

## Partner Offer

Date of Submission: 06.10.2026

We are...  offering ourselves as partners  looking for a partner to join our consortium

### Horizon Europe Call Topic

(Title or topic ID)

HORIZON-CL4-2027-04-DATA-09: Energy efficiency and sustainability of AI dataprocessing in Data Centres (IA)

### Description of your expertise / the expertise you are looking for

(up to 1000 characters)

The University of Tirana, through the Faculty of Natural Sciences and the Department of Applied Mathematics, offers expertise in applied mathematics, optimisation, numerical modelling, dynamical systems, machine learning, reinforcement learning, data science, and computational analysis of complex systems. This expertise is relevant to AI-based methods for energy-efficient and sustainable data-centre operation, including workload scheduling, adaptive power management, dynamic resource allocation, energy-demand forecasting, and optimisation under thermal and operational constraints. The department can contribute to mathematical and data-driven modelling of coupled computing-energy-thermal processes, and validating optimisation strategies. Within HORIZON-CL4-2027-04-DATA-09, it could support AI workload optimisation, and integration into energy systems.

### Keywords describing your expertise / the expertise you are looking for

(up to 10 key words)

Applied Mathematics, Mathematical Modelling, Optimisation, Dynamical Systems, Machine Learning, Reinforcement Learning, Data Science, Energy-efficient AI, Sustainable Data Centre Optimisation

### Organisation information

Name of your organisation:

Department of Applied Mathematics, Faculty of Natural Sciences, University of Tirana

Type of organisation:

Industry (Large)

Research Institute

Industry (SME)

Public Body

University or College

Other, please specify: [Click here to enter text.](#)

Previous participation in an EU project?

No

Yes, please specify: [Click here to enter text.](#)

Website: <a href="https://www.fshn.edu.al/departments/department-of-applied-mathematics">https://www.fshn.edu.al/departments/department-of-applied-mathematics</a> , <a href="https://unitir.edu.al/">https://unitir.edu.al/</a>
<p><b>Description of your organisation or the consortium for which you need a partner:</b>          The University of Tirana is the largest and one of the leading public higher education institutions in Albania, with a strong role in education, research, and academic cooperation. The Faculty of Natural Sciences provides teaching and research in mathematics, physics, chemistry, biology, informatics, and related interdisciplinary fields. Within the faculty, the Department of Applied Mathematics focuses on mathematical modelling, optimisation, numerical methods, dynamical systems, data analysis, machine learning, and computational approaches to complex scientific and engineering problems. The department contributes to the training of students and researchers and is interested in international cooperation in AI, data science, Digital Twins, sustainable energy systems, and energy-efficient computing.</p>

## Contact details

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## Declaration

I herewith declare that I am responsible for the content provided and that I expressly consent to its publication in my NCP's national network, e.g. via website, social media or other communication channels usually used by my NCP.

*(Please note that a publication of your data will **not** be possible if this box is not ticked.)*

I agree that the filled-in template should be sent via e-mail to NCP offices in other countries so that they may circulate my offer among their national stakeholders.

## **Instructions**

1. *Fill in the form if you are*
  - a. *looking to join a consortium for a call in Horizon Europe Cluster 4 or one of the associated Joint Undertakings and would like to offer your organisation's expertise*
  - OR
  - b. *looking for a partner with specific expertise to join your consortium for a call in Horizon Europe Cluster 4 or one of the associated Joint Undertakings.*
2. *Check any or all of the boxes under "Declaration" so that we know how you would like us to distribute your offer.*
3. *E-mail the filled-in template to the Cluster 4 NCP office in your country\* to have it published on our website and/or distributed to our NCP colleagues in other countries*

\* You can find the contact details of your digital NCP on our website: <https://www.ideal-ist.eu/representatives>. You can also find all officially nominated Cluster 4 NCPs on the Funding and Tenders Portal and use the filter function to find your country's NCP: [List of Cluster 4 NCPs on the Funding & Tenders Portal](#).