



Department for
Business, Energy
& Industrial Strategy

Social Housing Decarbonisation Fund Demonstrator

Competition guidance notes

Deadline for Expressions of Interest: 17:00, Friday 16th October 2020

Deadline for Applications: 17:00, Thursday 12th November 2020

Withdrawn



© Crown copyright 2020

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: enquiries@beis.gov.uk

Contents

1. Overview	5
2. Competition Background	7
3. Aims & Objectives	8
a. Eligibility criteria	8
4. The Competition Scope	9
a. Energy Demand	11
Energy Demand Methodology	11
Performance Gap Methodology	12
b. Cost reduction	13
Cost reduction Methodology	13
c. Supply chain	13
d. Scale	13
e. Focus	14
f. Innovation	14
Process Innovation Methodology	15
g. Safety	15
h. Health, Comfort, Well-being and Unintended Consequences	15
Health, Safety, Comfort, Well-being and Unintended Consequences Methodology	16
5. Funding Levels and State Aid requirements	18
a. Eligible Costs	19
b. Aid Intensity	19
c. Public funding	20
6. Deliverables	21
a. Report	21
7. Application Process and Assessment Criteria	22
a. Application process	22
b. Timescales	23
c. Assessment Criteria and Scoring Methodology	23
8. Project Plans, Skills Required, Finances and Financial Viability	26
a. Project Plans	26

b. Eligible contractors	26
c. Skills Required	26
d. Delivering Value for Money	27
e. Financial information	27
f. Financial viability	28
9. Notification and Publication of Results	29
a. Notification	29
b. Publication of results	29
c. Feedback, re-application and right of appeal	29
10. Monitoring, Reporting, Evaluation, Key Performance Indicators and Intellectual Property Requirements	31
a. Monitoring	31
b. Payments	33
c. Knowledge Sharing & Evaluation Requirements	34
d. Key Performance Indicators	34
e. Intellectual Property	35
f. Ownership of Equipment	36
Annex 1 – Example Memorandum of Understanding terms and conditions	37
Annex 2: Draft monitoring and evaluation data submission template	38

1. Overview

This guidance sets out the context, application process, and assessment criteria for the **Social Housing Decarbonisation Fund Demonstrator (SHDF Demonstrator)**. This document should be read in advance of submitting any application and should be referred to throughout the SHDF Demonstrator competition process.

On 8 July 2020, the Chancellor's Summer Economic Update announced the UK-wide SHDF Demonstrator to start the decarbonisation of social housing over 2020/21, and to support green jobs as part of the COVID-19 Economic Recovery Plan.

This £50 million grant programme will support social landlords to demonstrate innovative approaches to retrofitting social housing at scale. It will mean warmer and more energy efficient homes, a reduction in households' energy bills, and lower carbon emissions.

The SHDF Demonstrator upscales the existing Whole House Retrofit Innovation Competition. The SHDF Demonstrator project is an initial investment to learn lessons and catalyse innovation in retrofitting for the Social Housing Decarbonisation Fund, for which the Conservative manifesto committed £3.8 billion of new funding.

The competition is open to applications between **30th September 2020** and **12th November 2020**. The application form and other required documentation is available to download from the [competition webpage](#).

This competition will make available £50m of grant funding for projects to demonstrate cost reduction in the whole house retrofitting of dwellings. The competition covers the whole of the UK, although applications must be led by a Local Authority. Where a grant from BEIS to the Authority (as defined in the Memorandum of Understanding) for the purpose of the SHDF Demonstrator would be State Aid, a maximum of £13.5m¹ will be available per undertaking per project, subject to leveraging match funding in line with the State Aid restrictions set out in section 5. The number of projects funded will depend on the range of solutions proposed and the quality of the proposals.

To ensure the SHDF Demonstrator contributes to the levelling up agenda, and supports retrofit innovation across the UK, we have set out an indicative allocation of funding based on the amount of social housing in different UK countries of up to £38m in England, up to £3m in Wales, up to £2m in Northern Ireland and up to £7m in Scotland. Depending upon the nature of bids received, BEIS reserves the right to vary the allocation of grant funding, taking account of the scheme criteria and the number and size of Value for Money proposals it receives.

If you are interested in the SHDF Demonstrator, you should register your interest by emailing SHDF.demonstrator@ricardo.com to ensure you are kept up to date as the scheme

¹ This value will be set at the exchange rate of €15m at the point of grant award. The figure of €15m per undertaking per project comes from the General Block Exemption Regulation, set out in section 5.

progresses. Ricardo Energy & Environment have been contracted as the delivery partner to manage the SHDF Demonstrator competition on behalf of BEIS.

The following table outlines the steps within the SHDF Demonstrator competition, from initial applications to final projects.

Table 1: SHDF Demonstrator competition timetable

Milestone	Planned completion date
Competition launch	30 th September 2020
Deadline for expressions of interest	16 th October 2020
Deadline for questions from applicants.	16 th October 2020
Deadline by which BEIS will respond to all applicants' questions	23 rd October 2020
Deadline for submission of proposals	12 th November 2020
Project selection and grants awarded	December 2020
Final installation report from participants	31 st December 2021
Final monitoring report from participants	30 th June 2022

2. Competition Background

Buildings play a crucial role in our lives. On average people spend 85% of their lives indoors, meaning the quality of construction and design plays a central role in our health, comfort, wellbeing and productivity. In the UK, to date, CO₂ emissions from homes have reduced by 19% compared to 1990 levels (16% for all greenhouse gas emissions from homes), demonstrating real progress. However, they still account for 15% of all greenhouse gas emissions, or 22% if electricity generation is included. As laid out in the government's Clean Growth Strategy (CGS), improving the energy performance of buildings is one of the most important and challenging components of our decarbonisation agenda but there is a big industrial opportunity for the whole of the UK to benefit from the transition.

In Autumn 2017, the Government published a call for evidence on building a market for energy which laid out the barriers to energy efficiency uptake in the UK and sought views as to how these might be addressed. Important amongst these is the deterrent posed by the high upfront cost of significant improvements in energy performance.

In 2017, the CGS set the ambition of 'as many homes as possible to be Energy Performance Certificate (EPC) Band C by 2035 where practical, cost-effective, and affordable', and for all fuel-poor homes to reach this target by 2030.

In May 2018 government laid out the Buildings Mission, the first mission of the Clean Growth Grand Challenge, to at least halve energy use in new buildings by 2030 and drive down the cost of retrofitting an existing building to modern energy standards. This competition forms a key early step in delivering this aim.

Given the current energy performance of the UK's existing homes, achieving the target standard of energy performance will require a significant number of homes to install multiple energy efficiency measures simultaneously, adopting a "whole house" approach to retrofit.

The SHDF Demonstrator sits alongside other projects. It upscales the existing [Whole House Retrofit \(WHR\) Innovation Competition](#), launched in 2019².

² <https://www.gov.uk/guidance/whole-house-retrofit-whr-competition>

3. Aims & Objectives

The **aim of this competition** is to demonstrate cost reduction in the deep retrofitting of buildings through innovation in the retrofitting process and economies of scale.

