

Call outline

Small research project funding

# Summary sheet

Call type: Small research project funding

Closing date: 16:00, Friday 17th April 2020

Funding Available: Up to £300,000 of funding (at 80% Full Economic Costs) is available for this call. There is no minimum project value but please note that no single application will be awarded in excess of £60,000 (80%).

How to apply: Applicants should submit an application form available from the Decarbonising UK Freight Transport website and submit to decarbonisingfreight@ucl.ac.uk by the deadline indicated. The Network is unable to consider applications submitted after the deadline.

Assessment process: The review and selection process has three key stages; initial review by independent industry and academic reviewers, panel review and ratification.

Key dates:

Call opens – launch date 5th March 2020

Deadline for applications 16.00, Friday 17 April 2020

Funding decision Friday 29th May 2020

Projects may start from Monday 7th September 2020

Expected end date 3 to 6 months after start date

Key contacts: Alexis Fidget, Network administrator, a.fidgett@ucl.ac.uk

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# About Decarbonising UK Freight Transport Network

UK freight transport is on the cusp of a sociotechnical transition away from fossil fuel dependency. This transition will require major investment to fleet and infrastructure, cause disruption to assets and business models, and will trigger significant reconfiguration. Whilst the scaling up of fossil phase-out is most likely to occur from the 2030s onwards, the next 10 years of investments are critical to enabling the transition, and to mitigating transition risks to the freight sectors, and by association UK trade.

The Decarbonising the UK’s Freight Transport Network Plus (Decarbonising UK Freight Transport) is focused on unlocking and enabling the next step in UK freight transport decarbonisation by providing a rigorous and independent co-created (stakeholder and academia) knowledge and evidence base and accompanying recommendations and strategy to accelerate investment. Decarbonising UK Freight Transport will prioritise research that can enable the energy/propulsion switch across the road, rail, sea and air freight modes

Decarbonising Freight is led by the UCL Energy Institute, in partnership with Newcastle University, University of Strathclyde, University of Oxford, University of Edinburgh, University of Westminster, University of Cambridge, University of Plymouth, The University of Manchester, Heriot-Watt University and University of Southampton. It is funded by the Engineering and Physical Sciences Research Council (EPSRC), part of UK Research and Innovation (UKRI), in the Decarbonising Transport Networks+ programme.

The work of Decarbonising UK Freight Transport is focused on five research themes:

1. The role of data and models for unlocking implementation decision making (public and private)
2. Managing uncertainty (macroeconomic, policy and technology) whilst mitigating climate risk in investment decisions
3. Fuel and propulsion technology pathways: multi-modal; multi-sectoral and UK, EU and Global energy system synergies and differences
4. Aligning drivers for decarbonisation investment/policy with air pollution, UK, EU and Global climate policy and integrating into private sector decision making
5. Coupling the evolution of logistics and its infrastructure with decarbonizing freight

For more information on the themes and their objectives visit [www.decarbonisingfreight.co.uk](http://www.decarbonisingfreight.co.uk)

# Funding call – Small research project funding

This is an open call for proposals of three to six months duration, to be funded through Decarbonising UK Freight Transport. The proposals must clearly address one of the five theme specific research questions on page 8-10. It is expected that up to five applications will be funded (one per research question), although note that whilst there is no minimum value for a request, the maximum that shall be awarded to any single project is £60,000 (at 80% FEC). Exact details on the amount that can be awarded for each of the proposals are stated in the research questions (page 8).

This document contains key information regarding the application process that applicants will need to follow in order to submit their proposal to this call. The accompanying theme specific call outlines contain the details of the types and scope of projects expected, and the kinds of research questions applicants will need to address.

# Timetable

Call opens – launch date Monday 5th March 2020

Deadline for applications 16:00, Friday 17 April 2020

Funding decision Friday 29 May 2020

Projects may start from Monday 7 September 2020

Expected end date 3/6 months after start date

# Black Swan funding

In addition to the above calls for small research project funding, the Network also has a separate fund of a total of £100,000 that will open on the 5th March 2020. This fund is earmarked for proposals that can enable the network to respond to changes in the research landscape that can impact investment. It is expected that the network will fund 2-3 proposals between 2020 and 2022. This funding will enable “black swan” studies to be conducted by small teams to inform the Network and wider stakeholders on topics such as: Policy e.g. impact on investments of a shift to 1.5 alignment for UK, strengthen alignment to 1.5 by UN, collapse of Paris Agreement; Energy e.g. CCS breakthrough, battery (performance/cost) breakthroughs, synthetic fuel breakthrough, major electricity or oil price movement (global and UK); Brexit – e.g. major restructure of global supply chains with key nodes in the UK, major shift in relevance of EU decarbonisation policy/initiatives.

