UKSBS
Shared Business Services

Commissioning Letter

Market and Opinion Research International Ltd t/a Ipsos MORI
3 Thomas More Square
London
E1W 1YW

Tuesday 8th January 2019

Dear [redacted]

BIS Research and Evaluation Framework Agreement – Lot 4
Evaluation of the Clean Growth Fund – Scoping Study
CR18186

Thank you for your response to the Specification for the above commission by the Department for Business,Energy and Industrial Strategy (BEIS) (the Customer) through the BIS Research and Evaluation Framework dated 2 January 2016 between (1) Secretary of State for Business, Innovation and Skills; and (2) Market and Opinion Research International Ltd t/a Ipsos MORI (the Framework Agreement).

Appendix:	A.	Specification for Evaluation of the Clean Growth Fund – Scoping Study
	B.	Tender dated Friday 14th December 2018.
Annex:	A.	GDPR

The Department for Business,Energy and Industrial Strategy (BEIS) accepts your Tender (Annex A), submitted in response to our Specification (Annex B).

The Call-Off Terms and Conditions for this Contract are those set out in Schedule 5 to the Framework.

The agreed total charges for this assignment are **£24,912.50** exclusive of VAT which should be added at the prevailing rate. The agreed invoice schedule is as follows:

[redacted]

All invoices should be sent to should be sent to finance@services.uksbs.co.uk or Billingham (UKSBS, Queensway House, West Precinct, Billingham, TS23 2NF) A copy of the invoice should be sent to [redacted].

You are reminded that any Customer Intellectual Property Rights provided in order to perform the Services will remain the property of the Customer. The following deliverables have been agreed:

OFFICIAL-SENSITIVE (COMMERCIAL)

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Section [illegible] Total Project Costs (Summary)

[illegible]	Number of Days	Total Staff Cost	Total Cost (Ex VAT)
1. Research	[redacted]	[redacted]	[redacted]
2. Data collection/compilation	[redacted]	[redacted]	[redacted]
3. Primary research/fieldwork	[redacted]	[redacted]	[redacted]
4. Drafting	[redacted]	[redacted]	[redacted]
5. Analysis	[redacted]	[redacted]	[redacted]
6. Project Management	[redacted]	[redacted]	[redacted]
7. Meetings	[redacted]	[redacted]	[redacted]
8. Any other costs	[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	£ [illegible]

Section [illegible] Total Staff Costs (Please complete)

Job Title	Standard Rate/Fee excluding VAT (£/Day)	Discounted Rate/Fee excluding VAT (£/Day)	Objective Area (Please Select)	Number of Days	Travel and Subsistence, [illegible] costs associated with the delivery of the [illegible]	Total Staff Cost (ex VAT)	Total Cost (ex VAT)
[redacted]	[redacted]	[redacted]	1. Research	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	1. Research	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	1. Research	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	3. Primary research/fieldwork	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	3. Primary research/fieldwork	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	3. Primary research/fieldwork	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	4. Drafting	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	4. Drafting	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	4. Drafting	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	6. Project Management	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	6. Project Management	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	6. Project Management	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	7. Meetings	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	7. Meetings	[redacted]	£ -	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	7. Meetings	[redacted]	£ -	[redacted]	[redacted]
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TOTAL STAFF COSTS						[redacted]	[redacted]

Notes:
[illegible]
[illegible]
[illegible]

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The Services Commencement Date is Wednesday 9th January 2019

The Completion date is Friday 8th March 2019

The Contract may be terminated for convenience by giving 30 days' notice in accordance with clause 38 of the Call-off Terms and Conditions.

The Authorised Representative for this Commission will be [redacted]

Until the date of publication, findings from all Project outputs shall be treated as confidential. Findings shall not be released to the press or disseminated in any way or at any time prior to publication without approval of the Department.

This clause applies at all times prior to publication of the final report. Where the Contractor wishes to issue a Press Notice or other publicity material containing findings from the Project, notification of plans, including timing and drafts of planned releases shall be submitted by the Contractor to the Project Manager at least one week before the intended date of release and before any agreement is made with press or other external audiences, to allow the Department time to comment on factual accuracy. All Press Notices released by the Department or the Contractor shall state the full title of the research report, and include a hyperlink to the Department's research web pages, and any other web pages as relevant, to access the publication/s.

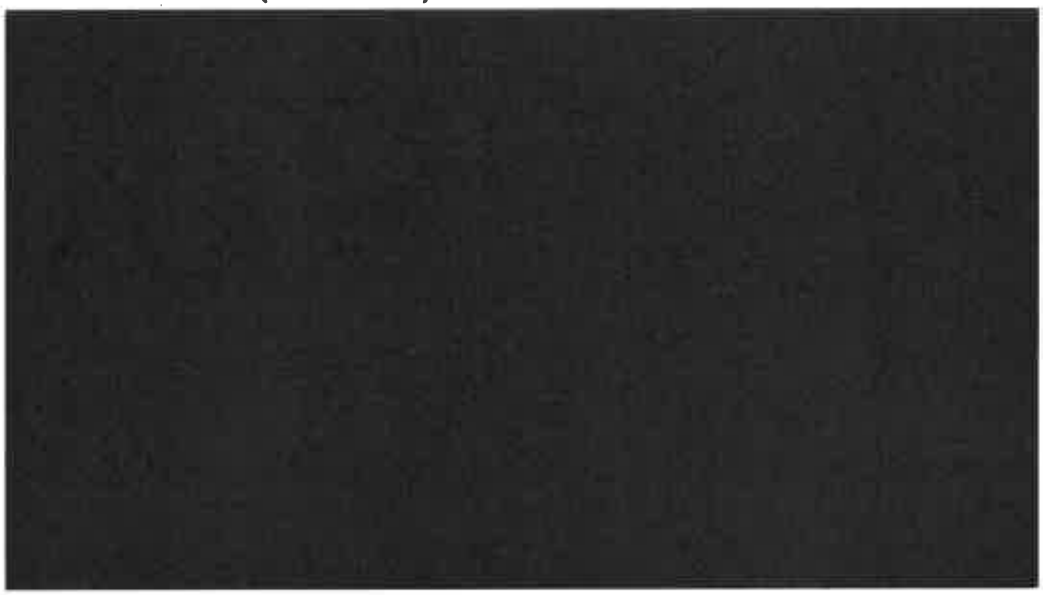
This clause applies at all times prior to publication of the final report and within one month from the date of publication. Where the Contractor wishes to present findings from the Project in the public domain, for example at conferences, seminars, or in journal articles, the Contractor shall notify the Project Manager before any agreement is made with external audiences, to allow the Department time to consider the request. The Contractor shall only present findings that will already be in the public domain at the time of presentation, unless otherwise agreed with the Department.

Congratulations on your success in being selected to undertake this Commission.

Yours sincerely

[redacted]
Category Specialist
UK Shared Business Services Ltd

BY SIGNING AND RETURNING THIS COMMISSIONING LETTER THE SERVICE PROVIDER AGREES to enter a legally binding contract with the Customer to provide to the Customer the Services specified in this Commissioning Letter and Annexes incorporating the rights and obligations in the Call-off Terms and Conditions set out in the Framework Agreement.



Appendix A – Tender Specification

Background

Introduction and summary of requirements

The project will provide a scoping study to determine and shape the evaluation of a new innovation finance intervention. The Department for Business, Energy and Industrial Strategy (BEIS) is contributing £20m to a new Clean Growth Fund (the Fund) to accelerate the deployment of innovative clean technologies. This £20 million will be invested alongside at least £20 million of private sector capital in a Clean Growth Fund. BEIS will be investing on commercial terms alongside other private investors in order to catalyse the market and leverage private sector funding to ensure that the UK is at the forefront of developing clean technologies and solutions. The programme was announced in October 2018 (More info here) and will be operational in early May 2019. It is expected that this programme will continue until approximately 2030.
Evaluation is vital as this project is novel and has significant learning potential to inform future development and similar interventions. The aim of the current scoping study is to identify clear options and recommend a detailed evaluation plan to ensure that the Clean Growth Fund is effectively monitored and evaluated. This will be achieved through a scoping exercise that informs the robust, timely and efficient evaluation of the programme. The scoping report will then be used as the basis for future research to evaluate the Fund.

