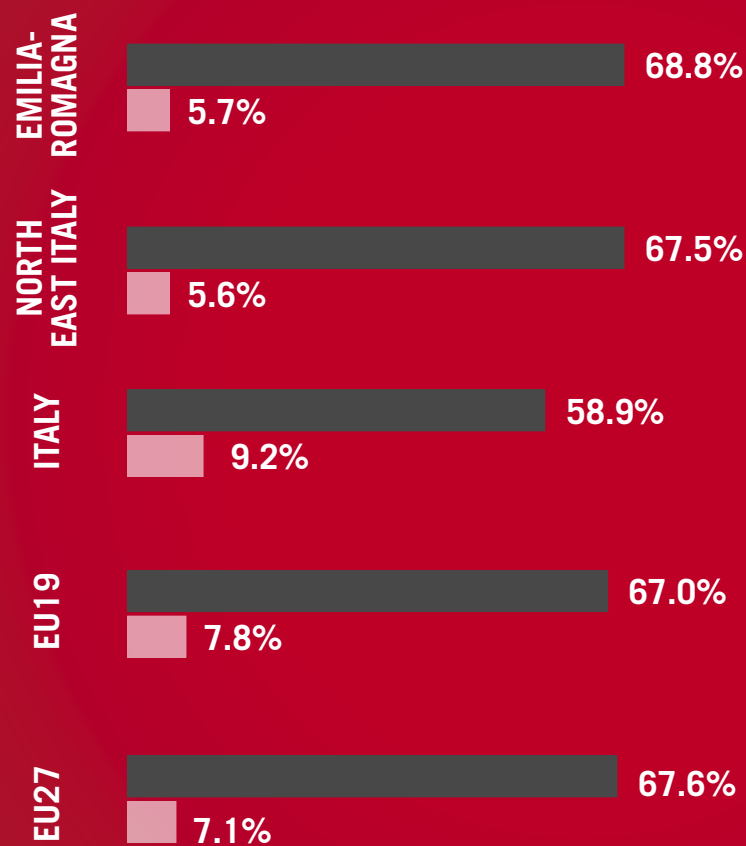
- **Global leader in industrial machinery** (e.g. packaging) and ceramics, boasting the top world Motor and Food Valleys, growing more and more in Health and Wellness and home of successful creative brands

A REGION OF WELLBEING

EMPLOYMENT, INCLUSION AND QUALITY OF LIFE

The Region's development model ensures both economic competitiveness and social cohesion. It has successfully pursued **job creation** as its **top economic priority**: the employment rate in 2020 was well over the Italian and European one.

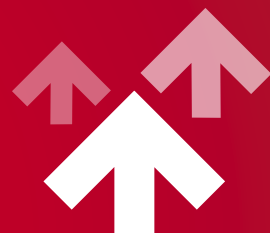
LEVELS OF EMPLOYMENT HIGHER THAN THE NATIONAL AND EUROPEAN AVERAGE



EMPLOYMENT RATE
(15-64)

UNEMPLOYMENT RATE
(15 years or over)

Source: Eurostat 2020

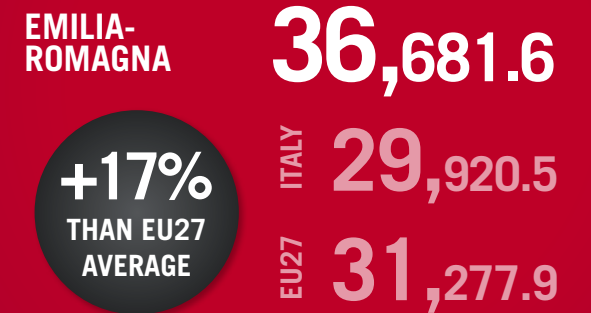


POLICIES

Pact for Labour and Climate signed in 2020 by 55 regional stakeholders aims at generating quality jobs, combating inequality and taking Emilia-Romagna through environmental transition, thereby helping to achieve the objectives of the 2030 Sustainable Development Agenda, in particular reaching carbon neutrality by 2050 and 100% renewable energy by 2035.

Small and medium sized enterprises - SMEs - are the driving force of the economy (about 75% of the total regional employees) fostering an extraordinary spread of wealth across the entire regional territory. Emilia-Romagna is an Italian leading region in terms of per capita income, and for years now it has been classified as one of the richest regions in Europe.

GDP PER CAPITA (EURO - PPS)

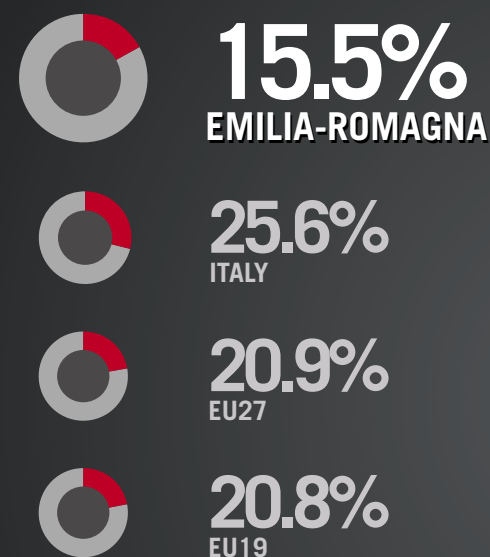


Source: Eurostat 2019

HIGHER LEVEL OF SOCIAL COHESION

Social cohesion is also a strong regional asset as shown by the percentage of the regional population at risk of poverty and social exclusion.

RISK OF POVERTY OR SOCIAL EXCLUSION (Source: Eurostat 2019)



QUALITY OF LIFE NATIONAL RANKING

Bologna is the first city in Italy for quality of life and 8 regional cities (out of 107) are in the Top 25
Source: Sole24Ore, 2020

Emilia-Romagna performs very well in the **Better Life Index (BLI)** :

- The region is very well positioned at national level on many parameters: Access to services (1/21), Civic Engagement (2/21), Jobs (3/21), Income (3/21), Housing (4/21), Education (5/21), etc.

Source: OECD 2020

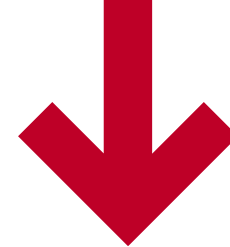
Emilia-Romagna is the leading Region in Italy as for the **efficiency of the health system**:

- 1st** First Italian region for Essential Assistance Levels (EAL)
Source: Fondazione GIMBE 2010-18
- 1st** First Italian region for the efficiency of the health system
Source: Demoskopika, 2020
- 8th** Istituto Ortopedico Rizzoli 8° Best Hospital in the World
Source: Newsweek (2021)

BEAUTY, CULTURE AND NATURAL RESOURCES

The huge and diversified cultural and natural heritage of Emilia-Romagna qualifies the region as one of the most beautiful in Italy and in the world, hosting Unesco sites, historical cities, mountains, beaches and widespread quality entertainment.

Emilia-Romagna region achieved a **new record in tourist visits**, which have increased steadily in the last years.



PORTICOES OF BOLOGNA

awarded by Unesco as World Heritage Site in 2021

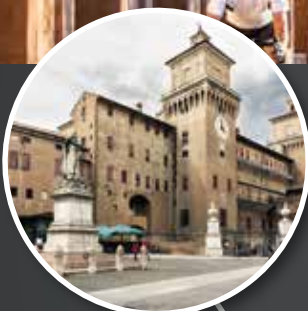


15 UNESCO HERITAGES, of which 5 World Heritage Sites:

Modena



Ferrara and its Po Delta Park



Ravenna



Bologna (City of Porticoes)



Sasso Fratino Integral Reserve



TOURISTIC FLOWS (2019)

Source: Unioncamere Emilia-Romagna

14.1 MILLION
ARRIVALS
+3.0% THAN 2018

60.7 MILLION
OVERNIGHT STAYS
+ 1.9% THAN 2018

1st

Top destination to visit in Europe in 2018 according to Lonely Planet

NETWORK OF NATURAL PARKS

2 national parks
1 interregional park
14 regional parks
17 natural reserves

158

Sites of European Nature 2000 Network

545

Museums

272

Archaeological and monumental sites

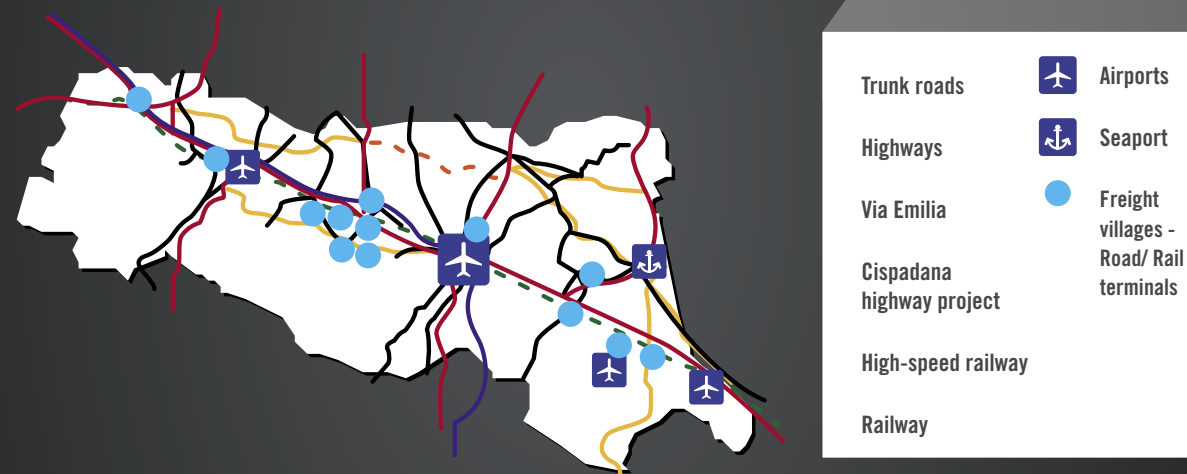
A WELL CONNECTED REGION

TRANSPORT INFRASTRUCTURE

The Emilia-Romagna region is a bridge: it is at the crossroads of the communication routes connecting Northern Europe with Adriatic and Mediterranean countries.

The regional logistics system for handling freight is one of the most advanced in Italy. Bologna is a major road and railway junction between Northern and Central-Southern Italy.

The **regional transport network covers the whole territory:**



VIA EMILIA crosses the region from southeast to northwest and is surrounded by a high concentration of businesses and logistics hubs

3 STRATEGIC INTERNATIONAL AIRPORTS: the intercontinental “Guglielmo Marconi” Airport of Bologna (the region’s main air transport hub), “Federico Fellini” Airport of Rimini, “Giuseppe Verdi” Airport of Parma

MAIN FREIGHT VILLAGES: Bologna and Parma (CEPIM). Main Freight Terminals: Piacenza, Dinazzano (RE), Rubiera (RE), Marzaglia (Modena), Villa Selva (Forlì), Ravenna.

HIGH-SPEED TRAINS CONNECT THE REGION WITH MAJOR ITALIAN CITIES From Bologna to: Turin - 2:19h, Milan - 1:04h, Florence - 0:37h, Rome - 2:03h, Naples - 3:25h

THE PORT OF RAVENNA is one of the top ports in the country

Bologna Airport

www.bologna-airport.it (2019)



9,400,000 passengers
(+10.6% than 2019)

120 direct destinations

50 flight companies

48,8 tons of cargo traffic.

Ravenna Port

www.port.ravenna.it



40% of national trade with Eastern Mediterranean and Black Sea (excluding coal and oil products).

Leader nationwide for raw materials movement in the ceramics, cereals, fertilizers and flour-based products.

Strategic role for the markets of the Middle and Far East.

