DRIVE35 Scale-up Fund

ADVANCED PROPULSION CENTRE UK

Driving Research and Investment in Vehicle Electrification (DRIVE35)

ADVANCED PROPULSION CENTRE UK

£2.5bn **ingrant funding delivered over ten years in partnership with the DepartmentforBusinessand Trade,InnovateUK, and the Advanced Propulsion Centre UK**

3 Strategic Funding Priorities

Supporting INNOVATION

Concept design to late-stage R&D

£150K up to £25m available, project duration from 12 to 36 months, depending on selected stream

Accelerating SCALE-UP

Validation and process delivery

£150k up to £20m available, project duration from 12 to 46 months, depending on selected stream

Enabling TRANSFORMATION

Industrial deployment at scale

Vehicle Assembly
Supply Chain Development

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DRIVE35

Department for Business & Trade

ENABLING
TRANSFORMATION

Automotive Transformation Fund

ACCELERATING
SCALE-UP

Scale-up Fund

Feasibility Studies

SUPPORTING
INNOVATION

Collaborate

Demonstrate

Mobilise

DRIVE 35 Scale-up Fund: Overview

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Department for Business & Trade

UKRI Innovate UK

The Scale-up Fund is to support manufacturing facility and process development at pilot scale or demonstration scale. These projects will enable businesses to validate manufacturing capability and commercial viability, achieving market entry at the targeted production volume.

You will need to demonstrate your readiness to secure co-investment for this scale up project, whether from parent companies, corporate sponsors, institutional investors or lenders.

Introducing Scale-up Fund

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Up to **£20m** in grant funding

- Singleapplicantsmay apply
- £2.5m minimum grant request per project
- £5m minimum total project cost
- Support manufacturing facility and process development at pilot scale or demonstration scale.
- Projects will enable businesses to validate manufacturing capability and commercial viability, from the project outcomes achieving market entry at the targeted production volume.
- Up to 50% grant if you are a micro or small or medium sized organisation; and up to 30% grant if you are a large organisation.
- Secure co-investment within a **9-month** period (extendable to 12 month) following award of grant offer.

•Scaling your manufacturing from R+D to commercialisation

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Stage	Concept	Lab scale / workshop	Pilot line (low-volume manufacture)	Demonstration line	Industrial plant
Description	Innovation of new tech concepts	Initialprototypesfrom manual lab or workshop	Initial production line	Single FOAK line representing scaled-up workflow	Full scale manufacturing
Flexibility and output	Complete flexibility, no process	Very high flexibility, manual process	High flexibility, low volume output	Medium flexibility and volume output	Lower flexibility, very high output
Development stage output	Early prototypes	Research to deliver prototypes and show product attributes	Process development topilot initialcritical process steps	Process development to demonstrate production at rate with QC	Customer product at full production scale
Commercial milestone delivered	Proof of Concept	Paid trials / 1st off's	1st adoptor programmes	Secureincreasing offtake	Volume programmes
Scale-up Fund Scope	-	-	Yes	Yes	ATF

Scope of Scale-up projects for zero-emission vehicle technology

As previously stated, the Scale-up fund aims to support the development of manufacturing readiness at pilot scale or demonstrationscale,achievingmarketentryatthetargetedproductionvolume.Theprojectmustincludetheactivities

required to design, build, and commission a pilot-scale or demonstration-scale manufacturing facility.

Examples of in-scope activities include:

- **Manufacturingfacilityplanningandengineering**,includingdetailedfacilityorprocessplanningandengineering,finalisationofsite selection, fabrication and construction work
- **Development of the Production Line**, including detailed production line design, equipment integration with site infrastructure, specification, procurement and purchasing, equipment installation and commissioning
- **Process development** including development of quality control and quality assurance process and equipment, and APQP (Advanced Product Quality and Planning) activities required, up to and including production launch
- **Technology implementation to** enable efficient and effective production processes
- **Training**
- **Product development to support 'DesignforManufacture',** where this enables your technology or product to be adapted for your target scale manufacturing
- **Development of UK supply chain** for your target production scale
- **Testing, Validation and Verification** of components and systems which are manufactured as part of this scale-up project
- **Dissemination** to enable market engagement and market feedback
- **Limited Commercial Activity** during the active phase of this project

Impacts and outcomes for your UK business

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GROWTH:Support growth, transition and resilience of the UK's automotive supply chain, increasingcapability whilstimproving productivity,efficiencyandcompetitiveness. Thismay also include growth within the UK Supply Chain supporting this scale-up project.