Background to the Fund

BEIS spending on energy innovation has typically been in the form of grant funding and incubation support, designed to foster "investment-ready" clean technologies that can then attract private investment to scale up and achieve positive economic and emissions reduction impact. However, BEIS analysis and stakeholder engagement has highlighted a significant funding gap in the UK for clean technologies (Accelerating green finance report, 2017). This funding gap is hindering many small companies' ability to commercialise innovative clean technologies. This lack of private sector venture capital investment is limiting the overall impact of clean technologies supported through BEIS existing innovation programme, as they are unable to access the follow-on investment required to scale up once investment ready.
To address this identified market funding gap, BEIS is piloting a new approach, where it provides and stimulates equity investment as a means of supporting innovative clean technologies. This Fund is in line with the manifesto commitment to increase Government investment in innovation and also demonstrates the Government's commitment to supporting clean energy innovation, as laid out in the Industrial Strategy Green Paper and the Clean Growth Strategy.
This Fund will be launched in early May 2019 to offer funding for companies with developed disruptive technologies that need small scale investment to reach commercialisation (the 'mid' stage of development). The initial BEIS investment of £20m has the aim of proving the viability of such a fund. A key success criterion for this initiative is that it informs Government whether further investment in a fund of this type offers a value-for-money route to increased deployment of low-carbon technologies in the UK. Success against this aim requires that both innovators and investors benefit from the Fund, such that the Fund is an attractive vehicle for investment. BEIS also wants to identify whether Government stimulation of investment can address the market funding gap for clean technologies by investing in a Fund. Wider benefits being sought are:

- An increased volume of private sector investment in early stage clean technologies; leading to commercialisation of a greater number of/more innovative clean technologies; in turn leading to cost-effective reductions in carbon emissions.
- To provide a strong signal to the market that Government is committed to supporting innovation in support of its Clean Growth objectives
- Leverage private sector funding into early-stage clean technologies
- To promote UK growth through investment in new innovative technologies

Aims and Objectives of the Project

BEIS is committed to investing in a body of evaluative work that covers key programmes and policies throughout their life cycle. Evaluation expertise is required to help scope the evaluation requirement for this Fund.

The aim of the overall evaluation of the Fund is to develop and document the market demand and supply for green venture capital (VC) and appraise and enhance the rationale, customer journey and logic inherent in the intervention. We envisage that the evaluation of the Fund will be a process and impact evaluation that will evaluate two aspects:

- The delivery of the fund and its reach
- The success of the funded projects/businesses

Evaluation expertise is required to help answer the following questions/address the following aims as part of the scoping study:

- Create a sound logic model and theory of change which explains the thought process by which the proposed Fund will ultimately deliver its objectives. This will be used to evaluate the policy; to review and prioritise the data which will need to be collected (and the means and timings for collecting it) to ensure effective evaluation is possible. This will include collecting and collating data on the application process and venture capital market and the demand for such finance.
- Scope and set out a structure for a full set of evaluation and analytical questions for evaluating the Fund. In particular, identifying what are the key relevant questions to be tested as part of a process and impact evaluation of the Fund?
    - This is a priority and will be decided in discussion with the BEIS team, as the identification of the evaluation questions will inform the rest of the scoping study.
    - Although evaluation planning within BEIS has identified a number of questions regarding the evaluation of the Fund (listed below), one of the key aims of the scoping study is to build on or refine these questions, with input from the policy team and evaluation lead. The evaluation expert/s will need to assess whether these are the right questions and how best to rationalise the questions for the evaluation of the Fund. These initial evaluation questions include:
        - What is being learned from implementation of the fund which can be applied to this scheme and other interventions?
        - Is it reaching the optimum segment of the SME marketplace [e.g. those with investable propositions which are not attractive to mainstream VC sector]?
        - Is the Fund delivering additionality [is it filling a finance gap for SMEs, is it enabling commercialisation of low carbon technologies]?
        - Is the Fund sustainable in the long term, and whether the Fund is bringing in private sector finance at an appropriate scale and stimulating the market in the intended way?
- What research method(s) are most appropriate and deliverable for these evaluation questions?
- How and when data needs to be collected and what techniques should be employed
    - What data already exists (and is this likely to be available) and what scheme data and additional data needs to be collected from beneficiaries and counterfactuals to support the required evaluation activities?
    - What approach should be taken to data collection (e.g. monitoring, primary data collection, secondary data, admin data)?
    - What data collection techniques should be utilised (e.g. surveys, case studies, interviews)?
    - What other sources of data could we use (e.g. primary, secondary and admin)?
    - What is the justification for the proposed approach as compared with other alternatives?
- Analysis
    - How can the evidence be analysed and brought together to draw conclusions and model impact?
    - Where there are interdependencies between the new Fund and other innovation support and how should this be taken into account? (e.g. firms benefit from more than one scheme at different times)

    - What is the justification for the proposed analytical approaches as compared with other alternatives?
- What types of expertise would be required from potential contractors to fulfil the requirement of the Fund evaluation?
- What are the key challenges for any future potential contractor(s) in undertaking the proposed evaluation on behalf of BEIS and how would these be overcome? Identify the risks and issues to the successful delivery and usefulness of an evaluation and how these could be overcome.
- Identification of key outputs and outcomes that should be monitored throughout and the development of appropriate Key Performance Indicators which are linked to the developed logic model.
- How can an appropriate counterfactual be identified in order to understand the impact of the Fund? How can we establish additionality of the Fund?
    - What are the possible counterfactuals?
    - How can the counterfactual best be assessed and measured?
    - How can the treatment group best be matched to a comparison group of non-beneficiaries?
    - How can the key un-observed variables be observed and integrated to add them to the matching work?
- Provide estimated costings for individual elements of the work and help finalise a costed evaluation plan that will address the evidence needs for evaluating the impact of the Fund

Challenges

A key challenge for the commissioned evaluation expert/s will be to become familiar with the policy and the evaluation requirement in time to meet the scoping timetable and effectively feed in to the development of the detailed evaluation plan, ahead of the Fund launch in early May 2019. We anticipate for the scoping study to be commissioned at the start of January 2019, with the final scoping report being delivered by early March 2019.

Consideration of evaluation options if there is low uptake of the Fund: Given that this is a new funding initiative by BEIS and although preliminary discussions with key stakeholders indicate that the uptake of the Fund will be positive, there is always the potential that there will be a lower uptake than expected. Therefore, we expect the scope of the evaluation to consider both the full uptake of the Fund and to consider how evaluation would be possible if the Fund does not receive full uptake/if the minimum of £20m of private investment is not realised.

Identifying the counterfactual: A key requirement of the evaluation is to identify the additional contribution of the Fund. We want to understand whether funds of this type could be used to stimulate innovation (beyond what would have happened anyway). We are interested in quantitative and qualitative impact evaluation strategies.

Specificity of evaluation plan: We also expect that the evaluation options should be as specific as possible to this policy and not generic recommendations. Therefore, in-depth knowledge of evaluation, financial instruments, the SME sector and low carbon technologies is required.

Contribution to future work

This scoping work will contribute towards a design of a project which is likely to put out to tender in due course. The outputs for the scoping study are likely to be put into the public domain at the time of, or before this process is underway. It is not anticipated that successful tenderers of this scoping study will not be excluded from bidding for subsequent work, if put out to tender.

Suggested Methodology

Please note that the below is intended as a guide and we would also welcome alternative suggestions, providing that they also meet the project aims and objectives. Bidders are required to set

out a written methodology of their choice, justifying the methods selected and making clear the need for any quantitative, qualitative, desk-based or a combination of such research within their proposals.