Successful projects will be expected to achieve all the following **objectives**:

1. Achieve significant energy demand reduction in dwellings by applying a whole house retrofit approach that is compliant with PAS 2035³ (and a reduction in fuel bills);
2. Achieve a significant cost reduction for the approach selected within the lifetime of the project, and provide evidence on the sources of cost reduction;
3. Support green jobs and utilise local supply chains⁴ to contribute to economic stimulus post-COVID-19;
4. Safely treat an appropriate number of dwellings to demonstrate achievement of cost reduction in a replicable manner;
5. Provide evidence on replicability and scale-up of approach in future projects;
6. Ensure the improvement of health, comfort and well-being of occupants and mitigate any unintended consequences;
7. Provide evidence of performance evaluation post retrofit.

a. Eligibility criteria

In order to be eligible to apply to the SHDF Demonstrator competition, projects must comply with the following minimum requirements:

- The project must be within the competition scope (as set out in the next section);
- The project activities must be conducted in the UK;
- The project must be led by a Local Authority (consortia⁵ with a single lead Local Authority are acceptable);
- Where a grant from BEIS to the Authority (as defined in the Memorandum of Understanding) for the purpose of the SHDF Demonstrator would be State Aid, the requested funding must be below the maximum limit of £13.5m¹;
- The lead applicant must confirm the project and all other leveraged funding complies with State Aid/subsidy control requirements (see section 5 for more detail);

³ PAS2035 compliance will be required on all projects. As such, Retrofit Coordinators will need to be appointed to oversee the assessment, strategy, design, installation, commissioning and handover, and claim compliance of the project with TrustMark. The whole house retrofit approach requires consideration of insulation, ventilation, efficient heating, and the potential for renewables on a home-by-home basis, whilst actively mitigating any risks associated with condensation, the livelihood of the tenants, and the heritage of the building. As such, the scope of a whole house retrofit will be different in every instance, given the current state of the building at hand.

⁴ Including Repair Maintenance and Improvement (RMI) installers, retrofit installers, manufacturers, design, surveying and retrofit coordinators

⁵ Bids may only come from Local Authorities in the UK. Where proposals cross LA boundaries a consortium bid should be submitted. Where a bid is from a consortium, a lead LA should be agreed, and this LA should submit the proposal on behalf of the consortium. Consortia can carry out work on LA retained social housing stock and/or housing association or arm's length management organisations (ALMO) stock.

- The lead applicant acknowledges the conditions outlined in the scheme’s published Memorandum of Understanding, which will need to be agreed and signed at pace in the event of a successful bid in order to meet a strict delivery timeline.

4. The Competition Scope

The SHDF Demonstrator competition is designed to contribute to achieving the Buildings Mission objective for homes of halving the total use of energy compared to today’s standards for new build, through halving the cost of renovating existing buildings to a similar standard as new buildings, while increasing quality and safety and to support green jobs as part of the COVID-19 Economic Recovery Plan.

Key benefits from the competition are envisaged to be:

- Improved energy performance of social housing
- Increase in green jobs in the retrofit sector as part of the wider COVID-19 economic recovery
- Reduce the cost of retrofits
- Reduce average fuel bills for households
- Support the development of the net-zero critical supply chain and skills within the UK

The SHDF Demonstrator competition scope is summarised in the table below. The following section provides further detail and outlines the proposed methods that can be applied to carry out the whole house retrofit to produce the required outcomes. The following suggestions are not exhaustive, and proposals should consider the best possible approaches that will guarantee the best possible outcomes.

Scope item	Summary	Assumptions
Energy demand reduction	Applicants must demonstrate how they will achieve at least a 50 kWh/m ² performance figure, which MUST be achieved in compliance with PAS2035.	Applicants should specify their sampling and performance testing approach to demonstrate the reduction is being achieved post-installation.
Cost reduction	The project must provide a detailed explanation of how a cost reduction of between 5-30% will be achieved within the delivery of this project.	Applicants are to provide robust and credible evidence of current costs to demonstrate the baseline for measuring the cost reduction. Projects must provide evidence in their reporting as to the sources of cost reduction.

Scope item	Summary	Assumptions
Supply chain	<p>Applicants will need to evidence their procurement approach.</p> <p>Applicants should outline how they propose to effectively measure the number of jobs being created/supported.</p>	<p>Quotes and indicative budgets will be required, along with appropriate contingency allowances in order to demonstrate value for money.</p>
Scale	<p>Applicants must explain how they have selected an appropriate number of dwellings to demonstrate achievement of cost reduction in a replicable manner.</p>	<p>Buildings over 18 meters are excluded.</p> <p>Focus should be on dwellings with an existing EPC rating below C. Where a small number of properties in a block or street are at C or above, they can be included where it makes sense to do so. Applicants should justify this approach in the application including the % of properties at EPC C or above. There would need to be a significant reason for inclusion of a greater number of properties already at EPC C but we would consider such applications on an exceptional basis.</p>
Focus	<p>The focus must be on social housing. Where leaseholder or freeholder (right to buy) properties are included grant and match funding must be used on those properties, without costs being passed on to leaseholders/freeholders.</p>	<p>The lead applicant and consortium members must ensure that the project as a whole does not receive Government funding above the level permitted by State Aid requirements.</p>
Innovation	<p>Projects are expected to demonstrate how process innovation can lead to cost reductions</p>	<p>Individual property assessments to determine appropriate measures must be undertaken on all properties</p>

Scope item	Summary	Assumptions
Safety	Projects should be carried out to strict safety standards	Applicants will need to detail their compliance with appropriate safety and construction standards
Health, Comfort, Well-being and Unintended Consequences	The project should seek to measure the impact of the retrofit on the occupants and show consideration to managing the risk of unintended consequences	Occupant engagement and advice will be expected in all projects
Timescales	Measures should be installed in treated dwellings within 12 months, followed by at least 6 months of energy performance monitoring	Projects should complete installation of measures within 12 months.

a. Energy Demand

An end use **energy demand target of at least 50 kWh/m²** is to be achieved for each retrofitted dwelling by taking an appropriate fabric first approach for the building type, which is technically and functionally practicable and incorporates necessary ventilation upgrades.

To provide a level of guarantee in the thermal performance of the retrofitted dwellings and to ensure the energy reductions are materialised, the projects will be required to propose an appropriate sampling-based approach for in-situ performance measurement to understand the actual thermal performance of the dwelling pre and post retrofit works, that is achievable within the project timescales. If, based on this sampling, performance is significantly below that specified in the design, the project will be required to provide a breakdown of the sources of variance and a plan for these to be remedied.

Proposals should also conduct a risk assessment to ensure the thermal performance of the dwellings that have been delivered under the whole house retrofit works, remains at the levels that was originally designed, immediately post occupancy and in the long term. Proposals should put in place handover procedures that allow a “soft landing” after the retrofit works, providing advice and training on the new envelope and systems with regards to efficient interaction and operation.

Energy Demand Methodology

Applicants should propose an appropriate and accurate method of measuring energy demand reduction. It is suggested that all dwellings selected within the performance measurement sample are assessed by the same team of experts so that any discrepancies due to inconsistent data input and assumptions are eliminated.

The competition is designed to promote diverse approaches from participants by avoiding specifying measures to be installed. The project will be open to inclusion of smart technologies that may be particularly relevant in minimising any potential performance gap. The project will also be required to provide a robust approach to demonstrate actual performance, through measurements using established techniques such as pre-retrofit and post-retrofit thermographic surveys, airtightness tests, logging environmental conditions, occupant surveys, logging actual energy consumption and co-heating tests. The exact approach will be left to applicants to propose based on the nature of the project to be delivered.

In line with the recent suggestions published by the Committee for Climate Change it is required that as part of any system upgrades there should be a prohibition of first-time gas or oil central heating systems.

To protect building occupants and owners, and to assure performance, retrofits will be carried out in compliance with the standards in PAS 2035 and PAS 2030 documents where applicable. Applicants should be familiar with these documents in great depth and should refer to these in their proposals where relevant.

