

January 2026

Heat Pump Ready Round 2

An online event to explain our initial proposals, answer questions and request feedback

Housekeeping

- Slides from this event will be available post-event, however no recording will be available
- Questions can be submitted using the Q&A function throughout the presentation
- Please complete the expression of interest form in MS forms after the event and before 12pm, Tues 10th February
- Any questions relating to the submission of the expression of interest can be sent to: heatinnovation@energysecurity.gov.uk

Heat Pump Ready - Round 2 - expression of interest and feedback form



Heat Pump Ready - Round 2 - expression of interest and feedback form

The purpose of this form is to gauge interest in Heat Pump Ready Round 2 and gather feedback on our initial proposals. Please note that no information provided by a potential applicant in response to this form will be carried forward, used or acknowledged in any way for the purpose of evaluating the applicant, in any subsequent competition process.

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

* Required

General Questions

1. Name *

2. Email Address *

3. Organisation *

Agenda

- Welcome and Objectives of Event
- Heat Pump Policy Landscape
- Background to Heat Pump Ready
- Heat Pump Ready Round 1 recap
- Heat Pump Ready Round 2 initial proposals
- Next steps
- Q&A



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Welcome and objectives of event

Why are we holding this event?

- To explain our initial proposals for Heat Pump Ready Round 2, answer questions and request expressions of interest and feedback on:
 - Current innovations within the chosen scope of the programme and their status
 - Our proposed competition design
 - Support needs beyond the competition
 - What we can do to support diversity and inclusion in the application process



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Heat Pump Policy Landscape

Warm Homes Plan

- On 21st January 2026, the Government published the Warm Homes Plan.
- Our aim is that by 2030 the heat pump market will have expanded to over 450,000 annual installations, as heat pumps increasingly become the desirable and natural choice for households replacing an existing heating system at the end of its life.
- Recognising the vital role that innovation will play in the transition to low-carbon heating, we will provide an extension of up to £30 million to the Heat Pump Ready programme

Warm Homes Plan



CP 1470

Credit: Ray Keller

The WHP announced a comprehensive policy framework to support this transformation to ensure that all homes are supported to install a heat pump:

Reducing costs

- £2.7bn funding for the Boiler Upgrade Scheme confirmed out to 2030 providing £7.5k grants for HP installations.
- Increased funding for the Warm Homes Social Housing Fund and Local Grant as part of £5bn of investment for low-income households to 2030.
- Launch of low-cost consumer loans for home upgrades via £1.7bn allocated from the Warm Homes Fund.
- Reduced electricity bills by an average of £150 per year from April 2026, plus further work to target additional reductions.

Removing barriers

- Ambition to speed up the consumer journey to be similar to a gas boiler – working with industry to target 3-day installations.

Planning:

- Ambition is that consumers can install a heat pump in almost all houses without needing to submit a planning application.
- Amended PDR rights – removed 1m rule last year and further consultations planned in 2026 on where we can go further.

EPCs:

- Confirmed that we will be removing the need to have a valid EPC under the BUS.

Building the supply chain

- Expansion of the Heat Pump Investment Accelerator Competition with £90m of funding to March 2030.
- Investment in skills and training, with increased funding of £7m annually for the Heat Training Grant.
- Clean Heat Market Mechanism provides industry with the confidence and incentive to invest in scaling up British supply chains for heat pumps through innovation, competition and consumer choice.



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Background to Heat Pump Ready

Heat Pump Ready Programme Aims

The Heat Pump Ready programme, established in 2021 under the Net Zero Innovation Portfolio (NZIP), has already invested £42 million to support the acceleration of domestic uptake of heat pumps in the UK. It aims to:



Reduce lifetime costs of domestic heat pumps



Develop and strengthen partnerships between the many players involved in the domestic heat pump sector



Improve lifetime consumer experience of heat pumps



Develop effective approaches and products to engage effectively on heat pump issues with homeowners and with the key players



Stimulate innovative research and solutions to address the impact of domestic heat pumps on the electricity system.