CAAB

www.caab.it



CAAB is leader for fruit and vegetable distribution in Italy, comprising warehouses for frozen and fresh goods, logistic platforms and offices. The area includes **FICO**, the **world’s largest food park**, covering an area of 100,000 sqm in Bologna.

ER.I.C. Emilia-Romagna Intermodal Cluster (<https://www.ericintermodal.it/>) includes the main regional transport and logistic actors and aims to develop collaborative activities and to promote the Emilia-Romagna Region’s system of intermodal platforms on the national and international stage.

DIGITAL INFRASTRUCTURE



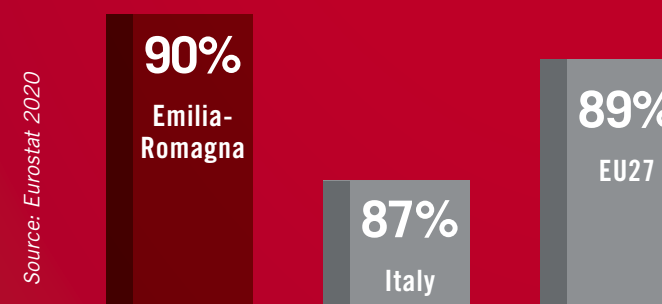
Digital development has been for over 20 years a regional policy priority. Emilia-Romagna has a **high broadband coverage** due to a digital infrastructure that ensures a high level of connectivity throughout the entire territory.

The regional **Digital Economy and Society Index (DESI)** is higher than the national average (Digital Agenda Observatory 2020, Politecnico di Milano). Moreover, if we look at the **Italian Smart Cities rankings**, our region is always very well positioned:

5 cities in the Top 15 (Smart City Index, Ernst & Young 2020)

4 cities in the Top 12 (I-City Rank, 2020)

HOUSEHOLDS WITH BROADBAND ACCESS:



LEPIDA: the broadband network for Emilia-Romagna’s public administrations provides high-speed connectivity throughout the entire region boosting efficient e-government services for citizens and companies.

The **Digital Agenda of Emilia-Romagna 2020-25** with the strategy “Data Valley Bene Comune” aims to invest 200 million euros to have a 100% digital and inclusive region, achieving the following objectives: contrast to digital divides in mountain areas, digital knowledge, networks and connectivity, Public Administration and digital services.

A REGION OF KNOWLEDGE AND RESEARCH

At the heart of Emilia-Romagna innovation ecosystem there is a **rich number of public and private actors** who invest their resources and collaborate for research results exploitation, new knowledge development, the adoption of new technologies and innovation in all economic and social sectors.

Land of ancient and prestigious universities, the most important national research institutions, globally-leading large companies and specialised competitive small and medium enterprises, Emilia-Romagna invests in **research, innovation and skills** to generate real impact in all production sectors, open up new market opportunities and create high-quality jobs.

Emilia-Romagna also attracts **students and business from abroad** in an innovative and vibrant ecosystem with consolidated partnerships and collaborations between companies and research organisations.

EDUCATION

The university and training system is widespread all over the region providing high skilled human resources for the research and the production systems and attracting international talents.

7 UNIVERSITIES

- University "Alma Mater Studiorum" of Bologna, with campus also in Forlì, Cesena, Ravenna and Rimini, is the oldest in the western world and the first in Italy for international students
- University of Modena and Reggio Emilia
- University of Ferrara
- University of Parma
- Cattolica University of Piacenza
- Piacenza campus of 'Politecnico di Milano'
- Johns Hopkins University - SAIS Europe

Many specialised advanced courses are available, some examples are: Bologna Business School (Master/MBA), International Data Science Phd, Advanced school in Food Safety, MUNER (Motorvehicle University), corporate academies, climate change.

400 COURSES (Three-year and Masters degrees)

153 2nd LEVEL MASTER COURSES

126 SPECIALISATION COURSES

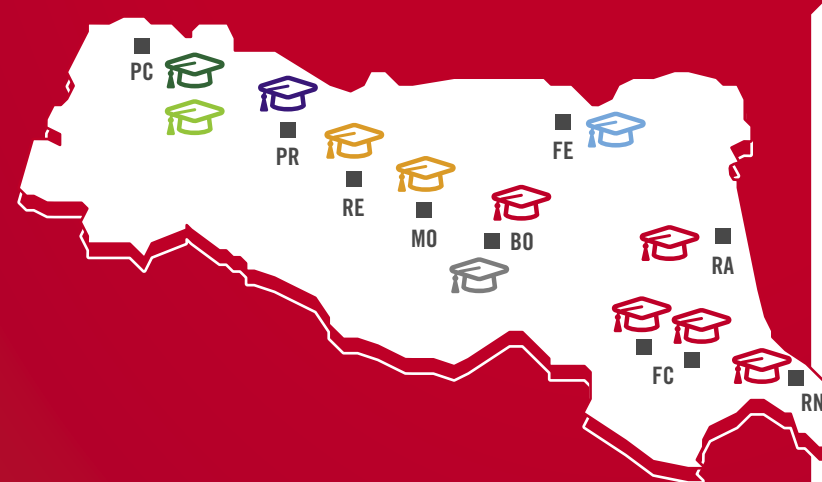
160,000 STUDENTS

Governance - EDUCATIONAL INFRASTRUCTURE: "EDUCATION AND RESEARCH EMILIA-ROMAGNA"

- integration among 544 schools (Miur, 2021)
- over 201 accredited training providers (2021)
- involvement of universities, research organisations and the economic system

ORGANIZED IN FOUR SECTIONS:

1. **Education and vocational training** issuing diploma with job-oriented three-year courses
2. **Polytechnic network** for technical and scientific skills: it includes 7 Higher Technical Institutes (HTI) Foundations providing 34 2-year post-diploma courses designed to train specialists
3. **Higher education and research:** specialised training, research grants, PhD scholarships and actions to support new innovative companies
4. **Employment and skills:** actions to foster the innovation, digitalisation, internationalisation and sustainability projects of companies, to support people in the transition from training to the labour market or between two different jobs and to update workers skills



- University of Bologna
- University of Modena and Reggio Emilia
- University of Ferrara
- University of Parma
- Cattolica University
- Piacenza campus of "Politecnico di Milano"
- Johns Hopkins University

RESEARCH AND INNOVATION

1st
REGION IN ITALY
FOR INNOVATION
Source: European Innovation Scoreboard 2021

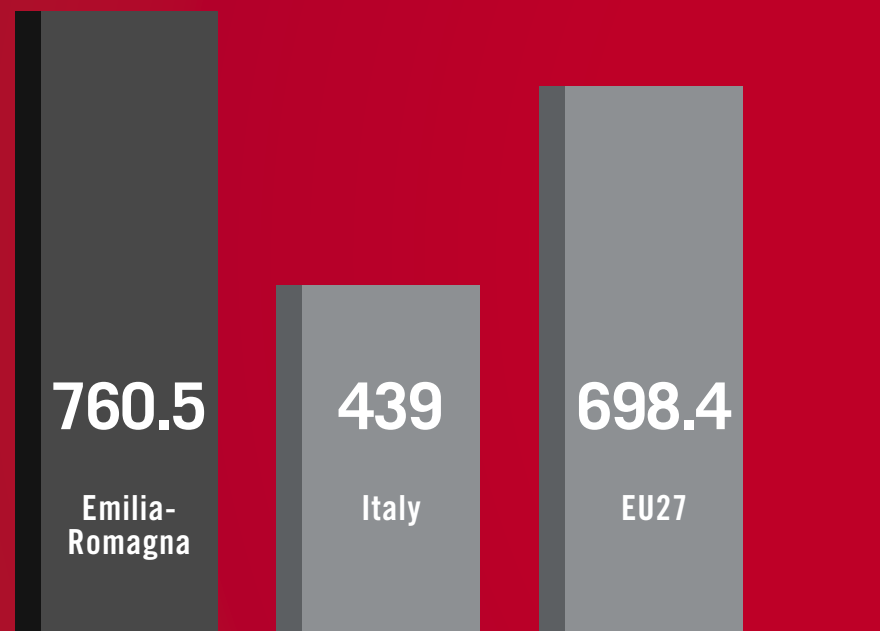
1281
INNOVATIVE STARTUPS
IN EMILIA-ROMAGNA
*Source: startup.registroimprese.it
November 2021*

The Regional Innovation Scoreboard 2021 elaborated by the EU Commission confirms the performance of the region as a “strong” European Innovator. Although Italy is still considered as “moderate” innovator in the national benchmarking, Emilia-Romagna shows its ability to be included among the most advanced European regions.

Research expenditure in Emilia-Romagna, including both the public and private sector, is the second highest in Italy and has increased steadily over the last years, with 45 thousand employees (full-time equivalent) in the public and private research system (Istat, 2019). Research activity is carried out by universities and research centres as well as by a network of industrial research labs and dynamic companies, both corporates and small and medium caps. About 1.3 thousand innovative startups complete the picture.

Emilia-Romagna ranks 1st in Italy for gross expenditure in R&D per inhabitant

Source: Eurostat 2019 – Values in euro per inhabitant



GROSS EXPENDITURE IN R&D INCREASED MORE IN EMILIA-ROMAGNA THAN IN ITALY AND EU IN THE PERIOD 2015-19 (PPS)
Source: Eurostat

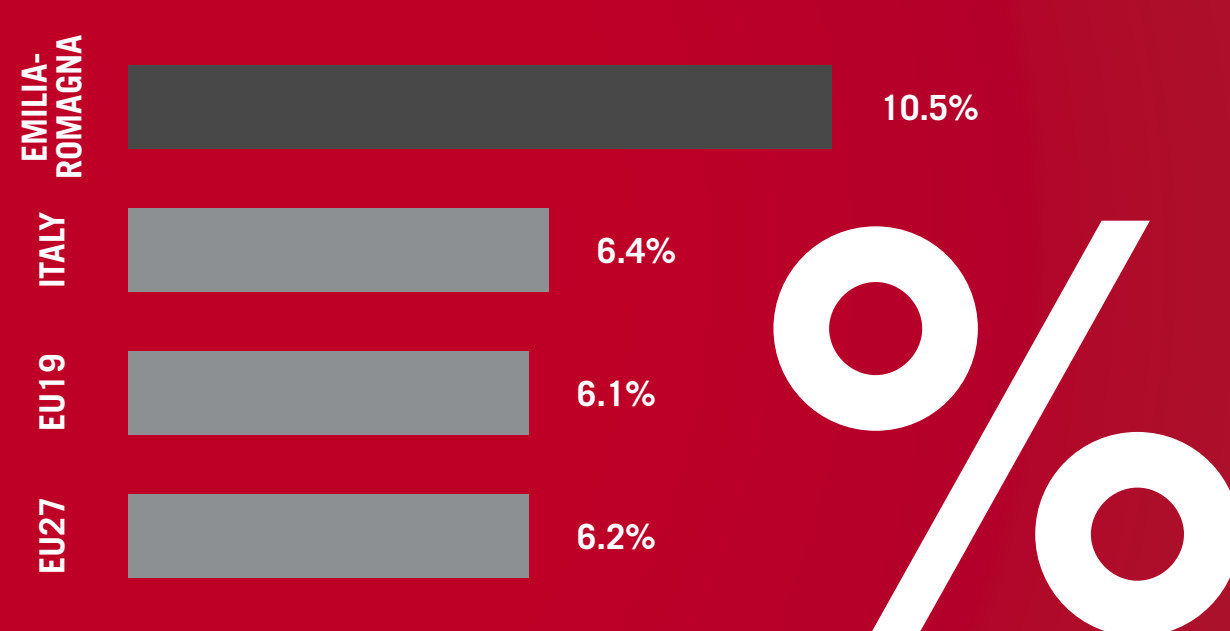
+ 30.6%
EMILIA-ROMAGNA

+ 19.3%
EU19

+ 22.4%
ITALY

The region also boasts a high percentage of employees in high and medium-high technology sectors