Cost reduction will be assessed against energy performance by providing energy use in a £/kWh/m² heat reduction metric.

Performance Gap Methodology

Studies addressing the post occupancy evaluation (POE) of retrofits have often found significant performance gaps between the designed and the measured energy demand in dwellings, before and after the retrofit works. This project requires applicants to propose a robust methodology in ensuring the designed energy demand reductions have been achieved in practice. This should include (but not be limited to) pre and post retrofit measurements of parameters such as heat loss coefficient, u-values and surface temperatures of thermal elements, gas and electricity demand. The sampling of the dwellings from which the in-situ measurements will be taken should be random to the extent that the project duration allows. Evaluation criteria will reward proposals with the highest percentage of dwellings undergoing POE and a good understanding of which dwellings would be at higher risk of presenting a performance gap so that these can be prioritised.

A methodology must be proposed to provide the evidence needed to verify the actual thermal performance before and after the works. It is recognised that for most of the dwellings it will not be possible to have measurements from two winter periods (pre and post retrofit), but the schedule of the works should allow for a representative number of dwellings to be assessed, particularly where initial installations are complete by October 2021. In some cases, it should be possible to acquire information based on historical data (e.g. from utility bills) and compare these to the same sources post retrofit works. Please note, any data using this approach will need to be normalised to account for seasonal variations.

b. Cost reduction

The Buildings Mission has set a target of reducing the cost of retrofits by 50% by 2030. This project will contribute to the trajectory of achieving the cost reduction targeted in the Buildings Mission, therefore it requires successful project(s) to demonstrate a cost trajectory that is aligned with this target by **reducing retrofit costs between 5-30%**.

A report by BEIS⁶ that captured qualitative data from installers and contractors working on retrofits provided some evidence on the possible reduction in costs from economies of scale for individual retrofit measures. On the basis of that evidence, it is reasonable to suggest that a large reduction in costs is possible purely by scaling up to a significant number of dwellings undergoing retrofit works. Further reductions should be enabled by process innovation and co-benefits of the “*learning by doing*” approach. Please note that bid scoring will be used to incentivise more ambitious proposals.

Cost reduction Methodology

The reduction of cost is a significant part of this project, therefore evidence of achieving the required outputs must be brought forward in a clear and concise manner. Evidence of cost reduction should be based on records of individual energy efficiency measures as well as previously completed whole house retrofit projects that are of similar characteristics to the proposed dwellings. Applicants should either present evidence of costs from existing projects or recent quotes from suppliers with clearly marked dates. Proposals will be rewarded for achieving the trajectory that reflects the Buildings Mission targets, in the most detailed and robust manner.

c. Supply chain

A significant number of jobs are expected to be supported within the supply chain during delivery of projects within this competition. Applicants will need to evidence their procurement approach and how they will manage the recruitment and availability of businesses within the supply chain in the context of the newly launched Green Home Grants Scheme and the ongoing risks from COVID-19.

Applicants should also outline how they propose to effectively measure the number of jobs being created/supported during the various phases of their project, including design, surveying, installation, monitoring etc.

d. Scale

This competition aims to build the evidence and advance the knowledge of retrofitting a whole house to substantially reduce its energy demand at a fraction of today’s cost by 2030. As outlined above, during the duration of this project a cost reduction of 5-30% should be

⁶https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/656866/BEIS_Update_of_Domestic_Cost_Assumptions_031017.pdf

achieved. To be able to provide the evidence for the achievement of the cost reduction the size of the project needs to be large enough to allow for the costs of the individual components to be brought down. Applicants must outline an appropriate number of dwellings to be treated to form an evidence base that provides robust accounting of cost savings, provide replicability in the approach and enable the supply chains formed to deliver the desired cost reductions.

The competition allows for multiple property types to be used to undertake a project, this also includes the use of different tenure types within properties.

e. Focus

The focus of the project must be on social housing. Where leaseholder or freeholder (right to buy) properties are a component of an application, SHDF Demonstrator grant funding and match funding must be used on those properties, without costs being passed on to leaseholders/freeholders.

Applicants can work with leaseholders and freeholders to access Government funding, such as the Green Homes Grant scheme, or leveraged match funding to contribute to the costs of the demonstrator project if they wish.

The Authority and Consortium members must ensure that the project as a whole does not receive Government funding above the level permitted by State Aid requirements.

To keep the competition within its scope, buildings over 18 meters are to be excluded. This is due to the difficulties in gaining resident approvals & consents, especially from leaseholders, in the tight timeframes involved in the demonstrator. There are also significant changes occurring to building safety and fire safety regulations for high rise buildings which we consider should be implemented before we tackle these properties through delivery of the main fund.⁷

f. Innovation

A combination of process-related innovations are expected in the following areas:

1. Identifying suitable properties and locations / communities to deliver area-based social housing decarbonisation projects using a desk-based approach;
2. Property assessment and system design to ensure that the resulting retrofit is effective and efficiently delivered;
3. Post-installation monitoring to provide assurance around performance and mitigation of unintended consequences;
4. Off-site manufacture of retrofit components to drive efficiencies from logistics and reduce the amount of time spent on site;
5. System integration (e.g. heating and energy generation components);
6. Improvement in skills and number of certified personnel able to undertake whole house retrofit;
7. Assessment of health, comfort and well-being, pre and post retrofit works;

⁷ This exclusion only applies to the demonstrator; further policy development is in hand to consider the longer-term implications for improving the energy performance of buildings over 18m in line with emerging building and fire safety policy.

8. Reduction of the 'hassle factor' that deters occupants from agreeing to the works;
9. Occupant engagement and advice (e.g. workshops, online portals/platforms, surveys) ongoing support for residents after works are completed (particularly outside of warranties / guarantees)
10. Ensuring occupant safety through compliance with COVID-19 restrictions

Achieving process innovation should reduce the cost (financial and non-financial) of whole house retrofit. At the same time adopting a "learning by doing" approach should also produce additional outputs such as:

1. Coherent and integrated delivery models
2. Use of multiskilled individuals or teams
3. Optimising use of shareable resources such as specialist tooling

Process Innovation Methodology

Addressing the scale of the required retrofits in this project as well as the variety of the housing stock in the UK, will inevitably lead to materialising economies of scope and scale. This method should allow for optimising processes leading to significant gains in productivity and reductions in costs from improved supply chains. Proposals should exhibit innovative developments that will enhance the learning outputs of this project and these should be recorded throughout the duration of the retrofit works.

Individual property assessments must be undertaken on **all properties** to:

- (b) Identify 'appropriate' measures for the property type to minimise unintended consequences;
- (c) Inform the design of retrofit measures;
- (d) Inform the process that will need to be implemented to deliver the measures, e.g. access, health & safety, special needs of residents, etc;
- (e) Determine the actual performance that is achievable for the property type.

Occupant engagement and advice must include:

- (i) Detailed information of proposed retrofit before any works are undertaken
- (ii) Details of warranties / guarantees and the implications of these, i.e. the maintenance that is required to maintain their validity;
- (iii) Details of the monitoring that will be undertaken and what input will be required and disruption that may occur.

