

# Trasferimento Tecnologico

# IOIP International Open Innovation Programme

System Innovation Edition 2025

**Program Presentation** 





Ministero dell'Università e della Ricerca





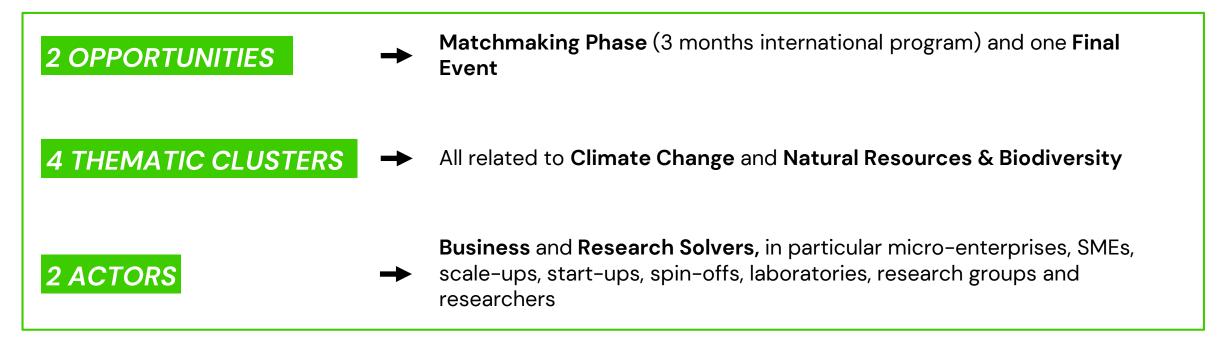


In collaborazione con



**Program Overview** 

IOIP is the International Open Innovation Programme based in **Emilia–Romagna Region** that aims at **supporting local companies** to address **specific business challenges** by creating **strategic matches** with other actors of the international innovation ecosystem, coming from both the **Business** and **Research** world



# **1 INTERNATIONAL OPEN INNOVATION PROGRAM**





Who can apply



# WHO CAN APPLY

Any Business or Research Actor with a **solution** or **know-how suitable** to the open call **challenges** 

...with a minimum TRL of 3...

...ensuring compliance with Warranties, Intellectual Property Declarations, and Content Conformity (more information)





Why IOIP



# WHY IOIP

#### Start strategic business collaborations and partnerships

#### Extend your international network

Create a **meaningful impact** on the ecosystem, your business or your research





Corporates





**Thematic clusters** 





Data Collection, Analytics & Traceability for the Ecological Transition

This cluster explores advanced solutions for **data collection**, **analysis** and **traceability**, to support strategic decision-making oriented towards the company's **ecological transition**  Manufacturing Methods & Industrial Optimization

Cluster #2

This cluster explores innovative **methods and processes** in **industrial production**, leveraging **cutting-edge technologies** to enhance **efficiency** and **product quality** 

This cluster explores innovative materials, products, and processes with minimal environmental impact, fostering the circular economy and reducing waste

**Sustainable** 

**Processes** 

Materials, Products &

Cluster #3

Cluster #4



This cluster explores systems for utilizing renewable energy sources and developing solutions to protect biodiversity





Challenges

#### Cluster #1



Data Collection, Analytics & Traceability for the Ecological Transition

- 1. Data and information to train a process optimization software
- 2. Real-time and predictive crop analysis systems
- 3. Solutions for embedding AI algorithms in vehicles for anomaly detection
- 4. Methodologies or tools to measure the carbon footprint of buildings
- 5. Solution for underground infrastructure mapping and analysis
- 6. Methodologies and analyses to launch Digital Product Passport
- 7. Methodologies or technologies to measure the carbon footprint of palm oil production
- 8. Technologies and tools for ensuring traceability in automotive parts sourcing
- 9. Software for data analysis and harmonization suitable for SMEs



#### Manufacturing Methods & Industrial

- Optimization
- 10. Solutions for automating sugar beet transplant processes
- Sustainable solutions for disposable medical devices in advanced wound care treatment
- 12. Solutions to merge steel and titanium for automotive exhaust pipes production
- 13. Innovative methods or technologies for surface treatments of medical filters
- 14. Sustainable sound-absorbing materials for noise reduction in industrial machinery
- 15. Innovative durable and hard materials for steel cutting

