Digital Energy Challenge
TECH ACCELERATOR

Digital Energy Challenge
PARTNERSHIP

DIGITAL ENERGY CHALLENGE 2026

Information webinar for potential applicants

5th May 2026

Global Gateway

Co-funded by the European Union

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Transforming Energy Access

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DIGITAL & GREEN INNOVATION ACTION

Digital Energy

Webinar participation guidelines

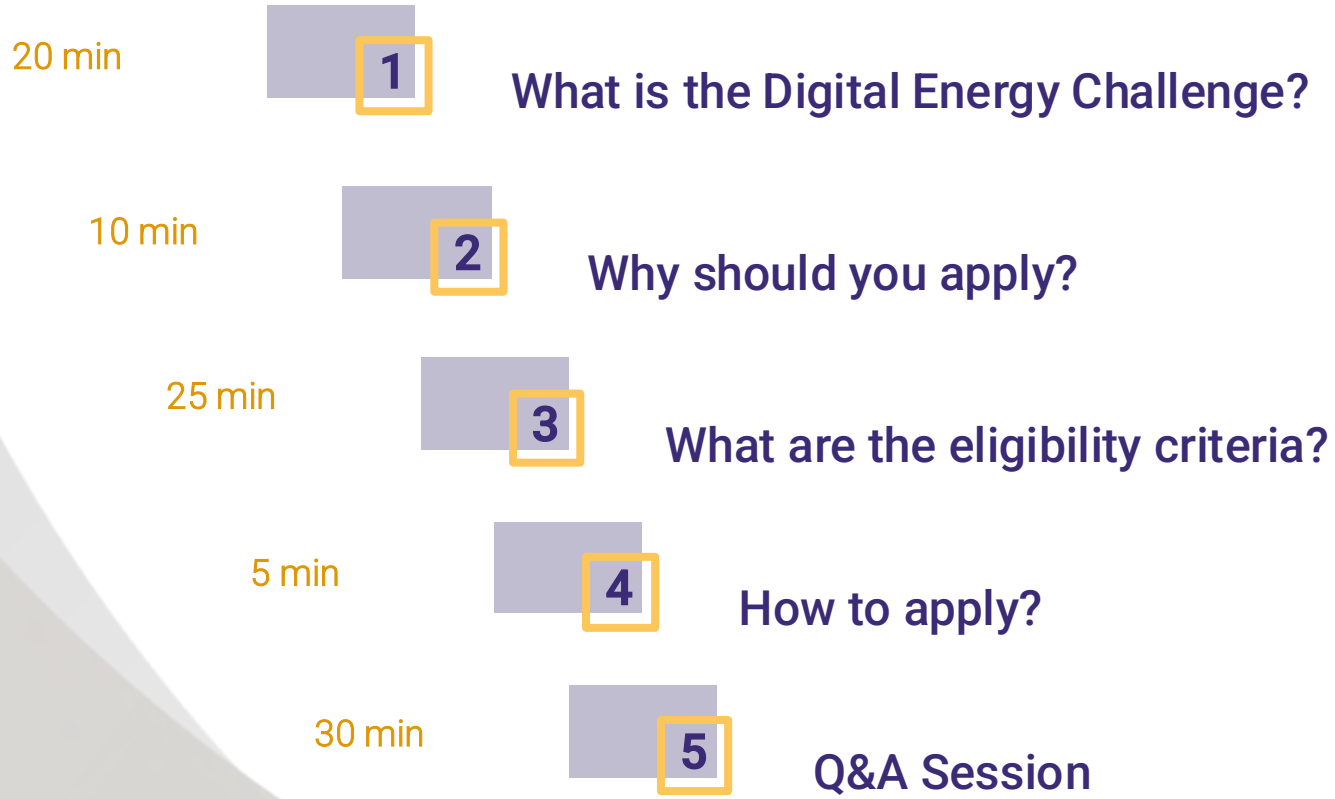
- Please enter your **First Name, Last Name and the full name of your Organisation** in your webinar participant ID