It is expected that this information will be given to residents beforehand.

g. Safety

Projects should be carried out to strict safety standards and applicants will need to detail their compliance with appropriate safety and construction standards during construction, including CDM regulations and any statutory requirements for Principle Designers to be appointed.

h. Health, Comfort, Well-being and Unintended Consequences

The proposals should seek to deliver improvements in the health and well-being of the occupants. Comfort conditions should be achieved or improved in all internal spaces after the retrofit, which should be evidenced by a resident survey or questionnaire as part of the

PAS2035 Basic Evaluation requirement. Indoor air quality should be maintained in acceptable levels for the relevant activities taking place in all internal rooms⁸. Increased levels of air-tightness in the building envelope can result in unintended consequences. The risk of summertime overheating should be considered in early-stage design and appropriate mitigation strategies should be implemented. The risk of condensation, mould growth and damp due to thermal bridges and inadequate ventilation should be given increased consideration and the design and quality of the works should ensure the elimination of this health hazard. Finally, proposals should identify and reduce to a minimum the disruption to the occupants caused by the proposed works and identify the planned approach to the works within coronavirus restrictions. All schedules and targets should be clearly communicated to those affected by the works to minimise any impacts on their physical and mental health, including final decorative standards.

Health, Safety, Comfort, Well-being and Unintended Consequences Methodology

It is recognised that assessing the improvements in health, comfort and well-being of the occupants presents a number of difficulties. However, proposals should design a methodology that can evaluate the impact of the retrofit on the occupants. This should include (but not be limited to) pre and post retrofit measurements of parameters such as internal air temperatures and humidity as well as indoor air quality metrics (VOCs, CO₂, Particulates). Together with this quantitative performance data, proposals should also communicate important aspects of the retrofit works and collect qualitative data on the health, comfort and well-being of occupants before and after the completion of the project, using established techniques such as:

1. Focus groups with representatives from the dwellings to assess impact and disruption and design and suggest mitigation strategies;
2. Online platforms to communicate key milestones and important information with regards to the proposed works;
3. In depth interviews with household members to establish improvements in health, comfort and well-being;
4. Open days in some of the retrofitted homes to educate and train occupants on the new indoor environment (i.e. heating, cooling and ventilation);
5. Surveys (not only online, anonymised) to evaluate the effectiveness of the above practices.

Proposals should also demonstrate an approach to quality assurance of *all* installations (both now and in the future) to ensure that the risk of unintended consequences from whole house retrofit (including overheating and damp/mould) *on a dwelling by dwelling basis* can be identified and mitigated on every step of the retrofit process, from early stage design to after the completion of the works, through the use of technology as well as training and education (e.g. thermography, moisture sensors, air tightness measurements, personnel training, CPD, etc.).

⁸ PAS2035 requires that demand controlled ventilation, which is suitable to the airtightness of the individual home, be fitted in all homes which receive insulation measures. As part of the basic evaluation required in PAS2035, the internal environmental conditions should be evaluated with a resident survey/questionnaire, as a minimum.

Withdrawn

5. Funding Levels and State Aid requirements

The competition will make available up to £50m of grant funding for projects to demonstrate cost reduction in the deep retrofitting of dwellings.

Successful bidders in England and Wales will be paid via the Local Government Act 2003, with an accompanying Memorandum of Understanding. At the commencement of the project, subject to the correct details being provided, the Secretary of State shall intend to **pay the full amount** of the Grant within 10 working days of receipt of the documentation specified in Appendix 1 of the Memorandum of Understanding.

Successful bidders in Scotland and Northern Ireland will be paid via the Industrial Development Act 1982 with an accompanying Memorandum of Understanding, and an associated milestone schedule. Payments will be made upon the completion of milestones. Subject to the correct documentation being provided, the Secretary of State shall agree to pay Scotland and Northern Ireland on a **milestone basis** in accordance with the grant amounts contained within Appendix 9 of the Memorandum of Understanding. BEIS will endeavour to issue payments within 10 working days of receipt of the evidence of achievement for applications in Scotland and Northern Ireland, assuming that there are no queries.

Where a grant from BEIS to the Authority (as defined in the Memorandum of Understanding) for the purpose of the SHDF Demonstrator would be State Aid, a maximum of £13.5m¹ will be available for each project, subject to State Aid restrictions.

Applicants must declare that they have considered the proposal in relation to State Aid rules and are content it will comply, both in terms of direct receipt of funds and intended use/expenditure of those funds (including analysis of the costs that are eligible). Whether or not a grant from BEIS through the SHDF Demonstrator is State Aid will depend upon a number of factors, likely including but not limited to the owner of the stock that the retrofit work is being carried out upon. Where some or all grant money from BEIS to consortia does class as State Aid, the General Block Exemption Regulation (GBER)⁹ will apply to legally binding agreements signed on or before 31/12/2020 or to such agreements signed afterwards that fall within the scope of the Northern Ireland Protocol. GBER sets out conditions around maximum grant awards, eligible costs and eligible activities/technologies in particular areas, as well as general conditions which must be complied with. The relevant article is Article 25 of GBER: research and development projects. In particular, the SHDF Demonstrator is considered to be 'experimental development'¹⁰.

⁹ Commission Regulation (EU) No. 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (OJ L 187, 26.06.14, p.1)

¹⁰ 'the acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services'.

a. Eligible Costs

The Eligible Costs are those costs relating to a project that, subject to the permitted aid intensity (see 5b below), can be funded under Article 25 of GBER. These are:

- Personnel costs: researchers, technicians and other supporting staff to the extent employed on the project;
- 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 of 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.

b. Aid Intensity

The GBER specifies an "aid intensity" for each block exemption. The aid intensity is expressed as a percentage and represents the maximum proportion of the potential Eligible Costs that may be covered by grant funding. For projects which are experimental development, Article 25 2(c) states that the normal maximum aid intensity is **25%** of Eligible Costs.

The maximum aid intensity can be uplifted to a maximum of 60% as follows:

1. By **20%** if the applicant is a Small Enterprise¹¹
2. By **10%** if the applicant is a Medium-sized Enterprise
3. By **15%** if one of the following conditions is fulfilled:
 - a. The project involves effective collaboration:
 - i. Between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or

¹¹ As defined by GBER Annex 1 Article 2 – Small Enterprise: fewer than 50 employees and turnover or balance sheet total does not exceed EUR 10M; Medium Enterprise: fewer than 250 employees and annual turnover not exceeding EUR 50M and/or balance sheet total not exceeding EUR 43M.

- ii. Between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results;
- b. The results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

The maximum aid permitted under an Article is equal to the aid intensity multiplied by the Eligible Costs. Please note these are maximum spending levels and BEIS may decide to provide less than the maximum in order to strengthen leverage and value for money, depending on the specific project requirements.

State Aid compliance is a legal requirement and the risk of non-compliance rests with the grant recipient. It is therefore crucial that you address State Aid fully within the application, as any errors at this stage may result in BEIS being able only to offer a reduced level of funding or require the repayment of grant by applicants.

c. Public funding

When considering levels of aid intensity (described above in section 5b), public funding includes the grant and all other funding from, or which is attributable to, other Government departments, UK public bodies¹² or other Member States. Such funding includes grants or other subsidies made available by those bodies or their agents or intermediaries (such as grant funded bodies).

In applying to this competition, you must state if you are applying for, or expect to receive, any funding for your project from public authorities (in the UK or in other Member States) or the EU or its agencies. Any other public funding will be cumulated with BEIS funding to ensure that the public funding limit and the aid intensity levels are not exceeded for the project.

Whilst BEIS will check the information provided to try and ensure that applicants meet the requirements of State Aid, applicants should establish that they fall within the State Aid rules before submitting applications. BEIS requires applicants to notify them of any change to their situations or circumstances during the project.

If there is a breach of State Aid regulations, for whatever reason, the European Commission requires repayment of any grant received, plus interest. In this situation applicants will be required to repay any funding received. It is also important to ensure that the total grant funding for the project from public sources (including from the European Commission) does not exceed the relevant permitted GBER aid intensity levels.