#### Cluster #3



Sustainable Materials, Products & Processes

- 16. Methodologies and tools for reusing pharmaceutical plastic waste materials
- 17. Powder solution to absorb liquids of different densities
- 18. Sustainable materials for tunnel excavation operations
- 19. Solutions for purifying and reusing wastewater from milk production processes
- 20. Solutions to achieve high barrier performance for cellulose-based packaging
- 21. Materials and methodologies for compostable wood packaging suitable for food contact
- 22. Materials, methodologies and technologies for sustainable packaging
- 23. Methodologies, tools and materials for sustainable packaging of industrial components

Cluster #4



- 24.Tools and methodologies for insect detection and tracking
- 25. Methodologies and tools for measuring biodiversity in agricultural soil
- 26. Regulations and requirements analysis on Renewable Energy Communities (RECs) in Italy
- 27. Methodologies for extracting hydrogen from foodservice industry wastewater
- 28. Affordable solutions for refining and purifying biomethane used as an energy source
- 29. Smart Systems for Underwater Animal Capture
- 30. Energy capture and storage solutions for machinery hydraulic systems
- 31. Solutions to monitor fishing trajectories underwater





**Focus Cluster 1** 

#### Cluster #1



Data Collection, Analytics & Traceability for the Ecological Transition

This cluster explores advanced solutions for **data collection**, **analysis** and **traceability**, to support strategic decision-making oriented towards the company's **ecological transition**  1. Data and information to train a process optimization software

2. Real-time and predictive crop analysis systems

3. Solutions for embedding AI algorithms in vehicles for anomaly detection

4. Methodologies or tools to measure the carbon footprint of buildings

5. Solution for underground infrastructure mapping and analysis

6. Methodologies and analyses to launch Digital Product Passport

7. Methodologies or technologies to measure the carbon footprint of palm oil production

8. Technologies and tools for ensuring traceability in automotive parts sourcing

9. Software for data analysis and harmonization suitable for SMEs





**Focus Cluster 2** 

#### Cluster #2



Manufacturing Methods & Industrial Optimization

This cluster explores innovative **methods and processes** in **industrial production**, leveraging **cutting-edge technologies** to enhance **efficiency** and **product quality**  10. Solutions for automating sugar beet transplant processes

11. Sustainable solutions for disposable medical devices in advanced wound care treatment

12. Solutions to merge steel and titanium for automotive exhaust pipes production

13. Innovative methods or technologies for surface treatments of medical filters

14. Sustainable sound-absorbing materials for noise reduction in industrial machinery

15. Innovative durable and hard materials for steel cutting





**Focus Cluster 3** 



This cluster explores innovative materials, products, and processes with minimal environmental impact, fostering the circular economy and reducing waste 16. Methodologies and tools for reusing pharmaceutical plastic waste materials

17. Powder solution to absorb liquids of different densities

18. Sustainable materials for tunnel excavation operations

19. Solutions for purifying and reusing wastewater from milk production processes

20. Solutions to achieve high barrier performance for cellulose based packaging

21. Materials and methodologies for compostable wood packaging suitable for food contact

22. Materials, methodologies and technologies for sustainable packaging

23. Methodologies, tools and materials for sustainable packaging of industrial components



#### **Focus Cluster 4**





Green Energy & Biodiversity

This cluster explores systems for utilizing renewable energy sources and developing solutions to protect biodiversity 24. Tools and methodologies for insect detection and tracking

25. Methodologies and tools for measuring biodiversity in agricultural soil

26. Regulations and requirements analysis on Renewable Energy Communities (RECs) in Italy

27. Methodologies for extracting hydrogen from foodservice industry wastewater

28. Affordable solutions for refining and purifying biomethane used as an energy source

29. Smart Systems for Underwater Animal Capture

30. Energy capture and storage solutions for machinery hydraulic systems

31. Solutions to monitor fishing trajectories underwater





**Timeline and contacts** 