The scoping work should include consideration of the following key elements:

- Review of the evidence base developed to date and learning from other funds to identify what can be built upon and where gaps exist which could be addressed through the evaluation.
- Familiarisation consultations with key stakeholders and delivery partners, covering the new Fund, existing policy delivery and implementation, and existing evaluation and monitoring functions.
- Workshop and consultations to develop and enhance the Theory of Change and the logic model linking the market failure rationale for intervention to the inputs and activities involved, and expected outputs, outcomes and impacts.

Ultimately, we want the scoping report to provide options as well as a strong recommendation as to the best possible approach for a robust process and impact evaluation to take place in the future. **Options should be as specific as possible to this policy and not generic recommendations for evaluation.**

Deliverables

This specification is to produce an evaluation plan in collaboration with BEIS evaluation lead and policy leads. We expect the minimum outputs to be:

- Project inception meeting – meeting the project steering group to define/clarify parameters, gather contact details etc. and the preparation of a project plan
- Agreement of methodological approach between BEIS and evaluation experts in the form of a short project plan
- Progress meetings/updates to discuss emerging issues and monitor activity/identify constraints
- A scoping report including:
    - The theory of change/logic model
    - The evaluation plan (exact format and length to be agreed with contractors) to include all elements listed above. This evaluation plan will form the basis of a subsequent ITT, written by BEIS, for commissioning the delivery of an evaluation or elements of an evaluation
    - Please note that there will be multiple draft revision rounds on the report and this should be factored in to timelines
    - Please be mindful that publication of the scoping report may happen, in accordance with BEIS publication guidance
- A summary of the evaluation plan that can be published and shared with potential contractors for any future evaluation project on the Fund
- Dissemination activities to accompany report including presentation of the findings to the BEIS team
- An electronic copy of any data collected during the evaluation, in line with GDPR requirements, allowing for personal data to be given to us and permission to recontact if necessary for the full evaluation of the Fund.

We would welcome initial suggestions as to any further outputs and would expect to agree a final set of deliverables at the inception stage.

Working Arrangements

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

The proposed way of working and plan of activity must be agreed by BEIS. The contractor should assume weekly progress update reports, in addition to communication either on-site or remotely, by phone or email, with the evaluation lead and associated Fund officials. Throughout the research, BEIS will be required to review and sign off all final data collection instruments, analytical approaches (including key assumptions) and outputs.

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.

Appendix B – Ipsos MORI Response

PROJ1.1 Approach

A. Requirements of the Scoping Study: The focus of the present commission is to scope an evaluation that will allow an assessment of the proposed Clean Growth Fund and its impact on developing market demand and supply for green venture capital (VC). It needs to develop a feasible and robust evaluation framework and approach to enable: an appraisal of the Fund's rationale and value for money; an assessment of the process elements of the Fund's delivery and its reach; and, an evaluation of the impacts of the Fund. The approach developed should allow a complete review of the viability of such a Fund, and the added value of similar BEIS interventions in the future.

B. Key methodological challenges

The design of the intervention raises a number of issues for any future evaluation which will need careful consideration in the development of an effective evaluation framework and approach. We provide a brief reflection on these below, drawing on our experience investigating similar issues in our previous evaluations, for example of the UK Innovation Investment Fund (UKIIF) for the British Business Bank.

- The scheme intervenes in financial markets, producing effects in the real economy indirectly through capitalising and supporting the expansion of early stage clean tech businesses. A robust evaluation approach will therefore need to consider effects of the intervention at three levels:
  - Fundraising, i.e. whether the intervention raises private capital larger than what which would have been otherwise deployed in similar clean-tech investments.
  - Equity investment, in particular whether businesses receiving investments would have raised similar levels of investments and similar levels of non-financial investor support.
  - Business growth, i.e. whether the equity investments undertaken under the fund propelled growth of firms supported. Given the fund focuses on Series A investments, possible impacts at the firm level will have to first be investigated by assessing progress in technology development and the probability of accessing Series B funding, before any GVA impacts can be investigated.
- The fact that the Fund is intended to invest pari passu with private sector capital, i.e. targeting commercial IRR rather than targeting marginal investments that would otherwise struggle to attract funds, will potentially pose challenges around the identification of additionality of the fund (i.e. companies that would have not been funded without the Clean Growth Fund), as it suggests that marginal benefits of the fund could be found in increasing the wider levels of equity investments across the clean tech sector, rather than the fund itself supporting firms that would have otherwise struggled to secure support. Notably this might contradict the assumption that the Fund reaches firms with investable propositions which are not attractive at mainstream VC. This is an issue we explored thoroughly in our evaluation of the UKIIF; our study found (awaiting publication) that £1 of public capital invested on a pari passu basis leads to an equivalent increase in VC investment over 12 months, despite substantial crowding out (50%) in the short term.
- Determining economic and environmental benefits to feed into a cost benefit analysis will depend on the extent to which returns to equity investments made under the fund can be compared to returns that would have been earned otherwise, environmental benefits will arise from the diversion of capital from other sectors/assets to clean-tech.
- Timescales of the intervention pose a challenge to evaluation planning and completion of a full impact evaluation within reasonable time, given the investment period of five years and timescales for exits of 10 years – this could potentially mean that a full and complete evaluation of impact might not be undertaken in the next 10-12 years, with a full economic evaluation even later.
- The level of Fund uptake – any evaluation approach developed will have to allow for the possibility of the minimum £20m private investment not being realised.

The planned structure of the fund (but without further detail on the level of demand or ways of working) suggests three principal approaches for designing a counterfactual impact evaluation:

- Competitive entry of fund managers – the fund manager of the Clean Growth Fund could be compared to any bidders for the management role that were unsuccessful, providing insights into fundraising effects. This would provide an indicative counterfactual likely to be low on the Maryland Scale of Scientific Methods, and would need to be complemented by qualitative research such as Contributions Analysis to investigate the effects on fundraising.

- Impacts on levels of equity investments and the number of VC deals could be investigated by exploiting any regional, sectoral and temporal variation in the investments supported by the Fund. The scope to use proprietary datasets tracking disclosed seed, VC, and IPO activity such as Pitchbook, Preqin, or Beauhurst could be explored[1] One challenge with this approach would be the relatively small number of planned investments.
- Impacts at the firm level could be explored if a "dead deal" log can be built into the monitoring requirements. An alternative option would be a "pipeline" approach, where firms receiving investments are compared to those firms receiving investments earlier/later

C. Summary of Methodology: Phase 1 involves a review of the Clean Growth Fund and its rationale for intervention, including a review of (i) underlying assumptions and hypotheses, (ii) current gaps in the financial markets to supply funding for clean tech, and (iii) the assumed benefits of the intervention on developing market demand and supply for green venture capital. Subsequently, we will develop a first logic model and subsequently a Theory of Change (ToC) that identifies key causal linkages, associated change mechanisms and the underlying risks and assumptions. We will then undertake a validation workshop to finalise the ToC and define a set of programme benefits.This approach will identify the multiple elements of context for the intervention, including the main confounding factors (inhibiting and enabling supply of finance, and related assumptions about actors' behaviour, contextual economic/other factors), as well as alternative delivery methods such as grant funding and incubation support. Phase 2 will develop a full evaluation framework and approaches, as well as propose underlying metrics and data sources, for the process, impact and economic evaluation to understand not only which impacts are attributable to the Fund, but also which intervention elements, stages, decisions, behaviours and processes within these affect these outcomes and how. Phase 3 provides a final review and validation of the developed evaluation framework, underlying approaches and metrics, to inform the submission of a complete evaluation scoping report to BEIS.

Phase 1: Inception and design of logic model

Task 1: An Inception Meeting with the Evaluation Steering Group (ESG) will be used to clarify the terms of reference and agree the methodological approach, discuss issues that may be encountered, obtain key documentation and contacts, and agree milestones and deliverables. A final project plan will be circulated after the meeting setting out the agreed actions and responsibilities with a detailed timetable and risk register to form the basis of weekly project updates.

