

The UKRI logo consists of the letters 'UK' stacked above 'RI' in a white, bold, sans-serif font, set against a dark blue square background.

Innovate  
UK

An aerial photograph of a solar farm, showing rows of solar panels arranged in a grid pattern across a green field. The panels are tilted towards the sun, creating long shadows. A road or path runs horizontally through the middle of the field.

# Welcome

# Agenda

**10.00** Welcome and Introductions, George Okechukwu IUK KTN

**10.10** Introduction to the Faraday Battery Challenge- Oyebola Bello, IUK

**10.20** How can UKBIC support SMEs to scale-up, Yahya Alvar, UKBIC

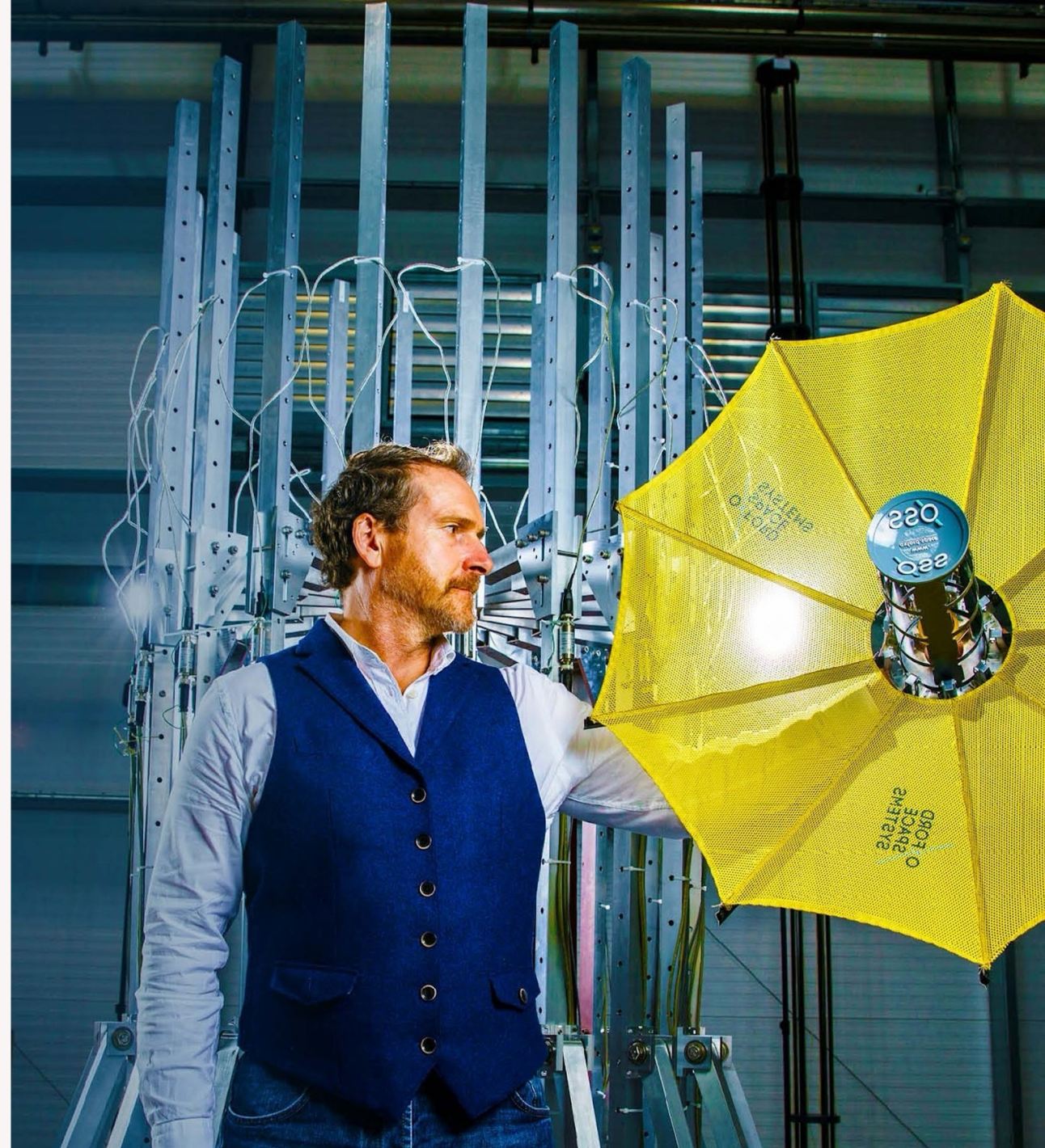
**10.40** Case study: Addionics, Marcelo Machado

**10:50** Competition Scope, Oyebola Bello, IUK

**11.10** How to apply, Sebastian Leonard, IUK

**11.30** Q&A

**12.00** Close





## About Us

Innovate UK KTN exists to connect innovators with new partners and new opportunities beyond their existing thinking – accelerating ambitious ideas into real-world solutions.



# What we do



## Connecting

- Finding valuable partners
- Project consortium building
- Supply Chain Knowledge
- Driving new connections
- Articulating challenges
- Finding creative solutions



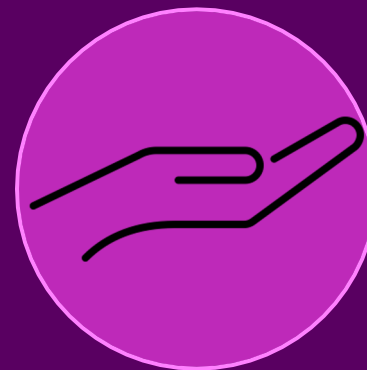
## Funding advice

- Awareness & dissemination
- Public & private finance
- Advice – project scope
- Proposal mentoring
- Project follow-up



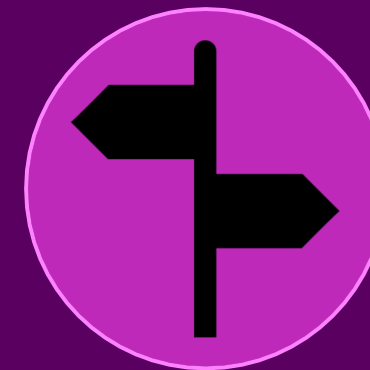
## Influencing

- Promoting Industry needs
- Informing policy makers
- Informing strategy
- Communicating trends & market drivers



## Supporting

- Intelligence on trends and markets
- Business Planning support
- Success stories / raising profile
- High level application review



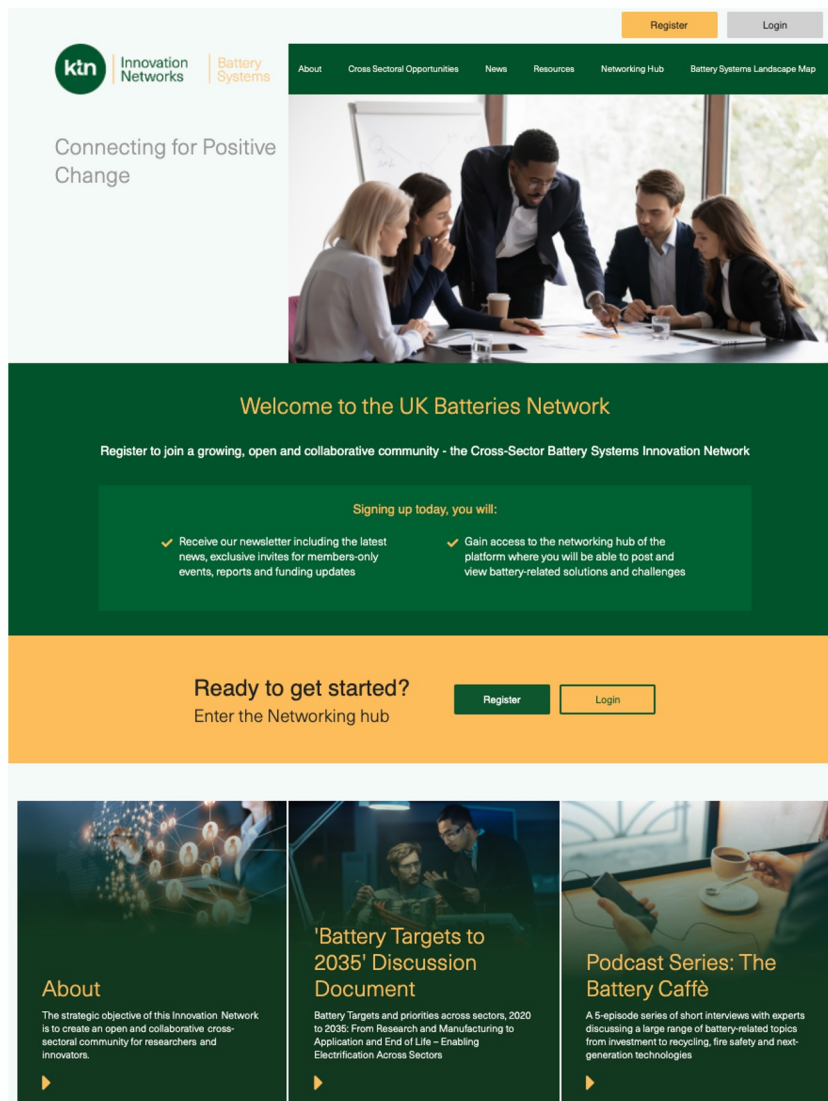
## Navigating

- Navigating the innovation support landscape
- Promoting coherent strategy and approach
- Engaging wider stakeholders
- Curation of innovation resources



