

# ENERGY CATALYST

Briefing and Brokerage  
by Innovate UK

16<sup>th</sup> March 2023 11:00 – 14:00



Innovate  
UK



Department for  
Science, Innovation  
& Technology



Foreign,  
Commonwealth  
& Development Office

# Agenda

Introduction to IUK KTN & Overview of Energy Catalyst

Keynote 1: Nigeria's Energy Transition Plan

Speed Networking and Tea Break

Keynote 2: Rural Electrification Agency

Energy Catalyst Round 10

Case Study from Previous Winner - PyroGenesys

Keynote 3: REAN

B2Match Platform

Q & A

Networking Lunch

# Who are we?

[www.ktn-uk.org](http://www.ktn-uk.org)



InnovateUK  
KTN

# OUR STRATEGIC PRIORITIES

## OUR NETWORK

**TRULY  
CROSS-CUTTING  
NETWORK**

**+40K  
UNIQUE  
ORGANISATIONS**

**90%  
SMES**

**+273K  
INNOVATORS  
IN THE UK**

**OVER 30  
COUNTRIES**

## SECTORS

We create diverse **connections** in the following sectors and areas of focus to drive **positive change**

- AgriFood
- Biotechnology
- Chemistry
- Creative Industries
- Design
- Digital
- Electronics
- Energy
- Geospatial
- Health
- Industrial Maths
- Infrastructure
- Manufacturing
- Materials
- Photonics
- Quantum
- Robotics and AI
- Security and Defence
- Sensors
- Space
- Transport
- Water