Task 2: Document and Literature Review: The study team will undertake a rapid review of key Fund-related documents and key Government and academic sources to:

- Refine understanding of the underlying logic of the intervention, market failures and gaps in clean tech finance motivating public intervention, and the potential benefits anticipated.
- Provide an initial mapping of the delivery processes involved, an assessment of their overall role in contributing to the successful delivery of the initiative, and to check for any clarification required.
- Develop insight into the characteristics of the planned investments, and the causal process by which those activities may lead to the anticipated benefits in the financial markets and beyond.
- Explore any non-financial issues compounding difficulties of SMEs in accessing finance, and any possible 'contamination' of proposed intervention through the Clean Growth Fund by previous programmes (financial instruments and other)

It is anticipated that the review will cover the Business Case for the Clean Growth Fund, including any data already existing to support the Business case, any memorandum of understanding and/or contract with the assigned fund manager, and details of the applications of any other fund managers that were unsuccessful, specifications of due diligence processes and monitoring arrangements at the level of BEIS and the fund manager as planned so far. The findings of the review will be used to develop and refine an initial logic model for the Clean Growth Fund.

[1] Ipsos MORI has access to Pitchbook which has proved a powerful instrument in assessing the net effects of the UK Innovation Investment Fund for the British Business Bank, as well as our current evaluation of the Biomedical Catalyst. The potential to use such an approach is also discussed in various academic literature such as Brander, Du, Hellmann (2010) The effects of government-sponsored venture capital: international evidence. NBER Working Paper No. 16521.

Task 3: Familiarisation Consultations: Understanding of the programme will be deepened through consultations with up to 5 key stakeholders involved in the design and delivery of the programme (focusing on similar issues as those above). It is anticipated that this exercise will need to cover key policy, appraisals, and contracting leads within BEIS as well as senior investment managers at the fund manager contracted to implement the Fund.

Task 4: Development of Theory of Change: Informed by the evidence collected in Tasks 2 and 3, we will draft an initial ToC. We will identify any feedback loops (bi-directional elements) or prioritised causal pathways within the overall programme logic model, and attempt to provide indicative timing of the revised list of direct and indirect benefits. The study team will then draft an overall ToC that presents a map of linkages between individual elements of the programme, identifies main sub themes, associated mechanisms, assumptions and risks (e.g. potential for mechanisms not materialising and why this might be the case) to test. We will systematically scrutinise and refine the assumed 'key routes' in the overall model against the evidence available at this stage. This process will be supported by a theory of change workshop held with up to 10 participants across BEIS. This will focus on specific mechanisms of the ToC where secondary evidence collected is weakest or conflicting. The workshop will be facilitated by Antonia Dickman (Project Director) and structured according to key questions for discussion and key ToC mechanisms for review.

Phase 2: Evaluation framework

Task 5: Development of Evaluation Framework, building on the activities above to cover:

- **Overarching evaluation framework:** The overall study will be underpinned by an overarching evaluation framework defining the rationale for intervention, a logic model outlining the anticipated causal process by which the scheme might lead on to its anticipated outputs, intermediate outcomes and impacts, and an assessment of wider Government interventions that may have a contributory (or competing) role in supporting the delivery of the outcomes involved.
- **Process evaluation issues:** An appraisal of the effectiveness of processes underpinning the implementation of the Fund, including collaboration between BEIS and the fund manager, reporting provisions for the fund manager on the programme and deal level, as well as any specific provisions on investment decisions, collaterals required and documentation of deal details.
- **Impact evaluation issues:** A comprehensive assessment of the issues likely to be encountered in the implementation of an impact evaluation, including issues in identifying a counterfactual, and the range of externalities that would need to be explored. An initial appraisal of the viability of all major forms of quasi-experimental method will be provided, including matching or panel techniques.
- **Economic evaluation issues:** A framework for the economic evaluation will be defined, itemising the resource and opportunity costs that may need to be covered through a cost-benefit analysis, alongside the economic and social benefits that may require monetisation.
- **Data requirements:** An assessment of (1) data required to implement the range of options identified, (2) how far the available data collected through monitoring and secondary sources might address these requirements, and (3) any gaps that may need to be filled through primary research.

Importantly, this task will undertake a review of the key evaluation questions suggested in the ITT, in light of the draft evaluation framework, and refine these questions were necessary.

Task 6: Development of Key Performance Indicators: Informed by the ToC developed and the draft evaluation framework, we will suggest a revised set of monitoring and performance metrics to enable future process, impact and economic evaluations of the Clean Growth Fund. Where appropriate we will suggest alternative or additional metrics to ensure adequate a) 'coverage', i.e. do existing metrics span the logic model's 'width', from inputs through to outcomes and impacts, or could other metrics improve it? b) 'depth' i.e. is the totality of potential outcomes covered? and c) are the key contextual and confounding factors that might influence the effectiveness of the intervention considered? In turn, we will identify metrics that are currently included in BEIS' monitoring plans which do not align with core elements of our rescoped ToC, and which BEIS could consider removing to alleviate the reporting burden on the fund manager or individual firms. We will also identify specific data sources we want to use and propose these as part of the revised set of metrics, in particular secondary data sources that

could be used to substantiate management information collected by the fund manager or BEIS.

Task 7: Development of Process Evaluation Approach and Plan which will need to assess the efficiency of the programme's processes, their effectiveness (in maximising generation of intended impacts and securing value for money), the programme's scalability and identify potential improvements and lessons along the initial evaluation questions listed in the ITT. It will define more detailed questions and issues to be addressed in specific work packages within the evaluation plan. The chart below provides our initial thinking on key questions and potential research components.

Key Evaluation Questions/Issues	Review of [illegible] data	[illegible] and fund manager interviews	Investee interviews	Counterfactual analysis
Awareness of programme within relevant sectors				
Whether implemented as planned				
Views on efficiency / effectiveness of process				
Costs incurred by applicants and comparison with other programmes (e.g. other UK government interventions in cleantech)				
How demand compares with available resources				
Processes/ guidelines/selection criteria for fund manager designed to reach optimum segment of SME marketplace and how far this was achieved in practice				
How emerging problems/issues are managed				
Whether the processes well suited to assessment of additionality				
Features of Fund design influencing effectiveness				
Lessons to be learned and their applicability to the Fund and other interventions				
Scalability of the fund as per its current design; and any impacts on efficiency/effectiveness of its current processes				
Levels of demand for a scaled Fund, and any confounding/enabling factors				

Key source of evidence (major): Key source of evidence (moderate): Complementary source of evidence

In addition to the key process questions summarised above, we anticipate it being important for the process evaluation of the Clean Growth Fund to consider the following two issues:
- Mandate flexibility: Whether the mandate agreed with the fund manager is sufficiently flexible to allow the fund to meet both its commercial objectives and BEIS' wider policy objectives (which could be in tension). This is something we have been exploring with BEIS, and providing learning and recommendation on, in relation to the UK Climate Investments Pilot (BEIS is seeking to invest on commercial terms whilst balancing this with additionality and transformational change objectives).
- Competitiveness: Given the size of the fund, it may be competing with VCTs who due to their tax advantaged nature may be able to tolerate lower rates of return. This could place distortionary constraints on the types of investment it is able to make unless the fund is able to acquire a similar competitive advantage using similar tax advantaged instruments (e.g. SEIS). It will therefore be important to compare the investments made and the IRR achieved by the fund to other UK funds of a similar scale and vintage year.

At this stage, we believe that the process evaluation could involve: (a) analysis of appraisal and monitoring data held by BEIS and the fund manager; (b) 10 interviews with BEIS policy officials and fund manager staff involved in the appraisal and due diligence/contracting processes, as well as external stakeholders identified as equipped to provide useful perspectives; (c) interviews with the first c5 investees, and (d) work drawing on contributions analysis. To capture the effect of lessons learned from an initial process evaluation, a follow up process evaluation could be planned at a later stage to assess whether early changes to Fund implementation have had the desired effect.

