# eurecat

## Innovation with impact

We promote business competitiveness and social welfare through applied research, technological development and innovation.

#### What is Eurecat



1

The main technology centre in Catalonia and one of the largest private research organisations in southern Europe.

2

We work together with companies of all sizes and sectors in the different phases of R&D&I.

3

We accelerate innovation, reduce the cost of scientific and technological infrastructure, reduce risks and provide specialised knowledge tailored to business needs.

4

Our multi-sectoral and multitechnological approach enables us to tackle complex challenges and meet major challenges in areas such as technology, the environment and energy. 5

We have highly advanced infrastructures and laboratories in water technology, medical devices, personalised nutrition, integrated electronics, artificial intelligence in industrial environments, lightweight materials and cognitive robotics, among other fields.

6

Our capillarity allows us to be close to our clients: with offices all over Catalonia and presence in Madrid, Malaga and Chile.



## Applied research, technological development and innovation with market impact

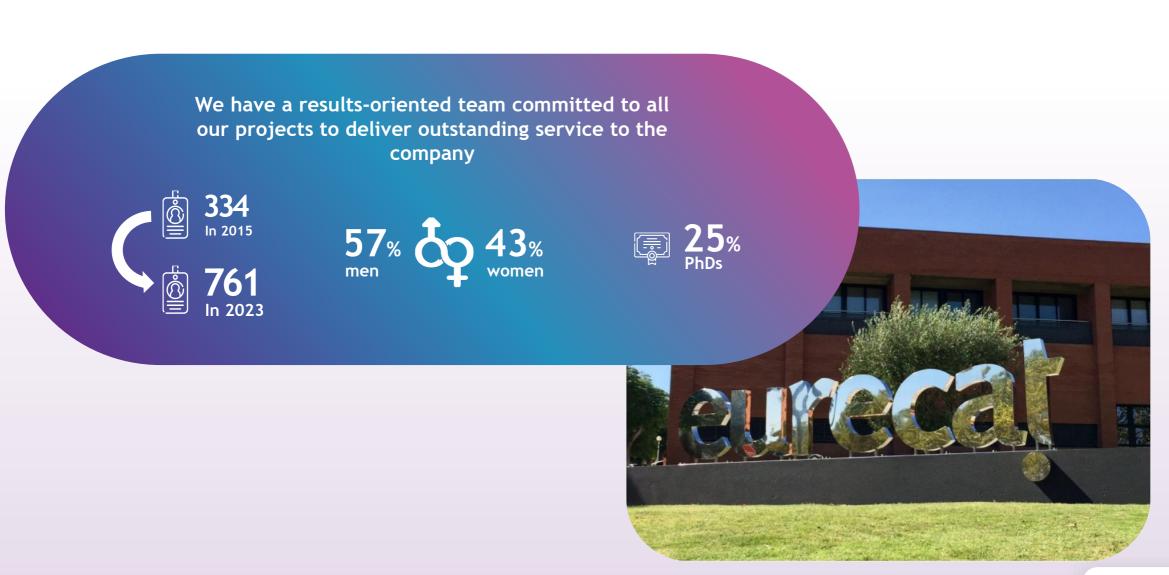


## Quite a challenge! ... which opens up great opportunities



### Committed team, close to companies





### Interdisciplinary integration





## **Industrial** Area

- Advanced materials and new manufacturing processes
- 2. Functional printing and embedded devices
- 3. Collaborative and cognitive robotics
- 4. Functional textiles
- 5. Chemicals
- 6. Modelling and multiphysics simulation
- 7. Product innovation



### **Digital** Area

- 1. Sensor systems and IoT
- 2. Quantum computing
- 3. Data science and analytics
- 4. Artificial intelligence
- 5. Cybersecurity
- 6. Multimedia technologies
- 7. Digital Health



## **Biotechnology** Area

- 1. Nutrition and health
- 2. Omic sciences
- 3. Biotechnology



## **Sustainability**Area

- 1. Water
- 2. Soil
- 3. Air
- 4. Energy
- 5. Waste
- 6. Environmental impact
- 7. Batteries
- 8. Climate change



## Our standout value:

Our interdisciplinary capabilities enable us to address complex challenges.

