



MADE IN EUROPE 2026

ONLINE PITCHING

Presenter: Jon Arambarri, ESTIA

23 June 2026

Institute Profile

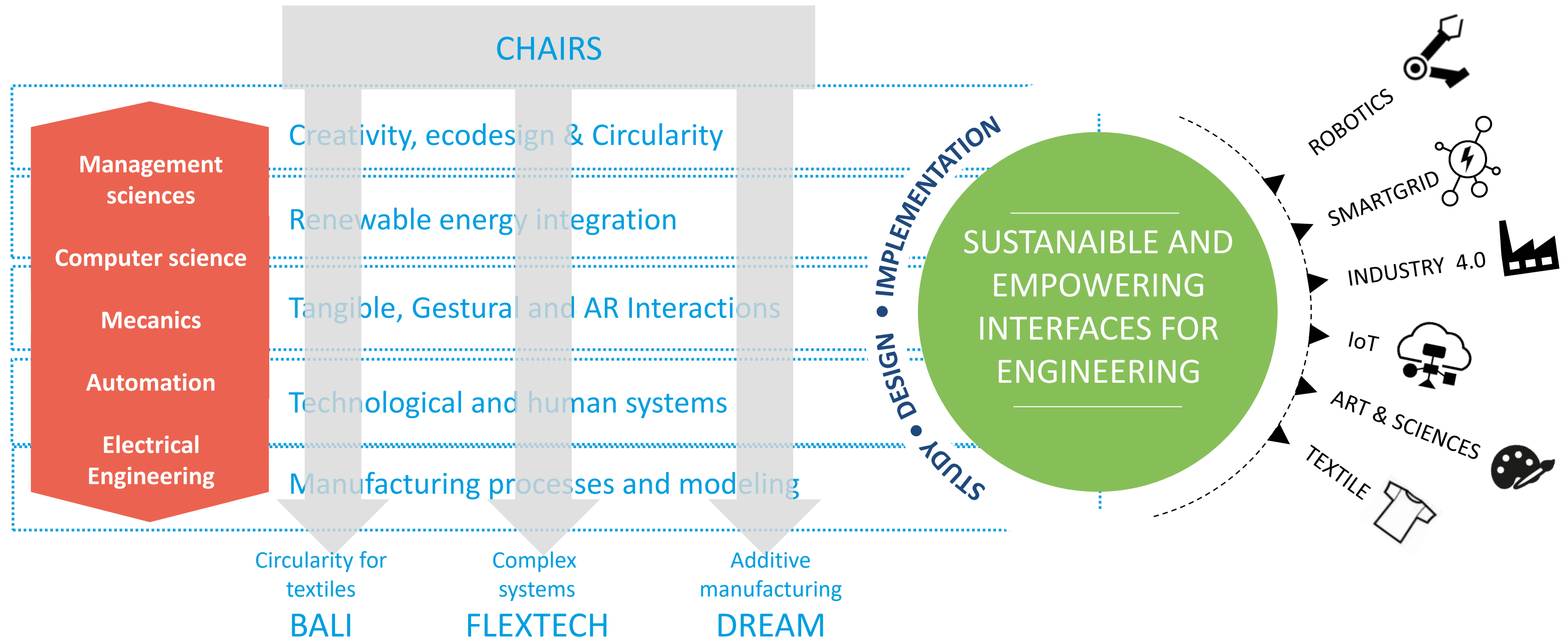
- Founded in 1996, the **ESTIA INSTITUTE OF TECHNOLOGY** is a general engineering French school training trilingual versatile engineers, to undertake positions such as product engineer, supply chain planner/manager, quality manager, production manager, and project manager.

