IMPLEMENTATION OF THE QUALITEE BUSINESS MODEL IN UNITED KINGDOM

V2.0

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QualitEE Project

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The QualitEE consortium comprises 12 partner organisations covering 18 European countries, an expert advisory board, including the European standards body CEN/CENELEC, and 59 supporters from major financial institutions, government bodies, trade associations and certification bodies.

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Contents

1 EXECUTIVE SUMMARY

A proposal for a UK scheme to accredit EPC providers has been developed and refined through extensive consultation with market stakeholders. The main features of the scheme are as follows:

- Trade association leadership by ESTA, the UK Energy Services and Technology Association
- Company accreditation through biennial audit of company capability and a sample project audit
- Sample project audits to review projects in operation, i.e. past first savings verification point
- Verification by independent auditors to be appointed by ESTA
- Public register of accredited EPC providers maintained online by ESTA along with quality criteria and case studies
- Addresses a gap in the market for independent accreditation of experienced EPC providers that can demonstrate successful projects in operation
- The market penetration strategy focusses first on experienced / pioneer EPC providers that want to distinguish themselves. The second focus is acceptance by clients as a required standard at which point it becomes something that EPC providers cannot afford not to have.
- Consultation with several EPC providers indicates keen interest in the scheme, and acceptance of the likely costs.
- Further consultation is underway before outlining a final proposal. The current implementation plan targets May / June 2021 for scheme launch.

The business case is outlined in detail in the following sections of this document.

2 INTRODUCTION

The objective of this report is to provide information about the national implementation of quality assurance schemes for energy efficiency services (EES). This report has been developed as part of the "QualitEE – Quality Certification Frameworks for Energy Efficiency Services" project supported by the EU's Horizon 2020 programme. The QualitEE project aims to increase investment in EES and improve trust in service providers.

This report aims to cover the practical implementation of the business model selected for the United Kingdom. A business model is the basis of business growth. It can be defined as “the rationale of how an organisation creates, delivers, and captures value, in economic, social, cultural or other contexts. The process of business-model construction forms a part of the business strategy”[1].

It will describe the basic idea of quality assurance for energy efficiency services in general, the idea of the national scheme and some facts about the development and implementation process of the national scheme (background).

[1] Osterwalder, Pigneur, Smith, *et al.*: “Business Model Generation” (2010)

3 THE CASE OF THE UNITED KINGDOM

3.1 Description

In the earlier stages of the QualitEE project market consultation was carried out in the United Kingdom through an online survey of Energy Performance Contracting (EPC) providers and facilitators, interviews of EPC clients and financiers, and via consultation of a group of interested stakeholders. This group includes the Energy Services and Technology Association and its ESCg Energy Services Contracting specialist group (Trade Association), Amber Infrastructure (Financial Institution), the Scottish Futures Trust (Public Body), TUV Nord (Certification Body) and the Department for Business, Energy and Industrial Strategy (Government Body – observational capacity only).

The results of the survey - completed by 32 UK based EPC providers and facilitators - (Keegan 2018[2]) indicate that well-established barriers to EPC business – namely lack of trust, complexity and high project development costs – are still prevalent in the UK.

It is thought that a national quality assurance scheme for EPC may help to address these issues by increasing consumer trust and driving standardisation (expected to reduce complexity and project development cost). The survey identified support for this; 67% of UK EPC provider and facilitator respondents indicated that a quality assurance scheme would achieve a 'major' or 'moderate' increase in consumer trust and most (56%) stated a preference for implementing quality assurance in the 'majority' or all of their projects.