Establish an evidence base to enable effective design and development of future heat pump policy and regulation

Heat Pump Ready Programme Overview

Heat Pump Ready Programme

Round 1(2021-2025)

Funded as part of the Net Zero Innovation Portfolio

Stream 1: Trialling approaches to high density heat pump deployment

Stream 2: Developing tools & technologies

Stream 3: Trial support & learning

Round 2 (2026-2030)

Funded as part of the Warm Homes Plan

Today's webinar



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Heat Pump Ready - Round 1 recap

HPR Round 1 was structured in 3 streams



1) Develop innovative coordinated methodologies to achieve high-density heat pump deployment



2) Support innovative tools and technologies which overcome barriers to heat pump deployment



3) Foster collaboration and learning across the Heat Pump Ready programme and wider heat pump and associated sectors



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HPR Round 1 - Stream 1 projects

- Projects aimed to achieve high-density heat pump deployment through the development of innovative methodologies for the deployment of heat pumps through a street-by-street approach
- 11 projects were funded to carry out feasibility projects, with 4 projects continuing to mobilisation and deployment
- The 4 projects which went on to trial their innovative methodologies carried out their projects in: Bristol, Rose Hill and Iffley (Oxford), Bicester (Oxfordshire) and Fenland (Cambridgeshire)



BURO HAPPOLD



**SAMSUNG
Research**



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HPR Round 1 - Stream 2 projects

- 34 projects funded, across 2 waves of funding.
- Projects developed innovative tools, technologies and processes to overcome specific barriers to domestic heat pump uptake, including:
 - improving installation in complex homes
 - developing solutions for urgent replacements (distress purchases)
 - reducing costs (upfront/lifetime)
 - enhancing performance with low-GWP refrigerants
 - improving consumer experience
 - enabling a smart and flexible home energy system





Tell us...

- What do you think worked well, and what do you think could be improved, in Heat Pump Ready Round 1 or similar innovation funding competitions?

Heat Pump Ready - Round 2 initial proposals

Heat Pump Ready Round 2

The initial proposals regarding the aims of Round 2 is to support innovators to develop commercialised solutions to overcome specific barriers to heat pump uptake by 2030. We propose to enable this through:

An innovation funding competition

Acceleration support

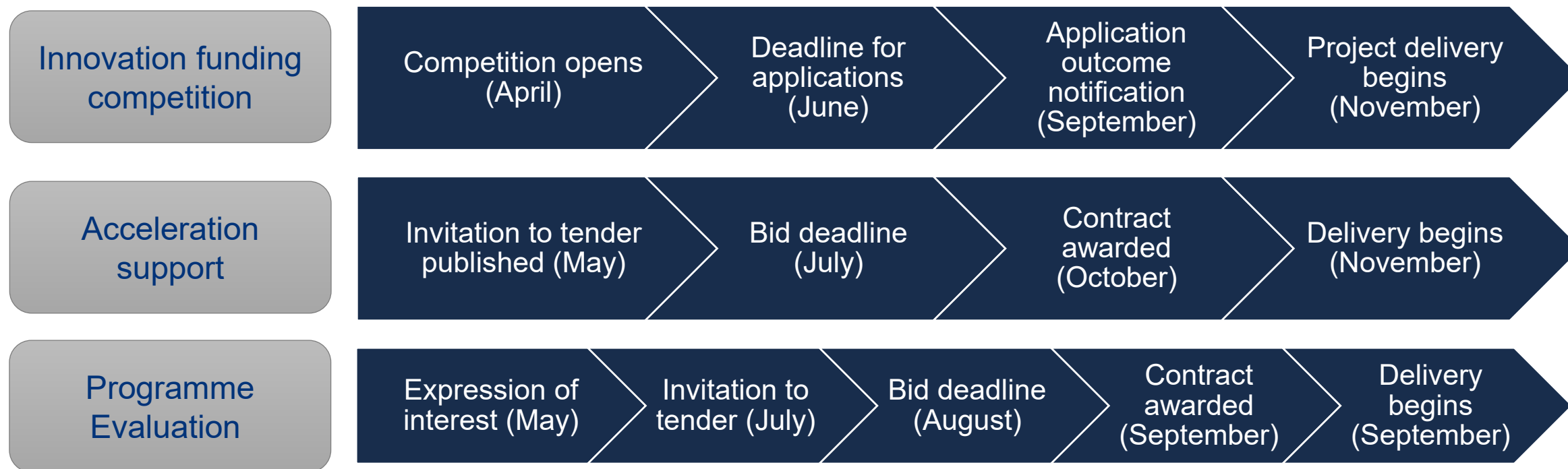
Programme evaluation

Complementary programmes

The following DESNZ programmes complement Heat Pump Ready:

- **Homes for Net Zero** - this programme may provide opportunities to use test facilities for innovations developed through this programme and for consumer recruitment.
[Homes for Net Zero | Energy Systems Catapult](#)
- **Heat Pump Investment Accelerator Competition** - a programme aiming to stimulate demand and scale UK manufacturing of heat pumps which may offer scale-up support to innovations developed within Heat Pump Ready – Round 2. It has received further funding across 2027-28 to 2029-30 as part of the Warm Homes Plan and details will be published here when it opens: [Heat Pump Investment Accelerator Competition \(closed to applications\) - GOV.UK](#)

Potential programme timeline



Heat Pump Ready - Round 2 initial proposals: Innovation funding competition part 1

Proposed barriers to heat pump deployment in scope of the competition

Capital cost of heat pump system hardware and components

Where innovation can reduce the capital cost of heat pump system hardware and components.

In-property changes required

To focus on innovative solutions to minimise or eliminate the need for additional in-property changes required (e.g. upgrading radiators, replacing pipework).

Internal & external space requirement

Using innovation to create smaller, space-saving heat pump systems and components.

Time taken for heat pump install from accepted quote

Innovation can speed up the installation process and reduce the time taken to install a heat pump following contract signature.



Proposed technology scope

In Scope*:

- Electrically driven heating technology (i.e., a heat pump) or is a constituent part or component of a heat pump system that provides heating and hot water to a domestic building.
- Heating technologies, or is a component of a heating technology, which takes ambient heat from either the air, ground or water.
- Hardware component(s) that makes up a heat pump system

*Where the innovation being developed through this competition is a component(s) of a heat pump system, the project team must integrate the component(s) into a complete heat pump system as part of the funded project.

Out of scope:

- Heating technology which take heat from a combustion source, e.g. gas, oil, or biomass boilers
- Software projects
- Solar thermal & solar PV
- Alternative Electric heating technologies, i.e. storage heaters, electric boilers, infrared heating, panel heaters, electric radiators, heat batteries (unless the heat battery operates as part of a heat pump system)
- Financial products, e.g. HAAS/loans

Example technology scope (1/2)

Barrier	In scope examples	Out of scope examples
1. Capital cost of heat pump system hardware and components	<ul style="list-style-type: none"> Utilising cheaper materials within the construction of thermal storage that do not compromise performance or longevity. Reducing the number of parts within the heat pump unit. 	<ul style="list-style-type: none"> Financial products/services to address up front cost, e.g. a loan, heat as a service.
2. In property changes required	<ul style="list-style-type: none"> High temperature heat pumps that reduce or eliminate the need for radiator upgrades or pipework replacements during installation Heat pump systems compatible with existing home infrastructure, for example: <ul style="list-style-type: none"> Developing cheaper, easier to fit, higher performing radiators. Development of less disruptive pipework replacement processes. 	<ul style="list-style-type: none"> App/software for sizing heat pump to home

To note: the overcoming of the targeted barrier in an application must not be at the detriment of another listed barrier and must not come to the detriment of increased running costs.

Programme is being developed and is subject to change

Example technology scope (2/2)

Barrier	In scope examples	Out of scope examples
3. Internal & external space requirement	<ul style="list-style-type: none"> Smaller thermal storage comparable to the size of a boiler Heat and hot water solution no bigger than a gas combi-boiler. Smaller heat pump units. 	<ul style="list-style-type: none"> Apps/software for sizing heat pump to home
4. Time taken for heat pump install from accepted quote	<ul style="list-style-type: none"> System providing heating and hot water within 24 hours from contract signature without using temporary measures. Installation complete in 3 days from first contact with an installer to system fully installed and commissioned. Heat pump systems that are easier to install, pre-plumbed and/or modular components that are quicker and easier to install requiring fewer adjustments during commissioning. 	<ul style="list-style-type: none"> Consumer journey apps/websites/software

To note: the overcoming of the targeted barrier in an application must not be at the detriment of another listed barrier and must not come to the detriment of increased running costs.

Programme is being developed and is subject to change



Tell us...

- What product or technology is being developed?
- Which barrier does the technology help to overcome?
- How much would the technology help to overcome this barrier? If you can, please provide numbers or percentages.
- How far developed is the technology today? Please select from one of the following technology readiness levels.
- How close is the technology to being sold or used by customers? Please select from one of the following commercial readiness levels.
- Without government support, how realistic is it that the technology could be ready for market by November 2029?
- What are the main difficulties preventing the technology being market ready by November 2029?