- **The ESTIA campus is an ecosystem which includes:**

Engineering courses & masters degrees
Research teams in technology
Technical platforms
A company incubator



Lab Experience and Key Projects



5 CNU Competencies
06, 27, 60, 61 et 63

divided into
5 Research topics

for
Study, design, implement

Capacitive
interfaces

for
6 Application fields



In the heart of the Campus

The European Dual Studies University Lighthouse Strategy

<https://eu4dual.education/>



1. Business & Management for Green Transition

- Sustainable tourism and green logistics
- Local government leadership
- Circular economy and sustainable design in fashion and textiles

2. Engineering for Sustainable and Digital Industry

- Human-machine interaction
- Artificial intelligence applications
- Additive manufacturing and 3D printing
- Industrial circularity and resource efficiency

3. Health and Welfare Transition

- Nutrition, diabetes, and food systems
- Mental health and cognitive aging with VR
- Inclusive health for vulnerable populations
- Working conditions, motor skills, and health in the workplace

4. Interdisciplinarity in Social Sciences: A European Way of Life

- Workforce development and education
- Future skills and emerging technologies
- Social and ethical dimensions of digital transformation

ESTIA-TECH – Strategic areas

- Industry5.0
- eHealth
- Energy
- Agri-tech



ESTIA ecosystem

CETIA: high-performance systems to make textile recycling operations competitive

ENERGEA: Power and control electronics for hybrid energy storage systems, energy management & optimization, micro-grids.

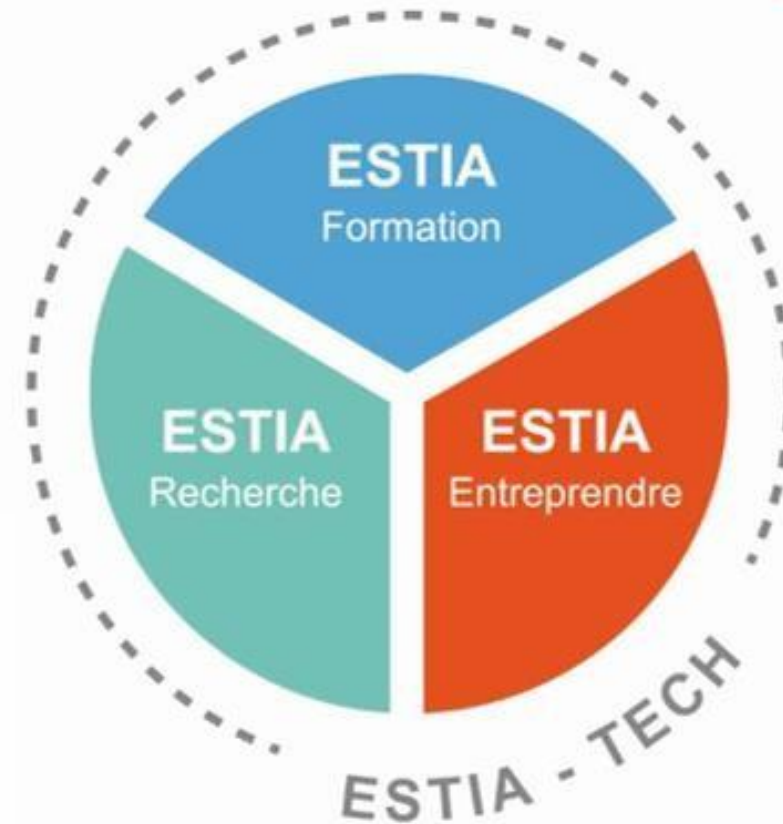
CETIA FROM GOODS TO MATERIALS

COMPOSITADOUR
COMPOSITES & ROBOTICS SOLUTIONS

COMPOSITADOUR: advanced processes, including composites and robotics

ENERGEA
ENGINEERING FOR RENEWABLE ENERGY

CCI BAYONNE PAYS BASQUE
Euskal Herri
1^{er} ACCÉLÉRATEUR DES ENTREPRISES



TURBOLAB
INNOVATIVE AIRCRAFT PROPULSION

TURBOLAB: innovative, low-carbon, high-performance aeronautical propulsion systems

ADDIMADOUR
ADDITIVE MANUFACTURING SOLUTIONS

ADDIMADOUR: metal additive manufacturing

DATA LAB
ARTIFICIAL INTELLIGENCE ENGINEERING

DATA LAB: R&D projects & training. Applied AI: agriculture, industry, satellite imagery

PEPSS
HUMAN FACTORS FOR INTERACTIVE TECHNOLOGY

PEPSS: Prototyping and evaluation. Expertise in ergonomics, human-machine interaction, and human factors analysis.

