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# Updates: Energy Innovation Programme

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# Updates

Since our last Rushlight Presentation, we've...

- Held the inaugural Green GB Week Innovation Summit
- Launched £15m CCUS innovation call in August to support the continued development of CCUS
- Issued invites for a £20 million venture capital fund to support early stage clean technology companies in the UK through investments
- Launched £9.2m Industrial Energy Efficiency Accelerator programme running until 2021
- Closed applications for £10m of grant funding for Phase 7 of Energy Entrepreneurs Fund
- Closed applications for £16m grant funding to develop solutions that provide low carbon heat & improve the energy efficiency of existing UK buildings

# New Competitions

Launching...

- Storage at Scale
- Flexibility Exchange Demonstration Competition
- Industrial Energy Efficiency Accelerator (Phase 2)

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# Storage at Scale



# Demonstrating Innovative Energy Storage at Scale

- **Objectives**

- help the UK meet its projected storage deployment needs cost-effectively;
- enable the UK to achieve world-leading status on static storage; and
- address issues associated with traditional energy storage technologies such as duration, lifespan, safety, and availability and sustainability of materials.

# Storage at Scale

## Competition parameters

- **£20 million grant funding** – match funding required
- **Up to 3** demonstration projects
- Demonstration of large-scale energy storage using **innovative technologies:**
  - (a) Electrical Energy Storage: >30MW or >50MWh
  - (b) Power-to-x: > 5MW
- Technology Readiness Level 6 and above

# Storage at Scale

## Important Dates

- **4<sup>th</sup> March 2019:** Information Day in London
- **17<sup>th</sup> April 2019:** Registration closes
- **26<sup>th</sup> April 2019:** Application window closes
- **July 2019:** Grant awarded
- **March 2021:** Build completed
- **December 2021:** Operational testing completed

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# FleX Competition





# Flexibility Exchange Demonstration Competition

- **Competition Objectives**

- Demonstrate the technical and commercial viability of flexibility exchanges in practice;
- Investigate the potential impact of these flexibility exchanges on whole electricity system costs, carbon intensity and system security;
- Investigate the effects of flexibility exchanges on community engagement and energy consumers/producers; and
- Inform future policy decisions

# FleX Competition: Key Features

- **£4 million grant funding** – private sector match funding required
- **Expect to fund up to 3** demonstration projects
- Demonstration of innovative, flexibility exchanges:
  - Exchanges to be trialled with a significant number of real flexibility assets (e.g. energy storage; controllable load; local renewable generation);
  - Exchanges to involve smaller commercial and/or domestic consumers;
- Funded activity focused on TRLs 5-7

# FleX Competition: Important Dates

- **13<sup>th</sup> March 2019:** Information Day
- **11<sup>th</sup> April 2019:** Registration closes
- **18<sup>th</sup> April 2019:** Application deadline
- **June 2019:** Grants awarded
- **March 2021:** Development, build & initial testing completed
- **December 2021:** Final trials and all reporting completed

For more information, go to: <https://www.gov.uk/guidance/funding-for-innovative-smart-energy-systems>

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# Industrial Energy Efficiency Accelerator (IEEA) Phase 2

# BEIS' Industrial Energy Efficiency Accelerator (IEEA)

## Objectives:

- To strengthen the global competitiveness of British industry
- To commercialise innovative energy efficient technologies and processes
- To fund technology demonstration projects on UK industrial sites (TRL 5-8)

## Target:

- UK manufacturing sector (anything that involves a manufacturing process)
- Datacentres, water and waste sectors
- Technology developers; industry; universities / research organisations

## Facts and figures:

- 87 companies submitted technology ideas in phase 1
- Up to £4.5m of grant funding still available
- £150k - £1m per project

## Successful applicants will receive:

- Grant funding
- Demonstration project support
- Incubation support

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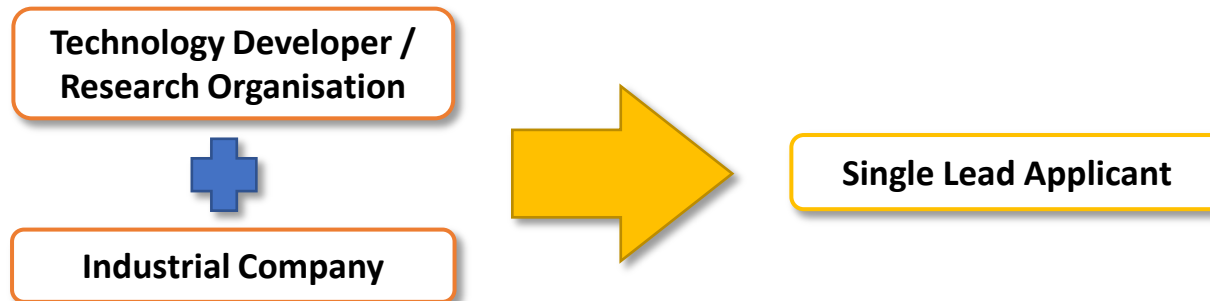


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# In IEEA Phase 1, seven projects were approved across a diverse range of sectors

Project Title	Companies
<b>Low carbon multi-component cements for UK concrete applications</b>	Led by the Mineral Products Association (MPA) alongside industrial partners Hanson Cement, Forterra Building Products, and Building Research Establishment (BRE)
<b>Development and trialling of Exergyn Drive™ for low-grade waste heat recovery</b>	Led by Exergyn alongside their industrial partner, a global engine manufacturer
<b>PRISMA Energy Storage (Peak reduction by integrated storage and management of air)</b>	Led by Innovatium alongside industrial partner Aggregate Industries and research partner Birmingham University
<b>Replacing hot water cleaning with electrolysed cold water</b>	Led by Ozo Innovations
<b>Development and demonstration of an automatic steam boiler blowdown system</b>	Led by Spirax Sarco
<b>Energy Efficient Leachate Treatment</b>	Led by LAT Water alongside industrial partner Viridor Waste Management
<b>Novel de-watering solutions within corrugated case medium (CCM) manufacture</b>	Led by Innventia alongside industrial partner, DS Smith

# IEEA Phase 2 will run from 1<sup>st</sup> February – 30<sup>th</sup> April, 2019. Up to £4.5m available



Applicants will be supported throughout the application process, including an initial screening recommendation to inform whether the idea is within programme scope



**For more information: [www.carbontrust.com/IEEA](http://www.carbontrust.com/IEEA)**



Find out more at:

<https://www.gov.uk/guidance/energy-innovation>

For the latest information on our Innovation Programmes please visit:

<https://www.gov.uk/guidance/funding-for-low-carbon-industry>

<https://www.gov.uk/guidance/funding-for-innovative-smart-energy-systems#uk--canada-joint-challenge-on-smart-grids-and-energy-storage>