The United Kingdom does not currently have a quality assurance scheme for Energy Performance Contracting projects or providers. Following the EU's Energy Efficiency Directive, the UK Government established a register of energy services providers[3] and concerning the provision of EPC, it references the providers on the RE: FIT scheme. RE: FIT is one of four commonly used EPC procurement frameworks in the UK, the others being the Non-Domestic Energy Efficiency Framework (NDEEF) used by the public sector in Scotland, the Carbon and Energy Fund and Essentia used by the National Health Service. RE: FIT mainly serves local authorities (municipalities) and the education sector in England and Wales. The frameworks go through a tendering process to appoint EPC providers, which essentially provides a level of capability auditing through the tendering exercise. Some of the providers on the frameworks, however, are not known to have delivered an EPC project and through the consultation, it was identified that there is a gap in providing independent verification of projects in operation. This would allow EPC providers to demonstrate their project delivery experience, and for clients to find robust independent verification of project delivery experience beyond case studies promoted by the EPC providers and the frameworks.

For energy efficiency projects in general, the Investor Confidence Project Europe's (ICPEU) Investor Ready Energy Efficiency™ (IREE) certification is already well known by the UK market. Verco - the UK technical leaders for ICPEU and also members of the ESTA ESCg – were therefore also closely engaged in the stakeholder consultation process.

[2] https://qualitee.eu/gb/publications/market-research-report/

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/628628/2017_List_Registered_Energy_Service_Providers.pdf

3.1.1 Initial Proposal

Following initial discussion amongst key national stakeholders, **an initial proposal of a business model for a UK quality assurance scheme for EPC was developed.** The following gives an overview:

- The EPC quality assurance scheme would be administrated by the Energy Services and Technology Association (ESTA).
- ESTA would maintain a public register of accredited EPC provider companies, each of which meets minimum requirements that demonstrate their capability to deliver EPC projects. Accredited providers will be issued with a quality label that can be used to promote their accreditation to clients and prospects.
- EPC providers must register basic details of all their EPC projects. One project per annum will be selected at random by the scheme administrator for an independent audit. Ideally, these projects would be past the first savings reconciliation point. In order for the EPC provider to maintain its accreditation, the project must successfully pass this audit.
- Three grades of accreditation would be given dependent on the results of the latest project audit:
    - Gold label – the audited project has reached first savings reconciliation point and guaranteed savings have been achieved/exceeded.
    - Silver label – no project is available that has reached first savings reconciliation point or there is one, but guaranteed savings have not been achieved.
    - Bronze label – no projects are available for audit.

- EPC provider companies would pay registration and audit fees that would fully cover the costs of scheme administration.

- ESTA would publish quality criteria for EPC providers and EPC projects to be based on criteria defined at a European level by the *QualitEE* project (Leutgöb et al 2018). ESTA would appoint a panel of experts to regularly review and update the criteria as required.
- ESTA would appoint a panel of specialist independent auditors able to carry out company capability and project audits.
- Where EPC providers are accredited as Project Developers by the Investor Confidence Project (ICP) they will have a lighter touch company capability audit and accordingly reduced registration fees. Also, if their audited project has received Investor Ready Energy Efficiency ™ (IREE) certification, the project audit will be lighter touch and associated fees would be reduced accordingly.

The rationale behind this proposal is explained in the following:

- Trade Association Scheme Leadership – whilst the market research showed that a Government led scheme would be most respected, discussions with representatives have indicated that the Government does not have an appetite to launch a scheme at this time. Rather, it is keen to find feasible ways to support industry led schemes. Therefore, a Trade Association led approach has been progressed as an alternative and is has been well received by ESTA. ESTA already has experience of quality assurance scheme management - ASPCoP (http://aspcop.org.uk/) is a scheme for service providers of automated meter reading of gas utilities.
- Compromise between cost and robustness – the market research indicated that costs should be kept to a minimum; over 70% of UK respondents selected that assurance costs should not exceed 1% of project value. To minimise assurance costs but still allow a reasonable level of project level verification it was decided that a company level accreditation with random project audits would provide the best compromise between cost and robustness. The idea of registering all projects for random selection aims to avoid 'cherry picking' where EPC providers submit only their most successful projects for audit.
- Interaction with the Investor Confidence Project – the market research indicated concern that a new quality assurance scheme for EPC may cause confusion and too many assurance schemes – 56% of UK EPC providers and facilitator respondents identified this as a potential drawback. The Investor Confidence Project Europe's Investor Ready Energy Efficiency ™ (IREE) certification is well established amongst UK energy efficiency stakeholders and discussions have indicated that UK stakeholders would favour a scheme for EPC that works in conjunction with ICP Europe / IREE. ICP Europe / IREE covers the technical quality elements of energy efficiency project development in general but is contract agnostic and therefore does not cover the specifics of delivery models such as EPC (e.g. savings guarantees, service contract terms and ongoing services). Initial comparison of ICP protocols and QualitEE draft quality criteria for EPCs indicate an overlap such that a company and project that meet ICPEU project developer requirements and IREE certification respectively would meet several quality criteria for EPC. To avoid duplication of effort and cost it has therefore been suggested that companies meeting ICPEU project developer requirements and achieving IREE certification for their projects would qualify for reduction in EPC scheme registration and audit fees. It has also been suggested that audits should be carried out by the same party for ICPEU / IREE and the EPC scheme.