Source: Eurostat 2020



INNOVATION ECOSYSTEM

THE EMILIA-ROMAGNA HIGH TECHNOLOGY NETWORK:
over 90 Industrial research Labs and Innovation Centres

10 TECHNOPOLES

7 CLUST-ERs
and 1 Big Data Association, with 450 public and private entities involved

More than 20 INCUBATORS and STARTUP ACCELERATORS

MAK-ER: the first Association in Italy for digital fabrication

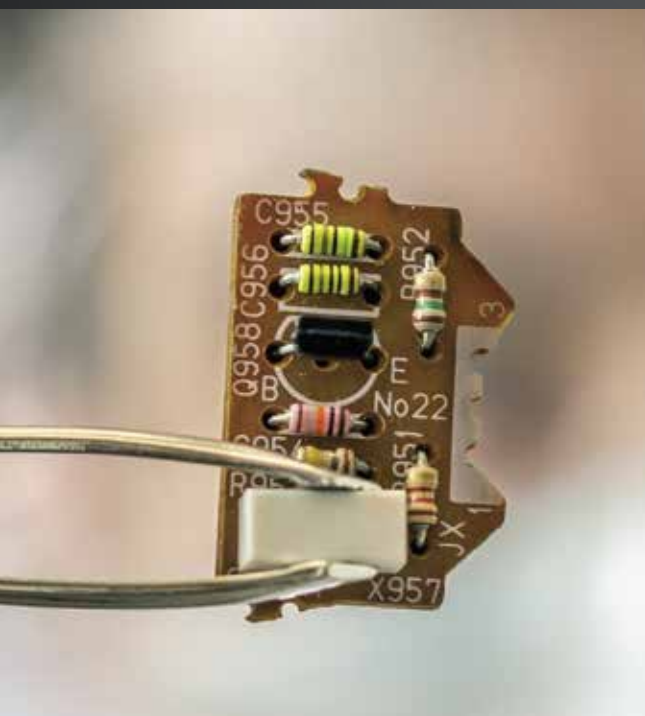
10 OPEN LABS FOR DIGITAL INNOVATION

ART-ER - ATTRACTIVENESS RESEARCH TERRITORY

ART-ER ATTRACTIVENESS RESEARCH TERRITORY

(www.art-er.it)

ART-ER is the Emilia-Romagna Joint Stock Consortium - among the Emilia-Romagna Region, the six Universities, the Research centres CNR, ENEA, INFN, the regional Union of the Chambers of Commerce and other local stakeholders - fostering the region's **sustainable growth** by developing **innovation** and **knowledge**, **attractiveness** and **internationalisation** of the region system. As for research and innovation activities, the Consortium is at the core of this vibrant innovation ecosystem, animating it through joint activities and open innovation actions involving all regional stakeholders as well as coordinating and supporting the High Technology Network, the Clust-ERs and the Technopoles.



“CLUST-ER” ASSOCIATIONS AND THE EMILIA-ROMAGNA HIGH TECHNOLOGY NETWORK (<https://www.retealtatecnologia.it/en>)

Clust-ER Associations are communities of public and private bodies (research centers, companies, training bodies) created to support the competitiveness of the most important production systems in Emilia-Romagna. The Clust-ER Associations rely on the innovation capacity of the entire innovation system: within the Clust-ERs, research laboratories and innovation centres belonging to the regional **High Technology Network** team up with companies and higher education organisations to face common challenges, develop strategic projects and multiply opportunities.



The National Research Council - **CNR** and the Italian National Agency for New Technologies, Energy and Sustainable Economic Development - **ENEA** own a **large number of laboratories in the region**. Also Universities make a major contribution with researchers working in technical/scientific fields. Other important research institutes in the region are: the National Institute for Nuclear Physics - **INFN**, the National Institute for Astrophysics - **INAF**, the National Institute for Geophysics and Volcanology - **INGV** and **CINECA**, the largest Italian computing centre.

THE TECHNOPOLES AND THE EMILIA-ROMAGNA HIGH TECHNOLOGY NETWORK

The **Technopoles** are **10 infrastructures located in 20 locations** throughout the Emilia-Romagna region, hosting and organizing activities and services for industrial research, experimental development and technology transfer. They are home to the industrial research laboratories and innovation centres of the **Emilia-Romagna High Technology Network** and also to the S3 AREA Desks, born to facilitate young graduates towards innovation and related employment opportunities.

R2B RESEARCH TO BUSINESS

(www.rdueb.it)

R2B - Research to Business is the first international exhibition in Italy aimed at fostering cooperation between advanced research and industry. Promoted by the Emilia-Romagna Region in collaboration with ART-ER, since 2015, R2B is the market place for innovation.



BIG DATA VALLEY

Emilia-Romagna qualifies as an international Data Valley boasting top world supercomputers, cutting edge data centres and a wide 'big data community' with policies supporting new investments and a dynamic business environment aimed to put Europe on a par with the giants USA and China. The Big Data Technopole - Bologna Hub will be the international digital hub hosting HPC infrastructures, namely: world class pre-exascale HPC supercomputer that will be one of the three precursors to Exascale Supercomputer at European level, ECMWF data centre, the new CINECA - INFN complex, the Competence Center Industry 4.0 BI-REX, the bio-banks of the Rizzoli Institute of Bologna, the Regional Agency for weather forecasts, environmental protection and energy ARPAE Emilia-Romagna, ENEA, as well as small and large companies.

The region concentrates investments and skills qualifying it as a 'European Data Valley' with top world supercomputers.

> 90%

SUPERCOMPUTING RESOURCES FOR PUBLIC RESEARCH IN ITALY MANAGED BY BIG DATA ASSOCIATION MEMBERS

140

EUROPEAN FUNDED PROJECTS - H2020, FP7, CEF

> 2.1 BLN€

TOTAL COSTS OF THE PROJECTS

160 MLN€

EU FUNDS



Supported by Regional policies and Big Data and Artificial Intelligence communities

• EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS (ECMWF) DATA CENTRE

The new ECMWF data centre opened in September 2021 on the site of the 'Tecnopolo di Bologna' and represents a key asset of the regional Data Valley. The centre is housing the new Atos BullSequana supercomputer system. The European Centre for Medium-Range Weather Forecasts (ECMWF) is an intergovernmental organisation supported by 34 states with head offices in the UK, data centre in Bologna and offices in Bonn. The regional Technopole won the European competition with other cities to host the data centre because of its "high-level services and logistics infrastructures" and offer of "important opportunities of technical and scientific synergies". The centre facilitates the continuation of investigative work into the field of machine learning in numerical weather prediction, as well as the use of advanced high-performance computing, big data and AI methodologies to create a digital twin of the Earth with a breakthrough in realism.

• SUPER COMPUTERS

EU chose the 'Big Data Technopole - Bologna Hub' as location of the new supercomputer Leonardo, worth 120 million euros, positioning the region among the world's top computing hubs.

• BI-REX COMPETENCE CENTER

The Bi-Rex - Big Data Innovation and Research Excellence is a Competence Center coordinated by the University of Bologna with a group of 57 stakeholders including five regional universities (Bologna, Ferrara, Modena-Reggio, Parma, La Cattolica), organizations part of the regional research system such as CINECA, CNR, ART-ER, IOR, INFN as well as companies among which IBM, Philip Morris, Siemens, Manz Ag and many other regional excellences.

• CINECA

CINECA is a Consortium composed by 98 universities and public institutions, led by a Board comprising the Ministry of Education and the Ministry of University and Research. Cineca's supercomputers are among the most important in Europe and worldwide, always present in the Top 500 list of the most powerful supercomputers in the world.

• BIG DATA ASSOCIATION

The Associazione Big Data was set up to interconnect and jointly exploit the knowledge, research and innovation potentials of high performance computing, big data analysis, deep and machine learning algorithms, high bandwidth networks. The Association is open to national and international stakeholders from the scientific, research and business communities and aggregates public organisations managing facilities and possessing skills and knowledge relating to big data, their applications and possible impact on the daily lives of citizens. More than 90% of supercomputing resources for public research in Italy are managed by association's members.

• INTERNATIONAL FOUNDATION ON BIG DATA AND ARTIFICIAL INTELLIGENCE FOR HUMAN DEVELOPMENT

The Foundation aims to be an independent and influential international point of reference for the scientific and cultural debate on human development, sustainability and new science. Its main objectives are: reinforcing, enhancing and promoting scientific research and its cross-disciplinary implications, with particular focus on BD and AI; designing scenarios related to economic and social transformations in connection with climate change, health crisis and other great challenges of our time; dissemination of the role and potential of AI and BD in addressing global issues with an impact on people's lives.

A SUSTAINABLE REGION

Emilia-Romagna Region promotes sustainable development, involving economic and social actors. The **Pact for Labour and Climate** - signed in 2020 by 55 regional stakeholders - aims to share a single strategy capable of tackling current difficulties by supporting the economy and society. It is a Pact whose primary aims are generating quality jobs, reducing inequality and taking Emilia-Romagna through environmental transition, thereby helping to achieve the objectives of the 2030 Sustainable Development Agenda, in particular achieving carbon neutrality by 2050 and 100% renewable energy by 2035.

REGIONAL PACT FOR LABOUR AND CLIMATE 2020

CHALLENGES

- Demographic crisis
- Climate emergency
- Digital transformation
- Reduce inequalities

STRATEGIC OBJECTIVES

- Knowledge and know-how
- Ecologic Transition
- Rights and duties
- Jobs, Businesses, Opportunities

CROSS-CUTTING PROCESSES

- Digital transformation
- Simplification
- Legality
- Participation

- The Regional Energy Plan sets the strategy and objectives of the Emilia-Romagna Region for climate and energy up to 2030 in terms of strengthening the green economy, energy savings and efficiency, development of renewable energy, interventions on transport, research, innovation and training.
- The Waste Management Regional Plan led to 73% of separate collection in 2021 and aims to achieve 80% in the period 2022-27.
- The Green Public Procurement Plan (GPP) led to 1.5 billion euros of green purchases in 2019, applying Minimum Environmental Criteria in 30% of the calls for tender.
- The new regional S3 Smart Specialization Strategy identifies and analyses the regional main sectors for the future innovative investments in Emilia-Romagna
- Regional Law for the promotion of Investments in Emilia-Romagna (LR 14/2014) and National incentives are strongly related to sustainability.

GREEN ECONOMY IN EMILIA-ROMAGNA

Source: GreenER 2021 – Regional Green Economy Monitoring Center managed by ART-ER

Emilia-Romagna has a strong presence of companies oriented towards sustainable business, that cover a wide range of sectors, with a presence in the main regional clusters. **About 6,300** companies have been identified as belonging to the **green economy** in 2021, including firms in traditional environmental sectors such as waste or water - that can be defined as “core green” - and also those ones that, regardless of the productive sector, act in a greener way and can be defined as “green business”.

The sustainable production and consumption are supported by the adoption of process and product certification tools with wide use of organic certifications and environmental Management System certifications (e.g.: ISO14001). Moreover, the regional companies are first in Italy for the number of EPD certified products (Environment Product Declaration) in 2021.