HORIZON-CL4-2027-02-DIGITAL-EMERGING-52-TWO-STAGE

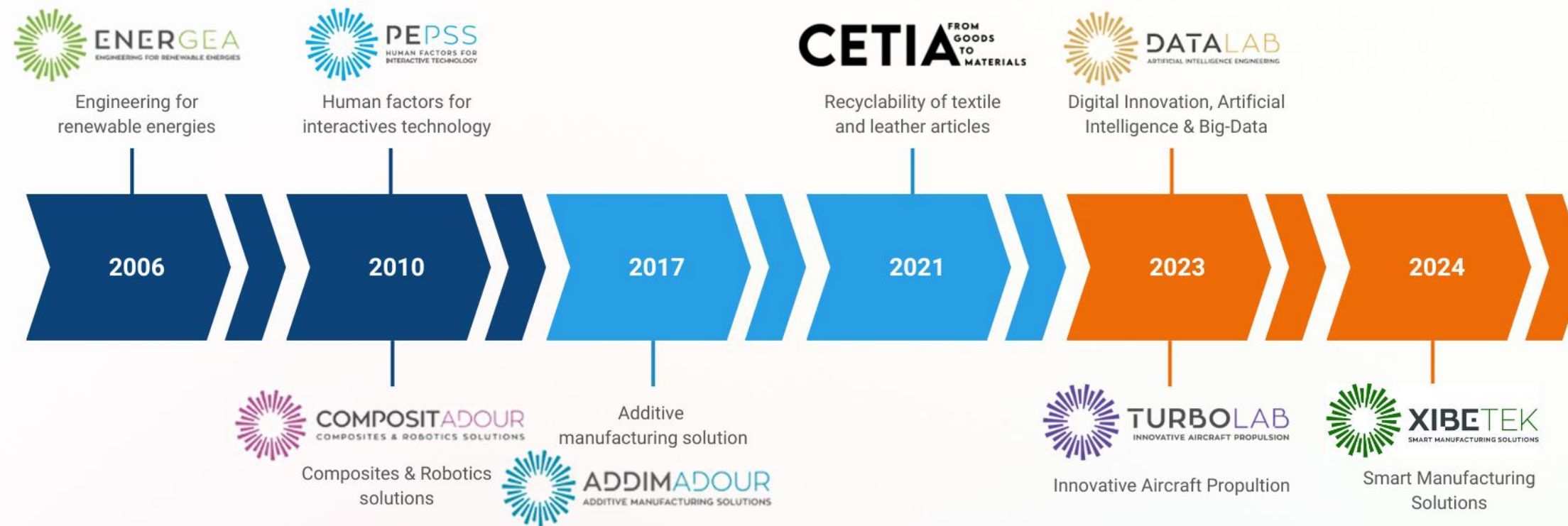
New approaches for Human/AI collaboration for the workforce of the future (RIA) (Made in Europe and AI, Data and Robotics partnerships)

Potential ESTIA Contribution;

- Human In the Loop + Ergonomics facts -> PEPSS
- IA & Decision support systems - > Data Lab
- IoT
-

Use Case;

- Textile dismantling
- Aerospace



8 technology platforms

- Support for research activity
- Support for teaching
- Support for companies



Technical Platform : **COMPOSITADOUR** (COMPOSITES ROBOTICS ADDITIVE MANUFACTURING) is a true platform for experimenting with the Factory of the Future's digital and robotic technologies. Compositadour provides high-tech equipment and mobilises its network of skills, from laboratories, SME's and major industrial groups to develop innovative projects. To help businesses appropriate these new technologies, Compositadour carries out the following missions:

- **R&D** : In partnership with industry, Compositadour initiates and carries out R&D programmes for new parts and manufacturing processes with outstanding research teams.
- **Training** : In association with vocational training players, Compositadour provides courses for operators, technicians and engineers in composites, automating and robotising processes, and additive metal manufacturing.
- **Technology transfer** : The platform's teams helps industry (SME, ETI, large groups) to integrate new solutions developed.