### Science and technology experts



To deliver a comprehensive response to the social, economic and environmental challenges Eurecat has 7 flagship domains









Functional polymers



Artificial intelligence in industrial settings



Lightweight materials



**Advanced robotics** 

### Aligned with future challenges



#### Relevant macro trends

- Diversity
- Inequality
- Climate crisis
- Demographic change
- Circular economy
- Platform economy
- Geopolitical changes
- Technological revolution
- Urbanisation

#### Sustainable Development Goals

















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#### Technologies with disruptive potential







Artificial Intelligence

**Self-driving** cars

**Augmented** Reality / Virtual Reality







IoT

**Advanced** robotics

Blockchain







Next generation genomics

**Advanced** materials

**Environmental** technologies

### Applied technology: Competitiveness of the company and welfare of society



= 35





**GREEN CITIES & INDUSTRIES** 



**MANUFACTURING** 



**MOBILITY** 



**WELLNESS INDUSTRIES** 



### **Sectors Markets Ecosystems**

We master technology, we know the market; we provide answers in technological terms to the challenges, needs and opportunities of the market, in order to improve the competitiveness of companies and the wellbeing of society.



**Packaging** 



Mobility

Aerospace

Logistics

#### Differential offer



Together with the company we create and/or improve products, services and processes, from the idea to industrialisation.



Applied research and technological development

- R&D&I units set up with the company
- R&D projects
- Minimum viable product



Advanced technology services

- Scientific and technological assessment
- Audits
- Testing and analysis
- Proofs of concept
- Approvals



Technology consultancy

- Innovation strategy and management
- Technology watch
- Trend analysis and feasibility studies
- Project management and funding



Specialised training

- Masters and postgraduate programmes
- Bespoke corporate training
- Continuous learning
- Soft and hard skills training



Value building

- Industrial and intellectual property protection and transfer
- Evaluation and support in building value from technological assets
- Advice and participation in setting up NTBFs
- Technological asset due diligence



Knowledge sharing

- Promotion actions
- Knowledge sharing and transfer actions

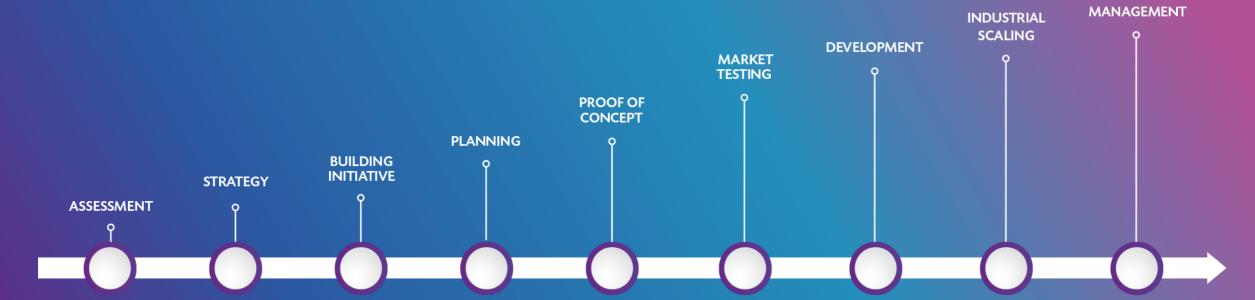
### **Results-Oriented**



SUPPORT FOR CHANGE

We mentor businesses from innovation design to pre-commercial scaling.

We use agile methodologies to monitor projects. Targeted towards ROI, quick wins, PoC.