3.1.2 Feedback and revised proposal

A key area of discussion leading to the initial proposal was around the target group and target object for the quality assurance scheme; should it be a project or provider focussed accreditation.

Once the initial proposal settled on the target group and object being focussed around EPC providers and their projects, consultation was then concentrated on EPC providers. Bilateral meetings with providers have been, and continue to be carried out to present the scheme proposal and solicit feedback on whether they would use the scheme, where they see the benefits and any areas for improvement.

A summary of the feedback received to date is outlined below:

- All EPC providers consulted indicated an interest in using the scheme and felt they could justify the costs of the scheme.
- The key benefit they identified was that their capability and project delivery experience would be highlighted to clients on a platform led by a nationally recognised trade association, supported by independent auditing. This provides an opportunity for them to distinguish their service against less experienced providers. There was also interest in how the scheme promotion/events could open up interest among new clients, especially in the private sector.
- Most providers reacted strongly to the proposal of bronze, silver and gold gradings. It was highlighted that a bronze or silver award would, in some ways, be worse than nothing. It was suggested that this be removed, and the scheme be streamlined to those that have passed both capability and project audits, without any grading system.
- There was also a general reaction to the idea that one project is selected at random for audit. Whilst most agreed that a system to avoid 'cherry picking' was a good idea in principle, there was also a risk that an uncharacteristically bad project was selected. There was also a concern that clients of selected projects might not be amenable to their project being audited.

It is envisaged that a revised proposal for the scheme will address the latter points by streamlining the scheme to a simple pass or fail grading system and allowing EPC providers to elect the project for audit.

3.2 Phases of quality assurance scheme procurement

3.2.1 Quality Criteria

The quality criteria presented below have been developed within the QualitEE project and are based on "preliminary quality criteria for energy efficiency services" developed for the Austrian market within the Transparense project.

This comprehensive set of technical, economic, communicational, and other criteria has been defined to be applied on energy efficiency services, with special focus on "Energy Performance Contracting" (EPC) and "Energy Supply Contracting" (ESC) in order to ensure minimum quality requirements which all services must comply with to be labelled as high-quality services.

The quality criteria selected have been object of discussion among stakeholders at both, national and European levels. Consequently, the feedback has been incorporated allowing us to present an extended and agreed set of criteria. These criteria are:

- **QC1 Adequate analysis:** the analysis of an energy-consuming unit (building, industrial establishment, facility, etc.) with respect to possible energy savings including the identification of possible energy efficiency improvement (EEI) measures is often the first step in an EES. The quality of analysis will thus, also have an enormous impact on the overall quality of EES.
- **QC2 Quality of implementation of technical energy efficiency improvement measures**: In many cases, the rendering of an EES is connected with the implementation of technical measures. A broad spectrum of quality standards can be met in practice while rendering services in this respect. QC2, therefore, stipulates a range of quality standards that must be complied with when implementing technical measures. In the process, compliance with such standards that regulate the implementation of technical measures is of paramount importance. Moreover, it must be ensured that the operator of the facility will be in a position to operate the newly installed facilities after the end of the project.
- **QC3 Savings guarantee:** some EES come with the promise that savings of a specific size will be realised. Such promises – routinely known as savings guarantee – must meet specific requirements for them to truly be beneficial to the client.
- **QC4 Verification of energy savings:** The identification and/or implementation of energy savings is at the center of EES. For this reason, the quality of an EES is also determined by the way that energy savings are verified. Energy savings cannot be measured directly but are always calculated. In simple terms, three approaches are differentiated:
  - Verification based on measured energy consumption: even in places where measurement equipment is available for the purpose of recording energy consumption, energy saving is determined through the comparison of the current value with a reference consumption (frequently called a "baseline"). At the same time, factors impacting energy consumption that are not caused by EES must be "filtered out" (often referred to as an "adjustment process" e.g. for the impact of variations in weather conditions);
  - Engineering calculation of energy-savings: usage of complex methods of calculation and simulation largely based on standards.;
  - Expert estimation: derivation from savings realized from similar and comparable cases.
- **QC5 Value retention and maintenance:** some EES also cover services relating to the maintenance and repairs of newly installed or existing facilities. Quality The quality of these services has a direct influence on the availability of the (energy) system and retention of its value. As these factors ensure desired benefits and long-term sustainability of projects beyond the contract duration, they also influence the overall quality of the EES.
- **QC6 Communication between the contractor and the client:** In addition to technical quality, the type and scope of communication between the EES provider and the client contributes to the quality of EES. EES providers assume only partial responsibilities from existing operating personnel. To avoid problems in the implementation of the EES the interfaces between contractual parties must be effectively managed through continuous and well-defined communication.

- **QC7 Maintenance of users' comfort:** The execution of EES shall not lead to any impediment on the comfort of the user. In this context, users' comfort requirements can be assessed either through physical parameters (temperature, air quality, luminous intensity, etc.) or captured by collecting feedback via a comfort survey tool.
- **QC 8 Information and motivation of users:** Since in most cases, users have a considerable impact on the energy consumption of an object and thus, also influence the success of EES, selected EES approaches entail actions for the information and motivation of users.

  Taking into account the heterogeneity of user-information activities, QC 8 contains just a "minimum package". In real EES projects, however, it may be advisable to extend user-information activities beyond the minimum requirements as included in QC 8.
- **QC9 Comprehensible contractual stipulations for the contracting of specific regulatory requirements:** several years of experience in contracting projects, have shown that their quality is not just of a technical and communicative nature but that the shaping of the Contract also contributes decisively to the quality of a project. The Contract must contain regulations for individual issues such as ownership transfer, handling of energy price risk, insurance or exit regulations, that will repeatedly lead to problems in practice, if they were not regulated.

3.2.2 Quality assessment criteria – UK adaptation

The European level quality criteria have been subject to a consultation in the UK through various discussion workshops and testing in pilot projects. The main feedback to the quality criteria is as follows:

- **QC2 Quality of implementation of technical energy efficiency improvement measures**: Should include further criteria on Health & Safety as this is a key area in the UK.
- **QC3 Savings guarantee:** Likely to include an additional Savings Guarantee Type 3; performance retention, which is a form of guarantee used regularly in Scotland.
- **QC4 Verification of energy savings:** Add further criteria around definition and agreement of reporting format.
- **QC5 Value retention and maintenance:** Part of this criterion to be optional dependent on the O&M agreement between the provider and client. Often the O&M of installed works will be handed over to the client directly after construction to bring under their existing maintenance contracts. Where this is the case there should still be a focus around clear definition of responsibilities, training and handover.
- **QC6 Communication between the contractor and the client:** The aspects of this criterion relating to "Capturing and continual updating of all EEI measures taken by the EES provider" should also have a focus on how changes to the scope of works and guaranteed values are managed.
- **QC7 Maintenance of users' comfort:** This criterion should focus on the measurement of environmental conditions against defined standards rather than surveying of users. User feedback was seen to be too subjective.
- **QC 8 Information and motivation of users:** This criterion should be optional dependent on whether a behavioural change programme is a feature of the EPC.

This will all be taken into account in the UK national quality criteria, which are still under development.

