

Korea-EU Horizon Europe Researchers Networking Forum on Energy & Advanced Mobility

• **Paula Ferreira**

• **Director/Professor**

• **ALGORITMI Research Centre
University of Minho**

• **Energy**



1. Short Introduction of your Organization

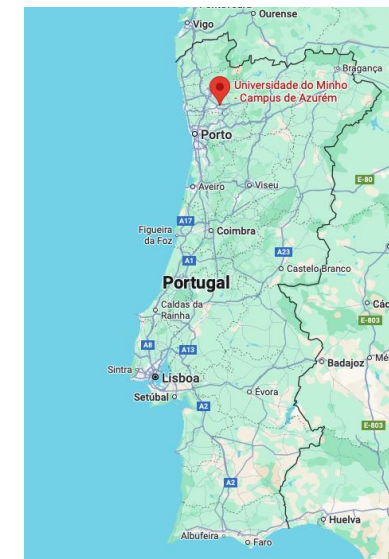
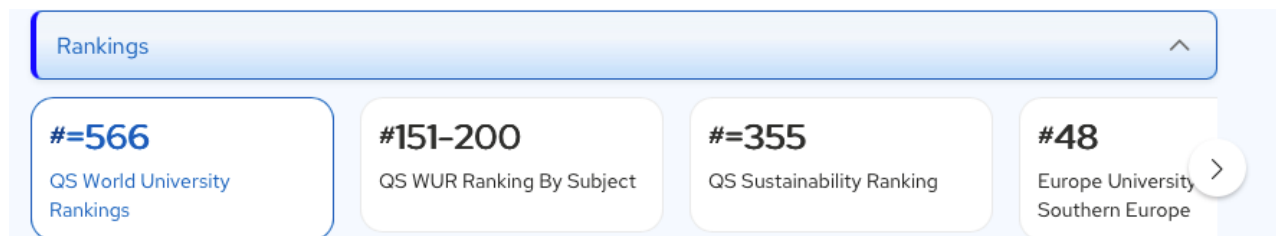
ALGORITMI RESEARCH CENTRE UNIVERSITY OF MINHO

The University of Minho is a **public University**, located in northern Portugal, with campuses in the cities of Braga and Guimarães.

Internationalization is a strong commitment and international activities are quite intense.

One of the leading universities with strong interrelation with the **industrial sector**.

21 000 students: 2400 international students, 1900 PhD students, 4910 MSc students



2. Expertise

ALGORITMI RESEARCH CENTRE

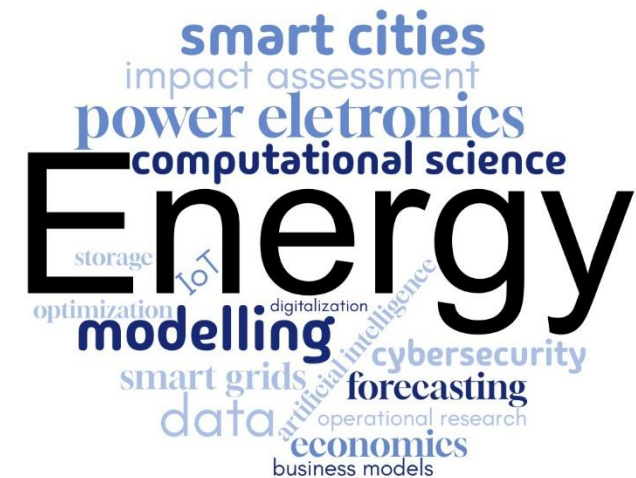


Largest Research Centre of the School of Engineering.

More than 120 integrated researchers holding a PhD and working on **industrial engineering, informatics, information and systems and industrial electronics.**



Strong link with the community, namely, the industry and the public administration.





3. Your Project Idea

HORIZON-CL5-2026-03-D3-01: Targeting key value chain components for increasing the competitiveness of renewable energy technologies in Europe

HORIZON-CL5-2026-04-Two-Stage-D3-02: Next generation of renewable energy technologies

HORIZON-CL5-2027-02-D3-11: Renewable Energy Valleys in Africa to increase energy security and energy access in Africa

HORIZON-CL5-2026-03-D3-19: Grid-forming capabilities for more resilient and RES-based electricity grids

HORIZON-CL5-2026-11-D3-15: Improved system design for innovative PV applications (EUPI-PV Partnership)

HORIZON-CL5-2027-07-D3-18: PV based electrification of the economy: Designing & optimising PV systems supporting industrial electrification and promoting participation in electricity markets (EUPI-PV Partnership)



3. Your Project Idea

HORIZON-CL5-2026-03-D3-23: AI-driven forecasting algorithms for Grid and Consumer friendly Energy Sharing – Societal Readiness pilot

HORIZON-CL5-2026-09-D4-01: Researching the technical, social & economic factors impacting the energy performance of Smart Buildings (Built4People Partnership)

HORIZON-CL5-2026-09-D4-03: Advanced data platforms to integrate whole life carbon in building information tools, assessments, and certification (Built4People Partnership)

HORIZON-CL5-2026-03-D2-02: Development of direct recycling processes (BATT4EU Partnership) - *Robust techno-economic analyses, comprehensive life-cycle assessments (LCA) highlighting sustainability benefits in terms of energy savings, CO2 emission reduction, biodiversity and ecosystems impact, and overall resource efficiency.*



4. Profile You are Seeking and Why

PARTNERS FOR JOINT APPLICATION

HORIZON-CL5-2026 and HORIZON-CL5-2027

Academy – complementary expertise

Industry – TSO, DSO, digital sector, manufacturing

Stakeholders/Communities – Users, demo cases

WHAT WE WILL BRING

ALGORITMI technical and scientific expertise on:

- Energy fields and related domains
- Transportation electrification technologies
- Computer science and associated technologies
- Industrial engineering and management
- Information systems and technology
- Computer communications and pervasive media
- Industrial and power electronics
- Techno-economic and environmental analyses

ALGORITMI network:

- Connection to national industries, users and communities
- Connection to international partners (companies,...)
- Connection with European and International Universities
- Connection with city council



5. Contact Details

ALGORITMI Research Centre

Universidade do Minho
Escola de Engenharia
Campus Azurém
4800-058 Guimarães, Portugal



Director –Paula Ferreira
paulaf@dps.uminho.pt
<https://orcid.org/0000-0002-3712-4803>



Deputy Director – Vitor Monteiro
vmonteiro@di.uminho.pt
<https://orcid.org/0000-0001-6640-8955>