### Alliances and territorial presence



## Proximity and trust

We promote alliances with universities and research centres to bring knowledge sources closer to companies. We are committed to being close to our clients and their challenges.

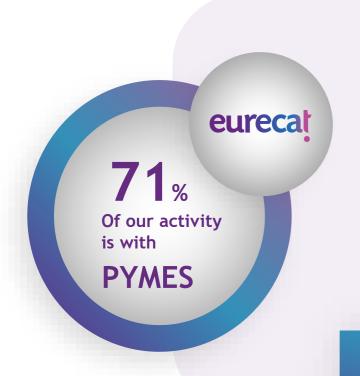
1 Eurecat Latam
Foundation Office



### Eurecat 2023 in figures



Sustained growth since 2015, to increase the competitiveness of Catalan companies and the welfare of society through R&D&I.







2.000 Client companies



**Eurecat's differential** value according to our clients:

- ✓ Expertise
- ✓ Multidisciplinarity
- ✓ Quality
- ✓ Proximity
- ✓ Impact

Customer satisfaction index: 8,65/10

We help companies to discover new opportunities and participate in the creation and improvement of products, services, processes and business models with an impact on their competitiveness and social welfare.

## Leaders in attracting competitive R&D&I funds:



Scale and impact

## Leaders in attracting competitive R&D&I funds:

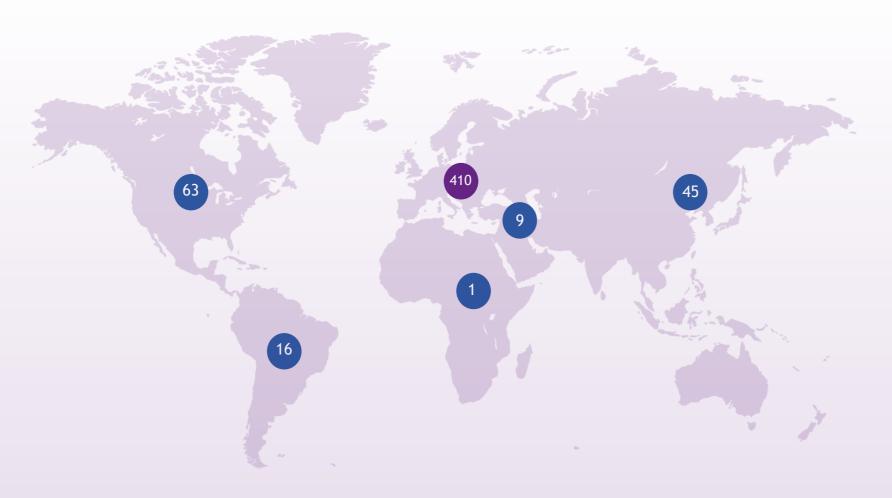
- 28.8 MEUR in 2023 in competitive public funds
- First Catalan private organisation to return from Horizon 2020 and fourth in Spain
- Eurecat is the research and technology centre with the most participations in Digital Innovation Hubs funded by the H2020 programme in Spain.
- Spain is the 2nd country with the highest return of European funds in water, circular economy and climate. Eurecat is the 2nd entity at national level.

2nd
Technology
Centre of the
Spanish State in
return of H2020

+ 170	H2020 and Horizon Europe projects (2014-2022)
+ 38	Coordinated H2020 and Horizon Europe projects (2014-2022)
+ 200	Spanish companies in projects with Eurecat participation
+ 200	Large consortium R+D+I projects
90	MEUR of return in H2020 and Horizon Europe (2014-2022)
3.432	Citations of our scientific publications by company researchers

### International alliances and partnerships





We collaborate with 544 organisations worldwide

Network of international collaborations since 2010 (publications, collaborative grant projects, news, conferences). Source: Linknovate

Eurecat deploys strategic alliances with agents in the R&D&I system to play a dynamic role as an ideal bridge between the global world of knowledge and companies, with the aim of responding to their innovation needs and boosting their competitiveness.





