

Digital Energy
Challenge
START-UPS

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Challenge
PARTNERSHIP




DIGITAL ENERGY CHALLENGE 2025

Information webinar for potential applicants

1st April 2025



A little 'housekeeping' first

-  Please enter your First Name, Last Name as well as the full name of your Organisation in your webinar participant ID
-  Your microphone is muted by default, please do not activate it and write your questions directly in the chat
-  This webinar is recorded and will be accessible on the Digital Energy Challenge website



Webinar agenda

20 min

1

What is the Digital Energy Challenge?

20 min

2

What are the eligibility criteria?

15 min

3

Why should you apply?

5 min

4

How to apply?

30 min

5

Q&A Session

The Digital Energy at a glance



The Digital Energy is a programme funded by the European Union (EU) and implemented by Agence française de développement (AFD)



Through the financing of innovative digital projects and products, the Digital Energy aims to:

- Support the integration of renewable energy sources into the grid
- Increase energy access
- Improve the performance of power utilities and reduce technical and commercial losses

1 - Digitalisation of utilities

2 - Financing innovation

3 - Creation of a Digital Energy Community

4 - Seed financing for innovative solutions for energy access companies

The Digital Energy programme is holding an annual Call for Projects
The 2025 Edition is the 5th occurrence of the Digital Energy Challenge

The Digital Energy Challenge Team

Financing

European Union



ADEME



Coordination



Cyril Renault



Cédric Joseph-Julien



Digital Energy management



Nathan Grenier Bellegarde



Fabrice Creste

Organisation of the Digital Energy Challenge & supervision of the Start-ups call for projects



Khalil Ababou



Olivia Torres



Laurence Hautrive



Supervision of the Partnership call for projects and fund management



Jérôme Gaonach



Jorge Rola



Digital Energy Community management



Sophie Biot



Chloé Chéry

Communication around the Challenge



Victoria Marshall

The Digital Energy Challenge rewards innovative and digital projects in Africa

The Challenge is a **major component** of the Digital Energy programme



Promote digital innovations/business models that:

- Improve energy utilities' performance and quality
- Increase energy access



1 Call for Projects per year:

- 1 category for Start-ups
- 1 category for Innovative technology/service providers

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Up to € 150K each

for 3-4 Start-ups

Including technical assistance

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Up to € 500K

for 1 Innovative
technology/service provider
Including technical assistance



All of Africa, except Mali and Niger, for the 2025
Edition



As part of the Challenge, four successful Calls for Projects were organised in 2021, 2022, 2023 & 2024

2024

Watch the 2024 Challenge video!



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



As part of the Challenge, four successful Calls for Projects were organised in 2021, 2022, 2023 & 2024

Past winners



The fifth Call for Projects is now open for 2 months, from **March 10** until **May 16, 2025**

2025



Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

10/03



Application period

- Download the Application pack
- Complete the Application form and prepare the required documents
- Submit your application online before May 16, 2025 23:59 CET

16/05

First responses
to applications

E-mail permanence to answer
questions from applicants

Preliminary analysis and filtering
Reception of application forms

Advanced
Analysis
*Interviews with
candidates*

Pre selection
committee

Selection
committee



01/04
Webinars

Announcement
of winning
projects



Award
ceremony &
Bootcamp



The Digital Energy Challenge Start-ups provides pre-seed / ideation / early-stage financing for Start-ups

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Start-ups and NGOs* eligible:

- < 10 years of existence
- Between 1 and 99 full-time employees
- Local
- < € 1M annual turnover
- < € 1M raised in seed funding



Non eligible entities:

- Companies with more than 100 employees
- Companies which were founded more than 10 years ago (at the time of application)



**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*

This edition's themes emphasize digital energy solutions accelerating Africa's energy access and transition

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Start-ups can apply under one of the three themes:

Universal electricity
access and mini-grids



Efficient grid
management



Resilience and
decarbonation of
power systems

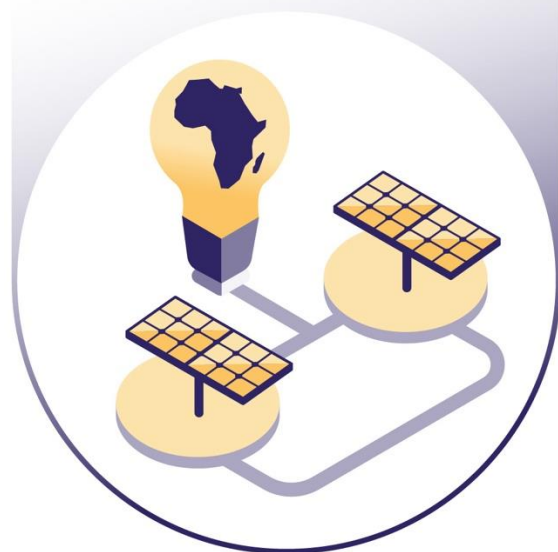


Theme 1: “Universal electricity access and mini-grids”