STRATEGIC TECHNOLOGY:Contribute to the UK's strategic aims and priorities, such as the HMG's Industrial Strategy as well as the Automotive Council's Roadmaps and Strategic Technology areas.

FACILITY INVESTMENT:CreationorconversionofUKmanufacturingfacilitieswhichsupportthe transition to zero-emission vehicles, achieving market entry at the targeted production volume.

IMPACTS: Enabling of substantial investment, creation and/or safeguarding of high-value jobs, increase of sales, together resulting in a lasting economic benefit to the UK.

REPORTING OUTPUTS: At project closure, deliver a Closeout Review and Demonstration Event to demonstrate the outcomes and deliverables of the Scale-up investment.

What will a strong Scale-up Project application consist of?

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Demonstrated **Business Capability** by organisational strength of the Leadership Team to deliver project outcomes and readiness for growth.

Strong Value Proposition supported by readiness to scale (demonstration of TRL / MRL)

Understanding of the **Market Opportunity** and **Competitive Environment**.

Demonstration of a **Strong Commercial Plan** including market entry strategy and growth supported by realistic sales projections and scale.

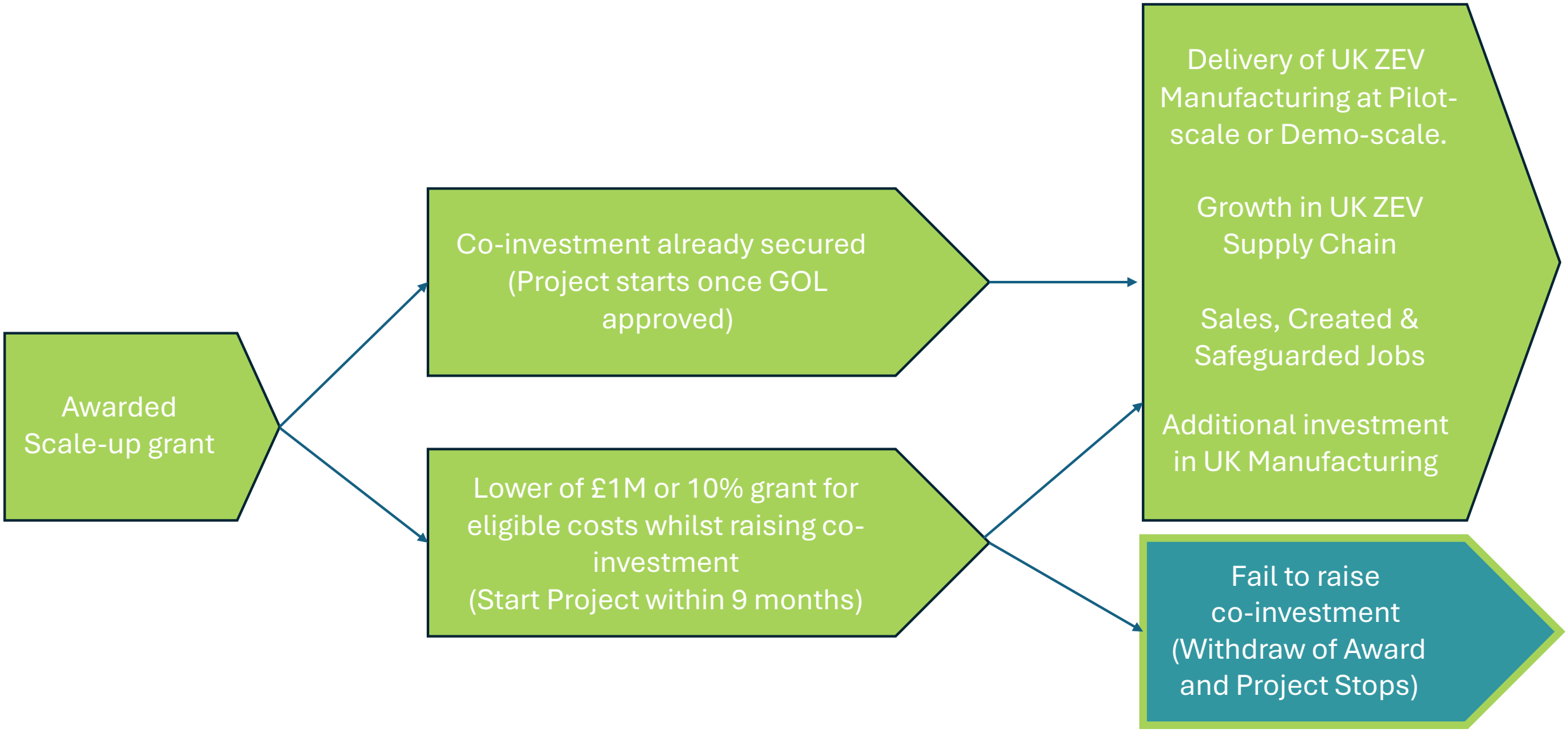
Clearly defined **Plan to Deliver** Scale-up including defined project objectives, project team, risk register, project costs, and timing plan. Any gaps should have clear mitigation plans.