Innovate UK  
KTN

# Cross-Sector Battery Systems Innovation Network Hub: [www.ukbatteriesnetwork.org/](http://www.ukbatteriesnetwork.org/)

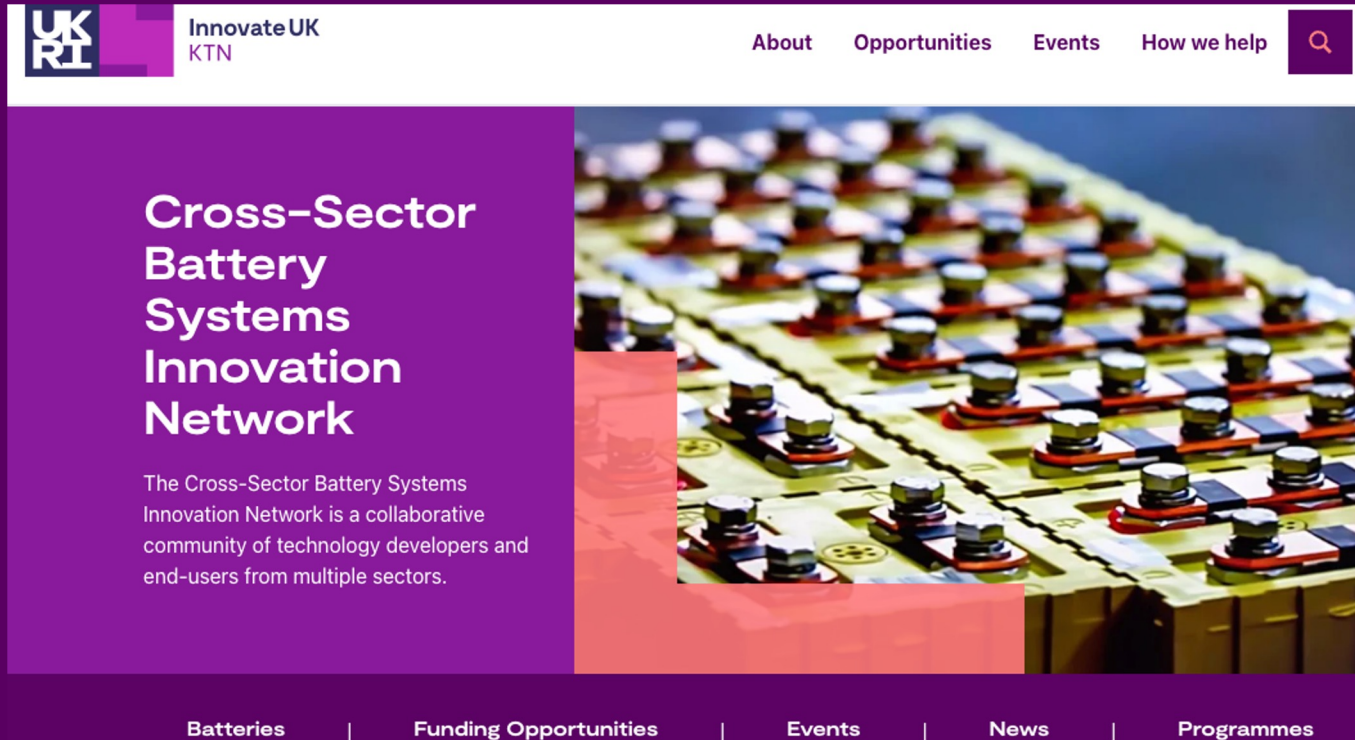


The screenshot shows the homepage of the UK Batteries Network. At the top, there is a navigation bar with 'ktn Innovation Networks Battery Systems' on the left and 'Register' and 'Login' buttons on the right. Below the navigation bar is a large image of a group of people in a meeting. The main content area is green and features the text 'Welcome to the UK Batteries Network' and 'Register to join a growing, open and collaborative community - the Cross-Sector Battery Systems Innovation Network'. Below this, there is a section titled 'Signing up today, you will:' with two bullet points: 'Receive our newsletter including the latest news, exclusive invites for members-only events, reports and funding updates' and 'Gain access to the networking hub of the platform where you will be able to post and view battery-related solutions and challenges'. At the bottom of the main content area, there is a yellow bar with the text 'Ready to get started? Enter the Networking hub' and 'Register' and 'Login' buttons. Below the main content area, there are three smaller images with text: 'About', ''Battery Targets to 2035' Discussion Document', and 'Podcast Series: The Battery Caffè'.

- **Stay informed:** Sign up to our newsletter for news, insights, funding opportunities and future sessions
- **Connect:** Register to the platform and share your challenges and solutions with other members in the networking hub  
<https://www.ukbatteriesnetwork.org/networking-hub/problems>
- **Showcase your capabilities:** Explore our landscape map and add your organisation <https://www.ukbatteriesnetwork.org/battery-systems-landscape-map>

Register to attend our first in-person industry showcase on 26 March 2024 in Leicester to link the battery supply chain with a broad set of end-use sectors.

# Visit our website and reach out to us!



Join the community and network  
with sector leaders!



<https://iuk.ktn-uk.org/energy/batteries/>

# Introduction to The Faraday Battery Challenge

Oyebola Bello, Programme Manager  
(Batteries), IUK



Delivered by  
Innovate UK



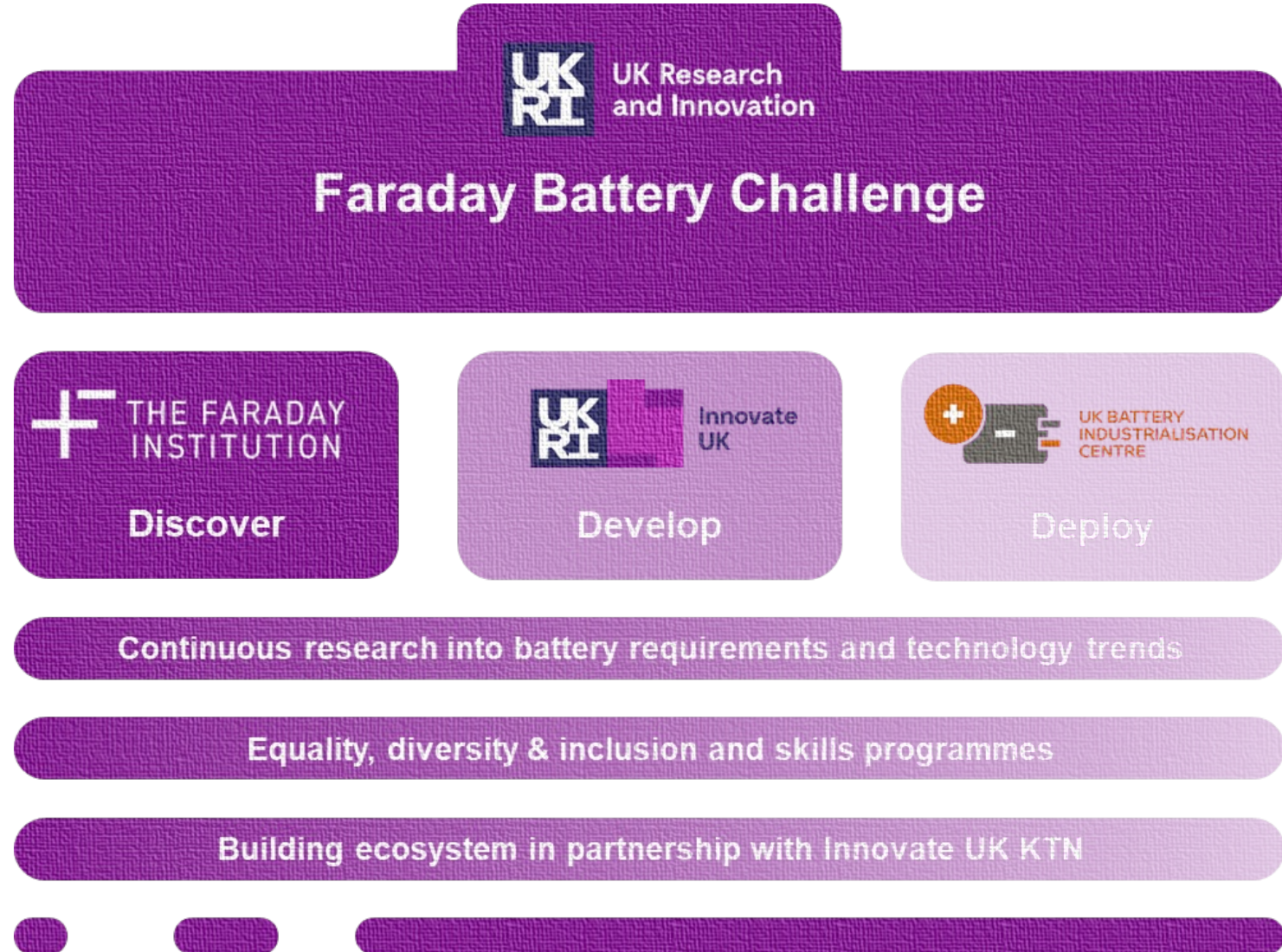
THE FARADAY  
INSTITUTION



UK BATTERY  
INDUSTRIALISATION  
CENTRE

# What is the Faraday Battery Challenge?

- £610 million programme
- Running from 2017 to 2025
- Part of the UKRI Challenge Fund
- Delivered by Innovate UK