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Universal electricity
access and mini-grids



Digital innovations in the field of mini-grids to maximise their efficiency and impact:

- Energy management systems for the optimal use of clean and renewable energy
- Software and hardware technologies for an efficient integration of productive use assets
- Storage systems and algorithms minimising the use of fossil fuel generators
- Tools to facilitate interconnections with the main grid and with other mini-grids
- Systems and algorithms for building-up nanogrids
- Geospatial data analytics for power demand evaluation and/or credit risk assessment

Theme 2: "Efficient grid management"

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Digital services and products ensuring a proper operation of the power grid, with a focus on:

Efficient grid
management



- **Information availability and communication systems**

- Grid data sharing, IT/OT integration
- Grid mapping improvement (e.g. through satellite imagery, GIS database management and interfacing)
- Adoption of cloud computing and IoT-enabled systems

- **Streamlining Business-As-Usual grid operational management practices of the power system**

- Optimisation of the assets' useful life through improved maintenance (digitised and remote maintenance)
 - Infrastructure inspection via drones and other new technologies
 - Active monitoring of the assets' condition via smart sensors
 - Data analytics to improve periodic and predictive maintenance
- Implementation of Dynamic Line Rating (optimising thermal limits according to weather conditions) and analysis of the grid's risk profile and resilience to extreme events
- Simulation tools for enhanced training and planning
- Management and supervision of grid interconnections
- Digitisation of substations and feeders

- **Increased power availability and service quality**

- Technological developments allowing energy efficiency gains on transmission and distribution networks
 - Reduction of technical losses and improved grid knowledge through grid data analysis
 - Reduction of non-technical losses through metering (big) data analysis
- Improvement of power supply continuity
 - Reduction of the number and duration of faults
 - Load shedding minimisation
- Enhanced customer relationship via service digitisation

Theme 3: “Resilience and decarbonation of power systems”

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Resilience and
decarbonation of
power systems



Digital-based solutions enabling the development of a greener and more resilient power infrastructure (encompassing generation systems as well as the grid):

- **Additional renewables capacity:**

- Renewable power plant (including wind, solar, hydro, biogas) connection to the main grid
- Renewable energy production maximisation in hybridised systems
- Renewable energy production forecast (leveraging on meteorological data) and monitoring to minimise curtailment and avoid grid outages
- Other grid services needed for higher renewable energy penetration

- **Grid stability and flexibility:**

- Integration of ancillary resources and services, such as energy storage via batteries
- Grid balancing and capacity firming
- Virtual power lines
- Renewable energy procurement through peer-to-peer trading

- **Energy savings at the end-user level (Commercial & Industrial as well as households):**

- Demand-response management
- Smart metering solutions for improved consumption monitoring
- Tools and applications to encourage and incentivise the adoption of energy-efficient appliances

To be eligible, all projects must be local, innovative and based on digital technologies



Digital

The project must have telecom, computer or cloud-based technology as a central element:

- Either as the **core value proposition**
- Or at the **core of the business model**



Innovative

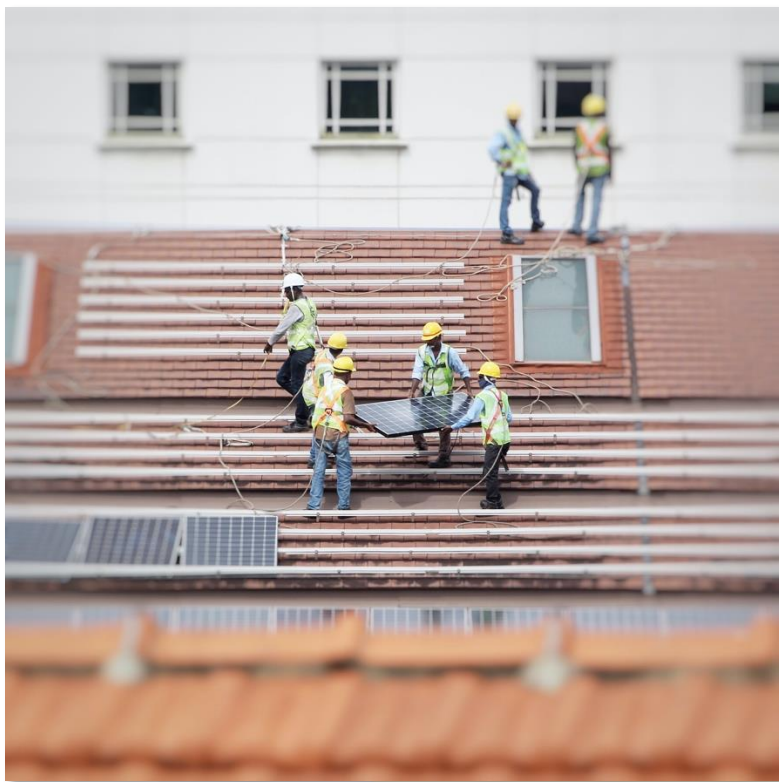
The project must be innovative:

- Either **intrinsically**
- Or in the sense that it **has not been deployed in a local context yet**



Local

- **Management** activities headquartered in the country where the activity/project takes place
- At least **one full-time employee** in this country



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The Challenge's prioritisation criteria take into account innovation, impact and risk levels



Digital & innovation

- Innovative aspects of the project (technology, new use, business model, payment method...)
- Digital technology reliance of the project
- Potential partnerships sealed
- Technology Readiness Level



Impact & benefits

- Project replicability/scalability
- Addressing barriers not addressed today
- Positive externalities (jobs creation, CO₂ emissions women empowerment, education, environment...)



Path to success & risk profile

- Sound economics
- Team of experts
- Risk mitigation plan
- Business resilience to crisis
- ESG risks

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Final score*

*The exact scoring methodology for the selection phase is detailed in the Call for Projects Rules, available in the application pack (to be downloaded via the Challenge website)

The Digital Energy Challenge Partnership rewards innovative technology/service providers



For the 2025 edition, innovative technology/service providers will apply to collaborate with Senelec (Senegal's utility) based on the selected 2025 theme: **"Identification and real-time census of connections"**.

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Technology/Service Providers* are eligible:

- Formally registered
- > 5 employees
- < € 50M of annual turnover
- < 15 years of existence
- Specific innovative solution already developed but to be tested
- Able to conduct the project in French
- Not necessarily local



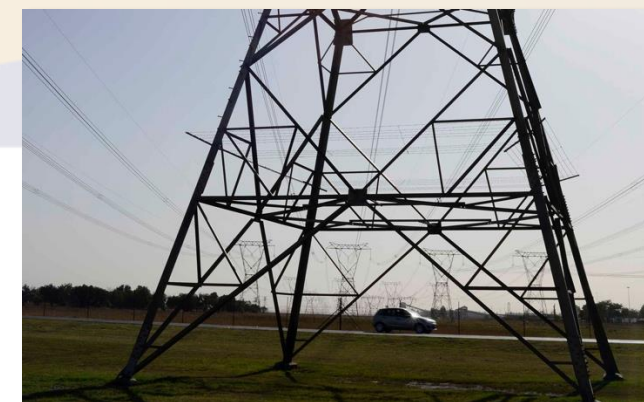
Non eligible projects:

- Coal-fired power plant projects
- Projects for power stations to produce electricity from fuel oil and diesel
- Infrastructures associated with an exploration unit for the production or storage of fossil resources or the production of electricity based on fossil fuels

**Technology/service providers can be spin-offs or subsidiary companies of larger corporations/groups*

Bidders are invited to propose solutions tailored to the following needs (see *dedicated webinar*):

1. Energy Demand Assessment
2. Customer Geolocation and Needs Assessment
3. Work Optimization
4. Digital Project Monitoring
5. Customer Connection Monitoring
6. Interface with Third-Party Applications



Why should you apply to the Call for Projects?

The awarded projects will receive a financial reward in the form of grant funding, possible technical assistance, increased visibility and will benefit from synergies with other awardees

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for 3-4 Start-ups

*Including technical assistance**



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Technical assistance for a
duration of up to 18 months



A common bootcamp for start-ups
and technology or service providers to
create synergies between awardees



Increased visibility through
social media communication
and the awards ceremony

Applicants will benefit from applying to the Challenge, by potentially participating in:



Workshops



E-events



Meetings

*Technical assistance for start-ups will be allocated at the discretion of the selection committee

Applicants and awardees benefit from close guidance and support

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

- Detailed **guidelines** in the application form
- **FAQ** page on the website

Constraints for awardees have been minimised

- Support provided to identify a **technical assistance 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



How can you apply to the Digital Energy Challenge?

- 1 Visit the Challenge website:**
 - [Start-ups](#)
 - [Partnership](#)
- 2 Start-ups → Fill in the [pre-inscription form](#) and download the Application Pack for Start-ups**
Partnership → Fill in the [pre-inscription form](#) and download the Partnership Application Pack
- 3 Complete the application form and prepare the required documents (Partnership projects only)**
- 4 Start-ups → [Submit your project online before 16th May 2025 23:59 CET](#)**
Partnership → [Submit your project online before 16th May 2025 23:59 CET](#)

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



- Even if you do not intend to apply, there may be **start-ups and technology/services providers 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



The 2025 Challenge Brochure



Social medial posts to share with your network (LinkedIn, X (ex-Twitter))



Q&A session



Let's take a moment to answer the questions raised during this presentation



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*