- **Your microphone is muted** by default, please do not activate it

- **Please write your questions in the Q&A section of the chat**

- **This webinar is recorded** and will be accessible **on the Digital Energy Challenge website**

Webinar agenda



The Digital Energy programme and Challenge

The Digital Energy programme

The Digital Energy programme is funded by the European Union and implemented by Agence française de développement (AFD). It consists of 4 components:

1. **Digitalisation of utilities**
2. **Financing innovation (Digital Energy Challenge)**
3. **Creation of a Digital Energy Community**
4. **Seed financing for innovative solutions for energy access companies**

The Digital Energy Challenge

The Digital Energy programme is holding an **annual Call for Projects**, also called **Digital Energy Challenge,** which:

- **takes place every year since 2021**, the 2026 edition being the 6th occurrence
- **has supported 47 projects across Africa**, led by start-ups, technology providers and energy operators, **integrating digital technologies to concrete use cases** such as energy planning, mini-grids, renewable energy integration and rural electrification.

This year, the Transforming Energy Access (TEA) initiative, an international research and innovation platform supporting the clean energy transition, **joins the Challenge as a partner**, providing financial support with UK aid from the UK government.

The Digital Energy Challenge rewards innovative and digital projects in Africa

The Challenge is a major component of the Digital Energy programme, aiming to:

- Serve as a **utility-tailored R&D and innovation sandbox** enabling collaboration between utilities and SMEs
- **Strengthen local innovation** capacity
- Generate scalable models that can **benefit the Nigerian power sector and the wider African energy market**
- **Increase access to clean energy**

The Challenge consists of **one Call for Projects per year with two categories:**

Digital Energy Challenge
TECH ACCELERATOR

Up to € 150K each
for 3-4 innovative SMEs
Including expert support[1]

Supporting high-potential digital innovation projects from selected countries in Africa[2]

Digital Energy Challenge
PARTNERSHIP

Up to € 400K
for 1 Innovative SME
Including expert support

Supporting a flagship collaborative project in Nigeria, led by the Abuja Electricity Distribution Company (AEDC) in partnership with an innovative SME

Notes: 1. Expert support for Tech Accelerator winners will be allocated at the discretion of the selection committee ;2. Eligible countries are: Algeria, Angola, Benin, Botswana, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of Congo (DRC), Congo Republic, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, The Gambia, Ghana, Guinea, GuineaBissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe

The Digital Energy Challenge Team

Financing

European Union

Global Gateway

FCDO (for Tech Accelerator only)

UKaid Transforming Energy Access

Pedro Almeida

Coordination

Cyril Renault

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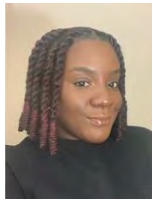
Digital Energy management



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Organisation of the Digital Energy Challenge and supervision of the Tech Accelerator call for projects

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Communication around the Challenge

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Supervision of the Partnership call for projects and fund management

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Coordination with Transforming Energy Access

Andie Sevelsted

Angus Vantoch-Wood

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Note: While this slide highlights the core team, the Digital Energy Challenge involves broader cross-functional members.

A track record of success: from 2021 to 2025

Watch the 2025 Challenge video!

2025

5 **projects** awarded:
- **4 start-ups**
- **1 partnership** between utilities & technology providers

Call for Projects open from March to May 2025
Award ceremony in November 2025 in **Dakar**

225 **applications** in 41 countries & **15 pre-selected projects**

2024

11 **projects** awarded:
- **7 start-ups**
- **4 partnerships** between utilities & technology providers

Call for Projects open from March to May 2024
Award ceremony in November 2024 in **Brussels**

182 **applications** in 38 countries & **21 pre-selected projects**

2023

9 **projects** awarded:
- **5 start-ups**
- **4 partnerships** between utilities & technology providers