Task 8: Development of Impact Evaluation Approach and Plan which will enable an assessment of whether the assumed benefits of the Fund, as scoped in Phase 1, have occurred. Any approach will likely have to be staggered across the lifetime of the Fund and beyond, with a final impact evaluation taking place 2-5 years after Fund close to capture the full breadth of potential impacts and to assess the sustainability of any effects on the level of overall equity activity in cleantech. Given the target

number of investments and the likely size of the Fund, it is likely that any early, interim and final impact evaluation will require a mixed method approach combining (a) a Realist approach, involving considerations of not only 'what outcomes were produced' but also 'how they were produced' and 'what is significant about the context in which they were produced' (e.g. providing examples of how the Fund has helped develop market demand and supply for green venture capital), informed by in-depth interviews with investees supported by the Fund, (b) contribution analysis through comparative case studies covering the c20 deals achieved as well as (c) quantitative analysis to enable assessment of a suitable counterfactual at the level of overall fundraising in clean-tech, additionality of equity investments in the 20 investees (volume and 'quality' of investor support) as well as firm performance with regards to progress in technology development and success in accessing Series B funding, and possibly any follow-on effects on firm growth through GVA or similar. This will likely involve collection from secondary data sources such as Pitchbook, IDBR, and potentially a wider survey of managers of cleantech VC funds in the UK, followed by a carefully contextualised econometric analysis using some of the approaches mooted above.

Task 9: Development of Economic Evaluation Approach and Plan: Whilst assessing and discounting the opportunity costs, fund management fees and other costs of implementation as well as total amount of investments made should be relatively straightforward, an investigation of the net economic benefits of the intervention will be much harder to establish given these will be a function of IRR earned on top of the returns that would have been earned in absence of the intervention, and any follow on economic effects of net additional equity deals in the performance of firms supported. Likewise, any environmental net benefits will follow on from the diversion of capital from other sectors/assets to clean-tech, and the degree to which these investments in clean-tech lead to a net increase in the use of renewable energy sources and uptake of energy efficiency solutions. There are additional challenges with the likely timing of economic and environmental benefits, which might make their inclusion in a cost benefit analysis impractical. As a next best alternative, early evidence on green changes in equity investments, r&d activity by investee firms and valuation of investee firms could be used as a basis of the value created by the Fund, and potentially be updated with a final economic evaluation of the net benefits comparing IRR achieved after close to the average IRR reported by other cleantech VC funds.

Task 10: Development of evaluation baseline: This task will scope the requirements for establishing an evaluation baseline. Based on the rescoped ToC and set of Key Performance Indicators, we will develop suggestions as to what information needs to be collected as part of an initial baseline, when and how and (b) the potential shortcomings of establishing this baseline after programme start (i.e. in the second half of 2019 or later). Whilst data on economic and innovation performance of potential investees, as well as overall levels of equity investment and deal numbers in clean tech can be collected at the time of the respective evaluation. However, a summary 'high level' assessment of the current environment for clean tech VC, such as relevant literature, and an interview programme with VC funds to test their investment intentions and views on the competitiveness of the UK clean tech sector, should be considered as part of an initial evaluation baseline to be undertaken as early as possible after the completion of the present evaluation scoping. This fieldwork would have to be control for strategic response bias, where possible, by carefully probing during interviews and reviewing secondary data against actual trends in investment.

D. Dissemination:

Phase 3: Task 11 - Draft and final reporting and presentation: Based on the work undertaken up to this point, the evaluation scoping report will be drafted as per the ITT requirements. It will include the final theory of change/logic model, the evaluation plan and framework, as well as any technical or methodological annexes. It will also include a standalone summary to facilitate wider dissemination of the scoping study key findings. We will allow for up to three revisions of this report, providing a first draft in late February 2019 and submitting a final scoping report by early March 2019. The findings of the scoping study will also be summarised in a PowerPoint slidedeck and presented to BEIS. We propose to deliver this presentation between the submission of the draft and final report in order to provide an opportunity to validate the findings and recommendations before submitting the final outpu

PROJ1.2 Staff to Deliver

The study will be jointly led by Ipsos MORI's Policy and Evaluation Unit and the Energy and Environment Research team, to bring together expertise from both teams. The Policy and Evaluation Unit consists of a team of economists and specialists with significant experience in designing and implementing process and impact evaluations, including assessing the impacts of financial market interventions. The Energy and Environment Research team brings experience researching and evaluating policies driving the development, financing and uptake of low carbon technologies, including in the SME sector. Both teams have collaborated in research in high profile policy areas for central Government, EU and international clients and have both delivered significant volumes of work for BEIS.

We particularly highlight the following areas of experience of relevance to this scoping study:

1. Assessing the impacts of financial market interventions: We bring significant expertise evaluating the economic impacts of programmes aiming to increase the supply of working and growth capital to SMEs and larger firms with growth potential. Our most recent experience directly related to venture capital includes studies examining the impacts of the Venture Capital Catalyst Fund and the UK Innovation Investment Fund for the British Business Bank – schemes seeking to boost the supply of equity finance by investing public funds on commercial resources, helping VC funds to reach a first close and leverage private investment. Ipsos MORI also led previous research into the impacts of Venture Capital Trusts for HMRC. Our wider experience includes a recently published study for BEIS exploring potential demand for a variety of potential Government supported financial products (coverage debt and equity) amongst early and late stage R&D intensive businesses and current evaluations of the UK Climate Investment Fund (through which BEIS make minority equity investments on commercial terms) and the Global Partnership Investment Fund (both for BEIS) which aim to remedy market failures inhibiting the supply of finance to large and small scale climate infrastructure projects in developing countries. Our diversity of experience in these areas will allow us to both quickly develop the theoretical frameworks needed to guide the delivery of an evaluation of the Clean Growth Fund as well as credibly engage with the VC community as part of the study.

2. Understanding the challenges faced by start-ups in the cleantech sector and the effectiveness of public measures to support their growth: We bring to this scoping study a great deal of familiarity with the market failures affecting this sector through our evaluation of the UK Innovation Investment Fund (one of its four targeted sectors was cleantech sector) as well as the diverse set of research and evaluation studies we have conducted for BEIS and Innovate UK which have assessed the effectiveness of various approaches (including grant funding, equity investment, commercially-designed loans) to address the broad sets of barriers that have the potential to hold back this market, including the commercialisation barriers faced by new technologies competing with mature alternatives, the limited extent to which the market values the public benefits from clean technologies, market weaknesses such as inadequate information, or the 'split incentives' for investment between building owners and tenants.

