







GreenDIGIT

GreenDIGIT ECML-PKDD Discovery Challenge 2026

*Predictive Modelling for Sustainable
Digital Research Infrastructures*

www.greendigit-project.eu



-  www.greendigit-project.eu
-  [GreenDIGIT-EU](https://twitter.com/GreenDIGIT-EU)
-  [GreenDIGIT-project](https://www.youtube.com/GreenDIGIT-project)
-  [greendigit-eu](https://www.linkedin.com/company/greendigit-eu)



This project has received funding from the European Union's HE research and innovation programme under the grant agreement No. 101131207

GreenDIGIT ECML-PKDD Discovery Challenge 2026

"Predictive Modelling for Sustainable Digital Research Infrastructures"



Why Participate?

- Real production data from Grid/Cloud/Network Ris
- Free SoBigData VRE compute resources
- Direct contribution to EU Horizon Europe research
- Open to academic, industry & non-profit teams
- Featured in SoBigData Magazine

About the Challenge:

GreenDIGIT addresses the need to reduce the environmental impact of digital research infrastructures (RIs) through data-driven approaches for monitoring, analysing, and improving sustainability performance. As digital infrastructures account for a growing share of global greenhouse gas emissions, the project takes an infrastructure-level view covering energy consumption, carbon footprint, and other sustainability-relevant dimensions.

The dataset comes from real High Throughput Computing (HTC) sites, managed through the DIRAC workload manager, which coordinates scientific job dispatch across distributed compute resources. The environmental cost of that dispatch varies significantly over time, making accurate forecasting of energy consumption and carbon footprint directly actionable — better predictions enable DIRAC to shift workloads toward lower-emission windows and sites. Participants will model operational time-series data collected by, GreenDIGIT's metric publication system, covering job throughput, energy (Wh), and carbon footprint (gCO₂e) at 15-minute resolution across 3 anonymised production HTC sites.

Awards & Recognition

- Interview in SoBigData Magazine dedicated page
- Formal recognition & challenge blog post
- Top teams invited to explore further collaboration or a joint publication
- Winners will also receive sustainable technology prizes
- Certificate of participation for all valid submissions

How to Register & Submit

1	Fill in the Registration Form at gd2.lab.uvalight.net
2	Register on SoBigData platform — VRE access granted from 1 May 2026
3	Download dataset and develop your predictive model
4	Submit complete code + 4-page report by 1 June 2026 to PKDDchallenge@SoBigData.eu

Timeline

Event	Date
Challenge opens	15 April 2026
Registration closes	30 April 2026
VRE access granted	1 May 2026
Submission deadline	1 June 2026
Results published	15 June 2026
Camera-ready deadline	15 July 2026

Organisers

Gonçalo Ferreira <i>University of Amsterdam</i>	Catalin Condurache <i>EGI Foundation</i>
Adnan Tahir <i>University of Amsterdam</i>	Kostas Chounos <i>University of Thessaly</i>
Shashikant Ilager <i>University of Amsterdam</i>	

Register: | <https://greendigit-project.eu/> | Contact: PKDDchallenge@SoBigData.eu

Funded by EU Horizon Europe — GreenDIGIT grant No. 101131207