Call for Projects open from March to June 2023
Award ceremony in November 2023 in **Paris**

194 **applications** in 30 countries & **20 pre-selected projects**

2022

10 **projects** awarded:
- **6 start-ups**
- **4 partnerships** between utilities & technology providers

Call for Projects open from March to June 2022
Award ceremony in November 2022 in **Marseille** *during the Emerging Valley event*

129 **applications** in 36 countries & **25 pre-selected projects**

2021

8 **projects** awarded:
- **5 start-ups**
- **3 partnerships** between utilities & technology providers

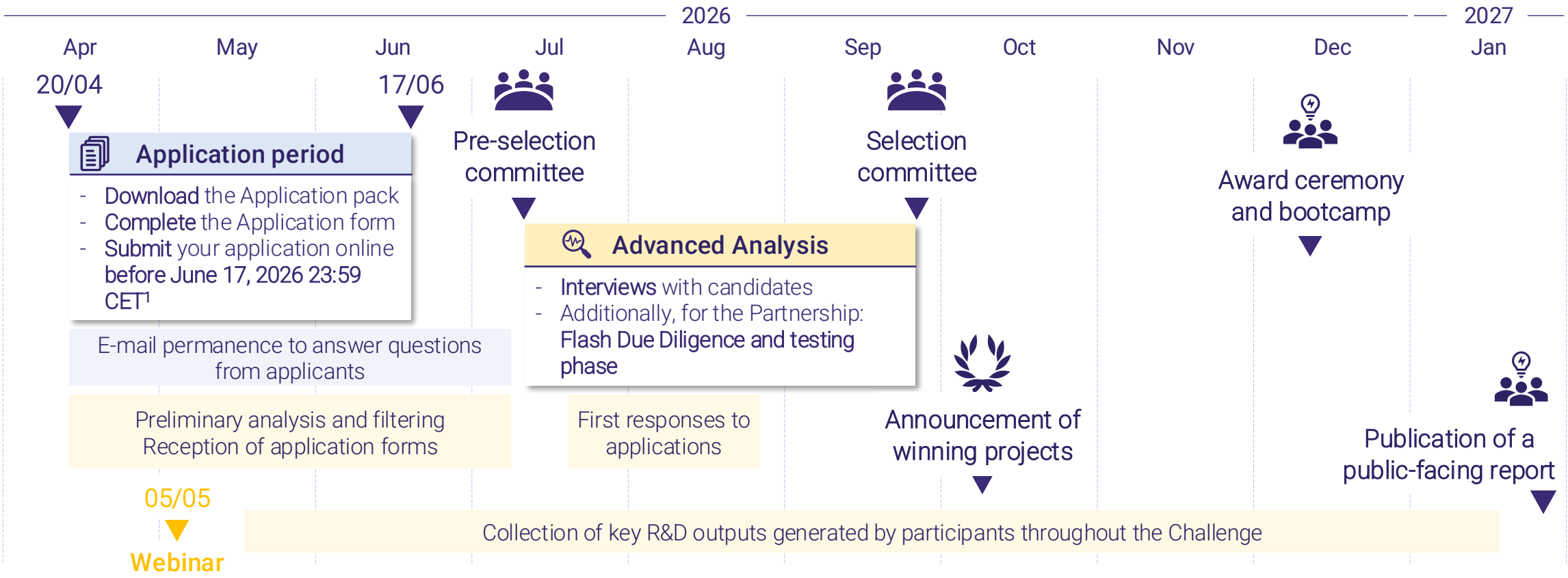
Call for Projects open from April to June 2021
Award ceremony in November 2021 in **Paris**

200 **applications** in 34 countries & **21 pre-selected projects**

A track record of success: from 2021 to 2025

Past winners

The sixth Call for Projects is now open, from April 20th until June 17th, 2026



Notes: 1. Full information is available in the Application Journey document in the Application Pack