We promote unique initiatives for the future, led by or with the participation of Eurecat. We respond proactively to the current and future needs of companies and society.



As a leader and orchestrator, in alliance with the agents of the system

#### Active



Technology and knowledge to cope with the climate emergency



Creation of a Technology-Based Company as a benchmark inMOLD Electronics (IME).



Creative and Cultural Industries (EIT)



Boosting digital manufacturing and 3D printing technologies



Centre of reference in R+D+I of the battery ecosystem in Southern Europe.





Joint Research Unit on Metal Manufacturing







#### In approach



Centre for the development and application of technologies for decarbonisation.

#### **PLEMCAT**

Marine Energy R+D+I Platform of Catalonia





### The leading R&D&I facility in the Southern European battery ecosystem.

- Joint Eurecat + IREC research unit. Specialised development, testing and innovation.
- Designed to improve transfer of knowledge to industry for the development of future generations of cells and batteries.
- Comprehensive support across the entire value chain: eco-design, new materials, testing and validation, assembly, production, second life and circularity, etc.
- Innovation with industrial, economic and social impact in batteries and their application:
  - sustainable, lightweight and environmentally friendly electric mobility
  - stationary energy supply support systems
  - renewable energy rollout
  - capital goods



www.battechbatteryhub.org







Metal Digital Manufacturing Hub





#### Joint Research Unit (JRU) of Metal Digital Manufacturing

- The Metal Digital Manufacturing (JRU) is a Joint Research Unit driven by Royal Melbourne Institute of Technology (RMIT) Europe and Eurecat.
- It brings together the knowledge, facilities and experience of RMIT's Advanced Manufacturing and Additive Manufacturing Centers, together with the Center of Excellence in Advanced Manufacturing of Eurecat.
- The unit covers the entire value chain, from advanced design and fabrication of metal components to the development of alloys and new materials that allow innovative design solutions to be customized throughout the value chain of metal digital manufacturing.



www.metaldigitalmanufacturing.com













#### The Digital Innovation Hub in Artificial Intelligence in Catalonia

- Part of the Catalan Government's Catalonia. Al strategy.
- The CIDAI aims to fast-track Artificial Intelligence uptake in business and society.
- It is a public-private initiative coordinated by Eurecat which promotes knowledge transfer and implementing joint projects between knowledge-generating organisations (universities, research and innovation centres), technology and service provider companies, and user companies and institutions looking for innovative solutions in applied artificial intelligence.
- It seeks to promote the Catalan Artificial Intelligence ecosystem as a flagship international hub by building a connected, active and vibrant community that embraces most of the stakeholders.



www.cidai.eu

#### Lead partners:































#### At the forefront of innovation in the tourism industry

- A public-private initiative coordinated by Eurecat designed to play a key role in the transformation of tourism: innovation, sustainability and the competitiveness of destinations and businesses.
- It is an international leader in applied research, technological innovation and knowledge transfer in the industry coupled with analysing tourism activity and recommending policies and instruments in and for the industry.
- Work strands addressing sustainability, tourism intelligence systems, digital transformation, talent and innovation.
- Aimed at the entire value chain of the tourism industry and related businesses, society as a whole and residents in tourism destinations.



www.coeintourisminnovation.org

#### **Promoters:**







































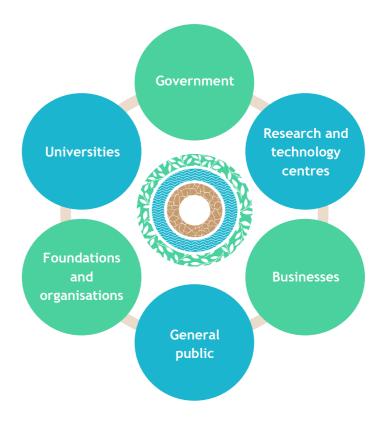






#### Technology and knowledge to tackle the climate emergency

- It seeks to become the flagship centre for climate resilience in adapting to and mitigating climate change in Catalonia and the Mediterranean.
- R&D&I of excellence to become more resilient to climate change and support sustainable development by fast-tracking the ecological transition.
- Transfer of knowledge and technology to businesses, government and society; outreach and training for society.
- Promotion across Catalonia by rolling out regional Living Labs.
- Joint initiative with ecosystem stakeholders coordinated by Eurecat.