# Faraday Battery Challenge Objectives



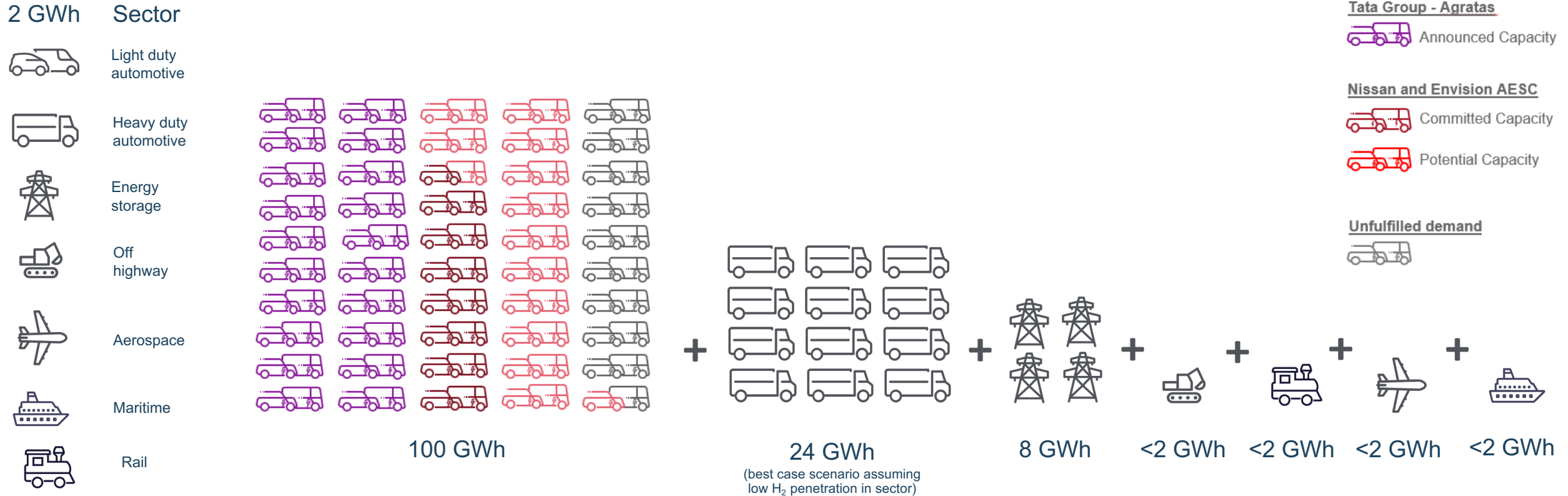
To ensure the UK automotive industry meets its net zero commitments **in the required timescale** by enabling development and scale-up of sustainable battery technologies.



To prosper from a just and fair transition to battery electrification across the nation through the development of a world class intellectual and physical supply chain.

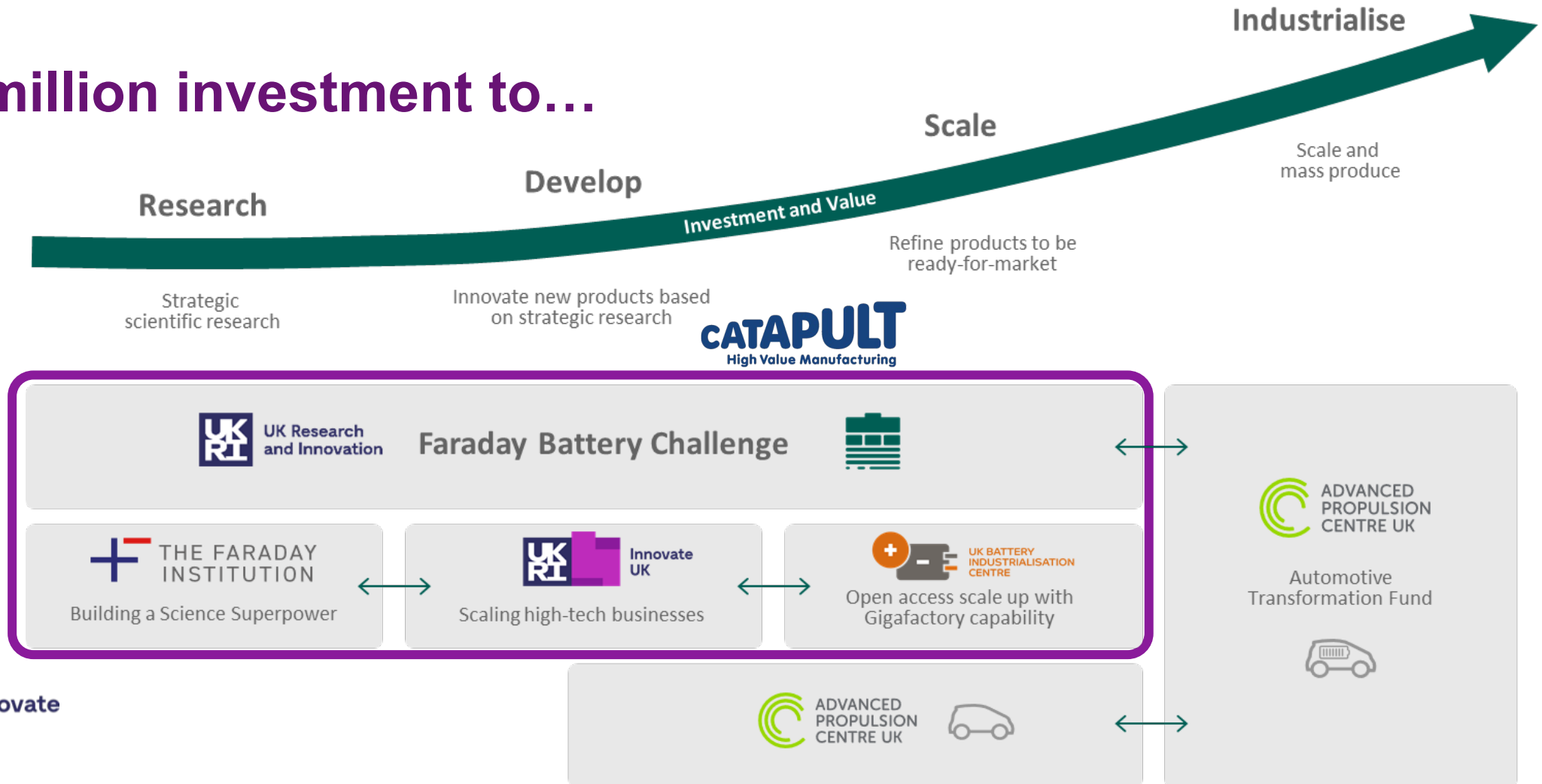


# UK battery demand growth (all sectors by 2030)

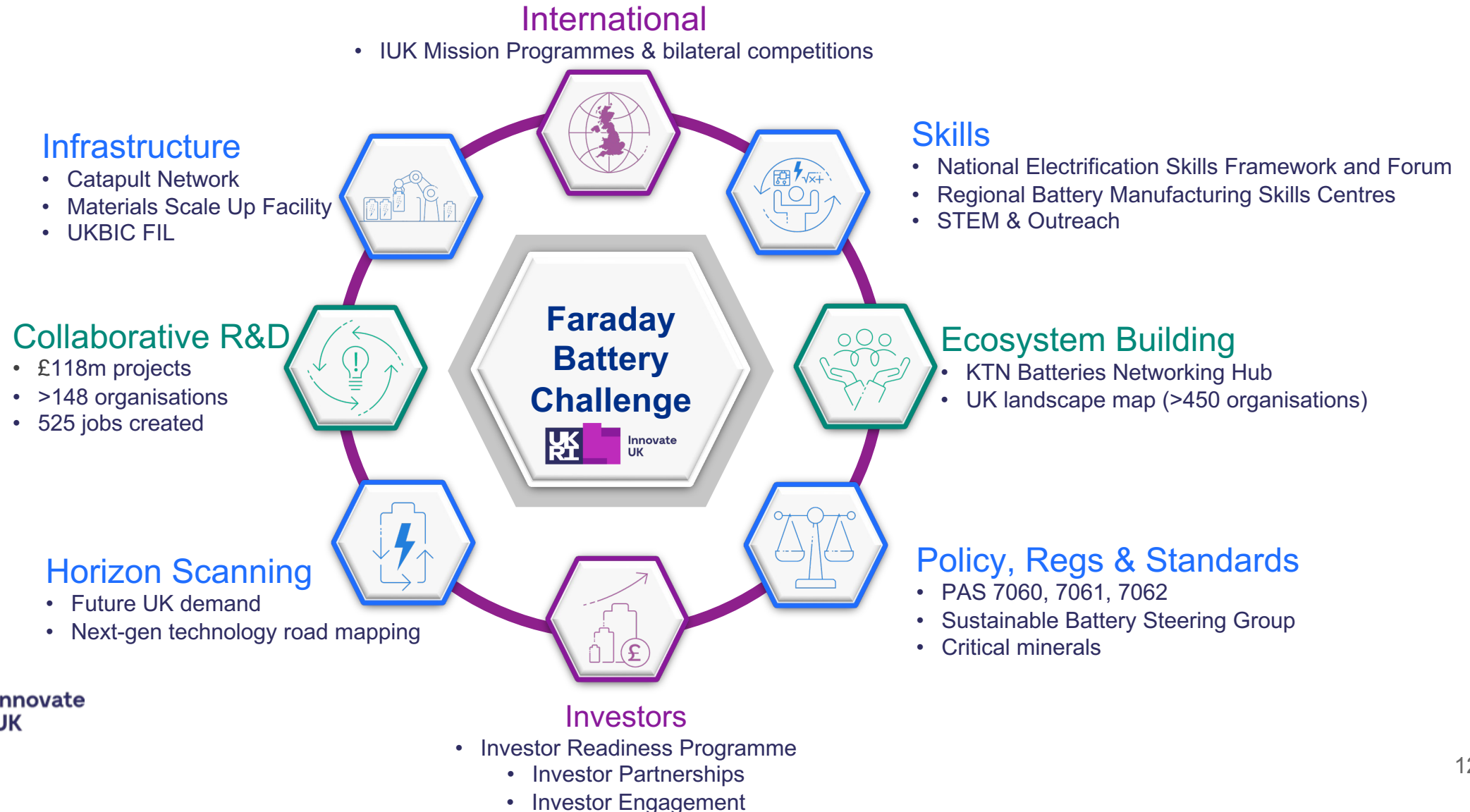


# The Faraday Battery Challenge: necessary but not enough

A £610 million investment to...