## CROSS-CUTTING AREAS

**GLOBAL  
INNOVATION**

**DIVERSITY  
AND  
INCLUSION**

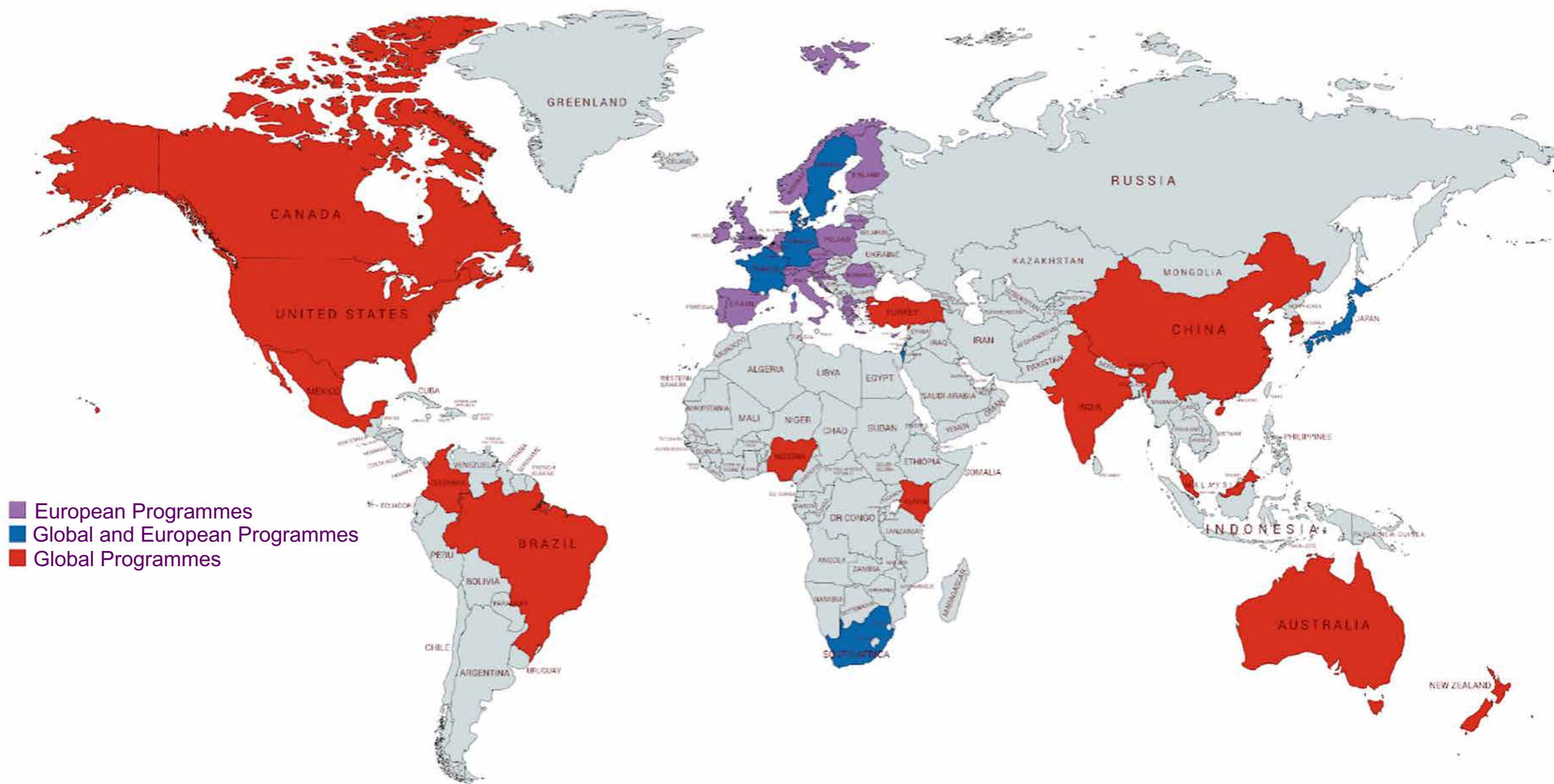
**PLACE**

**NET ZERO**

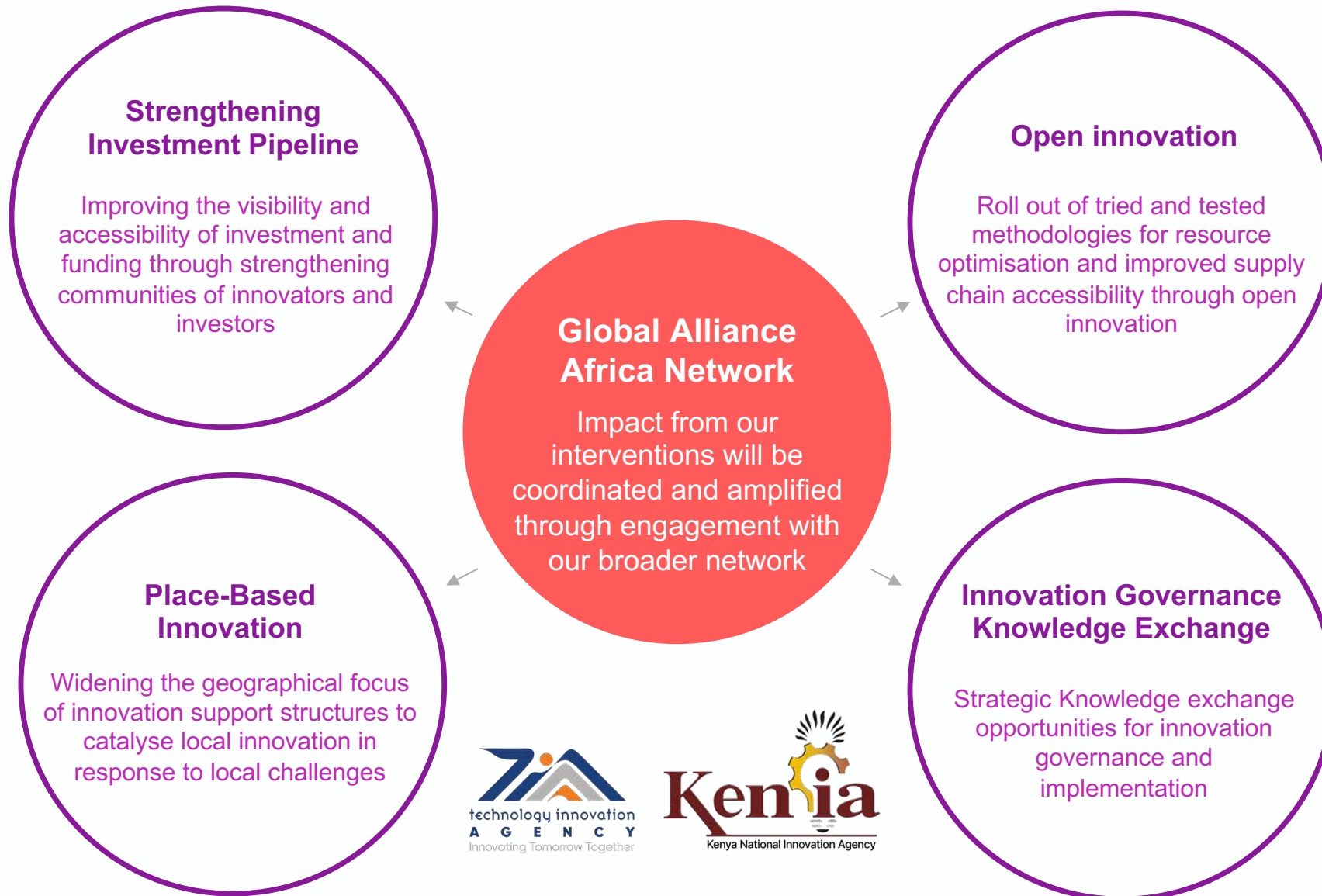
**ADOPTION  
AND  
DIFFUSION**

# Our Reach

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# Pilot Interventions



# Our Global Alliance Africa Team



**ENERGY**  
CATALYST

**Energy Catalyst**



The Energy Catalyst's mission is to accelerate the innovation needed to meet SDG 7 - 'Affordable and clean energy' - by providing financial and advisory support to innovators we help create strategic partnerships, uncover insights and develop business models to improve lives in Africa and Asia.



# Energy Catalyst accelerates innovation that enable affordable, reliable, sustainable and modern energy for all.



To improve lives in Africa and Asia, we...

Provide financial and advisory support to innovators from around the world.