If you are interested in applying to the Black Swan fund, and for further information, please contact decarbonisingfreight@ucl.ac.uk to discuss your proposal. Due to the strategic emphasis of the Black Swan fund we are unable to accept unsolicited applications. In evaluating the proposals/applications, the review process for small research project funding will be followed.

# Scope

In this round, funding is available for a maximum of five small research projects which will address the research questions as set out in pages 8-10. Applications to this call for small research projects should be submitted by 16:00, Friday 17 April 2020 to decarbonisingfreight@ucl.ac.uk.

In addition, the Network is interested to hear from parties who would like to bid for Black Swan funding. Please email decarbonisingfreight@ucl.ac.uk directly to express your interest to this fund; the Network will not consider unsolicited applications for Black Swan projects.

# Eligibility

* Every Small Project shall have a named Lead University. This organisation may apply independently, or may include other Project Partners in its application.
* Funding will be disbursed from UCL to the Lead University only. Any subsequent distribution of funding to Project Partners shall be the responsibility of the Lead University.
* The award holder may include other stakeholders (Project Partners) in their project team but should not exceed more than three co-instigators. The inclusion of Co-Investigators should be clearly justified in respect of their added value (e.g. bringing expertise from a different discipline, or a different methodology) and the duties/responsibilities they will commit to undertake as part of the project.
* Industry participation and ‘matched funding’ is strongly encouraged and desirable. Estimates of contributions (whether cash or in-kind) would be a useful addition to the application; industry participation needs to be shown as appropriate and adding value to the proposal, i.e. ‘is it necessary?’ and ‘what does it add?’.
* Each project shall have a named Principal Investigator (PI). The PI shall be employed continuously by the Lead University (i.e. their post will outlast the project). The PI shall be considered the key contact for the award, taking responsibility for delivery, budget and reporting. The PI must be from the organisation that will administer the grant. The PI will take intellectual leadership of the project and manage the research. All named investigators are responsible for ensuring that successful proposals are undertaken and completed in the manner specified.
* Any funding requested for staff shall only be awarded for named individuals, who are already in post in the organisation. The short duration of the Small Projects precludes the option of making new appointments in the funding period.
* Early career researchers[[1]](#footnote-1) (ECR), (including post-doctoral researchers and new or probationary lecturers) are eligible to participate and are encouraged to do so, but shall not act in the role of PI. Where an ECR is the primary actor in a Small Project, a PI shall be named and shall be considered as the key contact for the award, taking responsibility for delivery, budget and reporting. In this case, a request for a modest percentage of the PI’s time may be included in the request (expected to be at least 2%).
* Impact: in line with UKRI expectations, it is recommended that applicants should allocate approximately 10% of the requested costs for impact activities.

# Costs

If successful, applicants will receive 80% of the full economic costs on proposals submitted (up to a maximum award of £60,000 at 80%) and applicants’ host institution will be required to support the remaining 20%. Exact details of the amount that can be awarded for each proposal is stated in the research questions on pages 8 - 10. Applicants should ensure that their request is appropriate for the scope, ambition and expected impact, and can viably be spent within the maximum six months permitted.

* Directly Allocated staff : Investigators and Technicians
* Directly Incurred staff: Researchers and Technicians
* Travel and Subsistence
* Other Directly Incurred costs: project specific consumables, consultancy fees, and equipment/data costing less than £5,000.
* Other Directly Allocated costs: e.g. support staff salaries, a share of the costs of departmental support staff and/or the costs of access to major research facilities.
* Estates and Indirect costs.

The following may not be requested under this Call:

* Associated studentships
* Any equipment/data costing more than £5,000 (including VAT)
* Costs associated with International Co-Investigators
* Costs associated with UK co-investigators in business, civil society or government bodies

# Expectations

To align with the expectations of the Decarbonising Transport Networks+ programme and Decarbonising UK Freight Transport, successful applicants shall:

* Provide updates on progress (if requested) and comply with end of project requests for reporting. Reporting requirements will be provided to successful teams. These shall align with UKRI templates and ResearchFish and include commentary on whether aims have been achieved, methods used, data produced, publications or other outputs, other outcomes, impact achieved and planned, problems encountered, and forward plans.
* Attend Decarbonising UK Freight Transport events, as required and may include presentations to the Strategy Board meeting and Annual Conference (full timetable available from the Network’s website).
* Promote and amplify the work of Decarbonising UK Freight Transport through their own networks. The Decarbonising UK Freight Transport Administrator will maintain contact with successful teams and those subscribed to receive updates to ensure that important information and announcements are disseminated widely.

# Review and selection Process

The review and selection process has three key stages; initial review, panel review and ratification. Please see the process timeline below.