# Faraday Battery Challenge Activities: What else do we do?



# UK Battery Industrialisation Centre SME Credit Round 2

Yahya Alvar, BDM, UKBIC  
January 2024

# Bridging the Gap from R&D to Mass Production

UKBIC scope

Volume, TRL, MRL

[Virtual Tour](#)



**Characteristic**

**Technology Readiness**

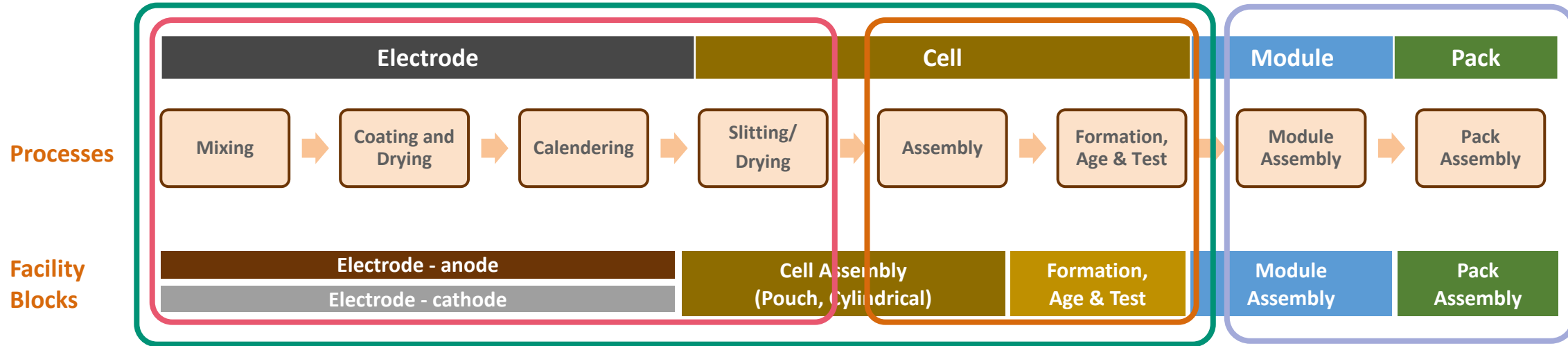
- |  |   |  |   |
|--|---|--|---|
| <ul style="list-style-type: none"> <li>University scale research labs using small quantities of hand-made materials.</li> <li>Fundamental materials research</li> <li>Initial half-cell experiments at coin cell scale.</li> </ul> | <ul style="list-style-type: none"> <li>Corporate R&amp;D pilot line or university / Catapult centre.</li> <li>Used to demonstrate early scalability of materials to full size cell</li> <li>Develop and demonstrate electrode mixtures, deposition processes and cell formats.</li> </ul> | <ul style="list-style-type: none"> <li>Full-scale GWh/yr manufacturing facilities used at low output rate.</li> <li>Used to develop and validate materials, cell design, manufacturing processes and parameters at industry rates prior to full plant investment.</li> </ul> | <ul style="list-style-type: none"> <li>Full-scale, high volume manufacturing plant. Typically 6-50GWh/year.</li> <li>Used to deliver very large volumes of cells with no variation or flexibility to chemistry, format or quality.</li> <li>Cost/kWh and process consistency are critical.</li> </ul> |
|--|---|--|---|

TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9
Principles & Research	Explore Applications	Analytical Experiments	Validation & Requirements	Design & Performance	Model & Prototype	Performance & Testing	Test & Demonstrate	Real World & Launch

<b>Manufacturing Readiness</b>	Research & Development					Industrial Engineering			Commercialisation	
	MRL 1	MRL 2	MRL 3	MRL 4	MRL 5	MRL 6	MRL 7	MRL 8	MRL 9	MRL 10
	Implication & Materials	Identify Processes	Proof of Concept	Identify Technology & Test	Prototype Materials, Tools & Skills	Processes & Detailed Costs	Pilot Line & Materials	Process Maturity Demonstration	Manufacturing Processes Proven	Production Ready
	Material Solution Analysis				Technology Development		Engineering & Manufacturing Development		Production & Deployment	Operation & Support



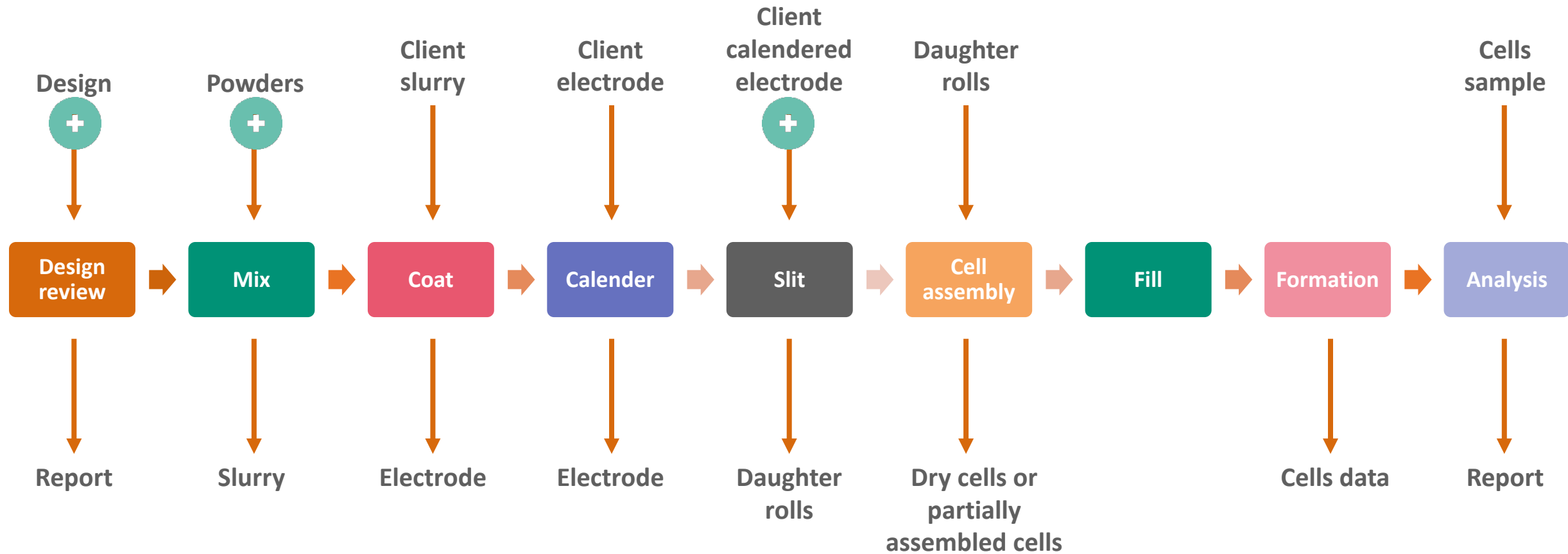
# Manufacturing Process Steps



**Product (Examples)**

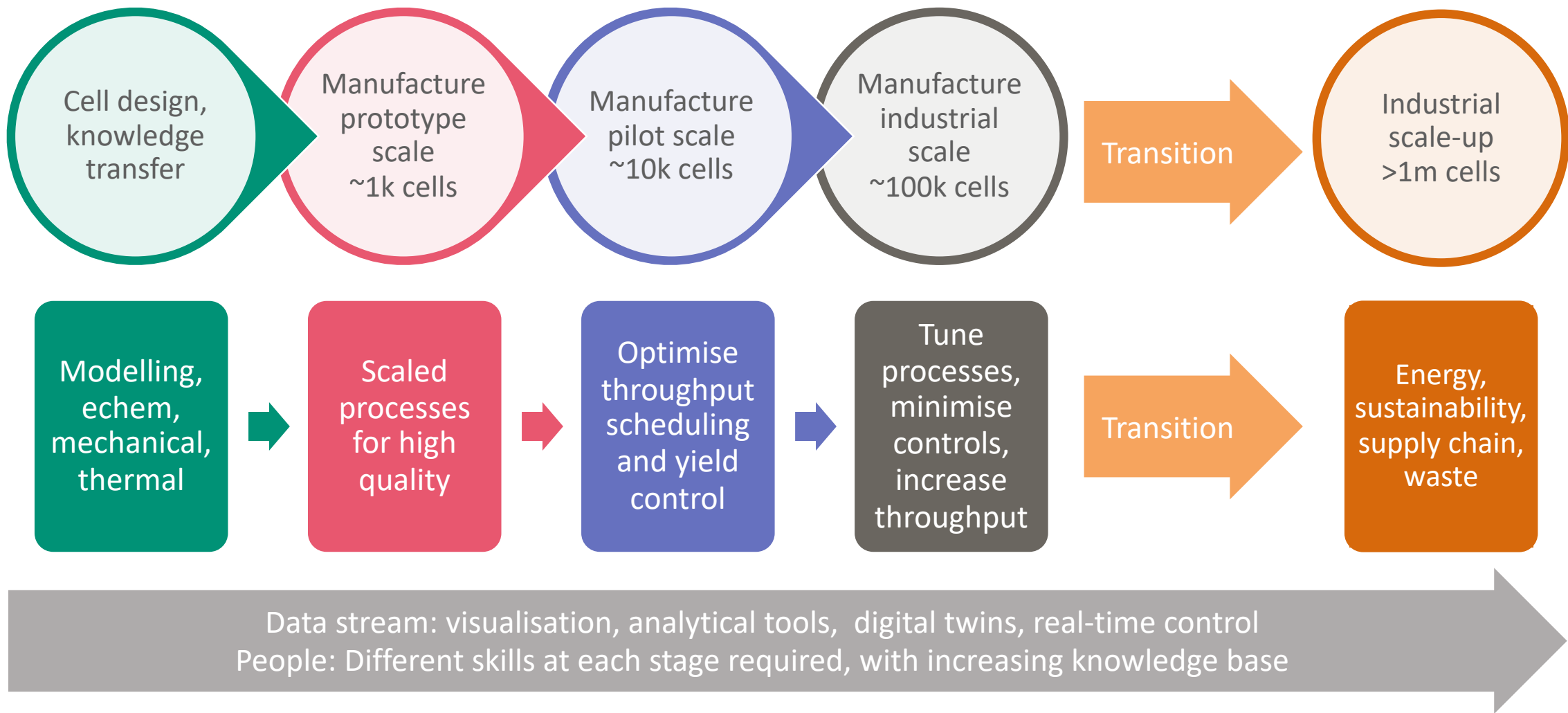


# A Modular Capability





# The Scale-up Journey



## Some electrode project limitations

- UKBIC will review materials and consider the limitation of processes
- Typical mix volume between 150L and 220L
- Typical solid mass per mix 200 to 450 kgs depending on slurry type and materials
- Max foil width 700mm
- Typical coat width 280mm-690mm
- Max coating speed – slurry/pattern dependent
- Typical anode coat weight 75-150 g/m<sup>2</sup>
- Typical cathode coat weight 150-250 g/m<sup>2</sup>
- Foil lengths of several kms
- Only NMP or water-based slurry processing