Please note, there are alternative questions for stakeholders who are not developing technology so please complete the form regardless of your potential role in a project

Heat Pump Ready - Round 2 initial proposals: Innovation funding competition part 2

What activities can be funded

The competition funding falls under the [Subsidy Control Act 2022: Streamlined Routes](#). Therefore, to be eligible for funding, funded activities must fall under the following definitions of 'research and development' and 'innovation':

- Research and development: 'activities must be novel, creative, uncertain in outcomes, systematic and transferable and/or reproducible. All five criteria are to be met every time a research and development activity is undertaken whether on a continuous or occasional basis'
- Innovation: means a new or improved product or process (or combination thereof) that differs from the previous products or processes and that has not been made available to potential users (product) or brought into use (process)

Project status requirement

The Department cannot fund the development of processes, technologies or products that are already commercially deployed in their intended form for the UK market. Technologies commercially deployed internationally may be eligible if significant R&D is required to adapt, validate, or redesign them for UK conditions, regulations, or system integration. Therefore, to be eligible for funding, you will need to confirm that your project:

- Does not involve a process, technology or product that is already commercially deployed in its intended form for the UK market
- If it is commercially deployed internationally, significant R&D is required to adapt, validate or redesign it for UK conditions, regulations or system integration

Technology and commercial readiness requirements

The competition is looking to support technologies that can be ready for market entry by 2030 because of the need to accelerate the uptake of heat pumps in the UK. Therefore, to be eligible for funding the technology should be:

- At a minimum, validated or demonstrated in a relevant environment (at least TRL 5 and no higher than TRL 8) at the time of application
- By the end of the project, be proven in an operational environment (TRL 9) and introduced to market (CRL 9)

Note: All projects must include, the trialling of their technology in a real-world setting – i.e. installed within homes, with monitoring data and experience of customers (e.g. installers and consumers) reported to the department.



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Efficiency requirement and grant size

The competition is looking to support technologies that overcome the selected barriers to heat pump uptake without increasing running costs. Therefore, to be eligible for funding, the technology must:

- Achieve an in-situ seasonal coefficient of performance (SCOP) of at least 3.5 before the end of November 2029

Based on our experience of funding innovation, we have estimated how much funding is needed for the development and commercialisation of hardware. Therefore, single projects could be eligible for between:

- Min £200k
- Max £2m

Project timescales and location

To be eligible for funding project activity must:

- Take place within the funded period (November 2026 - November 2029). Any spend on projects after this date will be at the project's own expense.

The competition is looking to support the growth of the UK heat pump economy. Therefore, to be eligible for funding:

- Any funded project activity must take place in the UK
- Any subsidy recipients must intend to exploit the results of the project activity in or from the UK

Match funding requirements

In line with subsidy control principles, only a portion of the total eligible project costs can be funded by the department through grant funding. Therefore, to be eligible for funding:

- Applicants will need to provide private sector funding to cover the balance of the eligible costs. This match-funding may come from a company's own resources or external private sector investors but it may not include funding attributable to any public authority (in the UK or elsewhere).
- Before the grant offer letter is issued, the applicant should demonstrate a credible plan to raise the match-funding required for the whole lifetime of the project. Please see next slide for Grant subsidy ratio requirements which show the level of match-funding required for different sizes of organisation and different types of innovation activity.

Grant subsidy ratio requirements

Type of innovation activity	Organisation size	Maximum amount of public subsidy as a percentage of total eligible project costs
Industrial Research – Single Companies	Small	70%
	Medium	60%
	Large	50%
Industrial Research – Collaborations: can be Business to Business where at least one Business is an SME; or Business and Research Organisation(s).	Small	85%
	Medium	75%
	Large	65%
Experimental Development – Single Companies	Small	45%
	Medium	35%
	Large	25%
Experimental Development – Collaborations: can be Business to Business where at least one Business is an SME; or Business and Research Organisation(s).	Small	60%
	Medium	50%
	Large	40%

Project team requirements – sole applicants

Projects must be delivered by individual, private sector businesses (sole applicants) or by a consortium of project partners led by a private sector business (consortium applicants). Private sector businesses of any size are eligible for funding in the competition. To be eligible for funding, sole applicants must:

- Be a private sector business registered with Companies House with the necessary skills, experience and capacity to effectively lead the proposed project.