Create strategic partnerships with local businesses and communities.



Uncover insights on how to unlock the best outcomes in the countries we work with.



Develop business models that share value and create local benefits.



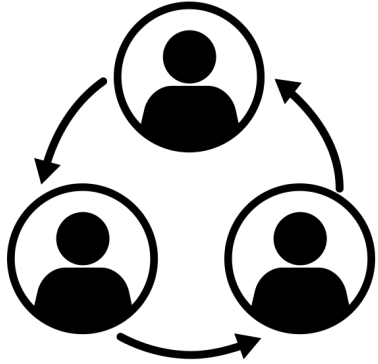
# The Energy Access Challenge



- > Around 789 million people still lacked access to electricity in 2018.
- > Without sustained efforts, 650 million people will still be left without access to electricity in 2030.
- > Estimated that poor electricity access is costing Africa 2% point reduction off gross domestic product (GDP) growth each year.
- > Vast majority (80%) of those gaining access to electricity worldwide are in urban area.
- > Represents a major opportunity for decentralised and smart energy systems
- > Need to limit global warming below 1.5°C

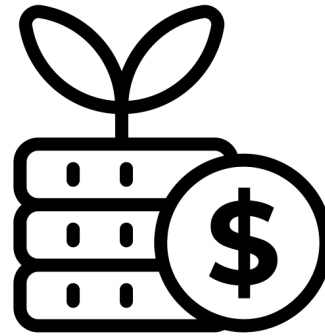
# Energy Catalyst combines three key activities to deliver this vision