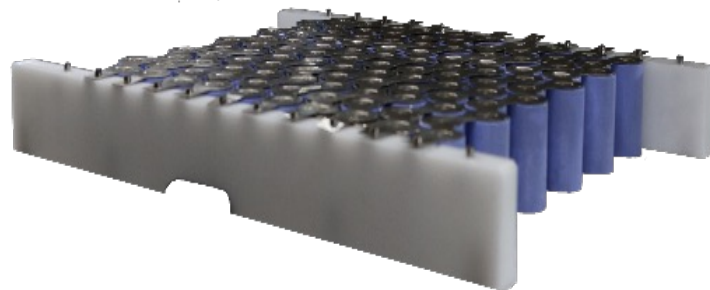


## Building cells at UKBIC

- UKBIC cells
  - 300x100x10 mm or 300x100x5 mm
  - 21700 cylindrical cells
  - Materials limitations – electrolyte composition and volume
  - Setup
    - 30 to 60 litres of electrolyte
    - 50m of electrode just for webbing up, several 100ms for set up
  - Typically, between 30 to 50 electrode sheets per cell, meaning 3 to 5 m of electrode length per pouch cell
  - Formation
    - 2048 cylindrical cell channels for formation
    - 360 pouch cell channels for formation



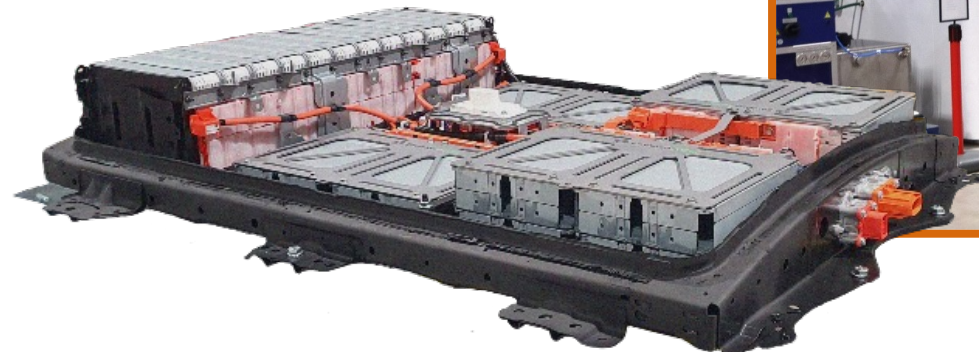
## Module Assembly



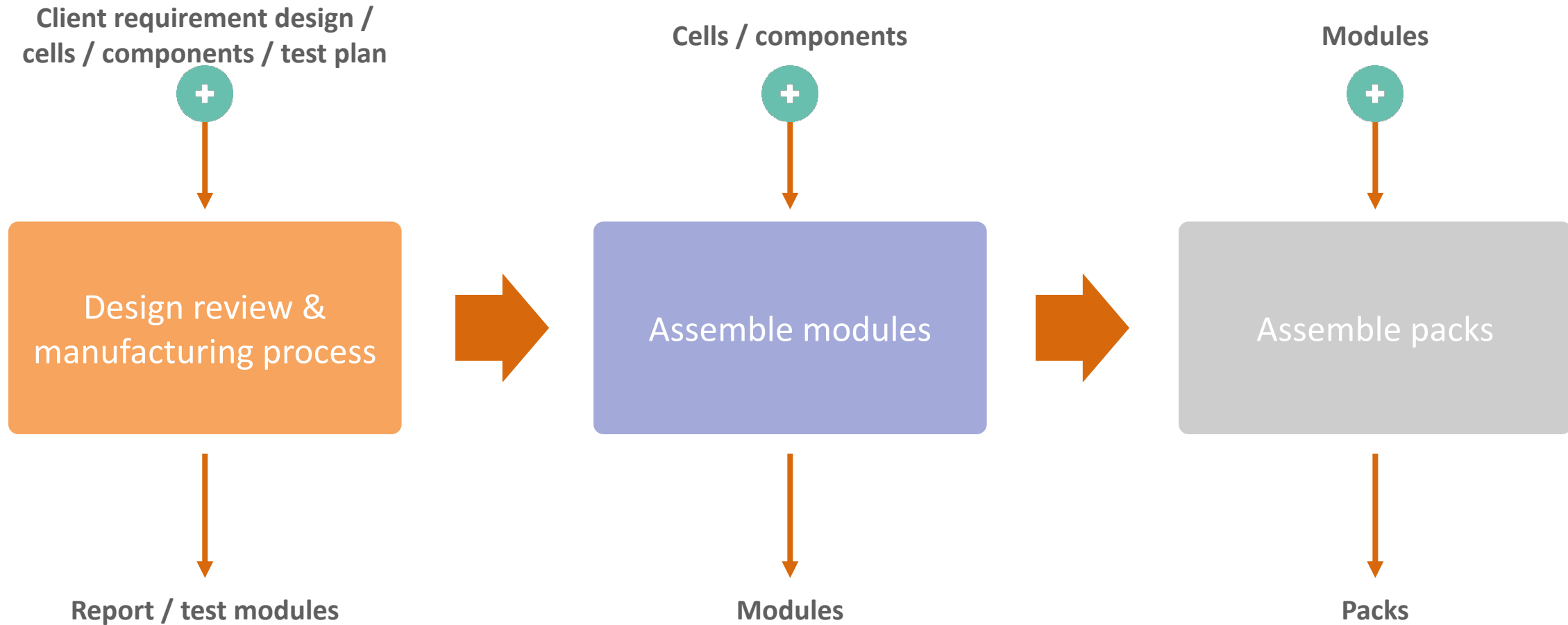
- Environment: ISO class 9, factory conditions
- Formats: cylindrical or pouch cells
- Max. dimensions: 0.4m x 0.4m x 0.25m
- Max. weight: 30kg
- Max. voltage: 60V
- Max. capacity: 200Ah
- Laser welding and wire bonding capabilities
- End-of-line testing
- Configurable process

## Pack Assembly

- Environment: ISO class 9, hazardous voltage
- Formats: cylindrical or pouch cells
- Max. dimensions: 2.5m x 1.75m x 0.5m
- Max. weight: 1000kg
- Max. voltage: 1000V
- Max. capacity: 135kWh
- End-of-line testing



## A Modular Capability



## Proposal – UKBIC

- UKBIC will be a subcontractor in the proposal and not a partner/co-bidder
- Quote
  - Breakdown of work packages and activities
  - Assumptions and dependencies
  - Risks
  - Key team members
  - UKBIC summary description and background
  - UKBIC T&Cs
- Finances
  - Cost per work package
  - Estimated timescales for activity, funding profile
  - Potential timing of project within the funding window (July 24 to March 25)
  - Payment terms

## Timeline

- Applications close: the 6<sup>th</sup> of March 2024

Date	Schedule
29th Nov	UKBIC SME Credits Event
11th Dec	Register interest with outline description of project by close of play – email <a href="mailto:sales@ukbic.co.uk">sales@ukbic.co.uk</a> with <b>'SME Credit'</b> in the subject line
15th Dec	UKBIC issues NDA and information gathering templates where relevant to capture more detailed information and set appointment dates in January
08/01/2024	Formal call opens
16/01/2024	Online briefing event
Jan till mid-Feb	Technical meetings, define the scope and proposal development
End 2nd week February (21/02/2024)	After this date UKBIC does not guarantee that it will be able to develop a proposal in time for the close of the call
End of February 2024	Final UKBIC financial proposal with estimated timings from UKBIC
06/03/2024	SME Credit Competition R2 closes
11/04/2024	Applicants notifications



## The UKBIC team supporting this call: Naseer Ahmed, Yahya Alvar, Vishal Nayar, Andrew Britton



[sales@ukbic.co.uk](mailto:sales@ukbic.co.uk)

Subject: 'SME Credits'

OUR LINKS:

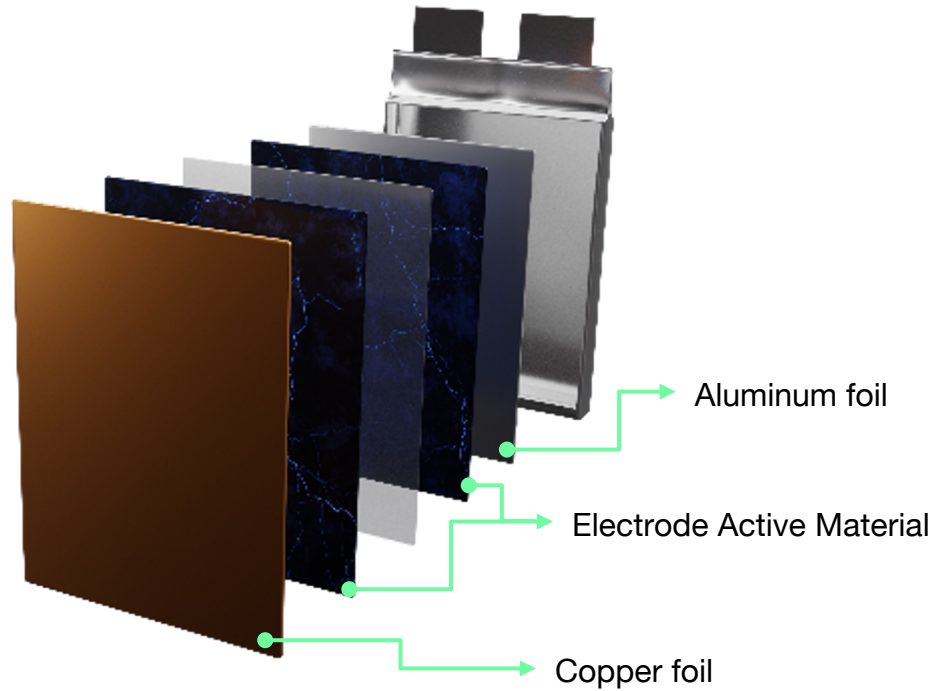


**ADDIONICS**

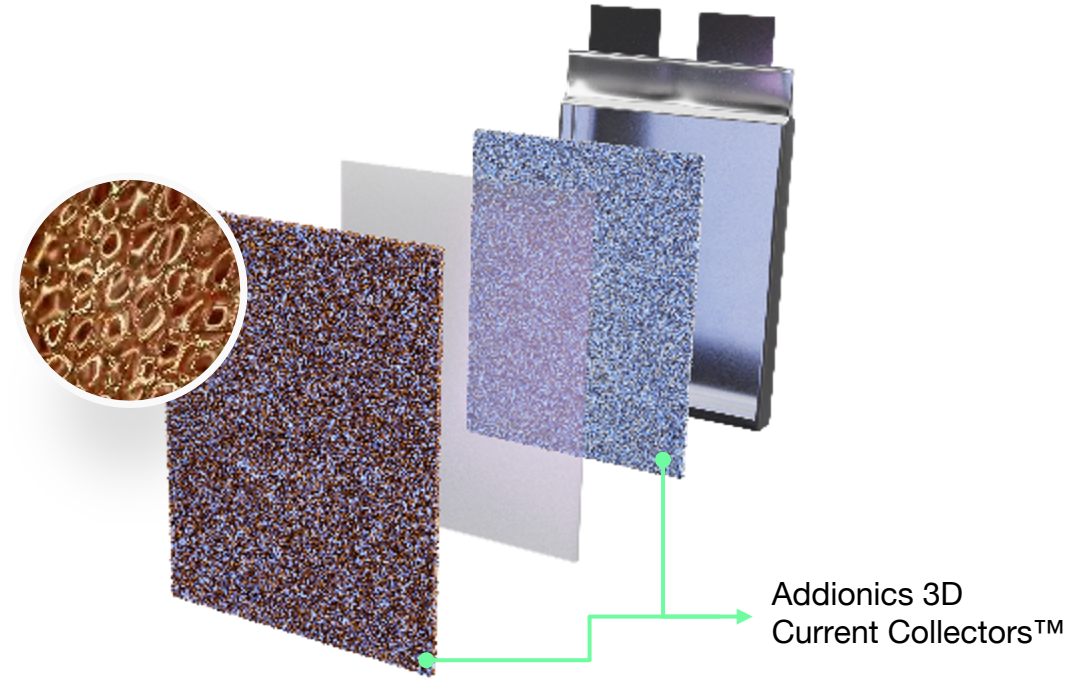
Marcelo Machado  
Technical Project Manager

January 2024

## Standard Battery Cells



## Addionics 3D Battery Cells



**ADDIONICS**  
3D Current Collectors

Addionics' revolutionary 3D design enables a higher energy and lower cost battery, with less inactive material. By introducing a porous, 3D structured current collector – Addionics is able to get higher energy electrode into a battery without compromising power

# Addionics Project Objective

Combining Addionics 3D current collectors into a well referenced cell design for manufacturing readiness assessment at UKBIC.

Addionics will assess and validate the manufacturability of their 3D electrode architectures to ensure production validation cells for onward qualification and commercial assessment.

Addionics will develop a cell to confirm the commercial viability of various 3D electrode architectures through cell manufacturing assessment at scale and certification.

**Manufacturability / Commercial Viability / Certification**



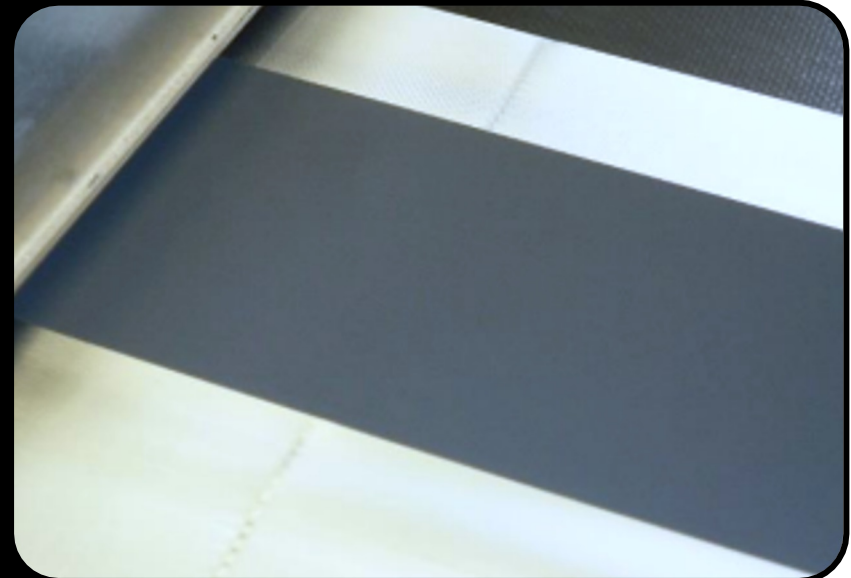
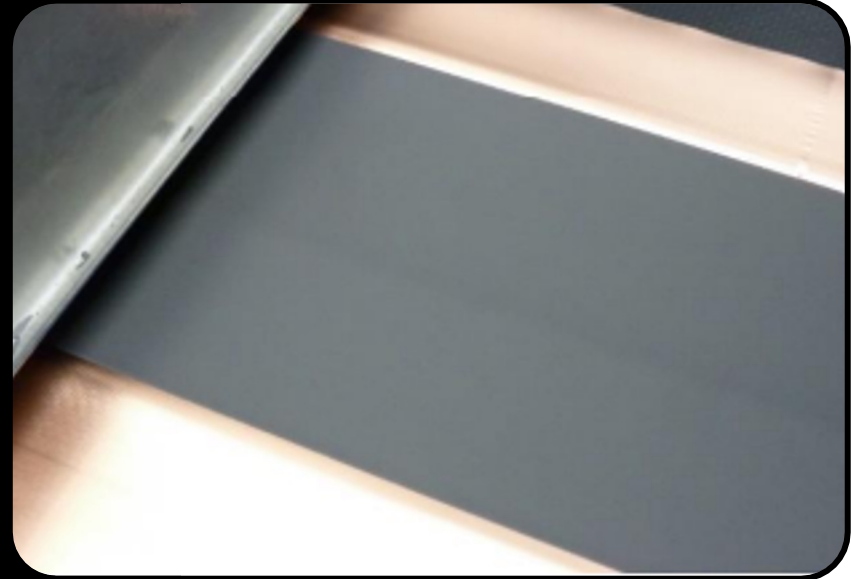
# UK Battery Industrialisation Centre SME Credit Round 1

## Project Setup

- Scope Definition / Quoting Process – UKBIC support
- Internal Approval – Business case
- Application Process – Experience with previous successful projects
- Project Initiation – Kick-Off meeting
- Project Management / Quarterly Reports

## Project Status

- Design phase and preparation activities completed.
- First operational activities at UKBIC starting in a few weeks.



Our vision is to integrate our solution into any battery in the world, to accelerate electrification, and create a better future.  
**For everyone.**

Thank You.

Contact:

Marcelo Machado  
Technical Project Manager  
[marcelo@addionics.com](mailto:marcelo@addionics.com)  
0 7447 736 110





# Faraday Battery Challenge UKBIC SME Credit Round 2 Scope

Oyebola Bello  
Programme Manager - Batteries

January 2024



# Faraday Battery Challenge UKBIC SME Credit Round 2 summary



Up to £1.5 million available for UK Registered Micro, Small and medium enterprises across 2 strands.

Strand	Research Category	RO Participation	Total project costs	Duration	Project completion date
Digital or Software projects	Experimental Development	Up to 45%	£70,000 - £300,000	3- 9 months	By 31 <sup>st</sup> March 2025
Processing for Electrode and Cells Projects	Experimental Development	Up to 45%	£100,000 - £1.0m	3 – 9 months	By 31 <sup>st</sup> March 2025

- support an SME's research and development for the scale-up of battery technologies within the UK
- support an SME to access the UK Battery Industrialisation Centre (UKBIC) and demonstrate technologies at suitable scales to customers
- increase engagement with UKBIC
- move UK battery innovations from technological potential towards commercial capability
- develop and secure material and manufacturing supply chains for battery technologies in the UK

Competition opened: 8<sup>th</sup> January 2024

Competition deadline: **11am 6th March 2024**



# Digital or Software Projects



Strand	Research Category	Grant available	Total project costs	Duration	Project completion date
Digital or Software Project	Experimental Development	£1.5m	£70k - £300k	3-9 months	By 31 <sup>st</sup> March 2025

For Digital or Software projects we encourage applications focused on:

- testing process measurement and control systems on the UKBIC cell manufacturing process line, while considering integration for closed loop control of processes
- using novel software analytical methods for manufacturing and cell formation, data generated from UKBIC internal programmes only, with opportunities to leverage on data generated from a number of internal runs at UKBIC to support your innovation still retaining your intellectual property (IP)

# Processing for Electrode and Cells Projects



Strand	Research Category	Grant available	Total project costs	Duration	Project completion date
Processing for Electrode and cells Project	Experimental Development	£1.5m	£100k - £1.0m	3-9 months	By 31 <sup>st</sup> March 2025

Processing for electrode and cells projects we encourage applications focused on:

- complete cell development project iterations, for example electrode through cells, includes mixing and coating, calendaring and slitting, up to cell assembly, formation and ageing
- prove electrodes at scale, for example electrode only, includes mixing and coating, calendaring and slitting
- developing cell to module and pack assembly processes and associated testing

# Specific Themes

---



Your project is expected to help build and secure the UK supply chain for battery technologies.

