**Specification for (“Historical trends in domestic energy efficiency retrofits and the potential for near-term market growth”)**

Tender Reference Number: MS-1222

**Specification of Requirements**

Invitation to Tender for “Historical trends in domestic energy efficiency retrofits and the potential for near-term market growth”

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Deadline for Tender Responses: 23:59 on [15] January 2023

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# 1 Introduction and summary of requirements / Preamble

The Climate Change Committee (CCC) is an independent, statutory body established under the Climate Change Act 2008. Our purpose is to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.

The aim of this project is to expand our understanding of the historical extent of energy efficiency retrofits, identify current market trends, and assess the capacity for existing supply chains to grow and deliver the volume of retrofits implied by our Sixth Carbon Budget Pathways.

# 2 Background

Across the UK, the number of energy efficiency measures installed in homes through government-backed schemes peaked in [2012]. Since then, installations have fallen significantly. The Government’s target is for all UK homes to be at least EPC C by [2030].[[1]](#endnote-2) However, at the current rate of progress this target will not be reached for decades.

There is good data available which describes the number of households that have received energy efficiency improvements through government schemes, such as the Energy Company Obligation (ECO), the Green Deal Framework, the Green Homes Grant Local Authority Delivery Scheme (LAD) and the Social Housing Decarbonisation Fund (SHDF). However, we lack similar information about the extent of retrofits undertaken by owner occupiers, landlords and others without government backing.

Rising energy prices have improved the economic case for energy efficiency. Reducing energy waste from homes is also an essential step to reduce emissions from buildings and reach Net Zero.

As we (the CCC) are preparing work for our 2023 Progress Report, and the Seventh Carbon Budget, we want to update our approach to assessing the state of domestic energy efficiency. This entails developing a more comprehensive understanding of the current state of energy efficiency in UK homes, and the path the market has taken over the past fifteen years. We want to understand the remaining potential to improve homes, and the capacity within the market to grow supply chains to meet this need.

We are tendering a project to develop this understanding. The tendered work needs to be delivered by [19/05/2023], at a cost of £32,000 - £40,000 excluding VAT.

The CCC’s past reports are available: [**http://www.theccc.org.uk/reports/**](http://www.theccc.org.uk/reports/).

# 3 Aims and Objectives

This project includes essential and desirable elements:

Essential: Estimates of the true extent of energy efficiency retrofits in UK homes since 2008. These estimates should be broken down by: the type of home, the type of measure, sources of funding, and other relevant information. Accompanied by an assessment of trends in the energy efficiency market over the same time period, and the factors which have influenced the type and number of retrofits undertaken.

Desirable: An estimate of the remaining potential to improve homes using a range of common energy efficiency measures. Further analysis of the supply chains for energy efficiency retrofits and assessments of their capacity to grow in the near-term.

**(1) Essential elements**

1. **Historical estimates of home retrofits.** Estimate the true extent of energy efficiency retrofits undertaken in homes over the past fifteen years. This should include:
   * The total number of energy efficiency measures received in homes since 2008, disaggregated by type (e.g. cavity wall insulation, loft insulation, smart thermostats, solid wall insulation).
   * The total number of homes that have received those energy efficiency measures, and the tenure of the occupants (i.e. owner-occupiers, private rentals, local authority properties).
   * Where possible separate measures installed under government-funded programmes (such as ECO and LAD) from those paid for by landlords and owner-occupiers.
   * Disaggregate estimates by other relevant information, such as: building archetype, on/off gas grid status, and location (regional or local authority).
2. **Energy efficiency market trends.** Assess current trends in the energy efficiency retrofits market. This approach could include:
   * Developing a set of indicators which summarise the upstream economic conditions of the retrofit market. For example: the prices of key materials and the volumes sold, the size of the labour force and trends in demand for labour, trade volumes for relevant goods, and the number of products available on the market.
   * Identifying factors which have influenced these indicators in the past. These might include: energy prices, international demand, public attitudes and policy decisions. In particular, the analysis needs to separate the market impact of new build homes from the market impact of retrofits.
   * Summarising trends in indicators and influencing factors in an assessment of market trends.

**(2) Desirable elements**

These questions are not a key part of the project but are desirable. We expect that they may be answered to some extent by the work undertaken to address the essential aspects of the project. As such we welcome a consideration of how achievable they might be within the scope of the application.

1. **Energy efficiency potential**. Building on the assessment of historical retrofits, assess the remaining potential to improve homes for a range of key measures across all tenures and archetypes.
2. **Supply chains.** Assess the capacity of existing supply chains and their ability to grow in the near-term:
   * Drawing on the analysis done for [i-iii], develop estimates for how quickly the UK could expand its supply chains for domestic energy efficiency retrofits.
   * Identify key bottlenecks which are limiting supply chain growth or could do so in the future.