Please note: The Energy Company Obligation funding is not classed as public funding and does not therefore come under the cumulation requirements.

As part of the assessment process, the added value and additionality of public funding will be tested. Applicants will need to demonstrate why public funding is required to deliver this project.

¹² <https://publicappointments.cabinetoffice.gov.uk/faq/>

6. Deliverables

a. Report

The successful bid(s) will be expected to deliver monthly update reports and a final report, to be published, describing all outputs and outlining the lessons that should be taken forward.

More specifically the final document should set out detailed information on:

- 1 Energy demand reduction and the reasons for any deviations from the targets set. This should include the list of all the measures installed and the expected performance of the dwellings. Any significant variance from the initial energy demand goals (performance gap) after retrofit should be clearly identified and a plan for rectifying this in affordable manner should be provided.
- 2 Cost reductions. This should provide evidence on the drivers and sources of cost reduction from scaling whole house retrofit (processes, design, methods, materials, technologies, supply chain, working practises, labour, etc.)
- 3 Number of jobs created/supported during the various phases of the project, including design, surveying, installation, monitoring etc.
- 4 Evidence on the replicability and scalability of the approach based on the economic, technical, political and social barriers identified during the project.
- 5 Lessons learned during the retrofit works. This project aims to demonstrate a cost reduction trajectory for whole house retrofit by adopting a “learning by doing” approach. Therefore, it is expected that a number of challenges will arise during the planning, design and execution of the works as well as several barriers that will need careful consideration. These need to be documented and made available to enhance the understanding of the whole house retrofit process in large scale. Especially those reoccurring with regards to the diversity of the housing stock, so that appropriate actions can be included in the future policy and innovation work.
- 6 Minimising the likelihood of a performance gap. Proposals should have a clear record on the steps taken to mitigate potential risks in sustaining the energy performance of the retrofitted stock. This should include any material used for providing handover advice and training on the upgraded fabric envelope and systems with regards to efficient interaction and operation. The results of the post retrofit in-situ measurements should also be published.

7. Application Process and Assessment Criteria

a. Application process

Applications must be completed using the application form at <https://www.gov.uk/government/publications/social-housing-decarbonisation-fund-demonstrator>. BEIS **will not consider** applications submitted in any other format.

Please ensure that you follow the guidance within the application form regarding formatting and number of words per section. When doing so, please refer back to this guidance document where necessary, and ensure that you have complied with all the competition requirements.

Please submit an expression of interest to SHDF.demonstrator@ricardo.com by 17.00 on 16th October 2020, stating the lead applicant name, your proposed project title, and your intention to submit a proposal.

All completed application forms and required attachments (such as the costing/project plan/risk assessment excel template) must be submitted electronically to SHDF.demonstrator@ricardo.com by **17.00 on 12th November 2020**.

As part of the assessment process BEIS may request applicants to further clarify elements of their application during November 2020. Applicants will be informed of the outcome of the assessment during December 2020.

Feedback to applicants, including unsuccessful applicants, will be provided at the same time as grants are awarded. BEIS's decision on project funding is final.

Further information: Completed application forms should be submitted electronically in pdf format and emailed. The maximum size email you can send is 10MB. If your application is larger than 10MB please break the submission down into smaller sizes and ensure the subject line of each additional email takes the following format 'SHDF (name of lead applicant) – email x of y'.

You should endeavour to answer all of the questions on the application in full. Incomplete applications and any containing incorrect or false information will very likely be rejected although BEIS may, at its discretion, request clarification or additional data before making a final decision.

All answers should be contained within the application form. Any appendices that support the answers in the application form must be appended to the end of the form. Supporting information can also be submitted where it adds substantive information to the proposal; however, you should not assume that any additional information will be cross-referenced or reviewed as part of the selection process – for example, it may only be used to help finalise the assessment of projects which receive very similar assessment scores. The application form must list all appendices and supporting documents.

Any applications or supporting documentation received after the application deadline will not be considered.

Note: Nothing in this funding call requires BEIS to award any applicant a grant of any particular amount or on any particular terms. BEIS reserves the right not to award any grants, in particular if BEIS is not satisfied by the proposals received or if the funding assigned to the scheme is required for other, unforeseen, purposes. BEIS will not, under any circumstances, make any contribution to the costs of preparing proposals and applicants accept the risk that they may not be awarded a grant.

BEIS also reserves the right to offer a larger or smaller sum of money to applicants depending on the range and quality of bids received.

b. Timescales

The following table outlines the steps within the SHDF Demonstrator competition, from initial applications to final projects.

Milestone	Planned completion date
Competition launch	30th September 2020
Deadline for expressions of interest	16 th October 2020
Deadline for questions from applicants.	16 th October 2020
Deadline by which BEIS will respond to all applicants' questions	23 rd October 2020
Deadline for submission of proposals	12 th November 2020
Project selection and grants awarded	December 2020
Final installation report from participants	31 st December 2021
Final monitoring report from participants	30 th June 2022

c. Assessment Criteria and Scoring Methodology

Applications will be logged, and an acknowledgement email will be issued providing a unique reference number for your application within two days of the closing date. This reference number should be used in all communications with BEIS about your application. All applications will be checked for eligibility. Only those that are considered to be eligible will be fully assessed. Those applicants that do not meet the criteria will be provided with appropriate feedback.

All eligible proposals will be assessed in relation to the following criteria.

Criteria	Weighting	Sub-criteria
Addressing the competition objectives (45%)	25%	Appropriateness and credibility of the chosen approach and technologies, and how this will achieve the competition objectives
	5%	Appropriateness of the selected scale of dwellings to provide robust evidence of cost reduction, and credibility of the cost-reduction baseline
	10%	Appropriateness and credibility of the proposed pre- and post-installation thermal performance measurement, post-occupancy evaluation and ability to address Monitoring and Evaluation requirements
	5%	Replicability of the proposed whole house retrofit approach across the wider UK social housing stock and the potential for spill over to other tenure types. Plans for disseminating the lessons learned during the project should be presented.
Deliverability (30%)	30%	Appropriateness and credibility of <ul style="list-style-type: none"> • The project work plan, milestones and deliverables • The project management structure and partners roles • Commercial approach to procurement and management of supply chain • Risk identification and mitigation
Skills and expertise (10%)	10%	Evidence of track record of project delivery and capacity, experience and capability of the proposed project team members
Costs (15%)	15%	Credibility, appropriateness and robustness of detailed project costing, including justification of the costs and leverage of other funding sources.

Scoring Methodology

Applications will be scored against each of the criteria above, according to the extent to which they meet the requirements of the competition. The meaning of each score is outlined in the table below.

The sub-criteria in the table above notes that proposals will be assessed for appropriateness and credibility. While BEIS does not intend to provide a precise definition of these terms in relation to each individual criteria, an appropriate, credible proposal would include one where:

- The individual steps and elements are shown to have been worked through with comfortable timelines and contingencies, with all foreseeable risks clearly identified and managed, and all contributions from consortia members already secured, or with a clear, step by step plan presented for how they will be secured.

A less credible proposal would include one where:

- Specific steps are proposed to be delivered at an accelerated pace with no clear plan for how that acceleration will be managed without compromising the project, or where the support of a contributor/consortia member has not yet been secured, with no clear plan

for how their participation will be secured and no contingency set out.

The total score will be calculated by applying the weighting set against each criterion, outlined above; the maximum number of marks possible will be 100. In order to be eligible for funding, projects must score a minimum total weighted score of 60%.