Collaboration



Collaboration building to help innovators find project partners

Competition



Open grant calls to develop and demonstrate innovative tech and business models

Acceleration



Business advice, learning from overseas, showcasing and dissemination

# ENERGY CATALYST

## Impact to Date

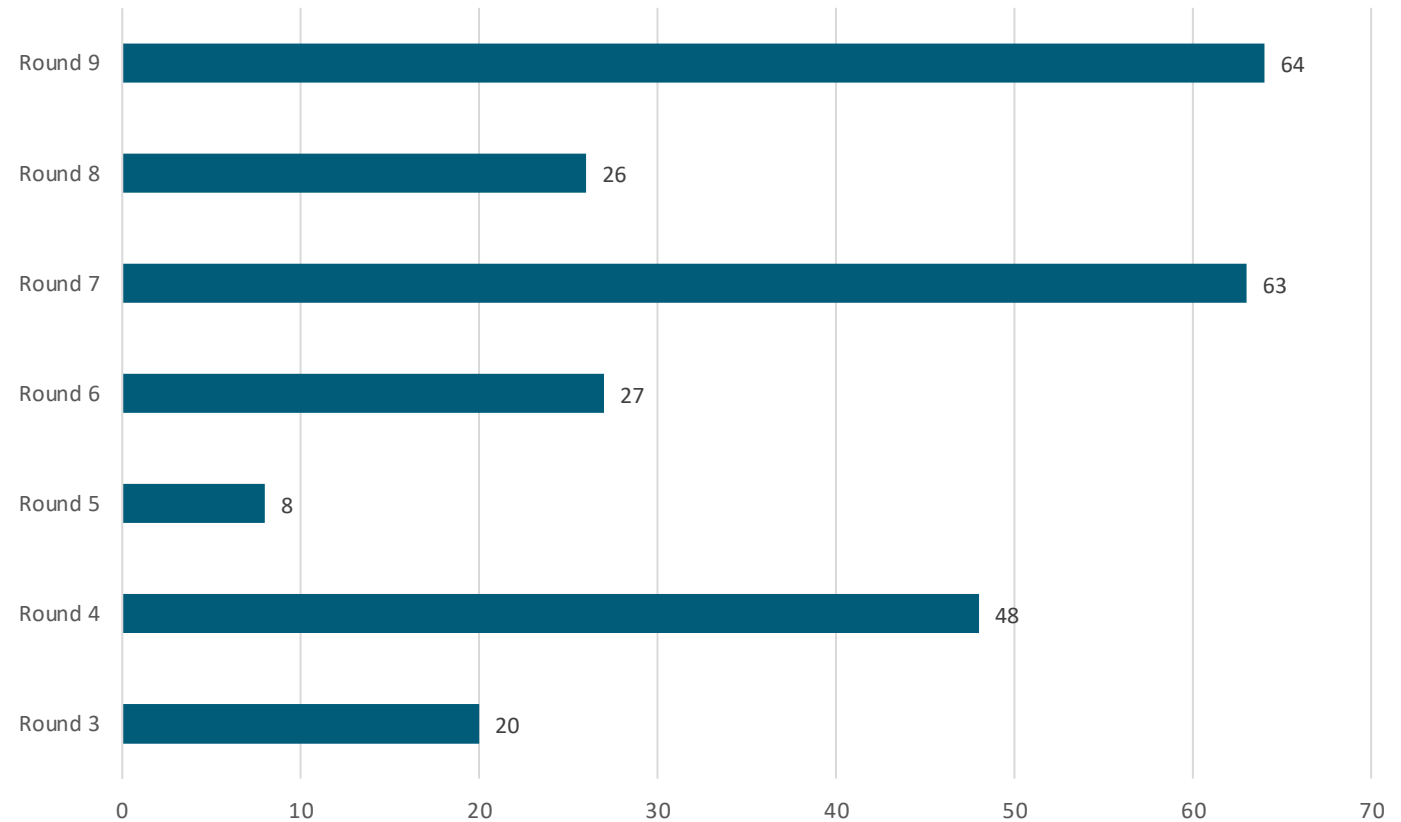


# Energy Catalyst has supported 256 energy access relevant projects to date

£119million of this funding is Official Development Assistance to support energy access relevant technologies and business models comprising:

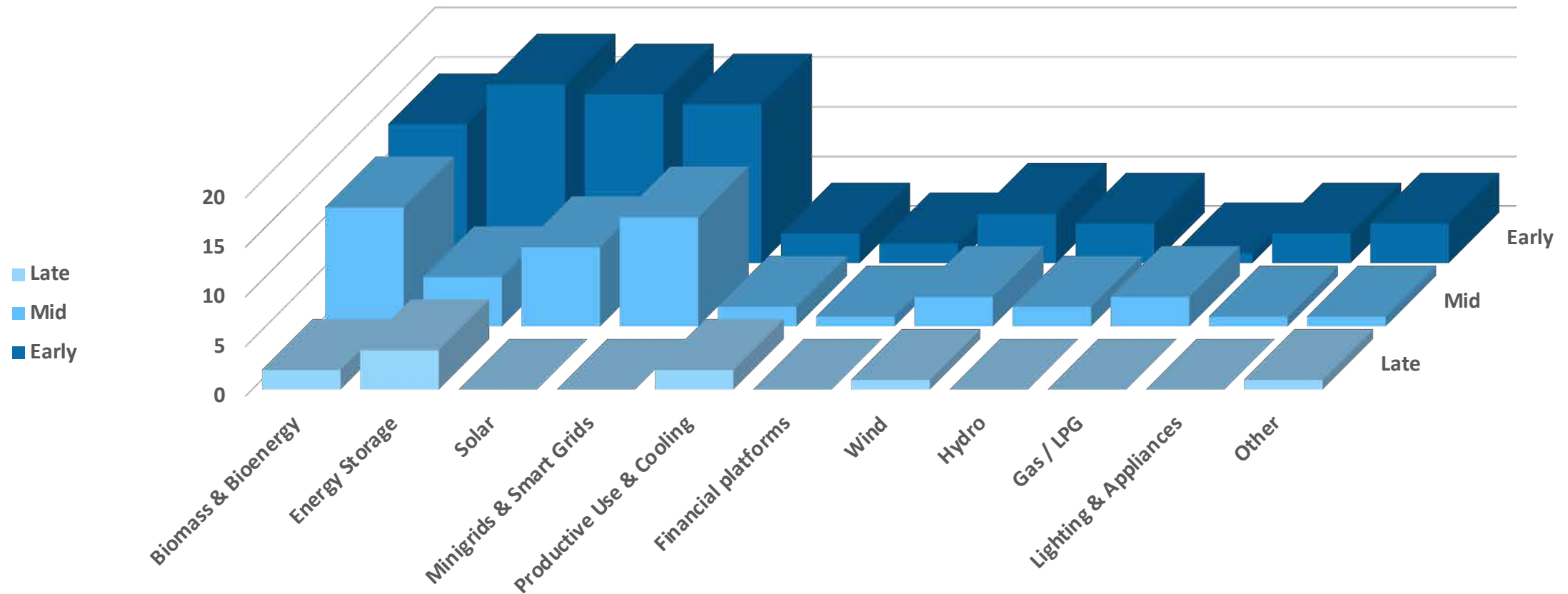
- 256 projects
- Over 400 unique organisations
- Wide range of energy access technologies and themes
- Targeting over 38 countries in Sub-Saharan Africa and South and South East Asia