Project team requirements – consortium applicants

Projects must be delivered by individual, private sector businesses (sole applicants) or by a consortium of project partners led by a private sector business (consortium applicants). To be eligible for funding, consortium applicants:

- Must be led by a private sector business registered with Companies House with the necessary skills, experience and capacity to effectively lead the proposed project.
- A single project application must be submitted to the department by the lead consortium partner.
- Apart from the lead consortium partner, the other project team members in a consortium can be:
 - private sector businesses or
 - academic, research, public, third sector or community organisations working as part of a project consortium with private sector organisations.
- The eligible project costs incurred by all non-business partners, carrying out non-economic work (e.g. Universities, Research and Technology Organisations (RTOs), public sector, third sector and community organisations) in a consortium must be less than 30% of the total eligible project costs.

Eligible costs

- **Personnel costs:** researchers, technicians and other supporting staff to the extent employed on the project, including participation in required dissemination and knowledge sharing activity (co-ordinated by the Acceleration Support contractor)
- **Costs of instruments and equipment** to the extent and for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible
- **Costs for buildings and land**, to the extent and for the duration period used for the project. With regard to buildings, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible. For land, costs of commercial transfer or actually incurred capital costs are eligible
- **Costs of contractual research, knowledge and patents** bought or licensed from outside sources at arm's length conditions, as well as costs of consultancy and equivalent services used exclusively for the project
- **Additional overheads and other operating expenses**, including costs of materials, supplies and similar products, incurred directly as a result of the project.

Stage gate delivery

We aim to ensure projects stay on track to achieve their goals. This includes ensuring that projects which fall behind have credible plans in place to get back on track. We are therefore proposing that:

- All projects will undergo a Stage Gate review every 6 months following the project kick-off meeting until project end

The purpose of Project Stage Gates is to assess the technical, commercial and financial progress towards the agreed objectives for each project. It will provide an opportunity for projects to demonstrate their capability to deliver the remaining duration of the project. The review will consider the deliverables produced, process to date and plans for the remainder of the project.

As a result of the Stage Gate review, projects will either (1) Continue as planned, (2) Take remedial action or (3) undergo termination.

Note: Project termination would occur where a project no longer has a realistic chance of achieving the commercialisation of their technology within the project scope/time/budget.

Project monitoring officers

- Successful applicants will be assigned two department-appointed Project Monitoring Officers (PMO) that for work the Department:
 - a grant specialist – main point of contact - from the Department's Central, Grant & Loan's (CGL) team
 - a 'technical manager' - referred to as a technical specialist – from the Department's Built Environment Innovation team
- Projects will meet with their PMOs at the project start, to agree the delivery plan, the milestones, and the specific outputs that will be delivered, as well as an invoicing schedule.
- PMOs will be responsible for reviewing evidence submitted as part of an invoicing claim before the invoice payment is approved
- Projects will meet with their assigned PMO on a monthly basis

Collaboration funding (1/2)

Subject to the department making the funding available, there may be the option for grant recipients of the Innovation Funding Competition to apply for additional funding. This funding would enable:

- An additional, collaborative project between at least 2 Innovation Funding projects to combine and integrate their funded innovations.
- For example, a project developing a heat pump system that is compatible with existing micro-bore pipes, may collaborate with another project developing cheaper, easier to fit, higher performing radiators.
- In this example, collaboration funding could be applied for to integrate and test the two separate products as a combined system.

Collaboration funding (2/2)

- The collaboration funding would be used to further develop or validate the combined innovations together such as carrying out trials and support their route to market, as an integrated solution.
- Collaboration could not be used as a contingency fund for existing projects – e.g. to repeat testing or expand number of trials. All collaboration funding activities must go beyond existing project scopes.
- The funding competition would only be open to existing grant recipients of the Innovation Funding Competition and made available through an annual competed application process.
- The amount of funding available would be limited to not more than £500,000 per project, with all collaboration projects completing by November 2029.



Tell us...

- Would you consider applying for the Heat Pump Ready Innovation funding competition?
- How much grant funding would you need to get your technology ready for market by November 2029?
- Do you have access to the match-funding needed alongside this amount of government grant? If yes, where would this funding come from?
- Would the funding help to overcome the main challenges facing the technology? If not, what would need to change to make it more helpful?
- What do you think of the additional Collaboration Fund as part of the competition? Would you be interested in this?