Your project must focus on one or more of the following:

- complete electrode and cell manufacturing process
- electrode manufacturing processes at scale
- new electrode formulations at scale, line compatibility to be confirmed dependent on specific solvent, either water or NMP, and material
- proving electrodes or other cell assembly processes at scale, for example, electrode only, includes mixing and coating, calendaring and slitting
- developing cell to module and pack assembly processes and associated testing
- testing process measurement and control systems on the UKBIC cell manufacturing process line, while considering integration for closed loop control of processes
- using novel software analytical methods for manufacturing and cell formation, data generated from UKBIC internal programmes only, with opportunities to leverage on data generated from a number of internal runs at UKBIC to support your innovation still retaining your intellectual property (IP)

You can also focus on alternative materials or processes that will yield manufacturing energy reduction at scale, for example:

- materials or processes. not equipment or monitoring, that reduce the need for very dry electrode handling environment
- reduced electrode drying energy whilst maintaining electrode performance and characteristics

# UKBIC SME Credit Round 2 - In scope



Your proposal must demonstrate :

- that you have developed or proven your innovation to a technology readiness level (TRL) 5 or above.
- the current maturity of your product or innovation including scale, yield and quality
- the work done to date to validate and prove your technology at its current level of maturity
- that your product or innovation is appropriate for, and compatible with the giga-scale pilot-line production facilities at UKBIC, for example, material and scale compatibility
- how you intend to use the UKBIC giga-scale pilot-line facilities
- the availability of materials and consumables for the project
- the nature of the outputs expected from the project
- if applicable, the volume of product expected at the end of the project
- how you will validate product performance
- how the project will accelerate your route to market
- how you will engage with customers during and following the project
- how the project outputs and outcomes will facilitate customer engagement

**UKBIC operates an advanced and high throughput but conventional Li-ion process line. This means that not all materials or processes will be compatible. Solid State processes are not viable on the existing line at this stage.**

# UKBIC SME Credit Round 2 - Out of scope

---



We are not funding projects that are:

- are cells assembly, formation and testing without the electrode stage
- are non-compatible materials, for example, lithium sulfur
- are non-compatible solvents, currently only water and NMP based processes can be undertaken at UKBIC
- are non-compatible cell formats, for example, 46xx, 18650 cylindrical cells and prismatic cells
- are solid state battery processes
- Use technology which has not been proven at least TRL 4 to 5

We cannot fund projects that are:

- dependent on export performance, for example giving a subsidy to a baker on the condition that it exports a certain quantity of bread to another country
- dependent on domestic inputs usage, for example giving a subsidy to a baker on the condition that it uses 50% UK flour in their product

# UKBIC SME Credit Round 2 – Eligible Cost



Eligible costs for this grant funding only include:

- labour
- travel and subsistence
- subcontracting
- overheads
- Materials

**Note:** Only the costs for materials manufactured by the SME, used in the project, are eligible. This is where the total value of materials allowed is not more than 20% of the total project costs in this competition.

Material development at a suitable scale, at a third party location, can also be an eligible cost.

- **Number of applications** An SME can only submit one application.
- Subcontractors are allowed in this competition.
- The majority of the costs for this grant funding must be subcontracting, of which UKBIC is the primary eligible subcontractor for this competition.
- All other subcontractor costs above 10% of the value of the project, will be deemed ineligible.

# Tips and support

---



For help applying contact the Innovate UK Customer Service Desk: [support@iuk.ukri.org](mailto:support@iuk.ukri.org) or 0300 321 4357

For support and advice on applications contact the Innovate UK Knowledge Transfer Network:

- Highly recommended that you use their service, especially if you are new to Innovate UK competitions
- George Okechukwu - Knowledge Transfer Manager for Clean Energy & Built Environment:

[george.okechukwu@iuk.ktn-uk.org](mailto:george.okechukwu@iuk.ktn-uk.org)

- For scope queries contact the Faraday Battery Challenge:
- Faraday Battery Challenge inbox: [faradaybatterychallenge@iuk.ukri.org](mailto:faradaybatterychallenge@iuk.ukri.org)
- Oyebola Bello: Programme Manager - Batteries
- Dr Diogo Vieira Carvalho: Innovation Leads - Batteries

Advice:

- Contact us for help early – do not wait until the last minute – there is always one application which misses the deadline!
- Read scope and application questions thoroughly
- Submit applications early to avoid any last-minute issues
- IFS will close to submissions at **11am 6th March 2024**

# How to Apply- Sebastian Leonard





# Eligibility criteria



# Eligibility criteria UKBIC SME Credit Round 2 - processing for electrode and cells

Project eligibility	<ul style="list-style-type: none"><li>• To lead a project your organisation must be a UK registered micro, small or medium-sized enterprise (SME).</li><li>• This competition is open to single applicants only</li><li>• must carry out your project in the UK</li><li>• exploit the results from or in the UK</li></ul>
Total project costs	Must be between £100,000 and £1 million.
Project length	last between 3 and 9 months

# Eligibility criteria UKBIC SME Credit Round 2 - digital or software

Project eligibility	<ul style="list-style-type: none"><li>• To lead a project your organisation must be a UK registered micro, small or medium-sized enterprise (SME).</li><li>• This competition is open to single applicants only.</li><li>• must carry out your project in the UK</li><li>• exploit the results from or in the UK</li></ul>
Total project costs	Must be between £70,000 and £300,000
Project length	last between 3 and 9 months

# Funding

## Funding rules

The level of funding awarded will depend upon the type of organisation and the type of research being undertaken in the project

Funding is calculated by project participant

IFS will advise the maximum grant % you can request based upon your answers to:

- type and size of organisation
- research category defined by the lead applicant in the Application Details section of the application

## Eligibility Criteria

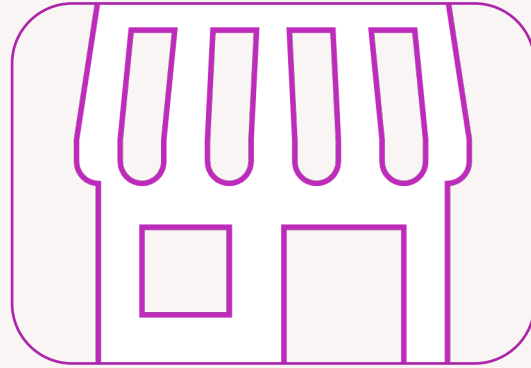
Experimental development: 45% for micro small, medium size enterprise



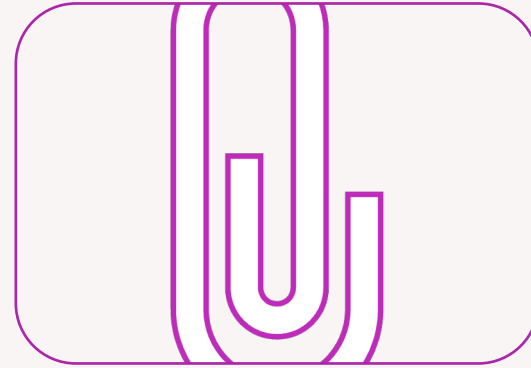
# Your Project Cost Categories



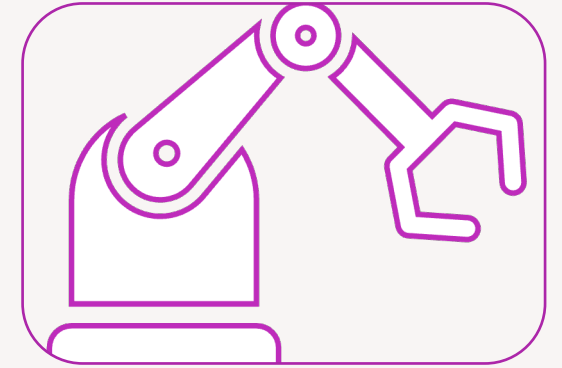
Labour



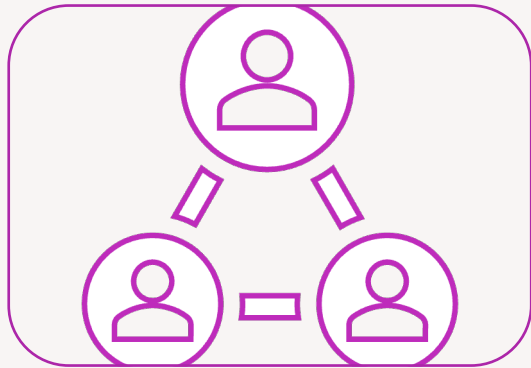
Overheads



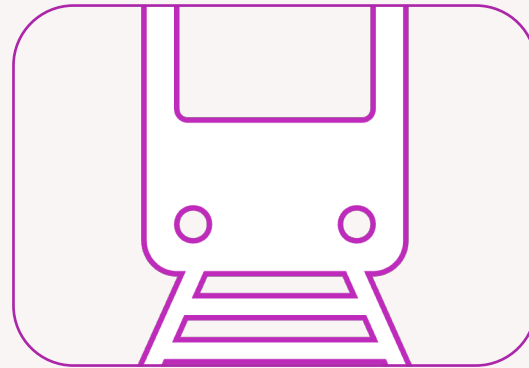
Materials



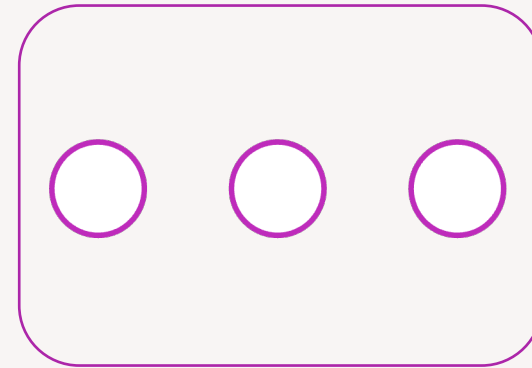
Equipment Usage



Subcontractors



Travel & Subsistence



Other

# Conditions of Award

Under the Subsidy Control Regime, we will conduct a financial review and seek assurances on your organisation, leadership team, and persons of significant control.