Total ODA funded projects by round



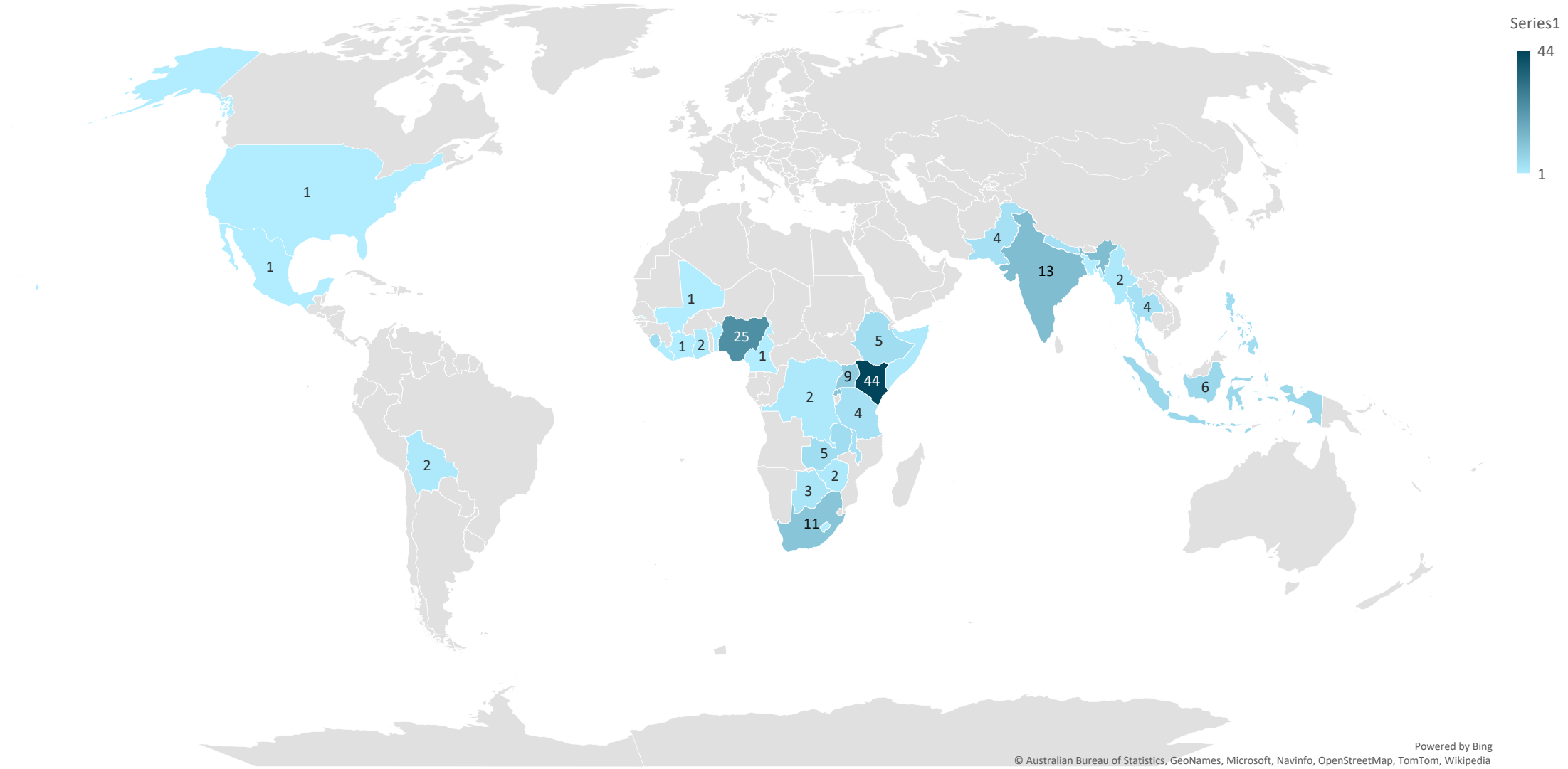
# Biomass, energy storage, solar and minigrid related projects represent the largest segments of the programme

Projects by Technology Category and Stage



Note: Funding has been prioritised toward storage and bioenergy projects

# Where we fund



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# Impact

9 Calls



£188m

Committed



£121m

Co-funding



£162m

Private investment raised



340+

Projects



1200+

Partners



170+

International partners



174

new tech prototyped



£60m

private investment



132

New patents



£4m

Sales



174k

People impacted



77,000+

end user connections



£40m

Public sector funding won





ENERGY  
CATALYST

# Energy Catalyst Round 10 Competition



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# Funding Sources



Foreign &  
Commonwealth  
Office



Department for  
Science, Innovation  
& Technology



- > Funding provided by the Foreign Commonwealth Development Office (FCDO) with support from Department for Science, Innovation and Technology (DSIT)
- > Contributions are counted as part of the UK's Ayrton Fund commitment
- > Up to £10 million available
- > Provides funding towards Energy Catalyst Accelerator
- > Both provide funds to a variety of technology specific priorities

# Round 10 open for applications 27th February – 28<sup>th</sup> June

Total amount of  
funding available  
up to

**£10m**



**3 Strands**  
which you can apply into

### Early Stage

£50,000 - £300,000  
3 to 12 months

### Mid Stage

£50,000 - £1.5 million  
Duration 6 to 24 months

### Late Stage

£50,000 - £5 million  
Duration 6 to 36 months

To be in scope your project must  
address the following:

Transforming  
Energy Access



Clean Energy



# 1. Energy Access

- > Aim to speed up access to affordable, clean energy services for poor households, enterprises and social institutions in official development assistance (ODA) eligible countries.
  - > we are particularly keen to receive projects which focus on the Indo-Pacific region
- > It must do this by supporting the development, testing or scale up of innovative technologies or business models.
- > A clear social or economic benefit in sub-Saharan Africa, South Asia or the Indo-Pacific Region is required.
- > This can include:
  1. creating new energy access in unserved regions
  2. improving existing access to provide a more reliable service

## Energy Access

7 AFFORDABLE AND  
CLEAN ENERGY



## 2. Clean Energy

Have a technology or business model which is

Affordable

Reliable

Low carbon

It must do all 3 or it won't be assessed

While any technology which meets the above criteria is in scope, priority will be given to the Ayrton Challenge priority areas (slide 19) and projects aimed at **replacing diesel and petrol generators with sustainable alternatives**

## Clean Energy



## Official Development Assistance (ODA) requirements

- > This funding is part of the UK government's official development assistance budget (ODA).
- > Projects must:
  - > be able to demonstrate that there is a clear economic and social benefit to one or more of the targeted countries.
  - > Have an ODA eligible country as a primary beneficiary. UK can be a secondary beneficiary
- > If projects are judged to be non-compliant with ODA, we will not submit the application for assessment.





## Eligible Focus Countries

Your project must target one or more of the following **ODA eligible** countries:



### **Sub-Saharan Africa:**

Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Eritrea, Eswatini (Swaziland), Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe (may be ineligible from 13 December 2024), Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe

### **South Asia:**

Afghanistan, Bangladesh, India (only as part of multi country projects), Maldives, Nepal, Pakistan, Sri Lanka

### **Indo-Pacific (ODA eligible ASEAN):**

Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand, Timor-Leste (not officially part of ASEAN), Vietnam

### **Indo-Pacific (Pacific Islands):**

Federated States of Micronesia, Fiji, Kiribati, Marshall islands, Papua New Guinea (PNG), Samoa, Solomon Islands (may be ineligible from 13 December 2024), Tonga, Tuvalu, Vanuatu

# Round 10 Eligibility

## Early Stage

- **Feasibility Studies**
- £50,000 - £300,000
- Duration 3 to 12 months
- UK SMEs can make sole or joint applications
- Applications must be led by a SME, academic or RTO
- Involve at least one micro, small or medium-sized enterprise (SME)
- International partners encouraged
- Max 50% research participation

## Mid Stage

- **Industrial Research**
- £50,000 - £1.5 million
- Duration 6 to 24 months
- Must be collaborative
- Must be led by a business
- Some work (testing/demonstration) must be done in SSA or SA
- Partnering with international entity in-country required
- Max 30% research participation

## Late Stage

- **Experimental Development**
- £50,000 - £5 million
- Duration 6 to 36 months
- Must be collaborative
- Must be led by a business
- Some work (testing/demonstration) must be done in SSA or SA
- Partner with international entity in-country required
- Max 30% research participation

Any organization from anywhere in the world can be a partner in a project

## Types of organisations we fund

- > Business – Small or Micro, Medium or Large Research Organisation (RO):
  - universities (HEIs)
  - not for profit distributing Research & Technology Organisation (RTO) including Catapults
  - Public Sector Research Establishments (PSRE)
  - Research Council Institutes (RCI)
- > Public sector organisations and charities doing research activity

You must involve at least one micro, small or medium-sized enterprise (SME).

If you are 100% owned by a large parent company as a small subsidiary this means you are classed as a large company and will only be entitled to the relevant grant.