Applications will be assessed by at least two assessors (these will include BEIS assessors and independent assessors). A moderation meeting will be held at the end of the assessment process to agree the overall combined scores for each of the projects and to determine an overall ranking list which will be used by BEIS to allocate the funding for the competition.

Funding will be awarded to the highest-ranking proposals; however, where several applications suggest the same or a similar approach, BEIS may also choose to allocate the budget to lower scoring projects proposing different approaches to develop and test a wider range of potential solutions.

Score	Description
1	Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard
3	Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps.
7	Good: Proposal meets the required standard, with moderate levels of assurance
10	Excellent: Proposal fully meets the required standard with high levels of assurance

The assessment of proposals will be based **only** on the information which is explicitly contained within your application. You must not assume that the assessment team has any prior knowledge of your organisation or its work.

Bid Clarification

After reviewing and evaluating the written proposals, BEIS may decide to hold clarification meetings with suppliers during November 2020.

8. Project Plans, Skills Required, Finances and Financial Viability

a. Project Plans

Applicants should provide a detailed project plan that demonstrates to BEIS their ability to deliver the project in line with the competition timescales. Plans should include:

- Occupant engagement/recruitment (where necessary);
- Pre-installation monitoring (or suggested alternative);
- Order and purchase of equipment;
- Installation schedule;
- Post-installation monitoring;
- Post occupancy evaluation;
- Reporting as outlined in section 6.

b. Eligible contractors

When making an application, LAs will be asked for details of their contractors, procurement status and Trustmark/Microgeneration Certification Scheme (MCS) certification status. It is a requirement for low carbon heat installers to be certified under MCS or a scheme that the Secretary of State is satisfied is equivalent.

MCS certification requires an installation company to be assessed by an affiliated certification body, have consumer code membership, and to have demonstrated suitable competency against relevant technology standards, as well as carry out installations in accordance with MCS installation standards.

Contractors installing other measures must be Trustmark-registered. TrustMark is the Government Endorsed Quality Scheme covering work a consumer chooses to have carried out in or around their home.

Trustmark certification requires an installation company to have been thoroughly vetted to meet required standards, and has made a considerable commitment to good customer service, technical competence and trading practices.

c. Skills Required

Due to the nature of the project, we expect applicants to have some or all of the following skills or experience within their teams:

- (a) In-depth knowledge about home construction and energy technology (e.g. insulation, air sealing, HVAC, air quality, etc.)
- (b) Understanding of planning process and building regulations
- (c) Consumer and wider stakeholder engagement

- (d) Experience at coordinating large scale projects, in particular, in the energy retrofit sector
- (e) Experience building partnerships between different organisations
- (f) Access to and experience with using building assessment and technical monitoring tools
- (g) Experience of working in the chosen local area they are bidding for, or demonstratable knowledge of the challenges and circumstances of that area
- (h) Understanding of the barriers to retrofit and the impact on the mental and physical health of the occupants.
- (i) Sales and marketing skills
- (j) Basic financing knowledge
- (k) Training and education skills (to support building skills for local supply chain)

d. Delivering Value for Money

Ensuring Value for Money (VfM) is a critical objective of this project reflecting the obligation on BEIS to ensure it is spending taxpayer's money as effectively and efficiently as possible. We have therefore designed the assessment criteria and process for the competition to assess the VfM of each project and ensure overall VfM for the programme can be assured as far as possible.

VfM means two things to BEIS: firstly, whether an individual project delivers value for money (interpreted as delivering net economic benefits to the UK); and secondly, in determining the combination of 'winning' projects to maximise the returns on the £50 million budget.

BEIS will evaluate the VfM of each application through the combined assessment of the expected project benefits and the justification for the money the application bids for.

e. Financial information

Applicants are requested to provide a firm price budget for the work. A detailed cost breakdown is required to enable assessment of the robustness of the proposed budget. A template is provided in the application form.

Financial information should detail labour (including manpower rates), material and capital equipment costs, contingency budget and any travel and subsistence requirements.

Please note:

- The total value of the competition is £50m, although BEIS may allocate less than the total budget depending on the quality of the applications.
- Where a grant from BEIS to the Authority (as defined in the Memorandum of Understanding) for the purpose of the SHDF Demonstrator would be State Aid, a maximum of £13.5m¹ will be available for each project. The number of projects funded will depend on the range of solutions proposed and the quality of the proposals.
- Grant funding under this competition is available until December 2021. All major project activities, including design, procurement, installation, dissemination, reporting and payments should be completed by this date.

- Leveraged match funding can be retained to deliver the post-installation monitoring (and related dissemination and reporting and payments) if these activities occur post December 2021; these activities should be complete by 30 June 2022.
- Eligible Expenditure consists of payments by the grant recipient during the Funding Period for the purposes of the Project. Eligible Expenditure is net of VAT recoverable by the grant recipient from HM Revenue & Customs, and gross of irrecoverable VAT. This means that all grants are outside the scope of VAT.
- All budgets should be in British pounds sterling.
- Applicants should include all leveraged match funding arrangements with other donors so that BEIS' contribution can be seen as part of any wider project financing.

Applicants should outline and disaggregate any intermediary transaction costs where your organisation is sub-contracting to partners.

Note: Nothing in this funding call requires BEIS to award any applicant an agreement of any particular amount or on any particular terms. BEIS reserves the right not to award any agreements, in particular if BEIS is not satisfied by the proposals received or if the funding assigned to the scheme is required for other, unforeseen, purposes. BEIS will not, under any circumstances, make any contribution to the costs of preparing proposals and applicants accept the risk that they may not be awarded an agreement.

f. Financial viability

The Delivery Partner appointed by BEIS (Ricardo Energy & Environment) will undertake appropriate financial viability checks on all consortium members. These will include looking at the latest independently audited accounts filed on the Companies House database.

Where a business is not required to file accounts with Companies House, other financial information may be requested to enable an appropriate financial viability review to be undertaken. We will be looking for evidence of your ability to resource the cashflow for the project appropriately, so the information we request will be focused on understanding how your business operates in this respect.

Before your project starts, BEIS will ask for evidence that you have the funding mechanisms in place to manage your cash flow across the life of your project. This could include Local Authority Funding Board minutes or other such mechanisms.

9. Notification and Publication of Results

a. Notification

Applicants will be informed by email whether their application has been successful, subject to compliance with the requirements of the relevant Memorandum of Understanding.

b. Publication of results

BEIS may wish to publicise the results of the scheme which may involve engagement with the media. At the end of the application and assessment process, BEIS may issue a press release or publish a notice on its website. These public documents may, for example, outline the overall results of competitions and describe some of the projects to be funded.

Some organisations may want their activities to remain confidential and you will be given a chance to opt out of any involvement in media relations activity and further case study coverage of projects, should you see this as being absolutely necessary. However, as noted above, the public description of the project you provide in your application will be made available in the public domain if your application is successful, and you are not able to opt out of the project description being published. In addition, all funded projects must include reporting and dissemination milestones – agreed with BEIS - as part of their project deliverables.

Any organisation that wishes to publicise its project, at any stage, must contact the Competition Project Manager or their Project Monitoring Officer before doing so.

BEIS also wishes to publicise details of the award recipients. Therefore, on or after issuing a grant, BEIS will publish the following information:

- Identity of the participant and its partners;
- Project summary information including aims and expected outcomes of the project and technology area;
- Total award value.

Following completion of the funded projects, BEIS will publish on its website a summary of the funded activities and the outcomes achieved. This will include a final summary report from each project detailing technical approach, key achievements and recommendations. BEIS may also revisit projects at a later date, and publish an evaluation report for the scheme as a whole.