Awardees will benefit from a financial reward, expert support and increased visibility

Selected projects will benefit from:

Financial support to implement the solutions

Digital Energy Challenge **TECH ACCELERATOR**	Digital Energy Challenge **PARTNERSHIP**
Up to € 150K *per project* *Including expert support*[1]	**Up to € 400K** *for one project* *Including expert support*

Expert support for a duration of up to **18 months**

A **common marketplace-like bootcamp** to create **synergies between awardees, top applicants and utilities** through workshops and networking sessions

Increased visibility within the Digital Energy ecosystem through the Digital Energy Community and social media communication

Expected number of awarded projects:

Tech Accelerator: 3 to 4 projects
Partnership: 1 project

Applicants will benefit from the Challenge by potentially participating in:

Meetings | Bootcamp | Workshops | E-events

Notes: 1. Expert support for Tech Accelerator winners will be allocated at the discretion of the selection committee

Applicants and awardees will receive close guidance and support

Applicants are granted access to many resources to **ease the application process:**

- The **Application journey document**, a step-by-step guide to navigate the process
- An online tool to generate **Application forms**
- A **FAQ** page on the website

Constraints for awardees have been **minimised:**

- Assistance provided to identify an **expert support provider** if required
- **Periodic reporting template** will be provided
- **Grant agreement template** provided for all candidates
- **Maximum 18-month** contract
- **Funding** granted through advanced instalments

The Digital Energy Challenge provides early-stage financing for innovative SMEs

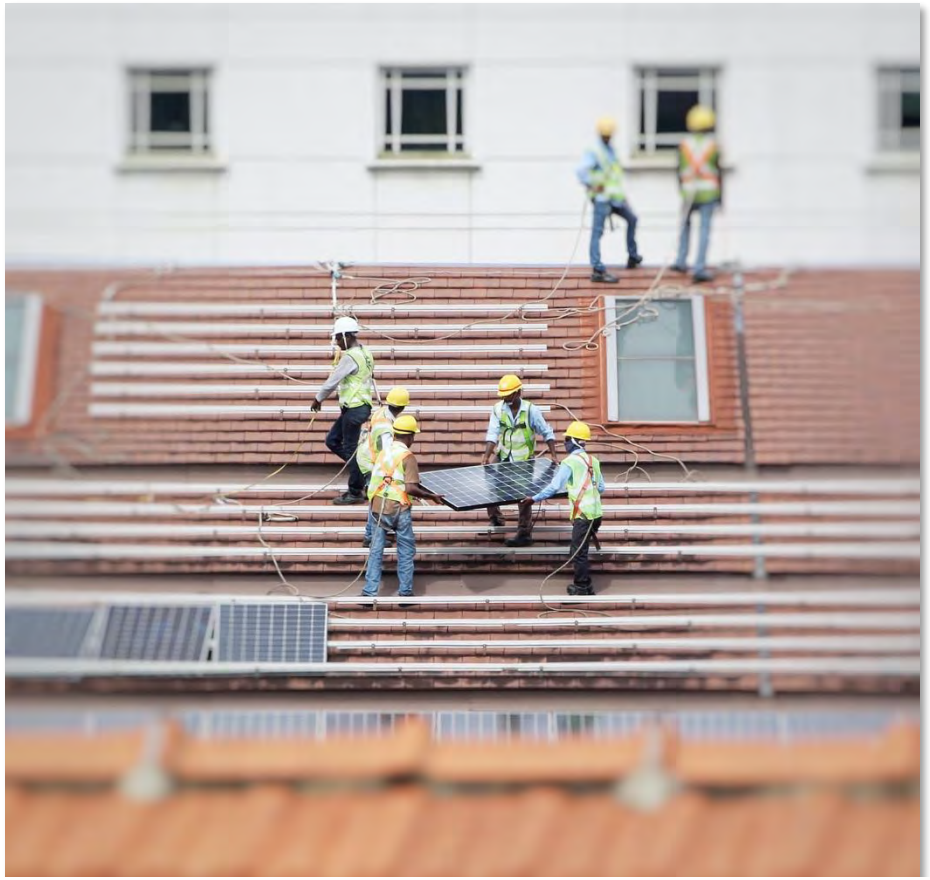
For both Challenge categories, eligible companies are innovative SMEs, which meet the following characteristics:

- Between 1 and 249 full-time employees
- < € 50M annual turnover or < € 43M balance sheet
- Independent[1]
- Research representing 20% of expenses[1]

➔ Full information on eligibility criteria are available in the Call for Project Rules in the Application Pack

NGOs can apply provided that:

- *Either the applicant is a 'branch' of the NGO which is set up as a company*
- *Or the activity for which the NGO applies is planned to spin off as a company in the coming years and has a dedicated team and business plan*



Notes: 1. Meaning that at least 50% of its capital must be continuously held by natural persons, associations or foundations recognised as being of public interest with a scientific purpose, … ; 2. Research expenses include depreciation allowances on fixed assets created or acquired new and directly allocated to scientific and technical research operations, including the development of prototypes or pilot installations, personnel expenses related to researchers and research technicians directly and exclusively assigned to these operations, …

The Digital Energy Challenge finances digital, innovative projects including a R&D dimension

For both Challenge categories, eligible projects meet the following characteristics:

- Be digital
- Be innovative
- Address the 2026 thematic priorities
- Include a clear R&D dimension
- Be beyond ideation stage (already piloted)
- Be implementable within 12 months, or has established a clear retro planning to market entry
- Do not depend on regulatory changes

For the Partnership specifically, eligible projects must in addition

- Take place in **Nigeria**
- Be based on a **collaborative approach with AEDC**
- Provide a **detailed financing plan s**tating the level of funding needed, the co-financing structure, the in-kind contributions, etc.

For the Digital Energy Tech Accelerator specifically, eligible projects must take place in one of the following African countries:

Algeria, Angola, Benin, Botswana, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of Congo (DRC), Congo Republic, 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, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.

Rewarded projects must respond to the Challenge's thematic priorities

Innovative SMEs can apply under one of the three products[1] defined in collaboration with AEDC:

Product 1 - Grid Planning and Investment Optimization

Item 1: Implementation of advanced planning tools
Item 2: Optimization of network investments

Product 2 - Microgrid and DER Management Platform

Item 3: Deployment of a Microgrid Controller with a VPP module

Product 3 - Data Platform and Integrated Network Visibility

Item 4: Improve network operation (network visibility and outage detection)

→ **Partnership** applicants are required to cover one or several products
→ **Tech Accelerator** project must cover one product only

Note: 1. Products are divided into items for clarity purposes, but covering a product requires addressing all its items, either individually or via an integrated solution.

Tech Accelerator's prioritisation will mainly consider digital, R&D and innovation aspects

Digital Energy Challenge
TECH ACCELERATOR

Digital, R&D and innovation	• **Innovative aspects** of the project (technology, new use, business model, payment method…) • **Digital technology reliance** of the project • **Technology Readiness Level**
Impact and benefits	• Project **replicability/scalability** • Addressing barriers not addressed today • Positive **externalities** (jobs creation, CO_2 emissions, women's empowerment, education, environment, …)
Path to success and risk profile	• Sound economics • Team of **experts** • **Risk mitigation** plan • ESG risks

Final score

➔ **Emphasis will be made on the first criterion "Digital, R&D and innovation".**

Partnership's prioritisation will mainly consider risk levels and financial aspects

Digital, R&D and innovation	• **Innovative aspects** of the project (technology, new use, business model, payment method…) • **Digital technology reliance** of the project • **Technology Readiness Level**
Impact and benefits	• Project **replicability/scalability** • Addressing barriers not addressed today • Positive **externalities** (jobs creation, CO_2 emissions, women's empowerment, education, environment, …)
Path to success for solution's integration and risk profile	• Relevance for the utility • Training and a transfer of expertise to the utility • Risk mitigation plan • ESG risks
Financial strengths and support needs	• Sound economics • Business model robustness • Team of **experts**

Final score

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➔ **Preselection will place emphasis on the third and fourth criteria "Path to success for solution's integration and risk profile" and "Financial strengths and support needs".**

How to apply to the Digital Energy Challenge?

