EnerTEF

The Future of Energy through AI Testing and Experimentation

Slovenia
TEF TSO Node
For transmission systems operators

Germany
TEF DSO Node
For distribution systems operators

Greece
TEF BUILD Node
For energy efficiency in buildings

Greece
TEF IND Satellite
For energy efficient industrial processes

France
TEF H2 Satellite
For hydrogen systems

Luxemburg · Italy · Netherlands
TEF EV Node
For smart electric vehicle charging & storage in energy communities

Greece · Sweden · Portugal
TEF RES Node
For renewable energy systems operators

Spain
TEF DHN Satellite
For district heating networks

About

EnerTEF is driving the future of AI in Europe's energy sector. By building a powerful network of testing and experimentation facilities, we empower innovators to develop, validate, and deploy cutting-edge AI solutions.

Bringing together leading energy companies, regulatory authorities and innovation experts, we accelerate market adoption, fueling a smarter, more efficient, and sustainable energy future.

Objectives

01 Create a Reference TEF Architecture

Establish an open, federated, and interoperable AI testing environment accessible for all European energy players.

02 Co-design the AI Services Catalogue

Collaboratively develop an AI services catalogue and clear testing scenarios, involving businesses, consumers, and AI providers.

03 Ensure AI Trustworthiness and Ethical Compliance

Develop guidelines ensuring AI-powered services fully align with the EU Artificial Intelligence Act for trustworthy solutions.

04 Enable CEEDS-compliant Data Exchange

Use existing energy infrastructures and industry expertise to create secure, interoperable data-sharing frameworks

05 Access the Federated EnerTEF Marketplace

Create a single-point marketplace for simple access and management of energy resources, data sets, AI models, and tools.

06 Integrate EU Energy AI Nodes and Satellites

Implement and manage a common European testing and experimentation platform, offering realistic regulatory test environments.

07 Involve SMEs in AI Services Development

Run practical experiments in real-world or close-to-real-world environments to showcase and refine AI energy solutions.

08 Ensure Long-term Self-Sustainability and Expansion

Build sustainable business models, attract investment, and partner with innovation hubs to ensure ongoing success of EnerTEF.

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EnerTEF Project

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