BEIS however recognises the need to maintain confidentiality of commercially sensitive information. BEIS will consult applicants regarding the nature of information to be published, in order to protect commercially sensitive information.

c. Feedback, re-application and right of appeal

A short summary of key feedback regarding the applications will be provided to all applicants, this feedback will be based on the comments of technical assessors and the Competition

Board. No additional feedback will be provided and there will be no further discussion on the application. BEIS's decision on project funding is final.

Withdrawn

10. Monitoring, Reporting, Evaluation, Key Performance Indicators and Intellectual Property Requirements

a. Monitoring

As part of the application form, LAs will be required to provide estimates for the KPIs set out in Table 1.

Table 1 – Key Performance Indicators for which estimates will be asked as part of the application form

Key Performance Indicator	Breakdowns
Number of eligible homes identified as eligible	Starting EPC band
Number of homes contacted	
Number of homes agreeing to an installation	
Dates of each Whole House Retrofit	Start date
	End date
Cost to LA of each Whole House Retrofit	Total cost
	Cost for: each measure, design, installation, OPEX, Capex
Number of people working (FTE) per project	Total
	Of which apprenticeships
Installations carried out	Number of installations
	Types of measures installed
	Expected bill savings
Number of homes improved to EPC band C or higher	End EPC rating

Each project will be allocated a Monitoring Officer from Ricardo Energy & Environment at the point of notification.

Applicants will undertake their own project monitoring with the support of their Monitoring Officer. Applicants are expected to provide reports on their project's progress. The narrative reporting will be as follows:

A monthly formal progress report, financial forecast, and update of the project plan and risk register (due by the 15th of the following month).

A final financial and narrative report on the installation phase of the project within 30 days of the end of the project and by end of December 2021.

The Monitoring Officer will review all reports and will address any issues in these and contact projects accordingly. They will be the first point of contact for projects for any project reporting, milestone claims and issue escalation. Any changes to schedules or project plans will need to be discussed with BEIS and applicants should expect significant interaction with the team during the project.

To achieve this LAs are expected to:

- include data collection requirements in all relevant contracts with installers and delivery partners
- collate the data across their projects, and check data for completeness (e.g. missing or inappropriate data)
- share this with their Monitoring Officer on a monthly basis

It is expected that the best way to deliver these requirements is for LAs to maintain a database capturing project details on an ongoing basis. A monthly update of this database can then be shared with the Monitoring Officer. All activity should be shared with the Monitoring Officer no later than the 15th of the month following the installation. For example, if an installation takes place in March, this should be notified to the Monitoring Officer by the 15th of April at the latest.

LAs are expected to perform core checks on the data, which will be suggested and enabled through the templates provided by BEIS upon grant award for the data collection. Firstly, checks that the installation data is for an eligible household and the installer meets the necessary standards (either through Trustmark or other means agreed as part of the grant award). Secondly, data completeness checks to ensure that all mandatory and required fields are completed. Thirdly, simple data validation checks, such as checking field formats (e.g. a date field is in date format) or that entries are valid (e.g. a postcode is alphanumeric). Annex 2 includes a proposed template for the database. This annex sets out the key data required; however, the compliance regime adopted by each LA may dictate additional data be provided. BEIS will provide a database template at the point of grant award to ensure consistent data provision. This will include a data dictionary to explain the data elements requested and the expected response report. To avoid duplication of effort, the format will align with existing industry reporting templates, for example those used by Trustmark or MCS.

LAs and, where relevant, lead delivery partners will be required to participate in interviews led by evaluation contractors appointed by BEIS. These interviews ensure that wider insights can be provided on the experience of delivering whole house retrofit under the scheme. It is expected that LAs and delivery partners will be asked to take part in up to 2 interviews.

A central part of the evaluation commissioned by BEIS will be collecting data from households receiving measures, as well as the installers delivering them. In addition to re-contacting households and installers as part of the evaluation, data linking to existing datasets will also be required for both compliance and evaluation purposes. To support this, the proposed data requirements in Annex 2 includes fields for household and installer contact details. It is the responsibility of LAs to ensure sufficient provisions are in place to support the data linking required to support scheme compliance checks as well as data linking for the purpose of evaluating the schemes. Explicit consent will be required to support recontact of the households and installers as part of the scheme evaluation. LAs will need to comply with GDPR when collecting and sharing this information.

BEIS will provide a suggested privacy notice and consent form at the point of grant award. Use of these is not mandatory; however, if they are not used LAs will be required to demonstrate how consent for recontact has been obtained and that all relevant parties have been notified of how their data will be used. LAs will also be required to put a data sharing agreement in place with BEIS and the Delivery Partner to support the sharing of household and installer data; to facilitate this, BEIS will provide draft agreements after grant award.

Lastly, the database template includes fields for energy, bills and carbon savings delivered in each home. All applications must state the methodology used to calculate expected energy savings with evidence reported to BEIS throughout delivery.

Options for calculating energy savings include, but are not limited to:

- Use of pre and post EPC certificates, including providing reference numbers of each EPC,
- Conducting pre and post assessments under the PAS2035 installation standards (where appropriate), including providing reference numbers of each PAS2035 lodgement,
- Conducting pre and post SAP 2016 energy assessment, including evidence of calculations.

b. Payments

Payments to applicants from England and Wales under the Local Government Act

Successful bidders in England and Wales will be paid via the Local Government Act 2003, with an accompanying Memorandum of Understanding. At the commencement of the project, subject to the correct details being provided, the Secretary of State shall intend to **pay the full amount** of the Grant within 10 working days of receipt of the documentation specified in Appendix 1 of the Memorandum of Understanding

Payments to applicants from Scotland and Northern Ireland under the Industrial Development Act

Successful bidders in Scotland and Northern Ireland will be paid via the Industrial Development Act 1982 with an accompanying Memorandum of Understanding, and an associated milestone schedule. Payments will be made upon the completion of milestones. Subject to the correct documentation being provided, the Secretary of State shall agree to pay Scotland and

Northern Ireland on a **milestone basis** in accordance with the grant amounts contained within Appendix 9 of the Memorandum of Understanding. Payments will be made on a **milestone basis** upon receipt of the agreed evidence of achievement, and must be invoiced in time to be processed and paid by 31st December 2021.

Claims will be subject to satisfactory progress against the project's work plan. A claim form will be issued with your letter of offer. Claims should be submitted to the Monitoring Officer, and BEIS will endeavour to issue payments within 10 working days of receipt of the evidence of achievement for applications in Scotland and Northern Ireland, assuming that claims received are complete and satisfactory claim and there are no queries. Finance is released against work carried out rather than a lump sum on approval.

If circumstances outside the control of the project occur which impact on delivering the expected outputs, the project must inform their Monitoring Officer as soon as possible. The Monitoring Officer will consult with BEIS to determine the best course of action.

All payments

In all parts of the UK, payments will be only made by BEIS after an agreement has been signed between the applicant and BEIS. Further details on payments and financial requirements will be provided by BEIS in a Memorandum of Understanding. These will include the requirement for detailed statements of expenditure and requests for funds in a specified format.

Applicants must satisfy the due diligence, financial and organisational checks required prior to receiving public funds.