3. Scoping options appraisals, including design (and application) of econometric methods: Ipsos MORI has led the design of econometric strategies to evaluate a range of significant industrial support programmes, including the £3.2bn Regional Growth Fund, the £1bn Advanced Propulsion Centre, the £240m Advanced Manufacturing Supply Chain Initiative (all for BEIS). We have also helped the Department for Transport explore the feasibility of applying instrumental variable methods to assess the local economic impacts of major road infrastructure upgrades funded through Growth Deals, implemented spatial econometric approaches to determine the impacts of Apprenticeship Hubs on SME demand for apprentices (for the Skills Funding Agency) and used distance-decay models to assess the

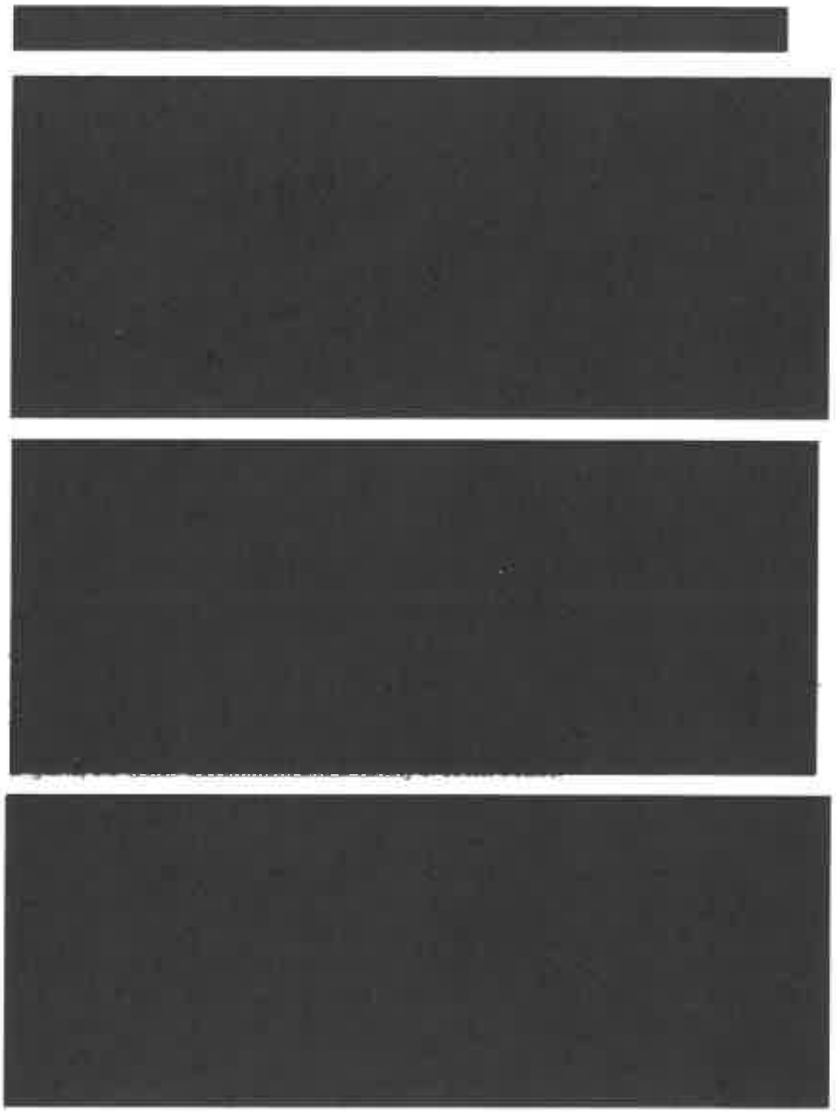
net local economic impacts of military shipbuilding (for the MoD, BEIS and HM Treasury). In addition to our extensive experience with econometric methods, we are also experienced in the design and application of theory-based approaches such as Contribution Analysis, including where these can be applied alongside quasi-experimental approaches (we have designed a mixed-methods approach to the evaluation of Local Plans to tackle air pollution for Defra and Department for Transport, for example). We have supported BEIS and others, such as the World Bank, in learning about the effectiveness and impact of innovative finance interventions through Contribution Analysis (for example, in the evaluation of UK Climate Investments and the Global Climate Partnership Fund) where small numbers of deals, and complex external environments have prevented the application of more robust approaches.

Our depth of experience in the areas above will enable us to effectively appraise the options for evaluating the Clean Growth Fund. We are highly experienced presenting such options assessments to clients, including working through any trade-offs with them (for example, between robustness and the generalisability of findings, or to advise on the most appropriate level of resource intensity) and supporting them to produce materials that can facilitate the procurement of a mainstage evaluation.

The specific experience of the individuals within the core team we have brought together for this study is presented below (full CVs are available on request).

Team member	Designing process and impact evaluation methodologies, including quasi-experimental approaches	Designing evaluations of financial instruments	Understanding of the SME sector	Understanding of the clean tech sector
[redacted]	✓	✓	✓	✓
	✓	✓	✓	✓
	✓	✓	✓	
	✓	✓		✓

[redacted]



PROJ1.3 Understanding the Environment

In this section we set out our understanding of the context in which the Clean Growth Fund is being designed, its rationale for intervention and the key issues which will frame its evaluation.

A. National Policy Context

The 2017 UK Industrial Strategy, framed by four 'Grand Challenges', sets out the Government's plan to improve the UK's productivity through fostering innovation, improving future business settings, producing high-paying jobs and upgrading infrastructure. In achieving these goals, there is expected to be significant disruption to the industrial landscape, requiring collaboration between business, academia, civil society and government to ensure the UK makes the most of opportunities created – including a global shift to 'clean growth' through low carbon technologies and the efficient use of resources.

UK Government strategy recognises that these shifts – driven partly by the Climate Change Act of 2008 which requires the UK to reduce its carbon emissions to 80 percent of 1990 levels by 2050 – will create both opportunities and threats for the energy sector in the UK. The shift in focus towards clean energy production has bolstered the UK's capability in developing and commercialising new low-carbon technologies (from automotive engines to building design to improve energy efficiency). Resulting from this technological innovation are new industries and companies which are driving the high-growth and high-value low carbon sector in the UK.

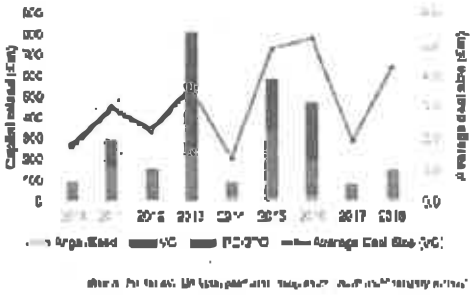
The Clean Growth Strategy[1] has two guiding objectives in achieving reduced emissions:

- To meet domestic commitments at the lowest possible net cost to UK taxpayers, consumers and businesses; and,
- To maximise the social and economic benefits for the UK from this transition.

To do this, there needs to be a clear and effective support mechanism by which innovation can flourish, such that more efficient products, processes and systems can reduce the cost of clean technologies. To achieve this, the Clean Growth Strategy has outlined its efforts in making the UK synonymous with gold-standard practices in providing financial support in clean growth industries, otherwise known as green finance. Its Green Finance capabilities are bolstered by the set-up of the Green Finance Taskforce and engagement with the British Standards Institution to develop standards around green and sustainable finance management. These various Green Finance strands of activity are integral in demonstrating the shift in UK attitude towards the development of innovative, clean technologies.

B. Recent Trends in Venture Capital and Clean Tech Investment

Interest and investment in clean technology increased in the first half of the 2000's, but then went through a period of decline after the 2008 financial crisis (the total capital raised by UK VC funds fell by almost 65 percent between 2007 and 2010[2]). Although, the UK VC market recovered to perform well when compared with the rest of Europe, more recently (since late 2015) the size and number of VC investments has decreased. The BVCA identified a number of key changes in the UK VC market, including the increased use of accelerator programmes (as reported by BEIS[3]),



[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf

[2] British Business Bank (2013). ECF VC Catalyst Evidence Paper.

[3] BEIS (2017). Business incubators and accelerators: the national picture.

institutionalisation of angel investment and crowd funding, growth in seed investment, an increasing number of larger later stage investment rounds, fewer IPOs (as illustrated in the trend chart above, drawing on Pitchbook data) and an increasingly international profile of both companies and investors.

From 2010 onwards, VC funds took an interest in raising specifically to support early stage clean technology ventures. Government subsidy schemes helped profits associated with these investments to be seen as almost risk-free. However, austerity measures put in place in the early-2010s resulted in lower government support around these technologies and the momentum in cleantech VC deals has slowed. Analysis of Beauhurst data has shown that since 2012, the average VC deal size has shrunk from £3.7m to £2.3m in 2016. Over this period, many VC funds have since altered their investment strategy to include a focus on technology enabled ventures more generally, rather than only clean technology.

