

Sparking the Cooking Supply Chain Competition -Webinar



Sparking the Cooking Supply Chain Competition – introduction to MECS

- Modern Energy Cooking Services (MECS) is a seven-year programme funded by UK Aid (FCDO).
- By integrating modern energy cooking services into the planning for electricity access, quality, reliability and sustainability, MECS hopes to leverage investment in renewable energies (both grid and off-grid) to address the clean cooking challenge.
- MECS is implementing a strategy focused on including the cooking needs of households into the investment and action on 'access to affordable, reliable, sustainable modern energy for all'.



Sparking the Cooking Supply Chain Competition (SC2) – introduction to the SC2 challenge

- The intended outcome is a market-ready range of innovations (technology and business models) which lead to improved choice of affordable and reliable modern energy cooking services for consumers.
- Working multiple partners in multiple countries, we have confirmed that most urban households can cook their local dishes using energy efficient appliances at a cost that is less than alternative fuels.
- In order to take this work forward and to scale, we hope this challenge fund can be used to spark a sustainable supply chain for energy efficient appliances.





The purpose of the MECS-SC2 initiative is to develop and implement a detailed sustainable supply chain activation plan.

The core research question for the competition is: How can the use of energy efficient ecooking appliances be accelerated by creating a sustainable supply chain with associated demand stimulation?





- Phase 1 starts with a 5-month formative research inception stage to develop a **detailed sustainable supply chain activation plan**. There is then a break point and depending on the plan the applicant can progress to phase 2.
- Phase 2 to implement the first step of the plan. This step of implementation is expected to include distribution and sales of 1,500 to 2,000 units. Progression to Phase 3 funding will be assessed near the end of Phase 2 but is dependent on the quality of implementation, research, and learning of Phase 2.
- Phase 3 will enable the maintenance of the momentum built during phase 2. This phase will ensure cash flow finance to enable the project to continue and the supply chain to be established.





- The project duration (for all three phases) will be a total of 35 months.
- Total funding available is £550,000 (split across the 3 phases £50k/£300k/£200k)
- Progression between the phases (i.e. phase 1 to 2 or phase 2 to 3) will be competitive and dependent on overall success of the previous phase.
- Multiple projects will be funded.
- Match funding (financial or in-kind) and demonstrating links to other funding programmes is desirable. The finance element of your application will be preferentially scored if this is secured.
- All payments are conditional upon receipt by Loughborough University of a satisfactory Statement of Grant Usage and supporting evidence of financial documentation such as receipts.



Question 1: Outline of a sustainable supply chain activation plan for the chosen context

- Using the framework/list of headings from within the section titled 'a detailed sustainable supply chain activation plan explained' (pages 5 -10 of the Grant Specification Document) outline, in as much detail as possible, a sustainable supply chain activation plan for the chosen context.
- You should include details of any groundwork already completed and the existing knowledge you're drawing from. You should differentiate between the data/information you have collected and data/information you have sourced from other organisations/references. The response to this question can be presented as either narrative, tabular, diagrammatically or as a combination of those options. Text in diagrams is excluded from the wordcount.



Question 2: Identifying data/knowledge gaps

The response should identify what data/knowledge gaps need to be filled during phase 1 and provide a detailed plan for how that data will be collected (e.g. methods and approaches) and analysed within the 5 months available. You should explain how the existing data/information can be incorporated into or support the new data that will need to be collected. The response to this question can be presented as narrative, tabular or a combination.





The response should provide an overview of the research/knowledge products that have been used to develop the initial sustainable supply chain activation plan explained in question 1. It should demonstrate critical analysis of the research/data currently available, and you should be able to highlight how it has influenced the design of the proposed sustainable supply chain activation plans outlined in question 1. If MECS resources have been used, please highlight these.



Question 4: Project Management

The response should include a Gantt chart of activities. Clearly describe relevant risks to this project and how you plan to mitigate them, especially relating to safeguarding and whistleblowing. Describe the roles, skills, and relevant experience of the project team, including any sub-contractors (bios of up to 250 words each can be provided for up to 5 team members). Details of other team members should be provided briefly in a tabular format. There are different skills needed for data collection, consolidation, and analysis. The response should demonstrate that there is a team capable of completing all the required tasks within the 5 months available.





- All cost information provided should be clearly explained and all rates must reflect fair market value.
- Sub-contractor costs should be justified.
- The response should clearly describe what you will spend the funding on and should demonstrate value for money.
- If you expect to pay VAT during the delivery of the research, (e.g. for consultancy/ subcontracting charges, material costs and other expenses), and are unable to recover this from HMRC, you must ensure that the cost of these VAT payments is included at this stage.
- Only eligible costs directly associated with the MECS-SC2 projects will be reimbursed. Please also refer to the section on Eligible Expenditure paragraphs 10-13 of the Grant Disbursement Agreement. Any claims made for items listed in the NOT Eligible Expenditures will not be paid.