## Certify you are eligible

When submitting an application, you must certify that you are eligible for funding. If you are unsure, please take independent legal advice before applying. You must pass our financial review and assurances before being offered a conditional award.

# Other Innovate UK projects

If you have an outstanding final claim or Independent Accountant Report (IAR) on a live Innovate UK project, you will not be eligible to apply to this competition, as a lead or a partner organisation.

We will not award you any further funding if you:

- applied to a previous competition as the lead or sole company and were awarded funding by Innovate UK, but did not make a substantial effort to exploit that award
- applied to a previous competition as the lead or sole company and failed to comply with grant terms and conditions.

# Previously submitted applications

Previously submitted application	Not a previously submitted application
Not materially different from one you have submitted before (but it can be updated based on the assessors' feedback)	<p>A brand-new application, project or idea that you have not previously submitted into an Innovate UK competition</p> <p>OR</p> <p>A previously submitted or ineligible application which:</p> <ul style="list-style-type: none"><li>• has been updated based on assessor feedback</li><li>• <u>and</u> is materially different from the application submitted before</li><li>• <u>and</u> fits with the scope of this competition</li></ul>



# Key Dates

Timeline	Dates
Competition Opens	08 January 2024
Briefing Event	16 January 2024
Submission Deadline (11am)	06 March 2024
Applicants informed	11 April 2024

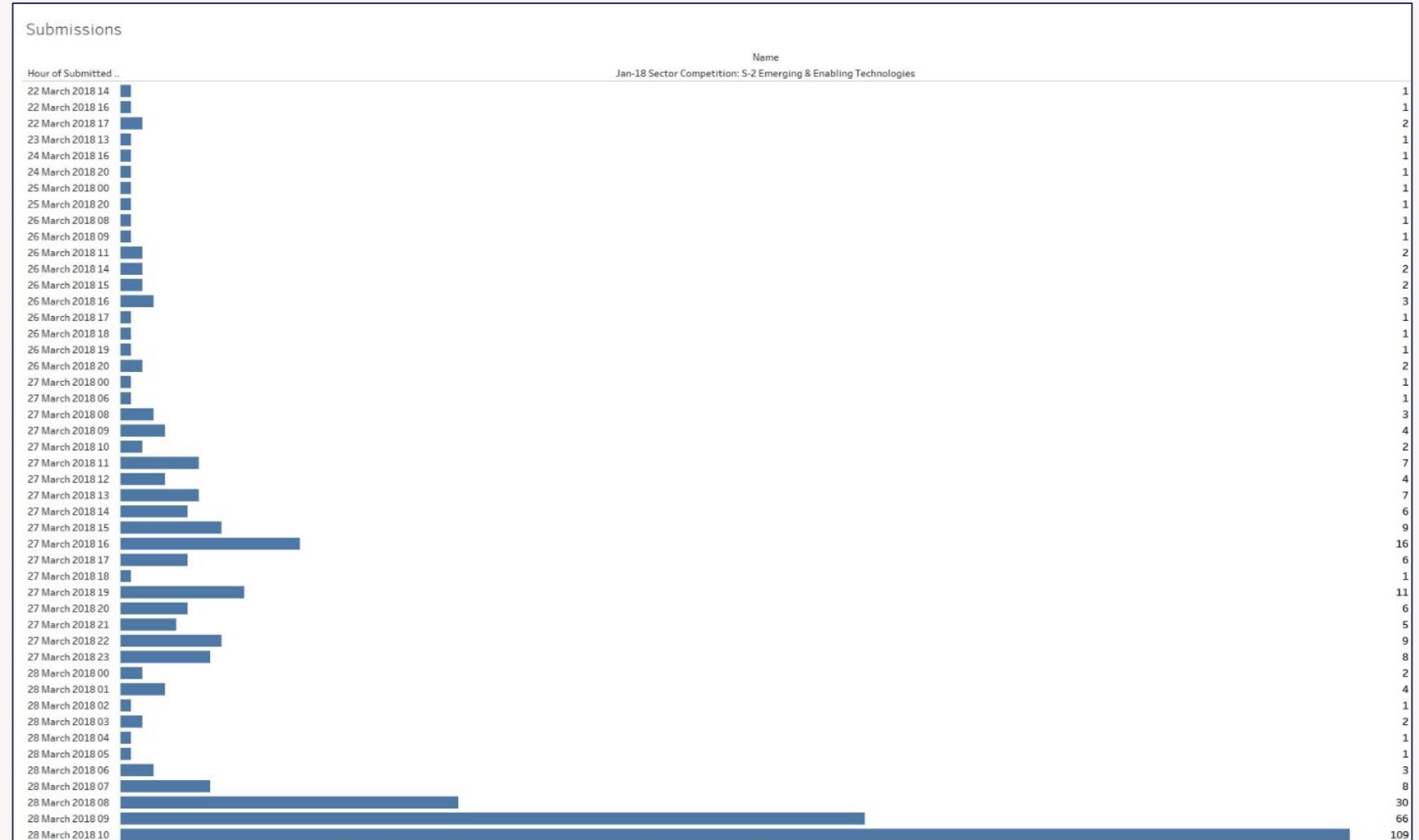
# Application Questions

	Question	Appendix
Question 1.	Applicant location (not scored)	No
Question 2.	Animal Testing (not scored)	No
Question 3.	Need or challenge and current status of innovation	Yes
Question 4.	Approach and innovation	Yes
Question 5.	Team and resources	Yes
Question 6.	Market awareness	No
Question 7.	Outcomes and route to market	No
Question 8.	Wider impacts	No
Question 9.	Project management	Yes
Question 10.	Risks	Yes
Question 11.	Added value	No
Question 12.	Costs and value for money	No

# Submit your application early!

Customer Support can help resolve any issues you might have when submitting but only if they are contacted before the deadline.

Once the deadline has passed, your application cannot be submitted.



# Conditional offer of awarding

If you receive a notification saying you have been successful at the assessment stage, you will have a further 8 steps to complete in Project Setup.

These are:

- Project details
- Project team
- Documents
- Monitoring Officer allocation
- Bank details
- Finance checks
- Spend profile
- Grant Offer Letter

**Work can only commence on the project once you have signed and returned the Grant Offer Letter.**

# Project Impact questions

- Each organisation in your application will complete the Project Impact questions within the 'Supporting information' section
- The Project Impact questions ask for data about your business and innovation and its contribution to the UK economy, society, and the environment
- Visit the [Project Impact guidance](#) page for more information, the types of questions you will be asked and how to get further support
- By providing this data, you are enabling us to better understand the impact of our support. It will help us identify success stories and provide evidence to government and the public of the value of supporting innovative businesses



## For more information:

- Watch Our Impact Management Framework video [here](#)
- Watch How to Complete the Project Impact questions video [here](#)

# Additional Support



# Equality, Diversity & Inclusion

- We are on a mission to embed Equality, Diversity, and Inclusion in everything we do, internally and externally.
- We believe that great ideas can, and do, come from anyone and everyone.
- We know that diversity and inclusion in businesses contributes to enhanced innovation, satisfaction, performance, and ultimately, commercial success.
- So, if you would like any support, please contact our Customer Support Service Team on [support@iuk.ukri.org](mailto:support@iuk.ukri.org) or at 0300 321 4357.



# What to Expect

1.

Contact our Customer Support Services Team as early as possible – we suggest at least 15 working days before the deadline

2.

Complete a request form which will be sent to our partner Diversity & Ability (D&A)

3.

D&A will conduct a Discovery Conversation with you and make reasonable adjustments recommendations

4.

D&A will organise and deliver bespoke reasonable adjustments for and with you

5.

Submit your application – please do so well ahead of the deadline as extensions cannot be provided

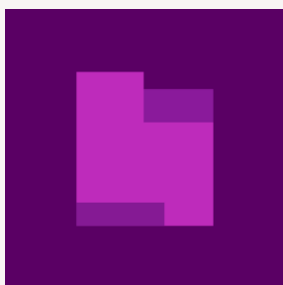


# Contact

## Customer Support Services

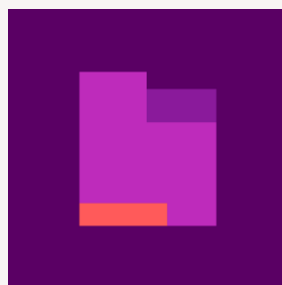
0300 321 4357 (Monday - Friday 9-5pm)

[support@iuk.ukri.org](mailto:support@iuk.ukri.org)



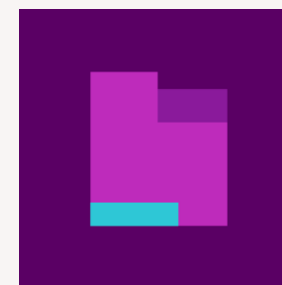
**Innovate UK**

[ukri.org/councils/innovate-uk](https://ukri.org/councils/innovate-uk)



**Innovate UK KTN**

[iuk.ktn-uk.org](https://iuk.ktn-uk.org)



**Innovate UK EDGE**

[innovateukedge.ukri.org](https://innovateukedge.ukri.org)