As reported by the Green Finance Taskforce[4], the green bond market in 2017 (although reaching $155.5bn), was only 2% of the larger bond market value.[5] Much more is still needed in order to fully support the effective development of a global clean growth economy. The Committee on Climate Change estimated the total investment required to meet the UK's fifth carbon budget at c. £22bn per year, the bulk of which will be led through private sector investment programmes. However, the deployment of public finance in the early- to mid-stages of development is often needed to 'crowd-in' venture capital by reducing the amount of expensive initial funding needed to progress these novel technologies.

C. Rationale for intervention (general market failures and those specific to clean-tech)

There remain underlying issues and barriers which hold back further acceleration in investment in the clean technology sector. As we know from our previous evaluations of funds and interventions in this sector (such as of the UK Innovation Investment Fund – UKIIF - for the British Business Bank, or our evaluations of the UK Climate Investments Pilot and the Global Climate Partenship Fund for BEIS), the broad suit of barriers include: the commercialisation barriers faced by new technologies competing with mature alternatives; the timeline for full development of a novel technology to commercialization; the limited extent to which the market values the public benefits from renewables; and, market weaknesses such as inadequate information.

Despite the various support mechanisms in place, including interventions Ipsos MORI have evaluated such as the Faraday Battery Challenge and other Industrial Strategy Challenge Fund programmes, there are still challenges to overcome more generally in the VC space. A variety of funding instruments (both institutional and private equity) are seen as key to unlocking the development of SMEs, with equity in particular cited as an important instrument to support the investment needs of high-growth firms.[6]

A number of financial market failures can therefore be recognised (and have been evidenced in our previous evaluations, such as of the UKIIF) to justify public intervention in finance markets, and venture capital in particular:

- The presence of imperfect information which makes the assessment of SME funding proposals as well as SME executive management teams difficult[7], especially for early stage companies and leads to the existence of transaction and due diligence costs.[8] These transaction costs are typically fixed, not varying by investment size, and therefore

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/703816/green-finance-taskforce-accelerating-green-finance-report.pdf
[5] Climate Bonds Initiative (2018) Green Bond Highlights 2017 https://www.climatebonds.net/files/reports/cbi-green-bondshighlights-2017.pdf
[6] Cowling (2014). The Scale-Up Report. The Scale Up Institute.
[7] Issue discussed in depth in BIS (2009) "The Supply of Equity Finance to SMEs: Revisiting the Equity Gap".
[8] Brand-Gladwin (2014) Access to finance for innovation: Rationales and risks of public intervention.

become difficult to justify for investors undertaking small investments where they will represent a large proportion of the sum to be invested.

- Due to the difficulties in valuing early stage companies and assessing their commercial potential, equity investors will place a lower value on the proposition and invest less resources than would be optimal in the first best case.
- Moral hazard problems: Whilst equity investors take ownership rights alongside existing investors and the founding owners, individual interests between the different investors and owners may be misaligned, for instance on their preference for exit routes. This creates a need for additional monitoring activities on the part of the investor and an equivalent sub-optimal level of equity investment to the challenge of asymmetric information.
- Thin markets: The small number of investors and growth firms in the UK are also thought to cause structural problems in domestic VC markets. The high levels of interaction between market participants needed to build an effective system of intermediary institutions are not present in the UK VC sector, creating co-ordination problems[9]. This creates a case for action to strengthen markets or to compensate for their weakness through the provision of public support.
- The relatively low returns from UK VC investment when compared to the performance of US VC have the potential to deter Limited Partners from committing their capital into a UK based VC fund.[10] Research from NESTA indicated that, despite UK returns catching up briefly in the mid-2000s, they dropped behind again in 2013.[11] This was partly a consequence of slower and less profitable exit opportunities in the UK. NESTA's research also highlights the poor performance of VC funds in general since the late 1990s. Globally since 2002[12], the median and mean Internal Rate of Return[13] has been negative and VC funds have consistently attained weaker returns than other classes of investment, such as equities. Importantly, however, there are large variations in the performance of VC funds and some have made substantial profit. For example, recent BVCA data for the UK does show financial returns to be improving (and moving into positive territory), but venture returns still lag those of other asset classes. For instance, BVCA figures show the 10-year IRR return for venture is 5.1%, which is slightly lower than the 5.6% return from investing in public equity markets.[13] Therefore, identification of fund managers capable of delivering above average returns is ever more important.
- There are a set of broader market failures and barriers which pervade this area: externalities such as knowledge spill overs from innovations that are not valued by investors, coordination failures between actors and institutional weaknesses.[14]

Once fully operational, the Clean Growth Fund aims to tackle these barriers by accelerating the development and deployment of clean growth technologies through £20m of investment, supported by a minimum further £20m fronted by private sector venture capital.

D. Clean Growth Fund Policy Issues

This context of the clean technology VC landscape, gives rise to a number of key issues:

- Longer timescales to commercial development: cleantech start-ups inherently have longer timescales to scale and commercialise technology in comparison to digital

[9] Nightingale et al (2009) From funding gaps to thin markets: UK Government support for early-stage venture capital
[10] British Business Bank (2016). Equity Tracker. URL: http://British-business-bank.co.uk/research/equity-tracker-2016/. Date accessed: 13/05/17.
[11] NESTA (2013) Unleashing investment - Barriers to US venture investors in UK internet and digital businesses. http://www.nesta.org.uk/sites/default/files/unleashing_investment.pdf
[12] The associated discount rate was makes the net present value of investment cash flows equal to zero; attractive opportunities are linked with positive IRR and investment opportunities are often prioritised by ranking their IRR.
[13] BVCA (2016) 'Performance Measurement Survey 2015' http://www.bvca.co.uk/Portals/0/library/documents/Performance%20Measurement%20Survey%202015%20Performance%20Measurement%20Survey%20Summary.pdf
[14] Bravo-Biosca (2014) Access to finance for innovation: Rationales and role of public intervention.

technologies. According to the Accelerating Green Finance Report 2017, the time elapsed for a 'first-investment' to 'exit' for a hardware start-up can be more than 10 years.This conflicts with the characteristics of a typical company invested in by VC funds; typically, VC funds are set up as 10-year partnerships where limited partners (outside investors) provide capital to the VC fund which is then managed by the general partners. The fund will normally invest in a portfolio of small, high-growth companies over the first 5 years, and reap the returns in the final 5 years. If a company cannot 'exit' within 3-5 years of raising funds, the VC may choose to write off the investment.

- **Knowledge spill-over market failure:** for those start-ups which do receive VC funding, competition from 'fast followers' i.e. those which 'ride the wave' and benefit from the spill over knowledge of the pioneers in the sector, poses a serious risk for investors which seek to invest in an idea which cannot be replicated so easily. Hence, investors tend to prefer projects which have little spill over knowledge. Furthermore, due to the longer timeframe associated with cleantech commercialisation, this exposure to knowledge spill over becomes ever greater for the investor.
- **Illiquid secondary market:** a key factor to consider when investing in a new start-up is the ability to exit from your investment; that is, to sell on the equity in the company. One of the issues here is that many of the large energy companies make up a significant part of this secondary market. The viewpoint of these companies surrounding clean tech is still yet to be confirmed however.
- **Strong competition for alternative energy supplies:** for those clean-tech companies which were in the business of energy production, there exists fierce competition from players in the commodities markets which operate with extremely tight margins and hold an abundance of cheap alternatives, i.e. oil and gas or silicon solar panels. This has meant that investment in R&D while also operating a lean manufacturing operation has proved difficult and deters investors from exploring these types of opportunities.
- **Nature of clean energy production technologies:** clean energy production technologies, face technology risks at two stages of their path to commercialisation. The first, as is common with all new start-ups, is the risk of the underlying technology failing in a lab setting. In addition to this, there also exists the issue around whether the technology works at scale. Often, progressing these types of technologies to full scale can be very capital-intensive, with very few VC funds having the capital outlay and or the risk appetite to invest at this stage. The risk attached to clean energy production technologies is greater than most other investments in the VC landscape, thus amplifying the risk identified above surrounding high-risk, low-reward.