Our research so far suggests that electric pressure cookers (EPCs) are the 'front running candidate' for this outreach, but we will consider any efficient electrical cooking appliance.

Combinations of more than one device are acceptable if a strong case is made.





Phase 1 - Detailed sustainable supply chain activation plan

- The application for phase 1 should focus on demonstrating an understanding of what a sustainable supply chain activation plan could look like in the chosen context.
- It should provide an overview of the groundwork already completed and the existing knowledge.
- If some of the necessary data already exists, this should be identified and stated in the application with details of how it can be incorporated into the new data that will need to be collected.
- It should identify what data/knowledge gaps need to be filled during phase 1 and provide a plan for how that data will be collected (e.g. methods and approaches) and analysed within the 5 months available.
- There are different skills needed for data collection, consolidation, and analysis.
- The application should demonstrate that there is a team capable of completing all the required tasks within the 5 months available.



A: Contextual and Market Understanding (1)

- Description of cooking culture: cooking is a deeply cultural activity.
 - Proposals should cite research and data that explains why they think that their proposed energy efficient electric device will save on the household's or businesses monthly expenditure in their regular weekly menu of meals.
- Existing availability of ecook appliances on the market:
 - What is the status of the current supply chain?
- Existing opportunities to mitigate the upfront costs for users
 - Credit facilities may come from a number of sources and can be offered on different terms (fixed term, a form of lease hire or as a pay as you go).



A: Contextual and Market Understanding (2)

- Increasingly seeing the possibilities of the voluntary carbon market and of Results Based Funding (RBF).
 - \odot This challenge fund can be used in conjunction with an application for RBF or carbon finance to enhance it
- Appliance and fuel stacking

 \odot When selecting appliances, consider data from the Global LEAP Awards.

- Policy and enabling environment observations
 - \odot Any proposed changes to the policy or regulation environment within the lifetime of the project.
- Sustainability observations
 - \odot The plan should clearly comment on the mechanisms by which growth will continue beyond the duration and funding of this call.



B: Detailed implementation plan development

- Location
- Target market
- Proposed appliance
- An analysis of how the proposed appliance fits with electricity delivery in the market segment(s) targeted
- Procurement of appliance/s
- Distribution/sales plan for a minimum of 1,500 units
- Household wiring assessment
- User willingness and ability to pay information

- User/Consumer finance plan: what financial mechanism/s will be used to mitigate upfront costs for users
- A sales and awareness campaign
- After sales services
- How repairs of appliances will be supported or how a warranty will be honoured
- Analysis of potential job creation
- Timescales





C: Research and data gathering plan

- This is a research programme
- During phase 1, the research activities implemented during phase 2 need to be incorporated into the development of the detailed sustainable supply chain activation plan.
 - A plan to monitor a minimum of 10% of users with energy meters.
 - A plan for gathering qualitative feedback from a minimum of 10% of users.
 - A plan to assess the suitability of the User/consumer finance plan (including links to results based financing or carbon credits).





Phase 2: Implementation -Implement the detailed sustainable supply chain activation plan a minimum of 1,500 to 2,000 units

Phase 3: Maintaining Momentum -Implement an extension to the detailed sustainable supply chain activation plan to reach the next 2,000 users.





- The competition is open to organisations of all sizes, businesses including micro, small and medium-sized enterprises, academia, and other organisations.
 Consortium applications are eligible, but a lead organization must be identified.
- Previous recipients of FCDO funding and other Loughborough University projects are welcome to apply.
- Organisations who fund grant making schemes of their own are not eligible to apply.
- The competition welcomes applications from organisations based in any part of the world, but project activities must take place in an eligible country. Proposals suggesting working in more than one country will be rejected.





- All the competition documents, including the application form, are available through the <u>Delta esourcing portal</u>.
- The access the documents you need to register as a supplier.
- Registration is free.
- If you have any problems registering with Delta please email MECS on <u>mecs@lboro.ac.uk</u>. Please note, we cannot register for you or submit documents on your behalf.
- The competition is open until 23:55 (BST) on Wednesday 5 October 2022.















- Once registered, the opportunity can be found using the Access Code*: T6SUQZ67RD
- Only applications made through the Delta portal will be accepted.
- Only applications made using the Application Form will be accepted.

* In the webinar recording we said you could also search for the title of the competition. This was not correct. You need to use the Access Code.