**Stage 1 Initial Review**

Applications received – generic inbox decarbonisingfreight@ucl.ac.uk

Applications sorted & sifted – removal of any that don’t meet specific criteria e.g. budget, incomplete documents, and allocate to reviewers

Applications sent for review to independent reviewer pool

* Each application is sent to two reviewers (industry and academic)
* Shortlist compiled based on top scoring proposals, two per theme

**Stage 2 Panel Review**

Shortlisted high scoring applications are reviewed by an independent panel of reviewers

* Any proposals that have a significant difference in review scores will be forwarded to the panel
* Final list is compiled, one proposal per theme is selected, five in total

**Stage 3 Ratification**

Final list of five projects to be ratified by the strategy board and EPSRC (& network coordinator)

**Important note:** Decarbonising UK Freight Transport reserves the right to reject proposals that are incomplete and that do not meet the requirements highlighted on the checklist before sending them to reviewers. The checklist can be found in the Application Form.

#  Evaluation criteria

There are six primary criteria against which all proposals shall be assessed. These are:

* **Quality**
* **Importance**
* **Ability to deliver**
* **Impact**
* **Equality, Diversity and Inclusion**
* **Value for money**

All applications shall be assessed against the same criteria, regardless of the size of request. Proposals shall be scored on how well they meet each of the six criteria (of equal weighting) on a scale of 0-3, as follows:

0 = criteria not met

1 = criteria met at the minimum level

2 = criteria partially met

3 = criteria fully met

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| --- | --- |
| **Criteria** | **How the criteria can be met** |
| Quality | * State clearly the aim and objectives of the project, how you aim to answer the research question, novelty of the research proposed, reference to the evidence base (including references to literature) and the expected addition to knowledge
* Describe and justify the appropriateness of the research approach/method, making clear links to which team members will be responsible for delivery
 |
| Importance | * Describe the relevance to decarbonising freight transport and unlocking investment
* Describe the strategic importance of the project, how the project fits with national and international priorities e.g. Industrial Strategy, clean growth strategy, Road to Zero, Clean Maritime Plan, etc.
 |
| Ability to deliver | * Justify why this team is the most appropriate to deliver the project, with reference to their track record/s
* Explain (with a timetable and work package/task structure) how you will ensure you deliver the project on time, including sufficient engagement and networking as part of the programme
* Provide an account of the key risks and how you will manage these (include any risks in respect of ethics, data management, and staffing)
 |
| Impact | * Describe the long-term effect that you expect your project to have on the decarbonising freight transport agenda, and how you would expect this impact to be measured or recognised.
* Set out your pathway/s to impact, including your target audience/s and beneficiaries, how you will reach them, and what change you expect to see
* Explain your overall approach to industry engagement and/or collaboration, including which people/organisations you will involve and how you will ensure this engagement
* State the proposed outputs and outcomes from the project, with reference to destination journals, conferences and industry groups
 |
| Equality, Diversity & Inclusion | * Describe how the project considers incorporating Early Career Researchers (ECR)[[2]](#footnote-2)
* Describe how the project fits with the EDI statement of the Decarbonising UK Freight Transport[[3]](#footnote-3)
 |
| Value for money | * Provide a clear justification for all resources requested
* Explain why your request is appropriate, given your project scope, ambition etc.
* State how you will contribute to the Decarbonising UK Freight Transport, making reference to your long-term plans for follow-on funding and collaboration
 |

#  Submissions

To download an application pack, visit the Decarbonising UK Freight Transport [www.decarbonisingfreight.co.uk](http://www.decarbonisingfreight.co.uk)

The deadline for submissions is 16.00, Friday 17 April 2020

Submissions should be sent to this email address: decarbonisingfreight@ucl.ac.uk

#  Enquiries

A FAQ page is available on the Decarbonising UK Freight Transport website. This will be updated regularly, applicants are requested to check these in the first instance if they have any questions regarding the call.

#  Sub-agreement

A template of the grant agreement will be sent to all applicants. Applicants are requested to review this or send to their departments for further consideration. It is expected that all projects will start by September 2020 and timely execution of the agreement is important so as to not delay the start date of the projects. We expect to have fully executed subcontracts with the awardees by 10th July 2020.

#  Contact

For any enquiries about the call, please contact Alexis Fidgett, Network administrator at decarbonisingfreight@ucl.ac.uk

#  Theme specific requests for proposals

The activity within the Decarbonising UK Freight project is distributed across five themes. More information and the specific objectives of each theme can be found on [www.decarbonisingfreight.co.uk](http://www.decarbonisingfreight.co.uk). The overall objective of the project is to identify ways to accelerate investment into the decarbonisation of freight transport (primarily UK freight transport, but acknowledging the UK is a node in a global freight system). The focus is in particular on shipping and trucking as dominant modes for both UK international and domestic freight activity and emissions, but the decarbonisation of all modes of freight transport (and the potential interaction between modes) is of interest to this project.