The above implications demonstrate the need for market intervention in facilitating VC investment in the cleantech space. Considering this, it will be important to reflect on the structure of the Clean Growth Fund and its capacity to achieve its overarching goal to catalyse the cleantech sector and leverage private sector funding to ensure the UK is at the forefront of developing clean technologies and solutions. It is noted that the Clean Growth Fund is aiming to do this with a relatively small fund size - owing to the costs involved in setting up and managing a VC fund, there tends to be a minimum size at which funds are commercially viable (around $100m), and smaller funds can face issues in attracting institutional investors[15].

The Fund is also targeted at Seed and Series A financing, i.e. small investments at the earliest/riskiest stage. We recognise there are several other VC schemes in place across the UK to support businesses of this nature, including SEIS, EIS and VCTs. This is important to consider as there may be potential for duplication in efforts around stimulating this end of the market, removing some of the additionality of the Clean Growth Fund. This will be a key consideration in the design of the evaluation of the Fund.

[15] National Audit Office (2009). Venture Capital Support to Small Businesses, 2009-10.

PROJ1.4 Project Plan and Timescales

Our detailed project plan including all principal tasks, milestones and deliverables is provided below. During the contract delivery, by providing you with updates against this work programme it will enable us to easily demonstrate progress, highlight any timetabling risks and track budget expenditure against planned tasks. Our project plan also indicates suggested meetings and other interactions with the BEIS team.

As detailed in our project plan above, we will provide the following outputs to BEIS:

- A detailed project plan following the inception meeting, outlining key dates, milestones and a risk register with associated mitigation strategies.
- Weekly progress updates tracking progress towards the deliverables listed above.
- A draft and final version of the evaluation scoping report including the evaluation framework, options appraisal, and an outline of the research activities and associated costs, and risk register for a mainstage process, impact and economic evaluation of the Clean Growth Fund. This will also include a standalone summary to facilitate dissemination of the key outcomes of this scoping study to a wider range of stakeholders.
- A presentation slidedeck in PowerPoint summarising the key findings and recommendations of the Scoping study.
- All research materials used during the scoping study (such as topic guides for stakeholder interviews) and any data generated – whether via secondary analysis or primary data collection including the necessary permissions to transfer this data to BEIS and for any stakeholders to be recontacted in future.

We are keen to support BEIS in communicating the findings of the scoping study effectively – whether this be to stakeholders internal to BEIS or in other parts of Government, or for the purpose of procuring a mainstage evaluation contractor. Therefore we will seek to discuss the deliverables above with you if commissioned, and explore any further or different modes of communicating and disseminating the findings to maximise reach and impact among your stakeholders.

Much of our research is high profile and in the public domain. Therefore, we place great emphasis on ensuring that our reports are clearly written and presented in an engaging manner. We have extensive experience of delivering reports for BEIS, including working to the Department's report guidelines, and are familiar with the drafting process allowing provision in the timetable for at least two iterations of comments and revisions.

Our working arrangements to deliver a successful programme of work

Our team (as set out in Proj1-2 "Staff to deliver") includes named individuals with clearly defined roles and responsibilities. Our Project Manager [redacted] will be the central point of contact for BEIS and will be responsible for day-to-day coordination across the Ipsos MORI team. [redacted] will be in copy in all internal email exchanges of the team to maintain an oversight of the whole project and communication channels.

As soon as the contract is awarded, the Project Manager will liaise with BEIS to organise an inception meeting. We propose to use this as an opportunity to present to BEIS a preliminary workplan and risk register and to receive feedback on this in order to inform the development of a final project plan (which will be sent to BEIS for review and formal sign-off following the inception meeting).

Throughout the project, the Project Manager will organise weekly internal team meetings to discuss progress and enable early identification of any potential risks to delivery. These meetings will feed into the weekly written updates and calls with BEIS. The project team is entirely based in London, enabling easier face-to-face interaction and the set-up of meetings on an ad hoc basis as needed. We also have Skype for Business conference support, which allows for the team to meet remotely if needed.

We have assembled a team for this study with sufficient capacity to deliver to the timescales set out in the project plan above (the detailed allocation of days by task area is provided in the Price Schedule submitted separately). However, in the eventuality of further resource being required (for example, in the case of staff absence or due to any change in the scope of the delivery of work) to meet this timetable, we have the ability to draw on the wider Policy and Evaluation Unit (a team of 20 evaluators, economists and statisticians).

Our approach to risk-management: assessment, management and mitigation

We commit to a "no-surprise" approach to project management, providing a structured strategy to identifying and mitigating risks to project delivery at an early stage. Our project plan will identify and highlight our mitigation measures to key risks we foresee for the delivery of this project. This will be the starting point of our Risks and Issues log, which will be reviewed on an ongoing basis. The weekly internal meetings, weekly written updates and calls with BEIS will be used to identify and flag any new risks and issues, and to propose appropriate remediation measures.

Our quality assurance strategies, policies and systems to ensure the delivery of the project meets quality requirements

Effective quality assurance (QA) is central to the high-quality delivery of any project and the extent to which the evidence it generates stand up to external scrutiny.

Within this specific project, we have built-in quality assurance processes and roles within the team. [redacted] will have sign-off on all materials being delivered to BEIS; both research related materials being provided for BEIS sign-off (such as consultation topic guides or workshop facilitation plans) and project deliverables (theory of change, scoping report, summary report). In addition, [redacted] (Head of Economics) is a core member of the team as an evaluation methods advisor. [redacted] will review the evaluation framework and options appraisal prior to the first draft being delivered to BEIS. These QA steps within our team will ensure that BEIS receive high-quality, thoroughly checked outputs first time from our team.

At an organisational level, Ipsos MORI's standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, robust findings. Ipsos MORI works to the highest quality standards which are engrained throughout the life-cycle of every project. Our suggested project team have clear roles and lines of accountability and follow project management procedures based on ISO quality systems. Ipsos MORI operates an integrated quality, compliance, and information security management system, and our 'Business Excellence System' is certified to ISO 27001 (data security) and Interviewer Quality Control Scheme (ICQS), ISO 20252 and ISO 9001 (market research and project management).

All data is handled and processed in-house. We are fully compliant with the requirements of the international standard for information security (ISO 27001) and the HMG Cyber Essentials Scheme and have been for many years. Our Business Excellence Team ensures we are fully compliant with GDPR regulations including establishing who is the data controller and the legal basis for collecting the data, informing participants of their rights as well as ensuring appropriate data flow and privacy policy notices are in place.

Annex A – GDPR

Description	Details
Subject matter of the processing	**BEIS will hold a small number of stakeholder contact details as part of stakeholder consultations.** **This is a small research study which involves discussing monitoring and evaluation issues with external parties**
Duration of the processing	**The project is due to start in January 2019 and will end March 2019**
Nature and purposes of the processing	**We are not expecting to handle any large amounts of personal information as we are conducting a scoping study that involves stakeholder consultations and as part of this process, we shall have stakeholder contact details.** **Stakeholders will be asked to provide consent to take part in the consultations, which may take the form of one to one meetings or small group discussions.** **Stakeholders' consent will be sought if any potentially identifiable information (e.g. anonymised quotes) is reported in any reports from the research.** **This study is designed to inform a subsequent project so stakeholder contact details may be subsequently passed on to the company responsible for the evaluation. Stakeholders will be asked for permission/consent for their contact details to be passed on.** **The lawful basis for processing and storing of contact details is "public interest".**
Type of Personal Data	**Name, address, telephone number**
Categories of Data Subject	**Key stakeholders who would be interested in the new Clean Growth Fund, including both innovators who would look to receive financial support from the Fund and investors who would look to invest in the Fund.**
Plan for return and destruction of the data once the processing is complete UNLESS requirement under union or member state law to preserve that type of data	**Any personally identifiable information will be destroyed 3 months after the end of the project**