Technical Platform : **ADDIMADOUR** (ADDITIVE MANUFACTURING SOLUTIONS) is dedicated to metal additive manufacturing technology transfer, the Addimadour platform provides the Technocité Technology Park with innovative and efficient facilities for industrial projects.

Mechanical characteristics improvement of parts obtained by additive manufacturing :

- Determination of optimal Key Process Parameters to obtain material soundness.
- Development of real-time instrumentation for monitoring and post-process control.
- Development of deposition strategies tailored to Additive.

Manufacturing processes Multiphysics numerical simulation of additive manufacturing processes

- Thermal, mechanical and metallurgical simulation for behaviour prediction (residual strains and deflection).
- Topology optimisation (Finite Element Method structural design for performance/weight ratio enhancement).



Technical Platform : **ENERGEA** (COMPOSITES ROBOTICS ADDITIVE MANUFACTURING) is s a research platform in power and control electronics for the integration of renewable energy sources and storage (hybrid energy storage systems), for energy management and its optimization, through the quality management of power supply and network stability, but also demand management.

- Automatic
- Power Energy
- Control
- Energy Storage
- Smart Grid



Technical Platform : **PEPSS** (HUMAN FACTORS FOR INTERACTIVE TECHNOLOGY) was created in 2010 by researchers from ESTIA (N. Couture & S. Minel) and University Paris Descartes (R. Mollard & M. Wolff).

- Human Centered Design
- Prototyping innovative systems
- Behavioral and Morphological Modeling
- Facilitate the interaction between people and between a human and a system
- Model human behavior: use, appropriation and emotion



TURBOLAB
PROPULSION AÉRONAUTIQUE INNOVANTE

TURBOLAB is a platform dedicated to innovative propulsion systems :
Electric, Hybrid or Alternative Fuels (SAF and H2)

Associating AKIRA expertise in innovative propulsion systems and ESTIA
Compositadour Addimadour in Material and Processes





Technical Platform : **DATALAB**

DATALAB is ESTIA's innovation platform focusing on Artificial Intelligence (AI) and Big Data applications. It supports industries in integrating these technologies into their processes, fostering digital transformation across sectors such as agriculture, healthcare, and manufacturing.

- **R&D & Innovation:** Conducting applied AI research and development projects.
- **Technology Transfer:** Assisting companies in adopting AI and Big Data solutions.
- **Training:** Offering specialized training programs in AI and Big Data for professionals and students.



Technical Platform: Xibetek

Xibetek is a training and experimentation platform dedicated to the local industry. It provides access to advanced technologies, prototyping tools, and expertise to help companies and students develop innovative projects and strengthen industrial skills.