Operational Growth Plan including requirements from the wider Supply Chain especially where new suppliers will be on-boarded to support scale up.

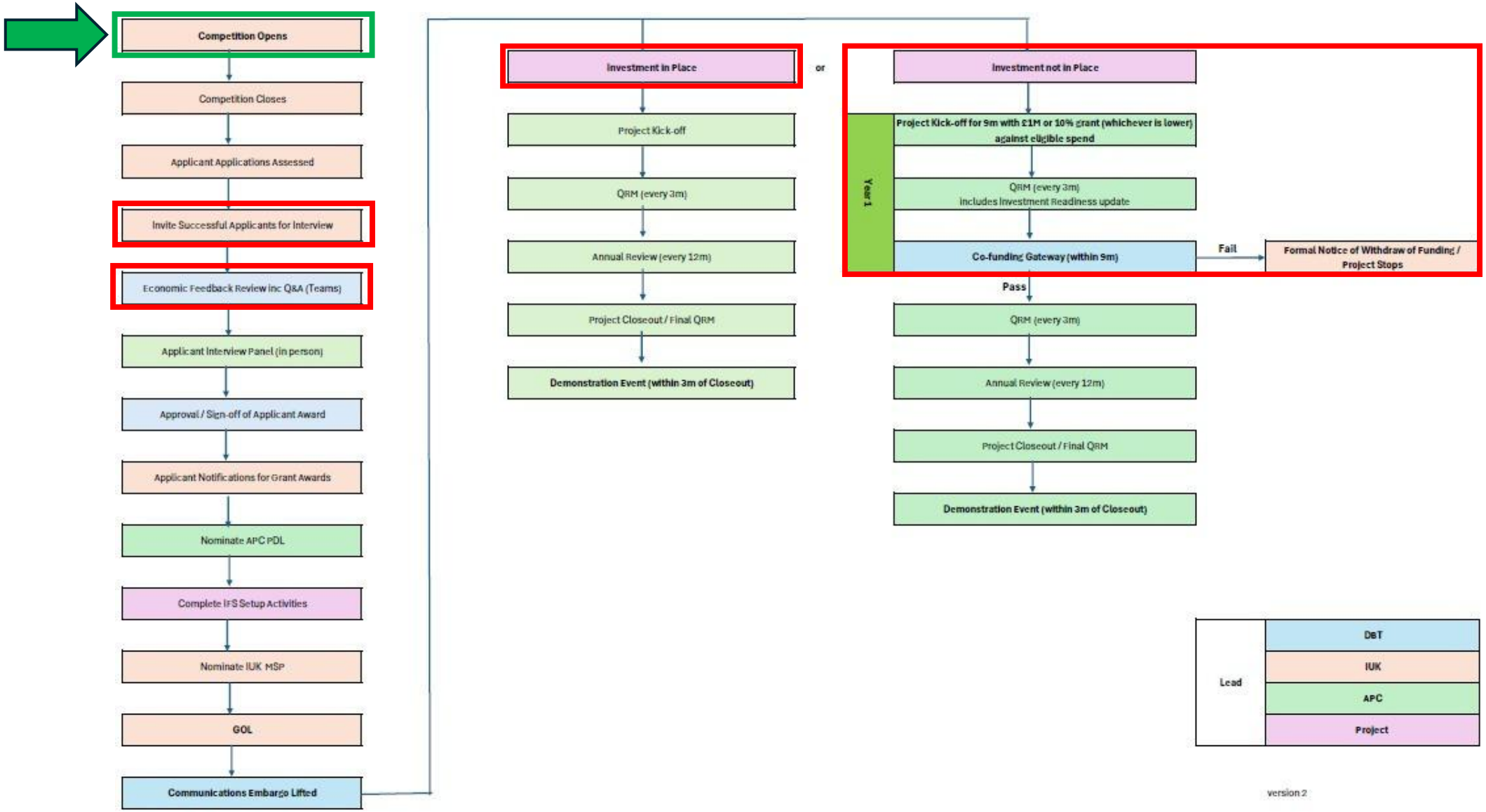
Financial Business Case including readiness for Investment where required to support Scale-up.