Competition Deadlines			
Competition opens	12 th August 2022		
Briefing webinar	17 th August 2022 at 1pm GMT		
Availability of webinar recording	22 nd August 2022		
Competition closes, application deadline	23:59 BST 5 th October 2022		
Decision to successful applicants	14 th October 2022		
Dates below are indicative timings			
Deadline date for Due Diligence Questionnaire and supporting documents	Friday 28 th October 2022		
Final Selection of applicants, notification and contracting.	November 2022		
Notification to unsuccessful applicants	November 2022		
Projects start	December 2022		
Kick off meetings	December 2022		
Final report deadline	May 2023 for phase 1		







Please read in detail all the competition documents supplied;

- 1. Grant specification document
- 2. Application Guidance document
- 3. FAQs
- 4. Grant Award Agreement





Any questions?









Policy Enabling Environment

	Access to modern energy	Is eCook framed as increasing modern energy access or as solution to cooking sector problems?
	Existing policy	Is the policy environment supportive/constraining? (which parts do what? Any influence from international policy/processes?
	Import tariffs	If components are imported, are they subject to tariffs? What are those impacts?
*	Job creation	If systems or components are assembled locally or if a help centre and service agents are in place, is this a sell point in job creation?
	Specific/general finance	Should credit for the system be specific to the institution, or to the consumer, or general to the consumer?

₩Ť.Ť.ř ※ ♡	Public good gender, health, child welfare, climate	Where will the marketing focus be? (e.g. cost savings, health, public good)
	Safety and standards	Of appliances, fuels, guarantees - what are they, and do they need to change?
	Regulatory environment	Tariff structures, tax, VAT, business environment - what are these structures and do they need to change?
đ	Waste disposal	Will waste disposal be a problem. Recycling of components, recycling of chemicals? Lifetime of appliances (realistic length of use)?
	Carbon and sustainability	To what extent can modern electric cooking services help to reach national carbon targets?









6	Investment finance	Initial or growing investment capital - where does it come from?		Marketing and digital support?	Is this specific to the institution (utility, off grid, SHS scheme, general merchants) or is it a nationwide campaign? Messaging? How does the information get spread?
	Component production	Are components imported or made locally? Are quality assurances covered? If imported, is the supply secure?	¢?	Help centre/customer services/complaints	How will eCook use be supported?
	System assembly	If most components are imported, is there a local assembly of the whole system? Can efficiency gains be made that reduce the cost of the whole system?		Linkages to local economy	How will local businesses promote & sell the product/service?. Opportunities to pivot existing supply/fuel networks to eCook (e.g. charcoal sellers)?
	Reliable supply chains	How can reliability and sustainability be built into supply chain? (for fuels, appliances, services etc).		Infrastructure and grids	How do plans for increased access to the grid and off-grid energy apply to eCook? How does eCook compare to alternative fuels? Impact of fuel stacking (and reduction in stacking).
	Consumer finance	What is being offered and how? Part of utilities, pay as you go, lease, funded by general micro credit? Are there plans for finance or stimulating the market?		Maintenance & spares	Are there people/local institutions that can maintain the equipment? Can spares be obtained? (beyond whole import of systems or having to purchase whole replacements)







Consumer Awareness

Existing beliefs	What existing beliefs, factual or otherwise, hold back the transition for a signifcant group of people.		eChefs recipes	Cooking is a cultural thing' - How do we engage to make sure people see the best cultural outcomes & good tasting food? (customer demos?).
Fuel stacking	Is fuel stacking an opportunity or an issue - eg gradual transition, vs continued poor health from partial HAP.	**** •**	Consumer confidence	Are consumers responding positively? Have business models been sufficiently demonstrated? How to build confidence in consumers and suppliers?
Mixed media promotion	How can we mix media promote the proposition both within the 'product' sales but also at a meta level?	Ê	Aspiration	How can we make eCook become an aspirational proposition like mobile phones? What motivation is strongest?





Other devices – what is energy efficient appliance?

- A classification of devices shows that, compared to hotplates
- Modern hobs save approximately 10%
- Automated devices save approximately 25%
- EPCs save approximately 50%
- (The slow cooker is an outlier because it loses energy for an extended period of time, so although it benefits from insulation and automation, it has a low overall cooking efficiency).
- (from unpublished analysis of field data, Scott 2022)

Device	Energy used expressed as proportion of energy used by Hotplate (%)		
Modern hobs			
Induction	83%		
Infrared	92%		
Insulated and automated devices			
Rice cooker	77%		
Frying pan	83%		
Curry cooker	75%		
Pressurised device			
EPC	48%		







- The competition welcomes applications from organisations based in any part of the world, but project activities must take place in an eligible country. Proposals suggesting working in more than one country will be rejected.
- The countries eligible are: Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Congo (Democratic Republic of the), Côte d'Ivoire, Ethiopia, Gambia, Ghana, Haiti, India, Indonesia, Kenya, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Morocco, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Swaziland, Tajikistan, Tanzania (United Republic of), Togo, Tunisia, Uganda, Vietnam, Zambia, and Zimbabwe.

