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SIXTH EDITION

DIGITAL ENERGY CHALLENGE

CALL FOR PROJECTS 2026

Accelerating Digital Innovation in the Energy Sector in Africa

#WorldInCommon

DIGITAL ENERGY CHALLENGE

CALL FOR PROJECTS 2026

SUPPORTING INNOVATIVE SMES AND ENERGY DISTRIBUTORS

Digital technologies are transforming energy systems: enabling smarter grids, accelerating renewable integration, and expanding access to electricity. The Digital Energy Challenge supports innovative SMEs developing digital and AI-driven solutions to address key challenges faced by energy utilities across Africa.

Implemented by Agence française de développement (AFD) and financed by the European Union under its Global Gateway strategy, the programme is also supported through the Digital and Green Innovation Action, a Team Europe Initiative backed by the Digital for Development (D4D) Hub, and the 2026 edition sees additional support from the UK government via the Transforming Energy Access platform.

2026 EDITION: KEY FEATURES

- A strong focus on innovative SMEs
- An Africa-wide impact with a dedicated Partnership category for a project in Nigeria, one of Africa's largest energy markets
- A utility-driven approach, in partnership with Abuja Electricity Distribution Company (AEDC)
- Two complementary tracks:
 - Tech Accelerator (scaling innovation)
 - Partnership (co-developing solutions with a utility)

APPLICATION PERIOD

20th April to 17th June 2026

FROM INNOVATION TO DEPLOYMENT

Since its launch in 2021, the Digital Energy Challenge has supported the development of innovative solutions across the African energy sector by accompanying a total of 47 projects.

In 2026, the Challenge evolves into a **utility-driven innovation sandbox**, enabling SMEs to:

- Test solutions using **real utility data**
- Validate their technologies in **operational conditions**
- Generate evidence to support **scaling and replication**

By bridging innovation and real-world deployment, the Challenge contributes to improving energy access, strengthening system performance, and accelerating the energy transition.

A PROGRAMME SUPPORTED BY KEY PARTNERS

Transforming Energy Access (TEA) is a research and innovation platform supporting technologies, business models, and skills needed for an inclusive clean energy transition.

As a partner of the 2026 Challenge, TEA contributes to:

- Supporting innovation aligned with energy access objectives
- Strengthening R&D and deployment capacity
- Providing financial support through UK aid



Transforming
Energy
Access



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Digital Energy Challenge

TECH ACCELERATOR

Digital Energy Challenge

PARTNERSHIP

ARE YOU AN INNOVATIVE SME

LOOKING TO SCALE UP YOUR DIGITAL INNOVATION OR AI-DRIVEN PROJECT IN THE ENERGY SECTOR IN AFRICA?

Does your solution contribute to improving grid planning and operations, integrating distributed energy resources, or strengthening data and system performance? After checking the [eligibility criteria](#), download the application pack and apply online!

WHO CAN APPLY?

The Challenge is open to **innovative SMEs worldwide**, with priority given to **African companies**.

Eligible SMEs must:

- Employ fewer than 250 people
- Generate less than €50M in annual turnover
- Demonstrate a strong **innovation and R&D capacity**
- Have a solution beyond the early ideation stage

FUNDING AND SUPPORT

The Digital Energy Challenge provides both **financial and technical support**:

Tech Accelerator category

- Up to €150,000 per project
- 3 to 4 SMEs selected

Partnership category

- Up to €400,000 for the winning project
- Direct collaboration with the Nigerian utility AEDC

All awardees benefit from:

- Tailored technical, strategic and operational expert support
- Participation in a bootcamp and networking opportunities
- Visibility and engagement with international partners and stakeholders

PROJECT ELIGIBILITY CRITERIA

Projects must:

- **Be digital** (software, data, telecom, AI, etc.)
- **Be innovative** and include a clear **R&D dimension**
- Address the Challenge's priority themes
- Be ready for **deployment within 12–18 months**
- Demonstrate scalability and impact potential

HOW TO APPLY?