3,023	AGRI-FOOD
539	WASTE RECYCLING MECHANICAL ENGINEERING CLUSTER
446	WASTE RECYCLING
391	RENEWABLE ENERGY AND EFFICIENCY
368	MOBILITY
342	BUILDING
276	ENVIRONMENTAL MANAGEMENT AND HYGIENE
402	INTEGRATED WATER CYCLE
114	GREEN CHEMISTRY
93	RECLAMATION
83	TEXTILE
81	MANUFACTURE OF PACKAGING

TOTAL
6,303



TRADE FAIRS

The framework of regional sustainability is completed by the system of international thematic trade fairs:

- **ECOMONDO** - Material and Energy Recovery and Sustainable Development
Rimini, www.ecomondo.com
- **KEY ENERGY** - Sustainable Energy and Mobility
Rimini, www.keyenergy.it
- **H2O - ACCADUEO** - technologies for the treatment and distribution of drinking water and wastewater treatment
Bologna, www.accadueo.com
- **REMTECH** - Remediation Technologies (including CHEMTECH on chemical innovation)
Ferrara, <http://remtechexpo.com/>
- **SEALOGY** - Blue Economy professionals
Ferrara, www.sealogy.it/

Many other regional fairs have strong connections with the green economy (e.g.: SANA, CERSAIE, GEOFLUID).

A COMPETITIVE AND INTERNATIONAL REGION

SOME TOP BRANDS IN EMILIA-ROMAGNA



Emilia-Romagna is one of the most competitive Italian regions, due to an economic system that is increasingly active in international markets and featuring:

- a strong manufacturing sector: 26.9% of total employees, being 20.7% the Italian average and 18.4% the EU27 one (Eurostat, 2020)
- highest labour productivity in manufacturing sectors in Italy (2018)
- a willingness to innovate: 44.9k employees and 3.4 Bln of investment in R&D in 2019 (Istat).

ECONOMY

Emilia-Romagna % on the Italian total

Data elaborated by ART-ER

POPULATION	7.5%	HIGH RATE OF ENTREPRENEURSHIP 2020
N. OF COMPANIES	8.2%	HIGH RATE OF ENTREPRENEURSHIP 2020
N. OF MANUFACTURING FIRMS	9.2%	STRONG MANUFACTURING SECTOR - 2019
GDP	9.2%	HIGH GDP PER CAPITA (+17% then EU27 average) - 2019
R&D EXPENDITURE	12.9%	INNOVATIVE ECOSYSTEM, 1st in Italy for intramural expenditure in R&D per inhabitant - 2019
EXPORT	14.1%	1ST ITALIAN REGION EXPORT PER CAPITA - 2020

INTERNATIONALISATION

Internationalization, trade, external relations: the Emilia-Romagna economy is proud of its long tradition of being open to the world, being on the one hand the birthplace of well-known brands exported worldwide and attracting, on the other, big foreign multinationals to the Region. Over 1,500 regional companies control firms abroad in about 130/140 countries, from Germany and the US to Albania and Zambia.

Foreign trade

Internationalisation firstly means trade with foreign markets to be increased also through production agreements and investment abroad. This is why Emilia-Romagna with 19,609 exporting companies, is the leading Italian region for export value per capita and the second for total exports.

EMILIA-ROMAGNA HIGHLY EXPORT-ORIENTED PRODUCTION SYSTEM

Source: 2019, Istat-Coeweb - Data elaborated by ART-ER



1ST ITALIAN REGION
EXPORT PER CAPITA

2ND ITALIAN REGION
FOR TOTAL EXPORT VALUE

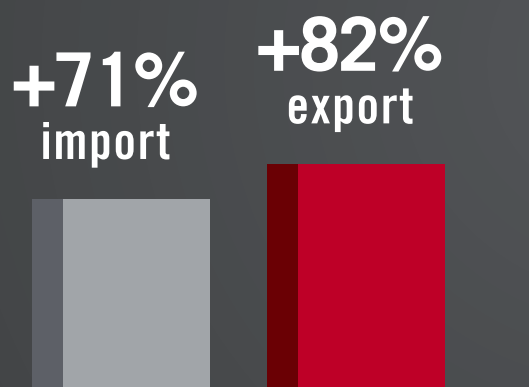
IN EMILIA-ROMAGNA **8.2%** OF THE NATIONAL COMPANIES EXPORT **14.1%** OF THE ITALIAN TOTAL

Trend of the exports

The regional economic system shows great resilience in times of crisis. Look at the growth after the global crisis in 2009 (+82% of exports in the period 2009-19) and see how the data in 2021 show an **increase of the flows with respect to the pre-covid figures.**

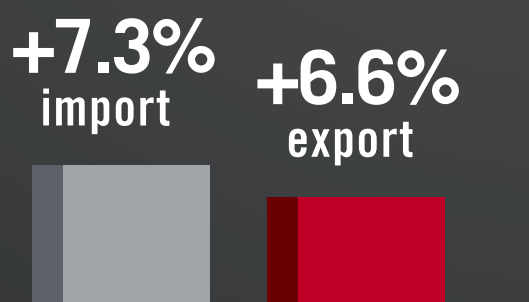
VARIATION 2009-2019

Source: Istat-Coeweb - Data elaborated by ART-ER



VARIATION 2019-2021 (1st half of the year)

Source: Istat-Coeweb - Data elaborated by ART-ER



FOREIGN TRADE EMILIA-ROMAGNA-WORLD BY KEY SECTOR

Values in Euro, Istat - Coeweb 2018 elaborated by ART-ER

In this graph, cross-cutting sub-sectors in mechanical engineering have been considered also in health and construction industries (but not in agri-food).

MECHANICAL ENGINEERING	36,742,535,843	Export
AGRI-FOOD	8,172,079,941	Export
FASHION	7,658,841,082	Export
BUILDING AND CONSTRUCTION	5,524,074,407	Export
HEALTH	3,327,296,374	Export
CHEMICALS AND PLASTIC MATTERS	3,824,570,421	Export
	1,504,938,975	Import
	7,134,862,912	Import
	4,301,497,023	Import
	1,463,776,755	Import
	3,762,824,637	Import

The regional companies are present at global level, with **Europe, North America and Asia** as main destination areas. All the **regional key sectors** contribute to international trade, with Mechanical Engineering as best performer being a cross-cutting cluster that develops process and product innovations that are essential for other value chains.

EXPORT, SOME REGIONAL SPECIALISATIONS WITH RESPECT TO THE NATIONAL TOTAL (2019)

- Tiles and ceramics: 93%
- Manufacture of tobacco products 97%
- Meat and meat-based products: about 38%
- About ¼ of Italian exports of 'agricultural machinery' (27%), 'other general purpose machinery' (29%), 'tubes, pipes, hollow profiles and related fittings' (28%) and manufacture of dairy products (24%), 'motor vehicles' (23%)
- About 1/5 of national exports in 'wearing apparel, except fur apparel' (22%), 'other special purpose machinery' (21%) and 'knitted and crocheted apparel' (21%) come from Emilia-Romagna.

GOVERNANCE

EMILIA-ROMAGNA GO GLOBAL 2021-25 - INTERNATIONALIZATION AND ATTRACTIVENESS PROGRAMME.

The programme is aimed at expanding the regional relations at international level, targeting Northern America, India, Japan, Korea and ASEAN countries in the fields of innovation and education in health, digital, green and creative industries.

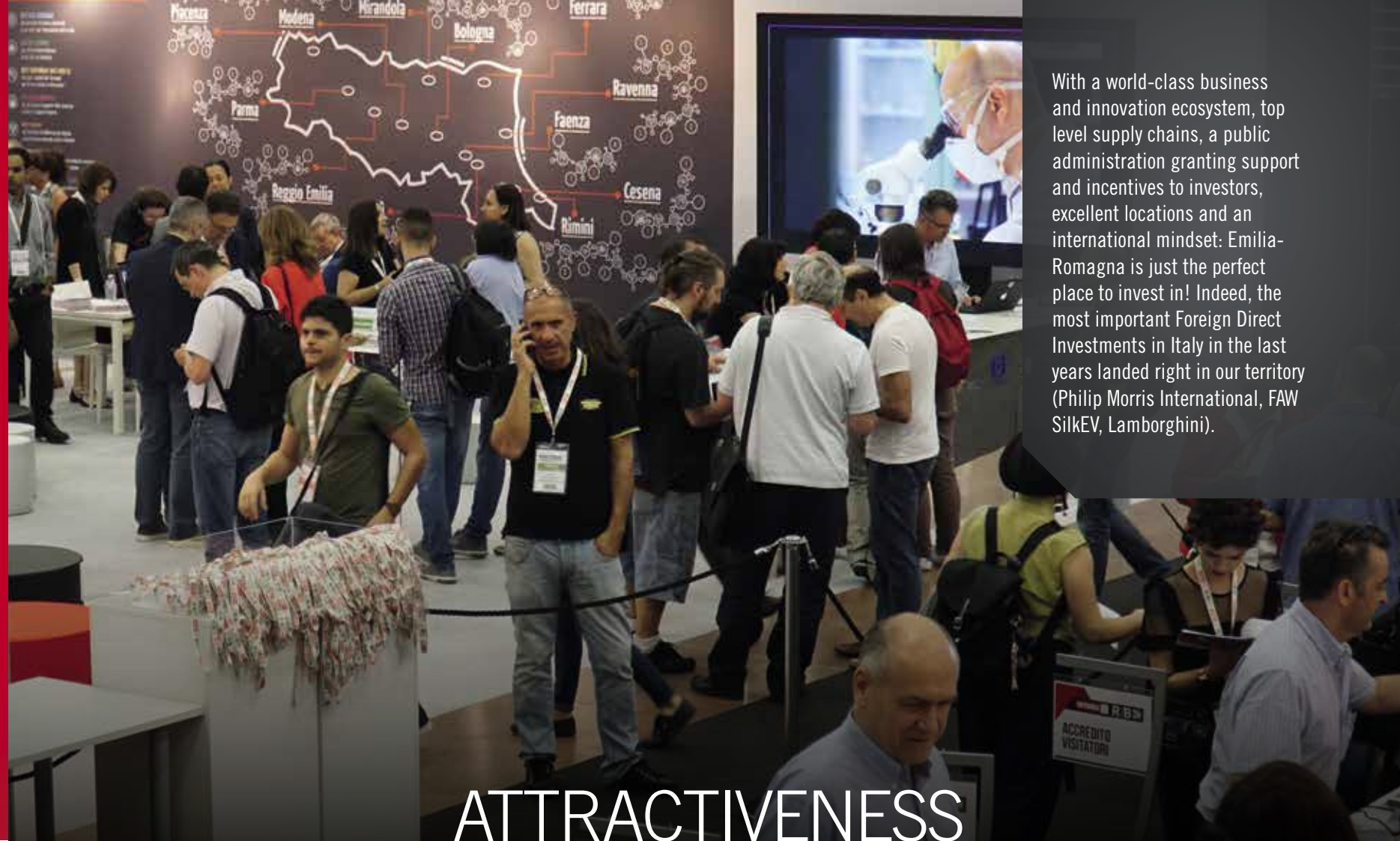
EMILIA-ROMAGNA HUB IN SILICON VALLEY

In 2015 the Emilia-Romagna Region opened an Innovation Hub in Silicon Valley managed by ART-ER. The initial aim of the Hub was to support startups and innovative companies to approach the Silicon Valley ecosystem and internationalization towards the North American market. Since 2018, ART-ER has expanded the action of Hub setting up and consolidating relations with the main innovation centers and ecosystems in North America. The purpose is to develop contacts in strategic specializations and find top level expertise and potential partners to develop targeted collaboration projects.