1. **Visit the Challenge website:**
   → French version
   → English version

2. **Download the Application Pack for the category you chose**: Tech Accelerator or Partnership

3. **Fill out the Application Form online**, including uploading required documents

4. **Generate a PDF version of your application form**

5. **Submit your full application on the Challenge platform before 17th June 2026 23:59 CET:**
   → Tech Accelerator (French version, English version)
   → Partnership (French version, English version)

Don’t hesitate to share information about the Challenge with your network!

- Even if you do not intend to apply, there may be **innovative SMEs in your ecosystem** that fit into the Challenge’s objectives and criteria.
- We would welcome your support to **promote** the Challenge!
- We can provide you with useful **resources** that you can in turn share directly with your contacts:

Challenge’s web page (French version, English version)

The 2026 Challenge Brochure

Social media posts to share with your network (LinkedIn)

Q&A session

Let’s take a moment to answer the questions raised during this presentation in the Q&A section of the webinar

Are there any other point you would need us to clarify?

Thank you for your attention!

If you have any questions **regarding the Challenge**, please visit:

- *The FAQ section on the Challenge webpage (updated regularly)*

If you have any further questions **regarding the Challenge**, please contact us at:

- *contact@afddigitalenergychallenge.com*

For general questions related to other components of the **Digital Energy**, please write to:

- *def@afd.fr*

Partnership applicants must meet AEDC's specific needs

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Mission
AEDC's mission is to provide reliable and efficient electricity distribution services to customers across Nigeria (more specifically to the Federal Capital Territory Abuja, parts of Kogi and the Nasarawa States), while improving service quality, technical performance, and customer satisfaction.

➔ **AEDC's core activities encompass electricity distribution and retail**, including operating and maintaining the electricity distribution network, installing and managing meter, billing, and managing customer service.

AEDC's specific needs

AEDC aims to accelerate the digital transformation of its power network to improve planning, operations, and the integration of new energy resources, leveraging advanced data-driven and AI-based solutions.

To this end, it has defined specific needs, which are more broadly detailed in the following slides. They are provided to help Partnership applicants design solutions addressing all products that will ultimately be integrated into AEDC's ecosystem if awarded the Partnership.

AEDC's specific needs only concern Partnership applicants. Although the Challenge's products cover Tech Accelerator and Partnership, **Tech Accelerator applicants are not required to comply with AEDC specifications**, as they may propose products tailored to the needs of other African utilities, or even not tailored to a specific utility.

AEDC’s specific needs - Product 1: Grid Planning and Investment Optimization (1/2)

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Grid Planning and Investment Optimization

Item 1. Implementation of advanced planning tools

Integrated planning platform leveraging a unified PostGIS database and a network digital twin to support load forecasting, constraint analysis, and investment optimization including:

- **Item 1.1 – Data & Load Management module (PostGIS)**
  - Integration of data within the unified PostGIS database (assets, topology, measurements);
  - Bottom-up load aggregation (customer → transformer → feeder);
  - Calculation and storage of load profiles;
  - Load forecasting (short, medium, long term);
  - Spatial analysis and mapping of growth area.

- **Item 1.2 – Simulation and planning Layer (Network Digital Twin)**
  - Electrical network modelling (topology, assets);
  - Power flow simulation (load flow);
  - Constraint analysis (overload, voltage, capacity);
  - Scenario simulation (load growth, new connections, DER);
  - Investment needs assessment and technical solution evaluation.