www.centreenresilienciaclimatica.org

#### Lead partners:



























#### **TEXTILE INNOVATION HUB**

- Business innovation programme aimed at the textile industry sponsored by Eurecat, Mataró Town Council and TecnoCampus as part of the Mataró Maresme Territorial Specialisation and Competitiveness Project (PECT). It is committed to promoting the restructuring of the industry and the places where it has the greatest footprint, starting with el Maresme and Catalonia.
- It seeks to be a leader for the textile industry, especially in fashion, health and sports, in technological innovation and business models.
- Strategic strands: (1) Driving a textile innovation and entrepreneurship ecosystem for the future, (2) textile industrial competitiveness and its digital transformation, (3) sustainability and circular economy as the key to standing out and the future of the textile industry, (4) internationalisation of the hub and its businesses.



www.reimaginetextile.com

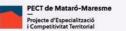
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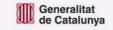












Partners:















#### H2CAT, the Catalan network for renewable hydrogen innovation

- H2CAT is made up of 30 research groups with knowledge in different lines of research and technologies related to hydrogen.
- Through the creation of valorisation programmes and the transfer of research results to the social environment, H2CAT works to increase the scientific indicators in the field of green hydrogen in the Catalan ecosystem.
- Consolidation of a scientific-technological model that promotes innovation and the scalability of benchmark industries with the aim of positioning Catalonia as a world leader in green hydrogen.
- Key element for improving the competitiveness of the energy, industrial and transport sectors, among others, motivating the deployment of a low-emission society and territory.



www.xarxah2cat.org

#### Lead partners:











### **Spin-offs**

## eurecat

## Valuing Intellectual Property Assets

1 Investees

We generate international patents every year and promote the creation of new technology-based companies that contribute to rooting the industry in the territory and generating quality employment.

14,6<sub>M€</sub>
In turnover

+ 200 patents

**85** people employed









REINFORCE 30



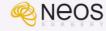








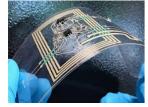




## eurecat labs

eureca

More than 20 laboratories at the service of companies to find technological solutions to complex industrial or innovation challenges.







Our laboratories have strategic equipment to carry out tests, analysis and characterisation services, concept tests and complex projects.

We have a highly qualified team to solve complex scientific and technological challenges and a business development team with experience innovating with companies.











Installations

- - References in Industry 4.0

- Experience
- Applied technological knowledge
- **Quality**

#### Training modalities

We connect with the company. We offer different types of training proposals to provide solutions to the needs of companies and professionals: Advanced training programmes, Continuous Training, In-Company Training, Professional Training for employment.



## **Testimonials**Success stories in the company





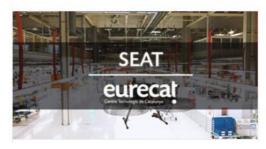
Santos Jorge and Eurecat collaborate in the valorisation of glass waste to obtain new materials and applications



Giromed Institute and Eurecat create an intelligent device for the follow-up of the treatment of obstructive sleep apnoea syndrome



Giró and Eurecat create innovative plastic-free fruit and vegetable packaging



SEAT innovates with Eurecat in autonomous vertical navigation with drones inside the factory



The Empordà Health Foundation and Eurecat innovate with an impact on ophthalmology through a process of innovative public procurement



The Sant Cugat High Performance Centre innovates with Eurecat in the creation of a distance learning platform





# Thank you

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