<https://www.emiliaromagnainsiliconvalley.it/en/>

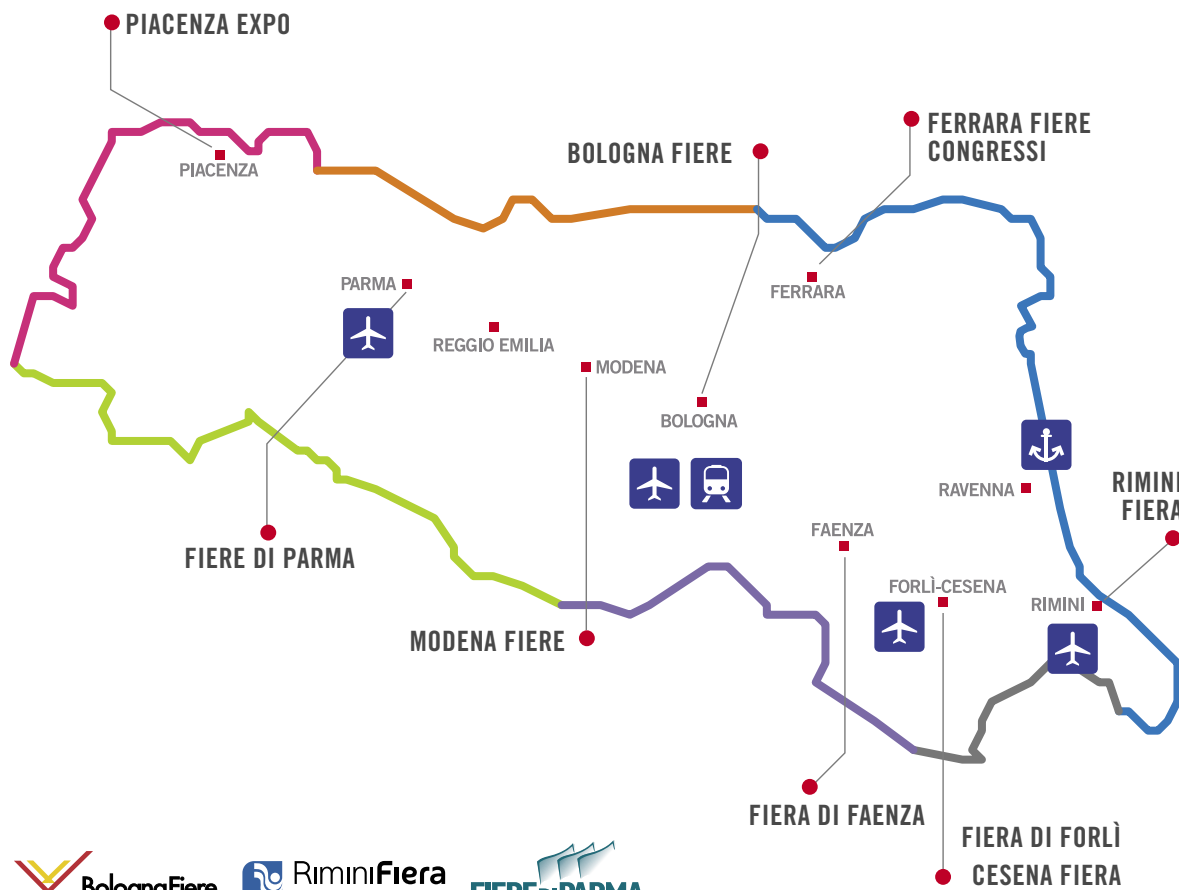
REGIONAL TRADE FAIR SYSTEM

The Emilia-Romagna Trade Fair System is a highly attractive global hub for those who want to do business and expand their network. It is one of the most modern and advanced business platforms in Europe, hosting over 30 international trade including events of global importance with an impressive number of visitors (about 2 million every year) and square meters of available exhibition space. The trade fairs calendar spans from the automotive to the building sector, from the biomedical to the food industry, from mechanical engineering to leisure time and tourism, also organizing trade fairs abroad (e.g. in China, United States, Japan, Russia). There are three main exhibition centres - Bologna, Rimini and Parma - out of a total of 9.



With a world-class business and innovation ecosystem, top level supply chains, a public administration granting support and incentives to investors, excellent locations and an international mindset: Emilia-Romagna is just the perfect place to invest in! Indeed, the most important Foreign Direct Investments in Italy in the last years landed right in our territory (Philip Morris International, FAW SilKEV, Lamborghini).

ATTRACTIVENESS



FOREIGN COMPANIES THAT HAVE ALREADY INVESTED IN EMILIA-ROMAGNA INCLUDE:

Altana, Amada, Amazon, AVL, B.Braun, Baxter, Basf, Berluti/LVMH, Borgwarner, Celanese, Crown, Daimler, Dana, Dover, Fev, FAW-SilKEV, Fresenius, Gea, Gowan Italia, Guillin, Havi, Ibm, Lovol Arbos, Manitou, Manz, Marini-Fayat, Medtronic, Mohawk, Philip Morris, Romaco, Schneider Electric, Segula, Siemens, TetraPak, TGK, Topcon, Torrecid, Toyota, Volkswagen, Weichai and many more.

About 1,200 foreign companies have invested in Emilia-Romagna, which is recognized by the Foreign Direct Investment division of the Financial Times as a Top European Region.

TOP 10

LARGE EUROPEAN REGION FOR FDI STRATEGY

Source: FDI division of Financial Times - Report "European cities and regions of the future 2020-21"

It-ER - International Talents Emilia-Romagna program is aimed at promoting Emilia-Romagna study, research and career opportunities among international talents and Emilia-Romagna expats. It provides information regarding services and initiatives to support talents to move and live in Emilia-Romagna as well as information regarding regional networks and communities, making easier to be part of the regional ecosystem.

<https://internationaltalents.art-er.it/>



REGIONAL LAW FOR THE PROMOTION OF INVESTMENTS (R.L. 14/2014)

The region is governed by a business-friendly public administration that supports new investments, offering financial incentives and reliable governance together with easy and fast procedures, also with a specific Law for the Promotion of Investments. The law supports innovation and specialization and encourages R&D projects by entering into **agreements directly with investors**. In addition, it guarantees regional coordination on procedures and collaboration with local bodies and stakeholders.

Since the law went into effect in 2016, it financed 57 investment programs creating over 2,200 jobs. Many regional companies active in the digitalization of products and processes have already been financed:



Regional Law for the Promotion of Investments in Emilia-Romagna (n. 14/2014)

Results of the calls for proposals to enter in “**AGREEMENTS FOR THE SETTLEMENT AND DEVELOPMENT OF ENTERPRISES**”

(update July 2021)

57

INVESTMENT PROGRAMS

OVER 260 ML EUROS

OF FINANCED INVESTMENTS (PART OF STRATEGIC INVESTMENT PROGRAMS FOR BILLIONS OF EUROS)

OVER 90 ML EUROS

OF GRANTS

OVER 2,200

NEW JOBS

TESTIMONIALS

New foreign investment project worth over one billion euro in Emilia-Romagna in 2021: **FAW - Silk EV** creating a cutting-edge hub for design and production of full electric and plug-in high-end cars.

Foreign investments in Emilia-Romagna grow and expand. Some examples:

PHILIP MORRIS (new Center for Industrial Excellence opened in 2021),

TOYOTA (180 additional hires in 2021-2022),

MEDTRONIC (from 400 to 560 employees in 2017-2021).

A wider set of incentives is available from **EU funds** and the **NRFP (National Recovery and Resilience)**, while our new Smart Specialization Strategy (S3) identifies the most strategic sectors to be developed.

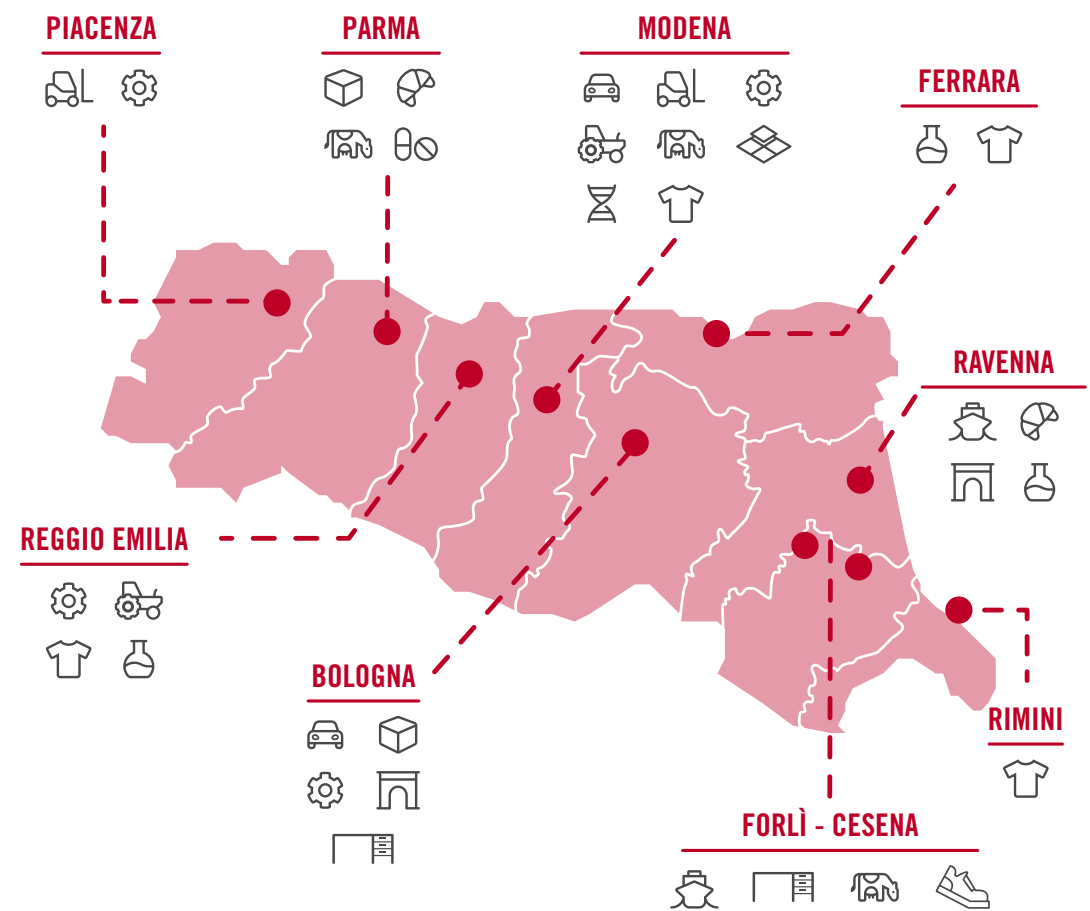
Many other opportunities derive from **national instruments** such as Development Contracts and Innovation Agreements. Investments supported by the national agreements with regional co-financing are creating **over 2,500 new jobs** in Emilia-Romagna (2016-21 period).

In order to **cut red tape**, the Region also offers a one-stop shop network assisting businesses by providing a single on-line procedure, managed by a centralised desk, to obtain authorisations and licences in the areas of health, safety, environmental protection, pollution and urban planning.

REGIONAL EXCELLENCES

From Piacenza to Rimini, from food processing to automotive design and manufacturing, there are **plenty of world-class examples of specializations** in the Region: packaging machinery in Bologna and Parma; agricultural machines, automotive design and manufacturing, oil hydraulics and electro-medical equipment from Modena to Bologna; ceramics in Sassuolo and Imola; food storage and cold chain systems in Romagna; ship building in Ravenna and the other maritime provinces.