ProjectImpact including created and safeguarded jobs, and future UK investment requirements for growth.

Scale-up Projects: Target Outcomes



Scale-up Fund Competition – High Level Activities



Scale-up Project: Eligibility

The Scale-up project under consideration, must:

Implement scale up in the UK auto sector, however, exploitation to other sectors is welcomed.

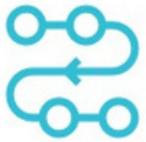
Single or Consortia led – subcontractors are allowed.

Carry out project work in the UK with significant justification for overseas activities.

Exploit the outcomes in the UK

Grant funding request between £2.5M to £20M with minimum project eligible costs of £5M.

A maximum of 30% grant funded for a large organisation, or 50% for an SME.



Project must be completed within 46 months.

You must make an industrial contribution of 3.5% of any grant received to support the running costs of APC UK

Technology Scope

This competition fund aims to support the manufacturing scale-up of strategically important technologies foron boardvehicleapplicationsinoneormoreofthefollowingareas:

- Electrical energy storage:
  - Developmentofbatteries,supercapacitors,theircomponents,management,andintegrated systems
- Electric machinesand associated driveline
- Power electronics:
  - Including Vehicle-to-Everything (V2X)
- Internal combustion engine (ICE) for off-road applications:
  - Wewillfundprojectproposalsthatsupportatransitiontozero emissions, utilising non-fossil fuels,
- Lightweighting:
  - Materials and manufacturing processes
- Fuel-cell systems:
  - Including associated balance of plant
- Hydrogen storage and management systems
- Zero-emission vehicle assembly

Technology Scope 2

Within the technology scope outlined on previous slide, your project can include:

- Upstream supply chain for the above technologies, including Raw materials, Component manufacturing, Sub-assembly manufacturing,
- Circularity and Design for Disassembly: Projects delivering manufacturing systems which enable the disassembly, remanufacturing, recovery, and reuse of materials.
- The deployment (but not principally the development) of technologies to enable productivity and cost-competitiveness across the relevant aspects of applicable manufacturing operations in any of the following areas:
  - Digital Transformation: Integration of digital tools within the manufacturing process. Such as the use of AI, digital twins, and Internet of Things (IoT).
  - Manufacturing process decarbonisation: Processes that use renewable energy sources or innovations enabling reduced energy consumption within manufacturing processes including capture and reuse.
  - Lean Manufacturing: Implementation of innovative lean principles to improve efficient use of materials used in processes, reduce their environmental impact and improve efficiency including the use of advanced automation techniques.

Projects we will not fund

We will not fund projects:

- Requesting grant greater than 50% of total project costs for an SME or 30% for a largebusiness.
- Not focused primarily on developing and validating manufacturing processes and assets
- Not aligned with the UK Industrial Strategy
- Do not have a robust future plan to enter the zero-emission vehicle supply chain
- Not of future benefit to the automotive sector
- Focused on small personal mobility applications such as e-Scooters, e-Bikes, or other low-powered mobility devices
- Do not lead to significant business or production scale up and expansion
- Focused on technologies or processes which are too technologically immature to scale with increasing market demand
- Focus on fossil fueled internal combustion technology
- Focused on fuel retail or wholesale fuel supply
- Focused on the development or production of low-carbon fuels
- Focused on the production of hydrogen
- Focused on off-vehicle charging infrastructure
- Focused on energy retail or wholesale energy supply
- Focused primarily on the development of digital or data technologies
- Focused on speculative site enabling projects

Wecannot 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

Portfolio approach to selection

We want to fund a variety of manufacturing scale-up projects across different:

- Technologies
- Vehicle applications
- Markets,
- Technological maturities
- Organisational sizes

All of which are aligned to policy and regulatory deadlines enabling automotive transformation including the transition to fully zero-emission vehicle manufacturing. As such, selection of funded projects may be determined by the fit of the project to the competition portfolio. We call this a portfolio approach.