In asset terms, the freight system is composed both of the fleet (vehicles) and infrastructure. Many of the decarbonisation investment decisions are strongly interacting between these two asset classes and both are being considered by the project. Similarly, decisions affecting freight decarbonisation investment can be related both to the production and supply of energy/fuels, the technical specification of assets, and the operational and selection decisions made by logisticians and cargo owners. Characterising the multiple scales of the freight system and the agents/stakeholders within it, investment decisions may require understanding both:

* What is the general pathway for the whole freight system’s decarbonisation? and
* What is the optimisation of a stakeholder’s decisions/pathway within the expected whole freight system’s decarbonisation pathway?

Acknowledging this landscape of stakeholders, decisions and assets, the five themes are seeking to answer five research questions with associated sub-questions, in order to gather knowledge that can guide the identification of further research that can be used to accelerate freight decarbonisation. These five questions are grouped under two broad headings to do with understanding decision points and decisions makers, and identifying potential methods.

**Understanding the decision points and decision makers relevant to investment into freight decarbonisation**

1. A wide scope analysis, which includes all stakeholders including owners, government, fleet operators, ports, etc. of the factors influencing freight transport investment decisions.
	1. What are the current factors that influence investment decisions for different actors in freight transport?
	2. What is the relative significance of these different factors to investment decisions?
	3. Can any changes in the relative significance of these factors over time be quantified?
	4. To what extent do these factors align in achieving freight decarbonisation?

A maximum of £30,000 (80%) is available to answer the research questions

1. A narrow scope analysis of financiers, including banks, institutional investors and equity investors of the factors influencing freight transport investment decisions.
	1. What approaches do investors (in general and specifically in the transport/freight sector) currently use to screen or ensure that an investment is decarbonisation-aligned? How widely/commonly used are the approaches?
	2. What is missing and most difficult to capture in terms of assessing decarbonisation alignment in these approaches (specifically addressing data, tools, models, metrics and frameworks)?
	3. In what ways can these approaches be improved to assist the investors in making their decisions decarbonisation-aligned?

A maximum of £60,000 (80%) is available to answer the research questions

1. Characterising the drivers of UK logistics’ carbon footprint, and the key decision points and makers.
	1. How can we benchmark UK logistics activity and its carbon footprint (which ‘parts’ have the most impact? How does this compare with other countries?)
	2. Who dictates the carbon footprint of UK logistics activity? – where along the supply chains are the key decisions made? What/where are the levers (locus of power, vested interests etc.)?

A maximum of £40,000 (80%) is available to answer the research questions

**Identifying potential methods that could be used to clarify opportunities and risks of investments into freight decarbonisation**

4) Methods to characterise, for decision makers, a wide range of freight technology and fuel-based decarbonisation options

 a) What are the options and their feasibility for a method or methods to describe and characterise a diverse set of technological and fuel-based decarbonisation options for a wider range of decision makers?

The approach to characterisation must be holistic and capture the widest viable range of decision-making influences and future scenarios, for example; the choice of batteries or electrification, fuel cells or internal combustion engines in a future fuels landscape; scalability of proposed technologies with regards to materials sourcing and recycling; the storage, handling and safety aspects of future fuels; the trade-off between infrastructure and vehicle investment and complexity.

A maximum of £60,000 (80%) is available to answer the research question

5) Concept/feasibility study for the development of an index that can categorise investment risks and opportunities and incorporate a whole system perspective inclusive of both freight technology/fuel and operational/commercial decarbonisation strategies

* 1. How can an index determine which options are sustainable, robust, optimum?
	2. What calculations would you do to determine an index?
	3. What data and models might be needed?
	4. What data and models are already available/accessible?
	5. To what extent can data and models from commercial markets be used?
	6. How would you determine uncertainty in any calculations?
	7. How would you validate any calculations and keep it valid with time?
	8. How well does the index differentiate between available solutions?
	9. What are the next steps to develop the concept further?

A maximum of £30,000 (80%) is available to answer the research questions

1. Defined as researchers active in research in the UK who have not previously led a project with funding exceeding £100k. Early Career Researchers shall typically be no more than four years post award of PhD/EngD. They may be within a researcher role or an academic role at the point of application. [↑](#footnote-ref-1)
2. Defined as researchers active in research in the UK who have not previously led a project with funding exceeding £100k. Early Career Researchers shall typically be no more than four years post award of PhD/EngD. They may be within a researcher role or an academic role at the point of application. [↑](#footnote-ref-2)
3. Available in Decarbonising UK Freight website [www.decarbonisingfreight.co.uk](http://www.decarbonisingfreight.co.uk) [↑](#footnote-ref-3)