AEDC’s specific needs - Product 1: Grid Planning and Investment Optimization (2/2)

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Grid Planning and Investment Optimization

Item 2. Investment optimization under budget constraints

The project aims to implement a light investment optimization module leveraging a unified PostGIS database and a network digital twin to prioritize network investments based on cost–impact criteria under budget constraint including:

- **Network Digital Twin:** Identification of network constraints (overload, voltage, capacity).
- **PostGIS**:
  - Calculation of indicators (load, losses, impacted customers);
  - Generation of investment options (reinforcement, replacement, extension) based on identified constraints;
  - Cost Calculation (CAPEX / OPEX);
  - Calculation of a multi-criteria score (cost vs impact) for each project;
  - Ranking of investments by order of priority;
  - Selection of projects based on available budget

AEDC’s specific needs - Product 2: Microgrid and DER Management Platform

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Microgrid and DER Management Platform

Item 3. Microgrid Controller with VPP module

The project aims to deploy an integrated Microgrid Controller and Virtual Power Plant (VPP) platform to supervise and control mini-grids, optimize the integration of distributed PV and storage, and ensure reliable operation across interconnected and islanded modes, including:

- **Item 3.1 – Microgrid Controller**
  - Mini-grid supervision;
  - Monitoring of electrical data from the mini-grid;
  - Monitoring of generation and storage assets;
  - Monitoring and control of points of interconnection;
  - Exchange of operational setpoints;
  - Management of interconnected and islanded modes;
  - Management of transitions (voltage stability).

- **Item 3.2 – Virtual Power Plant (VPP) module**
  - Integration of distributed PV systems and batteries;
  - Estimation of available power;
  - Short-term production forecasting (24 hours);
  - Visualization of aggregated generation, forecasted production, demand, and operating margins;
  - Exchange of operational data with PostGIS (network, load, generation).

AEDC’s specific needs - Product 3: Data Platform and Integrated Network Visibility

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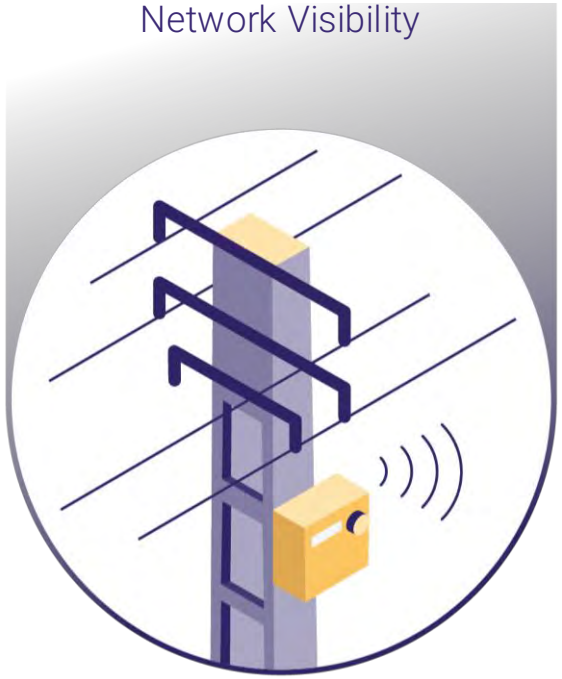
Data Platform and Integrated Network Visibility



Item 4. Improve network operations

The project aims to leverage a unified PostGIS database to improve network visibility, outage detection, and loss analysis, including:

- Use of a limited dataset (selected feeders and transformers) for pilot implementation;
- Integration of key data sources within PostGIS (assets, measurements, metering sample);
- Detection of outages and anomalies using simple rule-based analytics (loss of load, abnormal values);
- Execution of transformer-level energy balance on selected assets;
- Use of existing GIS tools (QGIS / ArcGIS) for visualization;
- Development of operational dashboards focused on prioritized field intervention lists (faults, overload, suspected losses).