SOME RELEVANT TERRITORIAL SPECIALISATIONS IN MANUFACTURING SECTORS



- Automotive
- Packaging
- Engines and hydraulic components
- Lifting and handling equipment
- Boating
- Agricultural machinery
- Bakery and farinaceous products
- Meat and dairy products
- Ceramic products
- Furniture and wooden products
- Biomedical
- Pharmaceutical products
- Textile and wearing apparel
- Footwear and leather goods
- Culture and creativity
- Chemical, rubber and plastic products

ADVANCED MECHANICAL ENGINEERING

Companies in the mechanical industry in Emilia-Romagna together represent a cluster with high level of technological innovation and strongly oriented towards Industry 4.0, thanks to cutting-edge skills and industrial research and supported by the regional R&D network and the universities and training institutes.

Mechanical engineering is the regional main cluster – spread all over the region – and supports all the other regional key sectors, especially Agrifood (e.g. agricultural machineries, food packaging); Housing (e.g. machinery for building and ceramics), Health Care (e.g. electro-medical equipment, packaging).

RESULTS OF THE REGIONAL SMART SPECIALISATION STRATEGY FOR RESEARCH AND INNOVATION

(updated: May 2021)

1,414
funded
R&D PROJECTS

871
million euros of
**TOTAL
INVESTMENT**

295
million euros of
PUBLIC FUNDS

674
new
RESEARCHERS





THE MAIN SPECIALISATIONS AND OUTSTANDING NICHES OF THE MECHANICAL CLUSTER ARE:

- sports cars and motorbikes, with famous brands (e.g. Ferrari, Lamborghini, Ducati, Maserati, Dallara, Pagani, FAW) and high level suppliers (e.g.: AVL, HPE Coxa, Magneti Marelli)
- packaging machinery/solutions (e.g. IMA, GD/Coesia, Sacmi, Marchesini, Ocme, Tetra Pak)
- industrial automation (e.g. Bonfiglioli, Rossi, Elettroc80, Sir)
- hydraulics, turbines and pumps (e.g. Interpump)
- machinery, equipment and gears for food industry, ceramics, constructions, wood, energy production, electromedical as well as measuring, checking and surveying instruments (e.g. Cefla, Kohler, ArgoTractors, Termal Group, Beghelli, Marposs, Metalcastello, Smeg, SCM group, GVS, Belco)
- aerospace has strong connections with the whole mechanical engineering and specific excellences (e.g. Curti, Poggipollini, Matecam, Beamit)
- other excellences such as boating (e.g. Ferretti) and wellness (e.g. Technogym)

In Emilia-Romagna there are 86 university programmes, 37 doctoral programmes and 26 master's degree programmes concerning Industry 4.0. Degree courses in engineering are available in all the 5 public regional universities (Bologna, Modena and Reggio Emilia, Ferrara, Parma, Milan Polytechnic in Piacenza).

INTERNATIONAL TRADE FAIRS IN EMILIA-ROMAGNA

MECSPE

Technologies for innovation
Bologna, www.mecspe.com

SPS-IPC-DRIVES

Smart Production Solutions
Parma, www.spsitalia.it

AUTOPROMOTEC

Automotive Equipment and Aftermarket Products
Bologna, www.autopromotec.com

SALONE DEL CAMPER

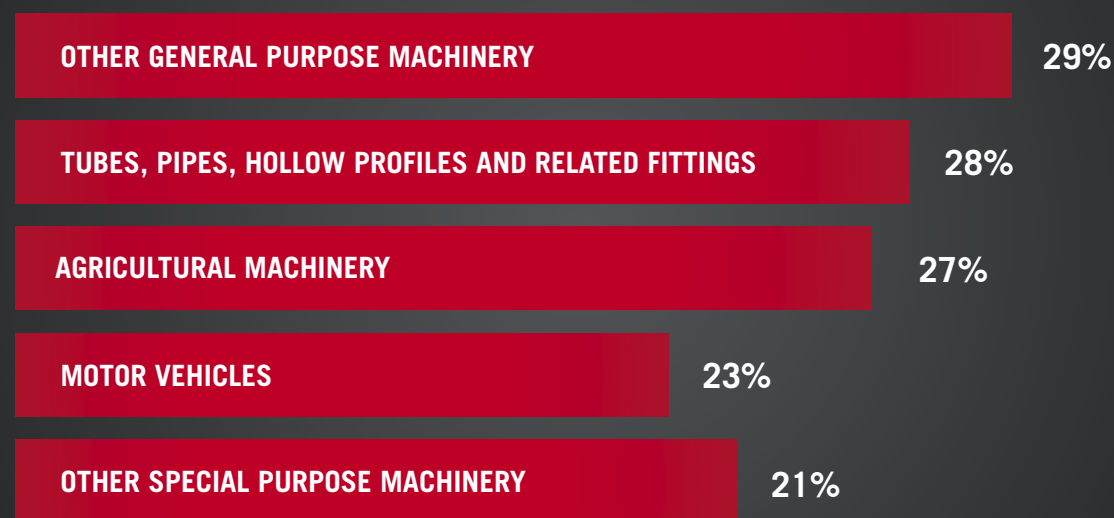
Caravanning and tourism en plein air
Parma, www.salonedelcamper.it

BOLOGNA INTERNATIONAL BOAT SHOW

www.salonenausicobologna.it

See more exhibitions related to specialized mechanical machinery in the following key sectors.

Specialisations: regional export on the national total (Istat Coeweb, 2019)



ADVANCED MECHANICAL ENGINEERING IN EMILIA-ROMAGNA

341
thousand
employees

Smail
2019

34.9
billion euros
export

Istat
COEWB
2019

50
thousand
local units

Smail
2019

16.2
billion euros
import

Istat
COEWB
2019

FOCUS: MOTOR INDUSTRY

For decades the automotive industry has represented one of the most important industrial sectors of the Emilia-Romagna production system. Brands like Ferrari, Maserati, Lamborghini, Ducati, Pagani and Dallara are just the top of a production chain that includes a high number of specialized suppliers, kept together by the search for absolute perfection.



ELECTRIC VEHICLES

Our worldwide known automotive cluster is investing in electric vehicles, with many relevant recent Foreign Direct Investments in the last few years (AVL, FEV, FAW, BorgWarner, Lamborghini, Ducati) supported by the Regional Government.

MANUFACTURE OF MOTOR VEHICLES

17,168

EMPLOYEES

399

LOCAL UNITS

6.7

BILLION EUROS
EXPORT

(source: Istat, employees/local units 2018, export 2019)



MUNER

Emilia-Romagna attracts the most motivated and prepared young students from abroad thanks also to the two international master's degrees in Advanced Automotive Engineering and Advanced Automotive Electronic Engineering at the **Motor Vehicle University of Emilia-Romagna (MUNER)**. MUNER groups together four regional universities - University of Bologna, University of Ferrara, University of Modena and Reggio Emilia, University of Parma - and the motor companies that represent the best of Made in Italy in the world: **Automobili Lamborghini, Dallara, Ducati, Ferrari, Haas, HPE COXA, Magneti Marelli, Maserati and Toro Rosso.**

<https://motorvehicleuniversity.com/en/>



FOCUS: PACKAGING

The regional packaging division is global leader in the Manufacturing and repairing of machinery for packaging and is highly connected with regional specializations, in particular agri-food, health, fashion.

FOCUS: AEROSPACE

Aerospace is one of the main priorities of the regional development strategy and has strong synergies with mechanical engineering and automotive. In Emilia-Romagna, we can find **competitive companies in many sub-sectors**: helicopters/aircrafts, composite materials, fastening element and structural components and systems, components in titanium/steel/aluminium, nano-satellites, engines, printed circuits, additive manufacturing, chemical fibers machinery.

MANUFACTURE OF PACKAGING
MACHINERY IN EMILIA-ROMAGNA (2019)

473
LOCAL UNITS

16,471 **53%**
EMPLOYEES OF THE NATIONAL TOTAL

3.9 **57%**
BILLION EUROS OF THE NATIONAL TOTAL
TURNOVER

SPACE ECONOMY IN EMILIA-ROMAGNA

TOP COMPANIES

Helicopter/Aircrafts

Curti, Elytron Aeronautica

Composite materials

Dallara Compositi, Bercella

Fastening element and structural components and system

Poggipollini

Components in titanium, steel, aluminium

Matecam

Nano-satellites

Scharck

Engines

Dieseljet, Aernova, Aerospace

Printed circuits

Cistelaier

Additive Manufacturing

Scharck

Chemical Fibers Machinery

Mae

and many more

NATIONAL PROJECTS WITH REGIONAL INVOLVMENT

Space flights in Houston

(Initiative supporting)

Mirror GOV SAT COM

(Innovative satellite system)

Mirror Copernicus

(Innovative infrastructures)

I-CIOS

(Commercial In Orbit Servicing).

COLLABORATIVE R&D

CICLoPE

(Centre for International Cooperation in Long Pipe Experiments. University of Bologna)

Clust-ER Mech (FLY.ER)

(Avionics and aerospace)

IR4I

(Innovation and Research in Aerospace/Aeronautics).

AGRICULTURE AND FOOD

The Emilia-Romagna agri-food system encompasses a unique heritage made of tradition and excellent quality, characterized by an approach strongly oriented towards research and innovation, environmental sustainability and food safety.

QUALITY AND CULINARY TREASURES

- The **44 regional PDO and PGI food products** represent the most important production value of Italian registrations (about 40% of the national total) with 6,190 regional companies involved.
- **The main PDOs and PGIs in terms of value are produced here:** Parmigiano Reggiano DOP, Prosciutto di Parma DOP, Aceto Balsamico di Modena IGP, Mortadella Bologna IGP and Grana Padano DOP.
- **400 out of 5,000 national denominations** of traditional agri-food products come from Emilia-Romagna
- **Enoteca Regionale Emilia-Romagna** - association created by regional law for the promotion of wine (also PDO/PGI) in Italy and abroad.
- **Food excellence** is also nurtured through specific educational institutions, including: **ALMA**, top International School of Italian Cuisine in Colorno (Parma) training chefs, sommeliers, managers, etc.; **Chef to Chef**, association of 50 chefs aimed at promoting evolution and reputation of the regional cuisine; **Casa Artusi**, the very first centre of gastronomic culture to be established, devoted entirely to Italian home cookery; large number of **hotels and catering high schools** across the region (31).
- Fico is the world's largest food park, covering an area of 100,000 sqm in Bologna.
- Emilia-Romagna is the **first region in Italy for number of 'Bib Gourmand' restaurants** in the Michelin Guide 2022

279.3
thousand
EMPLOYEES
(SMAIL, 2019)

84.9
thousand
LOCAL UNITS
(SMAIL, 2019)

8.1
billion euros
EXPORT
(2019)

6.8
billion euros
IMPORT
(2019)

4.5
billion euros of
AGRICULTURAL
production value
(2020)

38%
OF MEAT AND
MEAT-BASED
PRODUCTS

SPECIALIZATIONS: REGIONAL
EXPORT ON THE NATIONAL TOTAL
(ISTAT COEWEB, 2019)



SUSTAINABLE AGRICULTURE AND VALUE CHAIN APPROACH

ORGANIC FARMING



179.866
HECTARES
16% OF THE REGIONAL
UTILISED AGRICULTURAL
AREA (UAA)



6,480
ORGANIC COMPANIES
IN 2020



4th
ITALIAN REGION
BY NUMBER OF
ORGANIC COMPANIES
(1ST AMONG THE NORTHERN REGIONS)

INTEGRATED AGRICULTURE (IP)



**REGIONAL PUBLIC BRAND
"QC – QUALITÀ
CONTROLLATA"**
TO MINIMIZE THE USE OF SYNTHETIC
CHEMICALS AND THE CONSUMPTION OF
RESOURCES



IP SECTOR
3,500 FARMS AND A TOTAL OF 96,000
HECTARES;



QC SECTOR: 108 SINGLE AND ASSOCIATED
AGRICULTURAL FARMS, MAINLY FRUIT AND
VEGETABLES (38, OF WHICH 16 FOR THE
INDUSTRIAL TOMATO).