# Methodology

* 1. We expect the contractor to identify the best and most appropriate methods to achieve the aims of the project. The key tasks for this project are to:
  2. Identify and acquire data sources to develop robust historical estimates on energy efficiency retrofits to the UK’s housing stock. This task will likely involve aggregating and standardising data from a range of sources, such as: the English and Scottish EPC databases, the National Energy Efficiency Dataset (NEED), the English, Scottish and Welsh household/housing surveys, and other similar sources. The contractor should be prepared to provide a detailed assumptions log describing how data gaps and inconsistencies were addressed.
  3. Drawing on a detailed, quantitative assessment of household energy efficiency, develop estimates for the number of homes that could receive further energy efficiency measures.
  4. Using further data sources, develop a set of indicators which describe market trends for energy efficiency retrofits.
  5. Integrating data on household uptake and potential (demand) and other information on market conditions (supply), develop estimates for how quickly supply chains could grow in the next 10 years. A scenario-based approach to test different economic and policy environments may be appropriate.

# Outputs Required

We expect the successful contractor to deliver both the essential and the desirable elements of the project set out in section (3). The outputs required from the project include:

* A report which details the findings of the analysis undertaken, and also explains the methodology and assumptions used to develop the analysis.
* Spreadsheets including all quantitative analysis and background calculations.
* Presentation of the interim and final results from the project to members of the CCC Secretariat, Committee members and other interested parties for the duration of the project.

# Ownership and Publication

The key deliverables will be handed over to the CCC, who may choose to publish these as supporting evidence on their website. All spreadsheets should be open access and unrestricted, to enable full QA of results and assumptions.

# Quality Assurance

All research tasks and modelling must be quality assured and documented. Contractors should:

* Include a quality assurance (QA) plan that they will apply to the modelling.
* Specify who will take lead responsibility for ensuring quality assurance. This responsibility should rest with an individual not directly involved in the research or analysis.
* Provide a QA log to demonstrate the QA undertaken, which must identify who undertook the QA and the scope, type, and level of QA that has been undertaken.

Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able to take responsibility for the work done. Acceptance of the work by the CCC will take this into consideration. The CCC reserves the right to refuse to sign off outputs which do not meet the required standard specified in this invitation to tender.

The successful tenderer will be responsible for any work supplied by sub-contractors and should therefore provide assurance that all work in the contact is undertaken in accordance with the quality assurance expectation agreed at the beginning of the project.

The CCC expects that:

* Analysis must be delivered in a simple, transparent Excel spreadsheet or set of spreadsheets, where key assumptions (agreed with the CCC) are clearly stated. All assumptions and figures should be adequately referenced and include any supporting workings. Any such spreadsheets will be the property of the CCC.
* Existing analysis and published research should be reviewed and considered in developing the scenarios and approaches to be analysed within this assignment.

# Timetable

The proposed timetable for the **essential elements** of the project is set out in the following table:

|  |  |
| --- | --- |
| Date | **Action/deliverable** |
| 15 Jan 2023 | Deadline to submit bids |
| w/c 16 Jan 2023 | Interviews and bid awards |
| w/c 23 Jan 2023 | Kick-off meeting |
| 3 Apr 2023 | Delivery of draft analysis |
| 1 May 2023 | Delivery of draft report |
| 19 May 2023 | Delivery of final report and associated analysis |

The CCC is willing to be flexible with timelines and will consider alternative timetable proposals.

In addition to the formal reporting points, the CCC would expect to have regular scheduled discussions (weekly meetings or calls) to ensure the work is progressing as expected.

# Challenges

Tenderers should highlight any challenges or risks that they envisage in delivering all the outputs of the project, whether in terms of scope of the work, resources, or timelines. Alternative suggestions will be considered if the risks are such that the project is unlikely to be able to be delivered in its current form.

# Ethics (amend to suit or delete if not applicable)

All applicants will need to identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the ‘addressing challenges and risks’ criterion.

We expect contractors to adhere to the following GSR Principals:

1. Sound application and conduct of social research methods and appropriate dissemination and utilisation of findings
2. Participation based on valid consent
3. Enabling participation
4. Avoidance of personal harm
5. Non-disclosure of identity and personal information

# Working Arrangements

The successful contractor will be expected to identify one named point of contract through whom all enquiries can be filtered. A CCC project manager will be assigned to the project and will be the central point of contact.

# Skills and experience

CCC would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each proposed team members experience and capabilities.

Contractors should propose named members of the project team, and include the tasks and responsibilities of each team member. This should be clearly linked to the work programme, indicating the grade/ seniority of staff and number of days allocated to specific tasks.

Contractors should identify the individual(s) who will be responsible for managing the project.