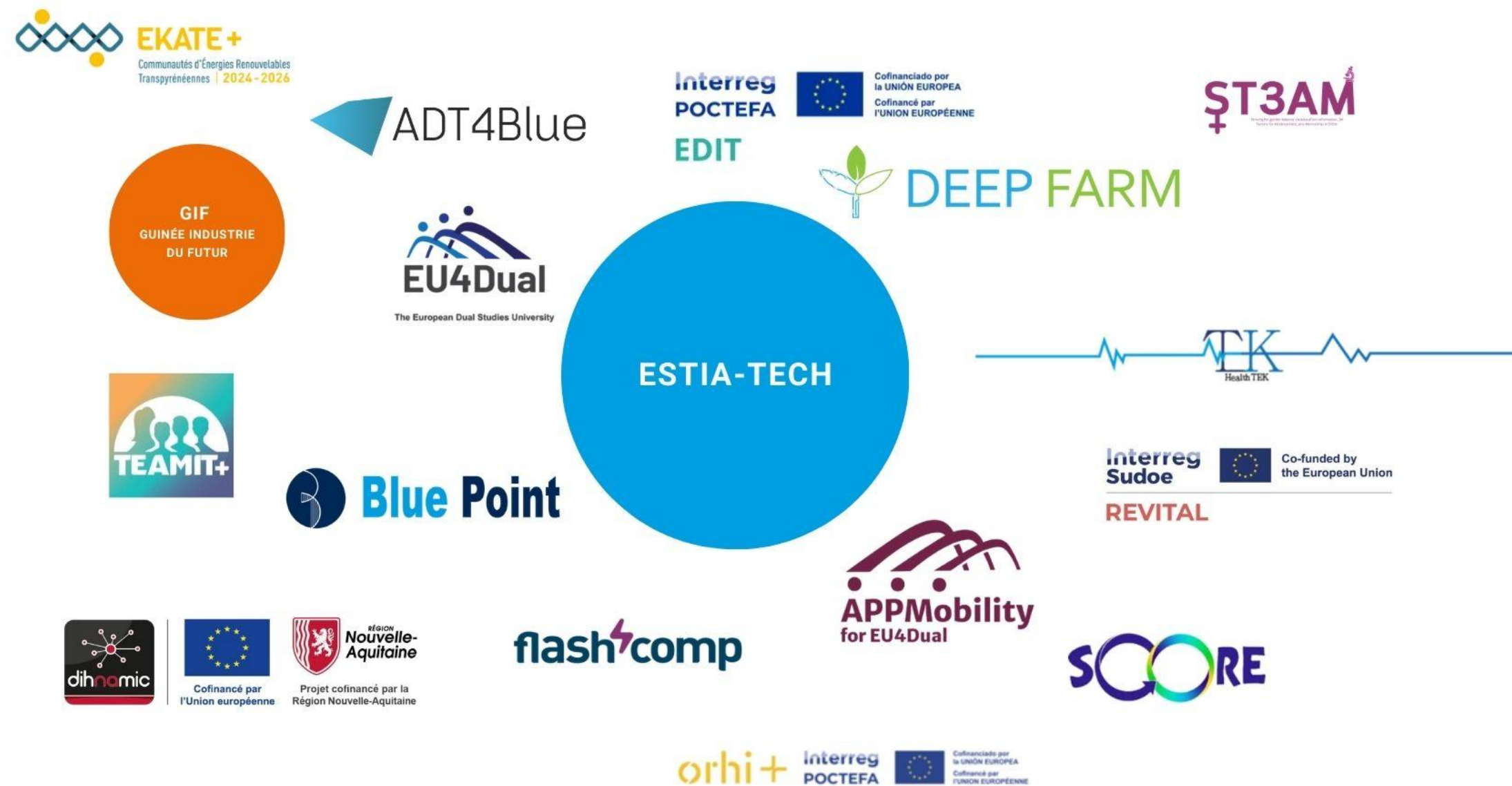
- **Training & Skills Development:** Courses and workshops for students and professionals.
- **Prototyping & Experimentation:** Access to machinery and equipment for testing new industrial solutions.
- **Industrial Support:** Assisting local companies in adopting and integrating new technologies.



Technical Platform: CETIA (Centre for Textile Innovation and Automation)

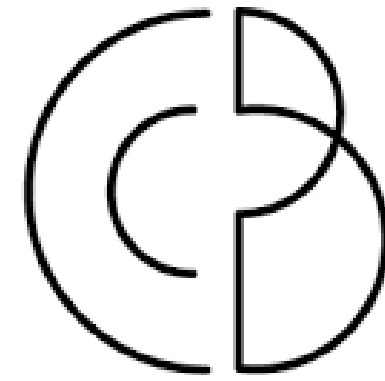
CETIA develops innovative solutions to transform textile and leather waste into recyclable materials. By combining automation, robotics, and AI, the platform supports brands, recyclers, and collectors in designing, testing, and implementing sustainable recycling processes.

- **Innovation & Prototyping:** Developing proofs of concept and pilot systems.
- **Industrial Demonstration:** Testing solutions at pre-production scale.
- **Technology Transfer:** Supporting companies in adopting new recycling technologies.



On-going projects

<https://www.estia.fr/recherche/projets-estiatech>



CHAIRE BALI
Disruptive materials & processes



EFFRA
EUROPEAN FACTORIES OF THE FUTURE
RESEARCH ASSOCIATION

Collaborative Networks

