

Digital Energy Challenge Digital Energy Challenge

# **DIGITAL ENERGY CHALLENGE** CALL FOR PROJECTS 2021

Boosting digital innovation in the energy sector with start-ups and power utilities









### DIGITAL ENERGY CHALLENGE CALL FOR PROJECTS 2021

### **Application** Period

6<sup>th</sup> April to 30<sup>th</sup> June 2021 (see full calendar on page 6) Digitalization is key to increasing energy access, integrating renewable energy sources into the grid and improving the performance of power utilities, especially in developing countries. Public utilities, start-ups and technology providers can boost digitalization through the implementation of innovative technologies and new business models.

To support this, the <u>Digital Energy Facility</u>, a European Union financed programme implemented by AFD, is launching the Digital Energy Challenge with an annual Call for Projects. The focus for the 2021 Call for Projects is sub-Saharan Africa due to the high needs in this region.



### WHO CAN APPLY?

**Start-ups** in pre-seed/early-stage activities, looking to scale up their digital innovations or digital transformation projects.

Public utilities in partnership with innovative technology and/or service providers, looking to implement innovative digital projects.

#### • IS YOUR PROJECT DIGITAL, INNOVATIVE AND LOCAL?

All projects\* must be:

**— DIGITAL** i.e. have telecom, computer or cloudbased technology as a central element of the project

INNOVATIVE either intrinsically or in relation to the local market/country

**— LOCAL** with management activities in the country where the project is based

In addition, projects must address one of three themes specifically chosen for each Challenge category.\*



#### AWARDS

An annual budget of EUR 1.5 million will enable a dozen awardees each year to benefit from financial and technical support:

Grant-based funding of up to 70K€ for start-ups and 700K€ for utilities

Technical assistance

In addition, the winners will benefit from a joint boot camp and increased visibility through widespread social media campaigns.



### How to apply?

Read more about the two categories on <u>Digital Energy Challenge for Start-ups</u> and <u>Digital Energy Challenge for Utilities</u>

---- Participate in the information webinar on 28<sup>th</sup> April 2021

Complete the application form and prepare the required documents

Submit your complete application before 30<sup>th</sup> June 2021 23:59 CET

For more information or to be added to the Challenge mailing list please contact us on

contact@afddigitalenergychallenge.com

\*see additional eligibility criteria specific to Start-ups and Utilities on the following pages



## Digital Energy Challenge

#### **BENEFITS FOR START-UP AWARDEES**

The 5-8 winning start-ups will each benefit from:

— **Project funding** of up to €70K to contribute to costs for equipment, software, training and recruitment

— The possibility to request **technical assistance** awarded on a case-by-case basis, such as project management support, strategic/technical expertise and accounting or reporting assistance

A joint boot camp with utilities awardees, run by cross-sectorial experts to support project implementation and foster synergies between project winners

**— Social media campaigns** piloted by AFD during the selection, award and release of funds periods.

#### **ELIGIBILITY CRITERIA FOR START-UPS**

Your start-up must:

- ---- Be less than 10 years old
- Be in the pre-seed/early-stage financing phase (less than €1M raised)
- Have an annual turnover of less than €1M
- Employ between 1 and 99 people full-time

### How to apply?

— Download the Start-ups Application Pack on <u>www.afd.fr/en/form/digital-energy-</u> <u>challenge-for-start-ups-application-pack</u>

---- Participate in the information webinar on 28<sup>th</sup> April 2021

— Complete the application form and prepare the required documents

Submit your complete application before 30<sup>th</sup> June 2021 23:59 CET

## ARE YOU A START-UP

LOOKING TO SCALE UP YOUR DIGITAL INNOVATION OR TRANSFORMATION PROJECT IN SUB-SAHARAN AFRICA?

— If your project aims to increase energy access or improve grid services and it meets the eligibility criteria, then connect to <u>www.afd.fr/en/form/digital-</u> <u>energy-challenge-for-start-ups-application-</u> <u>pack</u> to download the Application Pack and apply online.



### Digital Energy Challenge START-UPS

## PROJECT THEMES FOR START-UPS

#### EACH PROJECT MUST ADDRESS ONE OF THE THREE FOLLOWING THEMES:

Services to the grid



All ancillary services ensuring satisfactory operation of the power grid such as:

----- Reduction of grid losses

Integration of Renewable
Energy (RE) – either centralised
or originating from Commercial &
Industrial or households

Power production forecasting and Demand Side Management

Improvement of operational management and planification of networks

---- Improvement of maintenance, asset management

— Capacity building (through digital channels, on energy efficiency tools for instance)

Innovative clean energy solutions, equipment and appliances for SMEs



Productive use of energy in sectors such as:

#### ----- Agricultural livelihoods

- Solar water pumping
- Cold chain management

#### — Light manufacturing

- Food processing and milling
- Carpentry, welding, ice-making

#### — Commercial and retail

 Food storage, refrigeration and freezing

Workshop tools, sewing machines, washing machines

 Media, entertainment, office equipment

- Haircutting and personal care

#### ----- Healthcare

 Medical equipment (e.g. a mobile ultrasound scanner for pregnant women)

 Digital tools for telemedicine, selfdiagnosis, health advice or cold chain management New/innovative digital solutions for energy access businesses



This includes products and services such as:

#### ----- Hardware

Kits and meters for off-grid solar applications

Kits and meters for clean cooking applications

#### ---- Software

 Improvement of demand evaluation and planning of investment

CRM (for customer follow-up for example)

- Last-mile distribution optimisation
- Applications designed for end customers

- Loan repayment and PAYGO-

- related software
- Dynamic monitoring of available biomass feedstock

## ARE YOU A PUBLIC POWER UTILITY

OR ORGANISATION IN SUB-SAHARAN AFRICA LOOKING TO IMPLEMENT A DIGITAL INNOVATION PROJECT?

— If your project aims to increase energy access or improve energy management, is based on a partnership with a technology provider and it meets the eligibility criteria, then connect to <u>www.afd.fr/en/form/digitalenergy-challenge-for-utilities-applicationpack</u> to download the Application Pack and apply online.



## Digital Energy Challenge

#### **ELIGIBILITY CRITERIA FOR UTILITIES**

Project owner must be a sub-Saharan African public electricity utility or organisation (including public Independent System Operators, power pools, regional organisations, energy regulators, rural electrification authorities and public organisations in charge of biomass resource preservation).

Technology or service provider must be a national or international registered company, with more than 5 employees and a turnover of less than €50M.

#### **BENEFITS FOR UTILITY AWARDEES**

The two or three winning utility partnerships will each benefit from:

— Project funding of between €100K and €700K\* to support costs for equipment, software, products or services provided by the technology supplier and training

**Technical assistance** for project management support, strategic and technical expertise

A joint boot camp with start-up awardees, run by cross-sectorial experts to support project implementation and foster synergies between project winners

**— Social media campaigns** driven by AFD during the selection, award and release of funds periods.

### How to apply?

— Download the Utilities Application Pack on <u>www.afd.fr/en/form/digital-energy-</u> <u>challenge-for-utilities-application-pack</u>

---- Participate in the information webinar on 28<sup>th</sup> April 2021

— Complete the application form and prepare the required documents

\*including technical assistance

## PROJECT THEMES FOR UTILITIES

### Digital Energy Challenge

#### EACH PROJECT MUST ADDRESS ONE OF THE THREE FOLLOWING THEMES:

Universal energy access



Solutions accelerating universal energy access and destined primarily for remote communities in rural areas. Possible examples are:

#### — Innovative off-grid solutions:

 Mini/microgrids with at least one of the following features: energy management or storage systems for optimal use of clean and renewable energy; interconnections with the main grid or other microgrids; energy metering; revenue collection through digitality;

 Solar kits or kiosks stand-alone systems

 Cost-effective last mile energy access solutions

 Demand evaluation and planning of investment

Innovative on-grid solutions:

 Power capacity optimisation tools for grid extension

 Grid extension planning digital tools

- Other innovative tools/

technologies to accelerate uptake in customer connections.

Improvement of grid management and quality of service



#### Solutions allowing the reduction of network losses and power outages, and improvment of quality of service

— Reduction of technical and nontechnical losses

 Improvement of power supply continuity (blackout analysis and reduction)

Enhancement of quality-ofservice management High-rate renewable energy integration



#### Solutions for achieving a higher rate of integration of Renewable Energy (RE) – including hydro – into the power grid

---- Connection of RE to the grid and management of RE production sites

 Implementation of interconnection dynamic line rating (optimising thermal limits according to weather conditions)

Mix of renewable/non-renewable sources to optimise RE use

---- Control and management of grid flexibility and stability

---- Control of connection/ disconnection of RE capacities

— Forecast of RE production

---- Other services to the grid for higher RE penetration

## **NEXT STEPS**

---- 6<sup>th</sup> April 2021 Call for Projects opens

---- September/October 2021 Notification of awards

— December 2021/January 2022 Signature of contracts and release of funds

### Digital Energy Challenge



### **Contact us**

For more information do not hesitate to contact us at:

contact@afddigitalenergychallenge.com

\*All projects must be submitted via the respective webpages <u>https://www.afd.fr/en/form/digital-energy-</u> <u>challenge-for-start-ups-project-submission</u> or <u>https://www.afd.fr/en/form/digital-energy-challenge-for-</u> <u>utilities-project-submission</u>



The Digital Energy Challenge Call for Projects 2021 supports projects in the following countries:

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