# Consortium Bids

In the case of a consortium tender, only one submission covering all of the partners is required but consortia are advised to make clear the proposed role that each partner will play in performing the contract as per the requirements of the technical specification. We expect the bidder to indicate who in the consortium will be the lead contact for this project, and the organisation and governance associated with the consortia.

Contractors must provide details as to how they will manage any sub-contractors and what percentage of the tendered activity (in terms of monetary value) will be sub-contracted.

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided. However, please note CCC reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

CCC recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to CCC so that it can make a further assessment by applying the selection criteria to the new information provided.

# Budget

**The budget for this essential elements of this project is £32,000-£40,000 excluding VAT.** We ask that bidders submit an additional budget estimate and timings for the **desirable elements**, which should be agreed with the CCC in a second stage.

Contractors should provide a full and detailed breakdown of costs (including options where appropriate). This should include staff (and day rate) allocated to specific tasks.

Cost will be a criterion against which bids which will be assessed. In doing this, we will assess the **combined budgets** for developing both the essential and desirable elements of the project.

Payments will be linked to delivery of key milestones. The indicative milestones and phasing of payments can be adjusted and agreed with the contractor and Project Manager. Please advise in your tender response how this breakdown reflects your usual payment processes:

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 60 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

The Committee on Climate Change aims to pay all correctly submitted invoices as soon as possible with a target of 10 days from the date of receipt and within 30 days at the latest in line with standard terms and conditions of contract.

# Evaluation of Tenders

Contractors are invited to submit full tenders of no more than **20** pages, excluding declarations and CV’s. Tenders will be evaluated by at least three CCC staff.

CCC will select the bidder that scores highest against the criteria and weighting listed below, see the ITT for further information.

Both the essential and desirable elements of the project will be assessed under the *method, ability, and technical capacity* (6) criterion.

**EVALUATION CRITERIA AND SCORING METHODOLOGY**

|  |  |  |
| --- | --- | --- |
| Criterion | Description | Weighting |
| 1 | RELEVANT EXPERIENCE / DEMONSTRATION OF CABABILITY | 15% |
| 2 | MANAGING YOUR RELATIONSHIP WITH THE CCC | 10% |
| 3 | QUALITY ASSURING THE SERVICES YOU PROVIDE | 10% |
| 4 | MANAGEMENT STRUCTURE | 5% |
| 5 | PROJECT TEAM – SKILLS AND KNOWLEDGE | 10% |
| 6 | METHOD, ABILITY AND TECHNICAL CAPACITY | 30% |
| 7 | UNDERSTANDING OF REQUIREMENTS | 10% |
| 8 | RISK AND CHALLENGES | 10% |
|  |  | 100% |

**Scoring Method**

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

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. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

|  |  |
| --- | --- |
| **Score** | **Description** |
| 1 | Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard |
| 2 | Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps |
| 3 | Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps. |
| 4 | Good: Proposal meets the required standard, with moderate levels of assurance |
| 5 | Excellent: Proposal fully meets the required standard with high levels of assurance |

**Scoring for Pricing Evaluation**

Price will be marked using proportionate pricing. We will consider the **combined budgets** for developing both the essential and desirable elements of the project. Please see the example below.

Marking proportionate to the lowest price.

Price will be scored as set out below.

There will be a maximum of e.g. 20 marks

The lowest priced bid will receive the full 20 marks, all other bids will then be marked as set out below.

Proportionate Pricing scoring example

If 20% = 20 marks

|  |  |  |
| --- | --- | --- |
| Supplier | Price | Marks |
| 1 (lowest bid) | £50,000 | 20 |
| 2 | £60,000 | 50/60 \* 20 = 16.7 |
| 3 | £75,000 | 50/75 \* 20 = 13.3 |

**Structure of Tenders**

Contractors are strongly advised to structure their tender submissions to cover each of the criteria above and supply a price schedule specifying the daily rates (ex-VAT) you will charge for each level of your staff.

**Evaluation for Interviews, if held**

CCC reserves the right to award the contract based on applicants’ written evaluation only if one candidate emerges from the evaluation stage as significantly stronger than the others.

Should interviews go ahead, CCC will shortlist the top three suppliers with the highest marks from the written proposals. Interviews are provisionally expected to be held on **w/c 16 January 2023**. If this date changes, CCC will notify applicants.

The areas to be covered in the interview, and markings allocated to each topic area will be sent to the shortlisted supplier prior to interview.

Further details of interviews will be sent to successful applicants on selection.

**Feedback**

Feedback will be given in the unsuccessful letters or emails.

1. Department for Business, Energy and Industrial Strategy (2021) *Heat and Buildings Strategy*, <https://www.gov.uk/government/publications/heat-and-buildings-strategy> [↑](#endnote-ref-2)