**AGREEMENTS FOR
APPLICATION OF
INTEGRATED PRODUCTION
STANDARDS:**

- 94% OF PROCESSED TOMATO IN
NORTHERN ITALY (ABOUT 6% IS
ORGANIC);
- 2/3 OF THE REGIONAL POTATOES
- 1/3 OF REGIONAL DURUM WHEAT

PRODUCER ORGANIZATIONS (PO)

WITH THE SUPPORT OF THE REGIONAL RURAL
DEVELOPMENT PROGRAM 2014-2020



**18 PRODUCER
ORGANIZATIONS IN 2020**
WITH € 451 MILLION IN TURNOVER (2019)



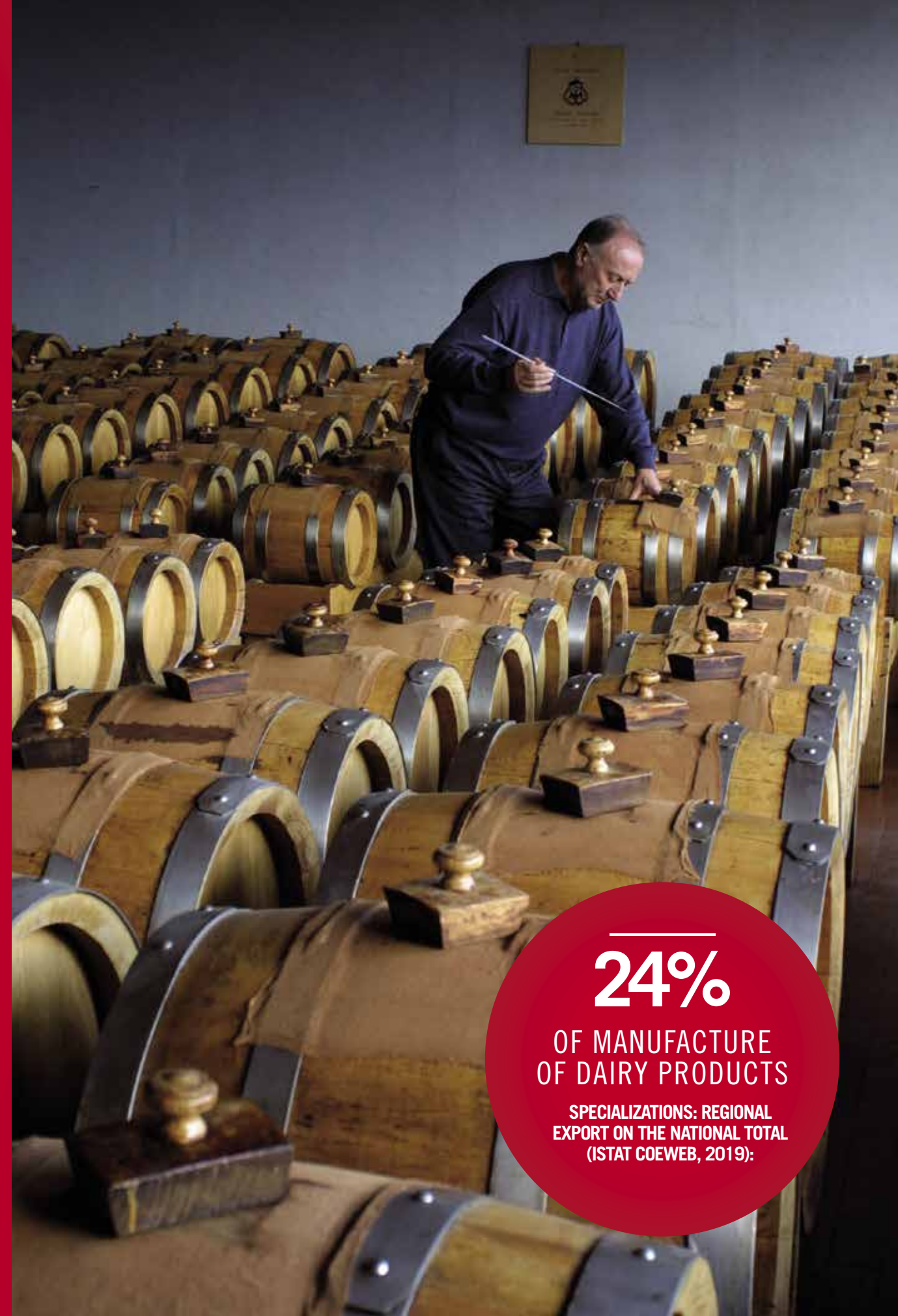
9 VEGETABLE PRODUCTS
€ 189 MILLION OF TURNOVER (2019)
AND 19,635 FARMS (2020)



9 ANIMAL PRODUCTS
€ 262 MILLION OF TURNOVER (2019)
AND 757 FARMS (2020)



**4 INTER-BRANCH
ORGANIZATIONS:**
PROCESSED TOMATO, PORK, PEAR, EGGS,
WORKING ALSO WITH OTHER REGIONS



24%
OF MANUFACTURE
OF DAIRY PRODUCTS
SPECIALIZATIONS: REGIONAL
EXPORT ON THE NATIONAL TOTAL
(ISTAT COEWB, 2019):

FOOD SAFETY

- Food Safety is a core area of public health policy and is implemented through the surveillance of the origin of food, animal and vegetable products, from farm to fork
- **EFSA European Food Safety Authority is located in Parma**, in the center of the regional Food Valley
- The **Regional Phytosanitary Service** works closely with the Central Plant Protection Service and local stakeholders in drafting of specific dossiers (Pest Risk Analysis or PRA) which are legally required to ensure safe access from/to international markets



Main activities of the regional Phytosanitary service	Result
Territorial surveillance activities	Control of two border inspection posts and over than 3,000 phytosanitary inspections per year
Monitoring related to foreign activities	Over than 9,000 phytosanitary certificates for export
Phytosanitary measures for sustainable agriculture	288 bulletin - Phytosanitary Alert System

INTERNATIONAL TRADE FAIRS IN EMILIA-ROMAGNA

EIMA INTERNATIONAL

Agricultural Machinery
Bologna, www.eima.it

CIBUS

International Food Fair
Parma, www.cibus.it

CIBUS TEC

Exhibition of Technologies for Food Industries
Parma, www.cibustec.it

MACFRUT

Plants, technologies and services for the production, conditioning, marketing and transport of fruit and vegetables
Rimini, www.macfrut.com

SANA

Organic and natural products: food, health and environment
Bologna, www.sana.it

INNOVATION

An Agricultural Knowledge System has been developed to coordinate agri-food production and research through an inter-sectoral approach along the whole value chain.

RESULTS OF THE REGIONAL SMART SPECIALISATION STRATEGY (updated: May 2021)

3,937
funded
R&D PROJECTS

1,132
million euros
OF TOTAL INVESTMENT

546
million euros
OF PUBLIC FUNDS

428
NEW RESEARCHERS

REGIONAL RURAL DEVELOPMENT PROGRAM 2014-2020

1.2
billion euros of
FUNDS
in the period 2014-2020

90
million euros to the
KNOWLEDGE SYSTEM
of which 50 million to finance the
Operational Groups – OG

214
OPERATIONAL GROUPS
financed through the 16
Operation Types

51
PROJECTS OF INNOVATION
in the food chain

HOUSING AND CONSTRUCTION INDUSTRY

RESULTS OF THE REGIONAL
SMART SPECIALISATION
STRATEGY 2014-2020
(updated: May 2019)

519
funded
R&D PROJECTS

230
million euros of total
INVESTMENT

132
million euros of public
FUNDS

200
new
RESEARCHERS

The regional companies in construction industry have become international leaders in terms of product quality and design innovation and are at the cutting-edge as regards research into materials and production technologies.

Exports of regional tiles and ceramics are worth 93% of the national total. The Italian ceramics industry is concentrated between the provinces of Modena and Reggio Emilia - the Sassuolo district, with 135 companies, almost 20 thousand employees, turnover of 5.3 billion euros - and also in Faenza (Ravenna) and Imola (Bologna).

The region is also home to the Italian companies operating in the production of machines and systems for the ceramics industry as well as in a series of related production areas, including earth moving machinery, cranes and hoisting equipment, and in the production of building material and shutters.

Production of high quality furniture and furnishings is another excellence with larger concentration in Forlì (upholstered furniture district), Rimini and Imola.

INTERNATIONAL TRADE FAIRS IN EMILIA-ROMAGNA

CERSAIE

Salon of ceramics for architecture and bathroom sanitary ware
Bologna, www.cersaie.it

SUN

B2B show dedicated to equipment and services for the outdoor sector
Rimini, www.sunexpo.it

SAIE

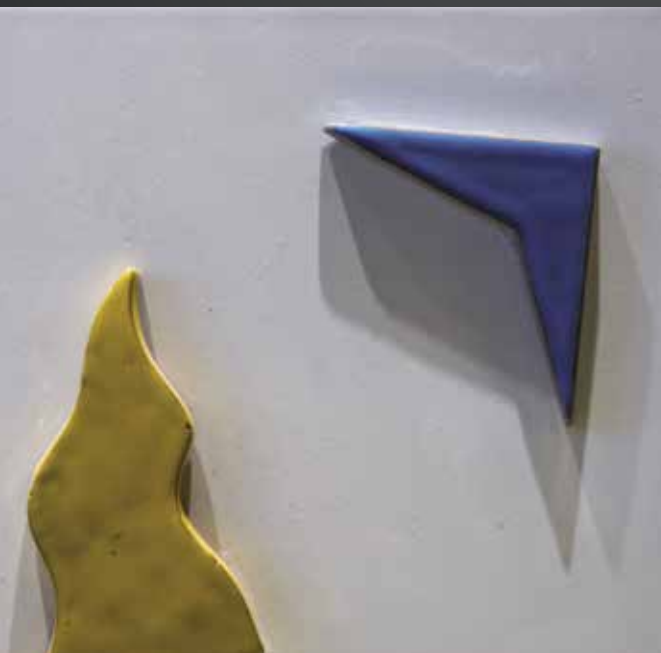
Exhibition of new building industrialization and land use
Bologna, www.saiebologna.it

GEOFLUID

Exhibition & Conference of Technology and Equipment for Prospecting, Extracting and Conveying Underground Fluids
Piacenza, www.geofluid.it

TECNA

International marketplace in the heart of the most creative, innovative and technological district for surface
Rimini, www.tecnaexpo.com



264
thousand
employees

Smail
2019

98
thousand
local units

Smail
2019

5.5
billion euros
export

Istat
Coeweb
2019

1.5
billion euros
import

Istat
Coeweb
2019

HEALTH AND WELLNESS INDUSTRY

The health industry is a field of activity that is acquiring increasingly greater importance. The **biomedical district** in Mirandola, Modena province, is a good example of a highly competitive sector, with around 5,000 employees. The production of orthopaedic prosthetic products in the Bologna area is another regional excellence.

Emilia-Romagna is the **1st region in Italy for the efficiency of the health system** (Demoskopika, 2020), with a network of cutting edge University Hospitals, including **Istituto Ortopedico Rizzoli 8° Best Hospital in the World** (Newsweek, 2021) and many other excellences. The pharmaceutical sector is also strong, with giants such as Chiesi, Acme or Alfasigma that have been operating in the territory for decades. Exports from the health industry sectors showed strong growth, in particular in the pharmaceutical cluster.