BEIS recognises the importance of remaining flexible and pragmatic throughout project implementation and will consider changes to ensure the most effective use of funds. Approval from BEIS should be sought for changes to the overall impact and outcome of projects and any significant changes in outputs. Requesting a significant change may necessitate a re-examination of project purpose or implementation. BEIS must approve any changes that require the movement of more than 10% of the total budget between budget lines. An updated work plan and budget may also be needed when requesting changes.

c. Knowledge Sharing & Evaluation Requirements

There will be a number of requirements on successful applicants during the course of the project, including after the final payment milestone:

Knowledge sharing: effective dissemination and knowledge sharing are key requirements of this competition. We will expect applicants to share useful data, lessons learned and experience through relevant industry forums and with relevant BEIS policy teams.

d. Key Performance Indicators

The Grant Recipient will be required to build in project data collection and reporting requirements for all relevant SHDF Demonstrator KPI Performance Metrics – using a Project

Data Collection and Reporting Template and a Standard Methodology Guidance. Project teams will be required to complete the Template at the start and finalise it at the end of the project (reviewing periodically), for all relevant KPIs. Upon completion, project teams will return the Template to their Monitoring Officer who will review and quality assure the contents.

KPIs for each project will be selected from, but may not be limited to, the BEIS Social Housing Decarbonisation Fund Demonstrator KPI Performance Metrics detailed below.

Key Performance Indicator	Breakdowns
Number and nature of partnerships or relationships set up	e.g. with Housing Associations or community groups that will facilitate household identification and engagement
Number of installers/suppliers engaged during pre-market engagement and who apply for delivery contracts	Total engaged Total applicants
Number and value of contracts issued to installers/suppliers	Total contracts awarded Total unsuccessful applicants
Number of eligible homes identified as eligible	Starting EPC band
Number of homes contacted	
Number of homes agreeing to an installation	
Dates of each Whole House Retrofit	Start date End date
Cost to LA of each Whole House Retrofit	Total cost Cost for: each measure, design, installation, OPEX, Capex
Number of people working (FTE) per project	Total Of which apprenticeships
Installations carried out	Number of installations Types of measures installed Expected bill savings
Number of homes improved to EPC band C or higher	End EPC rating

e. Intellectual Property

Organisations interested in taking part in the SHDF Demonstrator competition should note that BEIS does not reserve the Research & Development results exclusively for its own use and suppliers will retain the intellectual property generated from the project and will be expected to

identify and protect patentable knowledge within five years of its creation. Costs associated with securing intellectual property arising from or associated with this project are not eligible for reimbursement and cannot be included within the contract price.

BEIS requires a UK wide, irrevocable, royalty-free, non-exclusive licence, together with the right to grant sub-licences, to use or publish information, data, results, outcomes or conclusions which are created in performing the project, for its internal non-commercial purposes.

The proposed arrangements for intellectual property rights and exploitation of IPR are set out in the model Memorandum of Understanding for this Competition.

f. Ownership of Equipment

Chosen suppliers will retain responsibility and ownership for the technologies and related equipment developed and used during the delivery of the projects.

Withdrawn

Annex 1 – Example Memorandum of Understanding terms and conditions

BEIS proposes to use its Memorandum of Understanding as the basis of the terms and conditions for the Social Housing Decarbonisation Fund Demonstrator Competition. This document can be found on the SHDF Demonstrator competition webpage.

Withdrawn

Annex 2: Draft monitoring and evaluation data submission template

The table below outlines the request for data from successful LAs for monitoring and evaluating purposes, this includes but may be subject to change: Installation data, Household Engagement data, Installer data and Project Delivery data.

As set out in the Monitoring and Evaluation section of the document, BEIS, LAs and all delivery partners are required to comply with Data Protection Act 2018. BEIS will ensure the final version of this template, and accompanying data sharing agreement, support compliance but it is the responsibility of LAs to ensure appropriate processes are implemented across delivery to ensure compliance.

The table below outlines the request for data from successful LAs for monitoring and evaluating purposes, this includes but may be subject to change: Installation data, Household Engagement data, Installer data and Project Delivery data.

As set out in the Monitoring and Evaluation section of the document, BEIS, LAs and all delivery partners are required to comply with Data Protection Act 2018. BEIS will ensure the final version of this template, and accompanying data sharing agreement, support compliance but it is the responsibility of LAs to ensure appropriate processes are implemented across delivery to ensure compliance.

Installation Data	Response
LA name	
Measure1_Type_installed	
Measure1_Reference_Number	
Measure1_Product_Name	
Measure2_Type_installed	
Measure2_Reference_Number	
Measure2_Product_Name	
Measure3_Type_installed	
Measure3_Reference_Number	
Measure3_Product_Name	
Purpose_of_Notification	

Installation Data	Response
LA_Criteria	
LA_Declaration_Reference_Number	
DWP_Reference_Number	
Associated_Insulation_MRN_for_Heating_Measures	
Date_of_Completed_Installation	
Building_Number	
Building_Name	
Flat_Name/Number	
Street_Name	
Town	
Post_Code	
Unique_Property_Reference_Number_(UPRN)	
Output_Area	
Private_Domestic_Premises	
Tenure	
EST_Land_Registry_Number	
Property_Type	
Property_Age	
Energy_Saving_Scoring_Method	
Annual_Energy_Saving (kWh)	
Annual_Carbon_Saving (kg CO2e)	
Annual_Cost_Saving (£)	
Measure_Lifetime(yrs)	

Installation Data	Response
Boiler_or_ESH_Warranty	
Adequate_Roof_or_Wall_Insulation	
DHS_Consumer_Protection	
Pre_Main_Heating_Source_for_the_Property	
Post_Main_Heating_Source_for_the_Property	
Pre_Installation_EPC_RRN	
Post_Installation_EPC_RRN	
Pre_Installation_EPC rating	
Post_Installation_EPC rating	
Installed_In_Accordance_with_PAS?	
Percentage_of_Measure_Installed	
Percentage_Of_Property_Treated	
Delivery partner / Project manager ID	
Installer1_ID	
Installer2_ID	
Installer3_ID	
Wall_Guarantee	
PAS_Certification_Number	
Trustmark_Business_Licence_Number	
Trustmark_Unique_Measure_Reference	
Trustmark_Lodged_CertificateID	
Household ID	
Measure_existing_funding_check	

Household Engagement Data	Response
Household ID	
Household contact name	
Household contact phone	
Household contact email	
Household consent for recontact	
Household consent for data linking	
Household contact preference	
Building_Number	
Building_Name	
Flat_Name/Number	
Street_Name	
Town	
Post_Code	
Unique_Property_Reference_Number_(UPRN)	
Household_engagement_method	
Date identified as eligible	
Date of first contact	
Date agree to installation	
Date refuse installation	
Reason for installation refusal	
At risk of fuel poverty	

Installer Data	Response
Delivery partner / Project manager ID	
Delivery partner / Project Manager name	
Delivery partner / Project Manager phone	
Delivery partner / Project Manager email	
Delivery partner / Project Manager registered address	
Delivery partner / Project Manager company registration number	
Delivery partner / Project Manager consent for data linking	
Installer ID	
Installer_Name	
Installer company registration number	
Installer contact phone number	
Installer contact email	
Installer registered address	
Installer consent for recontact	
Installer consent for data linking	
Trustmark_Business_Licence_Number	
MCS License Number	

Project Delivery Data	Response
Project_capital_cost (£)	
Project_administration_cost (£)	
Project_ancillary_cost (£)	
Jobs_supported_project_delivery	
#_households_identified_eligible	
#_households_contact_successful	
#_households_contact_unsuccessful	

Withdrawn

Withdrawn

This publication is available from: www.gov.uk/government/publications/social-housing-decarbonisation-fund-demonstrator

If you need a version of this document in a more accessible format, please email enquiries@beis.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.