1. Choose your category: Tech Accelerator or Partnership
2. Download the Application Pack for your chosen category: [Tech Accelerator](#) or [Partnership](#)
3. Watch the [information webinar](#)
4. Prepare your proposal
5. Submit your application online: [Tech Accelerator](#) or [Partnership](#)



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A CHALLENGE ROOTED IN REAL NEEDS

FOCUS COUNTRY 2026: NIGERIA

Nigeria represents one of the most dynamic and complex energy markets in Africa, with significant challenges in:

- Grid performance and reliability
- Demand forecasting and investment planning
- Integration of distributed energy solutions

The 2026 Challenge focuses on supporting solutions that can address these needs at scale. While the Partnership category project will be implemented in Nigeria in collaboration with AEDC, the Tech Accelerator category supports projects that can be deployed across Nigeria or other African countries.

CHALLENGE THEMES

The 2026 edition focuses on three priority areas key for AEDC and other African utilities:

1. GRID PLANNING AND INVESTMENT OPTIMIZATION

- Advanced planning tools
- Load forecasting and scenario modelling
- Investment prioritisation and optimisation

2. MICROGRID AND DER MANAGEMENT PLATFORM

- Microgrid control systems
- Integration of distributed energy resources (DER)
- Virtual Power Plant (VPP) solutions

3. DATA PLATFORM AND INTEGRATED NETWORK VISIBILITY

- Network monitoring and outage detection
- Data integration and interoperability
- Operational dashboards and analytics

These themes reflect critical needs in improving **efficiency, resilience, and sustainability of energy systems.**

DIGITAL ENERGY CHALLENGE PARTNERSHIP

The Abuja Electricity Distribution Company (AEDC) distributes electricity across Abuja and surrounding states, operating a complex and evolving network. Like many utilities in the region, AEDC faces challenges in **network visibility, planning, integration of distributed energy resources, and operational efficiency.**

As part of its digital transformation, AEDC is leveraging advanced digital and AI-driven solutions to:

- Improve **grid planning and investment optimisation**
- Integrate **mini-grids and distributed energy resources (DER)**
- Strengthen **network monitoring, outage detection, and data management**

Through the Challenge, AEDC provides access to **real operational data and use cases**, enabling the winning SME (Partnership category) to:

- Test and validate solutions in real conditions
- Co-develop innovations tailored to operational needs
- Improve **utility performance**





WORDS FROM A CHALLENGE WINNER

Patrick AGESE – CEO, PAM AFRICA
Challenge winner 2023 & 2025

2025 Project: Using AI to improve grid performance and make electricity more affordable

« Our solution uses AI-driven demand response to reduce losses, optimise operations and make electricity more affordable for end users. The Challenge has allowed us to adapt this approach to utility needs and deploy it in real conditions, demonstrating how data-driven solutions can improve performance and expand access to reliable energy at scale. »

TIMELINE

— **20th April 2026**
Call for Projects open

— **17th June 2026 (23:59 CET)**
Application deadline

— **Autumn 2026**
Selection process

— **December 2026**
Bootcamp & awards

TWO WAYS TO PARTICIPATE

TECH ACCELERATOR CATEGORY

Designed for SMEs developing innovative solutions that can be scaled across African markets.

Projects:

- Focus on one of the Challenge themes
- Do not require direct integration with AEDC
- Must demonstrate strong replication potential

PARTNERSHIP CATEGORY

Designed for one SME to collaborate directly with AEDC on a flagship project in Nigeria.

Project:

- Addresses specific operational needs defined by AEDC
- Is tested using real data and in real conditions
- Aims to deliver measurable impact on utility performance potential

ELIGIBLE COUNTRIES

Projects in the Tech Accelerator category can be implemented across a wide range of African countries.

Algeria, Angola, Benin, Botswana, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Republic of Congo, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.

CONTACT US

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Toward a world in common

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Agence française de développement (AFD) helps advance France's policy on sustainable investment and international solidarity. Through its public sector and NGO financing operations, research and publications (Éditions AFD), sustainable development training programs (AFD Group Campus) and awareness-raising activities in France, AFD finances, supports and drives the transition to a fairer, more resilient world.

Alongside our partners, we provide sustainable solutions for – and with – communities. Our teams are working on over 2,700 projects in the field, in over 115 countries, including France's overseas departments and territories, to support projects for the climate, biodiversity, peace, gender equality and global health. Together with Proparco and Expertise France, AFD supports the commitment of France and the French people to achieve the Sustainable Development Goals (SDGs). Working by your side, toward a world in common.



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