Worthwhile noting that the spa resorts spread across the territory and the resulting tourist industry are part of the so called Wellness Valley linking health to quality of life, including also the presence of top global companies such as Technogym.

RESULTS OF THE REGIONAL SMART SPECIALISATION STRATEGY 2014-2020

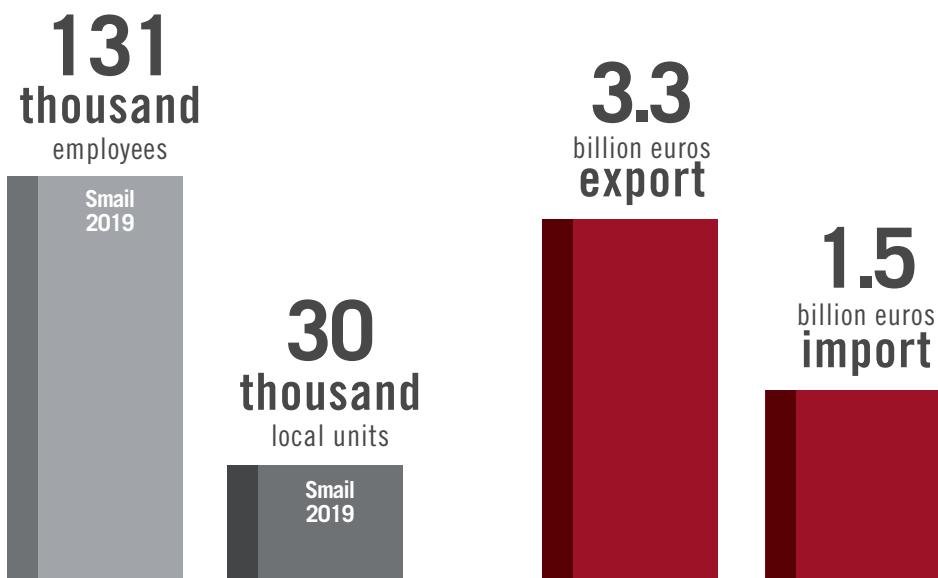
(updated: May 2019)

605
funded
R&D PROJECTS

267
million euros of total
INVESTMENT

160
million euros of public
FUNDS

406
new
RESEARCHERS



Export trend

PHARMACEUTICAL INDUSTRY

+160% (2008-2019)
+44% (1st half of 2019-2021)

Export trend

TOTAL REGIONAL HEALTH INDUSTRY

+84% (2008-2019)
+21% (1st half of 2019-21)

INTERNATIONAL TRADE FAIRS IN EMILIA-ROMAGNA

EXPOSANITÀ

Health and health care services

Bologna, www.exposanita.it

COSMOPROF

Perfumery and cosmetics

Bologna, www.cosmoprof.com

COSMOFARMA

Health, wellbeing and beauty products and services for pharmacies

Bologna, www.cosmofarma.com

RIMINI WELLNESS

World of sport (sports and beauty equipment, clothing, footwear, sports medicine and nutrition, etc.)

Rimini, www.riminiwellness.com

EXPODENTAL

Dental sector

Rimini, www.expodental.it

FASHION

A WELL-KNOWN INTERNATIONAL TRADE EVENT IS

MODA MAKERS

ON ITALIAN KNITWEAR

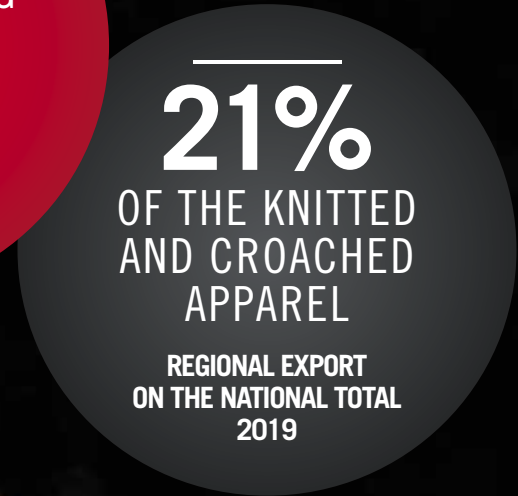
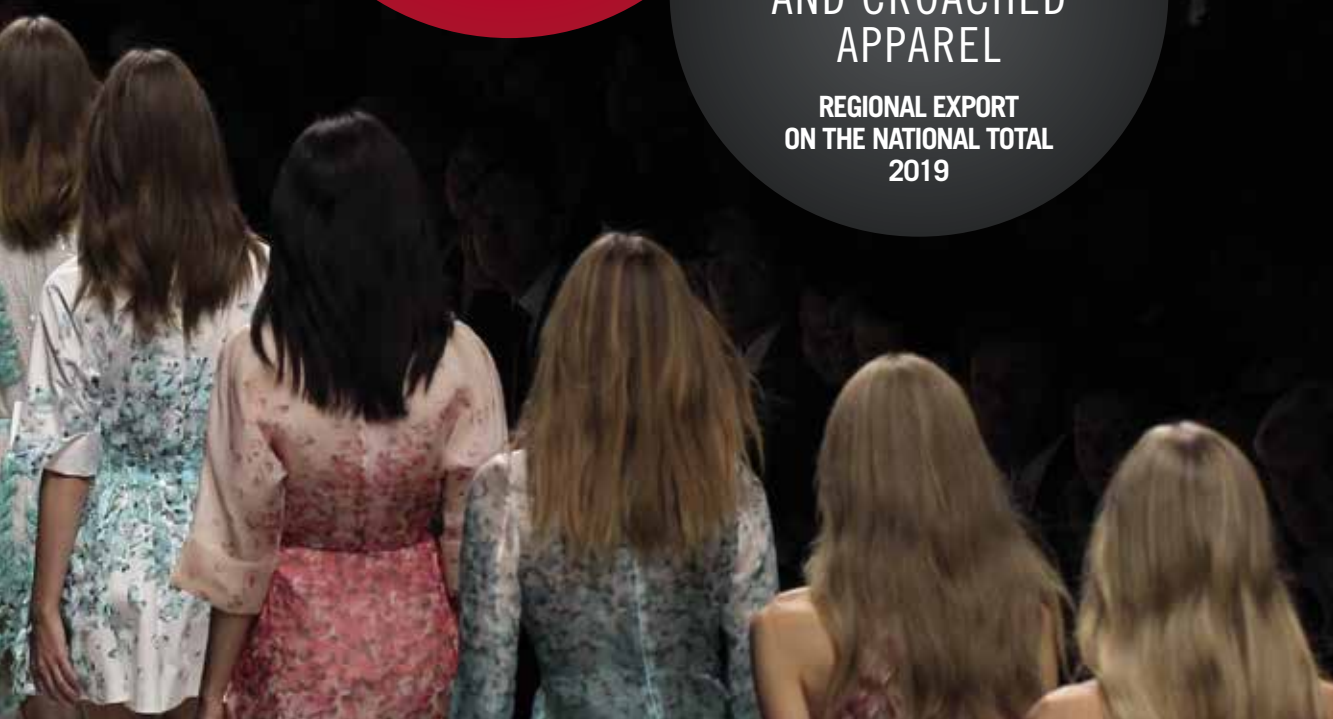
Carpi, it.modamakers.it

The **fashion production chain**, divided into textiles-clothing, footwear and accessories, is based on the presence of a large number of small companies either working for third parties or on niche productions, characterized by technical and manual skills of the highest quality. At the same time, there are also very well-known brands such as Max Mara, Liu Jo, Pinko, Twin-Set, Furla, Piquadro, which have production plants and design centres in Emilia-Romagna.

The **Carpi district** - in the province of Modena - is the symbol of this sector: specialised in knitwear and clothing in general, it is one of the industry's leading centre at national level with more than 1,000 companies, 7,000 employees and a turnover of 1.5 billion euros, with a share of 37% of export (source: Carpi District Observatory 2018)

Cutting-edge **footwear industry** is concentrated in Romagna - in particular in the San Mauro Pascoli district, in the Forlì-Cesena province - but is also present in other parts of the region, with well known brands such as Baldinini, Giuseppe Zanotti, Casadei, Sergio Rossi. The French company Berluti - part of LVMH group - built a factory in Ferrara and signed agreements with local institutions for specialised training projects.

Trade and access to markets are also leading factors for the wealth of the sector. For example, YNAP - global leader in the luxury **fashion e-commerce** - started as Yoox from Emilia-Romagna region. **Centergross** based in Bologna - is one of the main fashion trade hubs in the region, spread over an area of 500,000 sqm, it employs 6,000 people and consists of over 540 companies including 240 fashion brands with 60% of the district's trade going abroad.



CULTURAL AND CREATIVE INDUSTRIES

The cultural and creative industries in our region play a key role in the development and quality of life of the local community. The production sectors involved cover **cultural and artistic enterprises, the media and cultural industries, multimedia and ICT creative services**, artistic hand-made products. In a more general sense, they also comprise the economics of creativity concerning high-tech innovative companies, the fashion industry, furniture and all other products connected with design.

The region also boasts a **strong offer of cultural festivals** ranging from classical and electronic music to theatre and movies. The region is also well-known at global level for excellences such as the **Cineteca - Centre for audiovisual development and technological innovation** with top skills in restoration. The **Fellini Museum** in Rimini is the largest ever named after a film director.



INTERNATIONAL TRADE FAIRS IN EMILIA-ROMAGNA

ARTEFIERA

International Contemporary Art
Bologna, www.artefiera.it

BOLOGNA CHILDREN'S BOOK FAIR

Children's publishing industry
Bologna, www.bookfair.bolognafiera.it



93
thousand
employees

Smail
2019

35
thousand
local units

Smail
2019

CULTURE AND CREATIVITY

1.453

funded R&D projects

119

million euros of public funds

RESULTS OF THE REGIONAL SMART SPECIALISATION STRATEGY 2014-2020

(updated: May 2021)

251

million euros of total investment

494

new researchers

SERVICES INNOVATION

1.226

funded R&D projects

184

million euros of public funds

219

million euros of total investment

125

new researchers

CONTACT POINT

Invest in Emilia-Romagna is the contact point for foreign investors operated by the consortium **ART-ER**, Attractiveness Research Territory, providing a wide range of services free of charge:



Support for incentives

Support for completing the 'Agreement for the Settlement and Development of Companies' (Regional Law for Investment Promotion no. 14/2014).
Support for national incentives.



Image building

Tools and context analyses for investment promotion.
Pre-investment information and support for the business set-up process.



Networking

Local and international business networking.
Collaboration with actors and institutions at national, regional and local level.



Support in location scouting



Aftercare

INVEST IN EMILIA-ROMAGNA

Invest in Emilia-Romagna



Website: www.investinemiliaromagna.eu
realestate.investinemiliaromagna.eu

Mail: investinemiliaromagna@art-er.it

Social media:

www.linkedin.com/company/investinemiliaromagna
[#investinEmiliaRomagna](https://twitter.com/investinEmiliaRomagna)



INVEST IN EMILIA-ROMAGNA ACTIVITIES FOR INVESTMENT PROMOTION

Support for incentives

Aftercare

ART-ER CONTACT POINT

Support in location scouting

Image building

Networking



GENERAL DIRECTORATE FOR
KNOWLEDGE ECONOMY, LABOUR AND ENTERPRISE

General Manager Morena Diazzi

Viale Aldo Moro 44 – 40127 Bologna – Italy

Ph. +39 051 527 6419

dgcli@regione.emilia-romagna.it

www.investinemiliaromagna.eu

December 2021

Edited by Emilia-Romagna Region in collaboration with ART-ER Attractiveness Research Territory





 Regione Emilia-Romagna