Please note, there are alternative questions for stakeholders who are not developing technology so please complete the form regardless of your potential role in a project

Heat Pump Ready - Round 2 initial proposals: Support needs beyond the grant funding



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Heat Pump Ready Round 1 – Project Support

- **Help finding project partners:** At the application stage of Heat Pump Ready Round 1, a collaboration platform was used to enable applicant networking and the forming of consortia. In total 300 users signed up for access and use of the platform.
- **Acceleration support:** Support services focussed on providing commercialisation support to SME-led projects was provided through the Net Zero Innovation Programme Acceleration Support contract. This support was delivered through a variety of tailored one-to-one support and expert-led cohort wide workshops.
- **Trial support & learning:** Dissemination of results from HPR was also supported through the Heat Pump Ready Stream 3 Trial Support & Learning Contract, which facilitated the development of outputs for publication, programme attendance at industry events and the running of the HPR annual conference.

Heat Pump Ready Round 2 – Project Support

To maximise the impact of the innovation projects, the Department proposes to contract an Acceleration Support provider, to deliver support to innovation funding projects in parallel with their grant-funded activities. This support will be tailored across four core areas:

- Commercialisation
- Collaboration
- Dissemination
- Social value

Note: This support would be delivered at no cost to the project team, aside from their time in engaging with the support provider.

Project commercialisation support

Aiming to advance innovation projects through tailored 'Acceleration Plans' that identify development needs, address barriers, and accelerate progression along the TRL and CRL pathways.

This support would be expert-led, through a DESNZ contractor.

Support would be provided through a combination of project specific support and group workshops to address common barriers and promote shared learning.

Collaboration support

Pre-application: HPR is looking to set up a collaboration platform similar to that used in HPR Round 1 to support networking and consortia building, for example to support technology providers to find heat pump installers and/or landlords to support their technology trials.

Throughout funded project: Through the contracted DESNZ Acceleration Support provider, we would aim to support project delivery by facilitating collaboration between funded innovation projects. This will enable the sharing of lessons and the building of relationships across the programme.

Collaboration support will be achieved through workshops, peer-learning platforms, and shared digital channels.

Dissemination support

The DESNZ Acceleration Support provider would support funded projects in disseminating their project findings and outcomes through a range of activities and outputs, including for example by developing project case studies to disseminate and share learnings, knowledge, evidence, results and impacts from the programme with key heat pump sector stakeholders.

Other routes to dissemination which may be considered include attendance at industry events, bespoke conferences and newsletter features at various points throughout the lifetime of the programme.

Social Value Support

The DESNZ Acceleration Support provider would also aim to enable grant funded projects to deliver social value outcomes aligned with programme aims.

DESNZ is looking to provide funded projects with support to identify and implement actions to help build resilient, innovative and flexible heat pump supply chains through creation of social value action plans and facilitation of focused workshops.



Tell us...

- Would you find the acceleration support (including support with commercialisation, collaboration, dissemination and social value) helpful?
- Which types of commercialisation support would be most helpful?
- Would an online platform help you find project partners?
- What other ways could help you find partners to work with?
- If the technology has already been introduced to the market, what are the annual sales in number of units? What is stopping it from being scaled up beyond this?
- How do you plan to overcome these scale up challenges and what routes have been explored to do this? What support would be needed to grow and sell the technology at a larger scale?

Please note, there are alternative questions for stakeholders who are not developing technology so please complete the form regardless of your potential role in a project

Heat Pump Ready - Round 2 initial proposals: Diversity & Inclusion

Application Process

- Applicants will be asked to submit an online application form, with supporting information by the closing date (which will be around 8 weeks after competition launch).
- We will not be able to consider any applications or any new material submitted after the deadline.
- You will need to thoroughly read guidance before starting your application.
- There will be an accessible word document which can be used to plan answers only.
- The Department will host a Competition Launch webinar shortly after the publication of the Competition Guidance.

An example of HPR Competition guidance (competition now closed) is available here:

[Link to HPR Round 1 - Stream 2 Comp Guidance](#)



Tell us...

- Do you expect any difficulties in submitting the application? If yes, please explain.
- Is there anything we could change to make the application process easier?
- Is there anything else you'd like to share with us that hasn't been covered by previous questions?



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Next Steps

Timeline

Activity	Date
Webinar Slot 1	29 th January
Webinar Slot 2	4 th February
Questions to the DESNZ Programme Team	10 th February
Complete Expression of Interest form	10 th February
Competition Guidance advertised – HPR Round 2 open for applications	April



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Q&A

Questions

- Any questions relating to the submission of the expression of interest can be sent to: heatinnovation@energysecurity.gov.uk

Thank you

Please complete the Expression of Interest form [here](#) by
Tuesday 10th February

Heat Pump Ready - Round 2 - expression of interest and feedback form