# The two types of leads

## Administrative Lead

- > will be the recipient of the award and will distribute funding to international partners (hub and spoke model)
- > will manage and be accountable for the finances for the project in accordance with the terms and conditions of the award
- > must be UK based
- > must claim funding through this competition

**Early Stage: UK SME, Academic or RTO**

**Mid and Late Stage: UK Business only**

## Technology Lead

- > will lead on the development of the scope, work packages within the project and other work from a technical perspective
- > can be from anywhere in the world
- > can be a micro, small or medium sized enterprise (SME), Academic or RTO
- > must claim funding through this competition
- > UK companies can be both the administrative and technical lead

**Early Stage: SME, Academic or RTO**

**Mid and Late Stage: Business of any size**

## Example Collaborations

Stage	Technical Lead	Admin Lead	Additional Criteria
Early Stage: Feasibility Studies	<ul style="list-style-type: none"> <li>&gt; can be from anywhere in the world</li> <li>&gt; can be an SME, academic organisation, or RTO</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must be registered in the UK</li> <li>&gt; must be a SME, academic organisation or RTO</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must involve at least 1 SME</li> <li>&gt; UK SME eligible to be both Tech &amp; Admin Lead</li> <li>&gt; encouraged to involve at least one partner with a legal entity in one of the focus countries</li> </ul>
Mid Stage: Industrial Research	<ul style="list-style-type: none"> <li>&gt; can be from anywhere in the world</li> <li>&gt; Must be a business of any size</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must be a UK registered business of any size</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must involve at least 1 SME</li> <li>&gt; must involve at least one partner with a legal entity in one of the focus countries</li> </ul>
Late Stage: Experimental Development	<ul style="list-style-type: none"> <li>&gt; can be from anywhere in the world</li> <li>&gt; Must be a business of any size</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must be a UK registered business of any size</li> </ul>	<ul style="list-style-type: none"> <li>&gt; must involve at least 1 SME</li> <li>&gt; must involve at least one partner with a legal entity in one of the focus countries</li> </ul>

## Collaboration

In all collaborative projects there must be:

- > at least two organisations claiming grant within the application (including the lead)
- > The UK admin lead can count as one of the collaborators if they are involved in the project beyond an administrative role
- > at least one legally separate collaborator.

## Resubmissions

- > Resubmissions are allowed in Energy Catalyst Round 10



# Additional information for Energy Catalyst projects

- > Energy Catalyst Accelerator
  - > Each project is enrolled into the Energy Catalyst Accelerator currently delivered by the Carbon Trust
  - > The accelerator provides 1:1 support to primarily the technology lead
  - > Cohort support offered to all project partners
  - > Support is provided via MFA with an MFA declaration required at the start of the project.
- > Reporting & Monitoring
  - > Each project will be allocated a monitoring officer (MO) who they will meet with quarterly
  - > You will be required to capture additional key performance indicators
  - > You will be required to complete post-project evaluations reports, 1 and 2 years after completion

# ENERGY CATALYST

## How to get involved



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# Energy Catalyst Virtual Brokerage B2Match

- > Sign up to the B2Match virtual brokerage site to engage over 300 organisations from over 25 countries who are looking for partners for potential Energy Catalyst projects
- > View the virtual marketplace to find organisations across the energy access ecosystem
- > Update your profile to highlight what you are looking for in a collaboration partner
- > Use the 1-1 meeting tool to set up meetings with potential collaborators
- > Attend webinars via the website to learn more about energy access ecosystems in markets, how to do business in country, and many more!

**Website:** <https://energy-catalyst-networking.b2match.io/>



[Home](#) [Eligibility](#) [How it works](#) [Timeline](#) [About us](#) [Contact](#) [FAQ](#) [Recorded Ses](#)

## Energy Catalyst Virtual Brokerage

Join the virtual brokerage to find partners for your Innovate UK Energy Catalyst Round 10 application.

From May 2022 through to June 2023, this website will host a series of webinars and 1:1 virtual meetings to discuss project opportunities and facilitate introductions between organisations to help provide clean, affordable and secure energy in sub-Saharan Africa, South Asia and the Indo-Pacific Region.

The aim of these webinars and the virtual Marketplace is to help organisations gain an understanding of the energy access issues in a particular country and to develop equitable partnerships leading to a collaborative application for Energy Catalyst Round 9 and 10.

Energy Catalyst Round 9 is now closed. Energy Catalyst Round 10 opens 27 February 2023, with further information available via this link: <https://apply-for-innovation->

# ENERGY CATALYST

Thank you for listening

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