3.2.3 Quality assessment criteria – Company capability

The previous sections dealt with the criteria that will be used to evaluate sample projects submitted by the ESCO. The ESCO will also be evaluated up front for company capability using the following headline criteria:

- Demonstrated use of performance guarantees/gain shares.
- Adequate financial standing/project insurance arrangements.
- Team capability, organisation & qualifications for EPC.
- Demonstrated experience in all key steps of EPC – following the project quality criteria.
- Appropriate public, products & professional insurances.

3.2.4 Evaluation of compliance

ESCOs will be evaluated for company capability and a sample project in each 2 year maintenance period.

- **Company Capability:** To streamline the process the ESCO will be required to complete a questionnaire and provide relevant supporting evidence. ESTA will appoint an independent auditor to assess their submission against the criteria. This process is expected to take 1-day of auditing time.
- **Sample Project Audit:** The UK scheme will focus on projects in operation and past the first savings verification point. This allows the auditor to review all aspects of the project in one audit process to minimise costs. The ESCO will select the project for auditing. To streamline the process, the ESCO will be required to complete a questionnaire and provide relevant supporting evidence. ESTA will appoint an independent auditor to assess their submission against the criteria. The scope of work for this aspect has been evaluated by EEVS through testing of the audit process in two pilot projects. This identified that the audit process requires around 3 days if relevant project documentation can be provided in an organised fashion. A checklist of relevant project documentation has been developed. It was also defined through consultation that the scope of audit should include a site visit to assess the quality of work and that the most time consuming aspects – such as the detailed assessment of energy savings projections (for proportionality, realistic assumptions and representativeness) can be limited to a sample rather than a comprehensive audit.

3.2.5 Accreditation process

Figure 1 – Accreditation Process for the Initial Proposal

Initial Registration	Quality Control	Ongoing Maintenance
DESCRIPTION OF THE PROCESS		
• ESTA sets & maintains EPC provider quality criteria • EPC provider pays initial registration fee and audit fee* • EPC provider completes registration form to provide evidence of compliance. ESTA appointed auditor verifies compliance with EPC provider criteria • ESTA issues Bronze label with unique company identifier and validity • ESTA maintains a register of certified EPC providers	• ESTA sets & maintains EPC project quality criteria • EPC providers log basic details of all ongoing EPC projects with ESTA • ESTA selects project at random and ESTA appointed auditor verifies compliance with EPC project criteria • Gold label issued where project passes & has exceeded guaranteed savings • Silver label issued where project passes but has not demonstrated guaranteed savings have been exceeded • ESTA updates status of EPC provider on the register	• EPC provider pays annual registration fee and audit fee* • ESTA appointed auditor verifies continued compliance with EPC provider criteria. If failed, remedial action agreed. If not met within required timeframe label revoked. • ESTA selects project at random and ESTA appointed auditor verifies compliance with EPC project criteria • Appropriate label issued and status updated on the register.

*Reduced registration and audit fees for ICPEU accredited project developers and IREE certified projects.

Figure 2 – Accreditation Process for the Revised Proposal

Initial Registration	Quality Control	Ongoing Maintenance
DESCRIPTION OF THE PROCESS		
• ESTA sets & maintains EPC provider quality criteria • EPC provider pays initial registration fee and audit fee* • EPC provider completes registration form to provide evidence of compliance. ESTA appointed auditor verifies compliance with EPC provider criteria	• ESTA sets & maintains EPC project quality criteria • EPC providers submits project for audit along with full documentation. • ESTA appoints auditor to audit project and verify compliance with EPC project criteria • Where provider and project criteria met, ESTA adds EPC provider to the online and public facing register of accredited EPC providers and label issued. • Where permitted by the EPC provider and their client, a case study will be added to the online register.	• EPC provider pays annual registration fee and audit fee* • Every 2 years. ESTA appointed auditor verifies continued compliance with EPC provider criteria. If failed, remedial action agreed. If not met within required timeframe accreditation revoked. • Every 2 years. EPC provider submits project. ESTA appointed auditor verifies compliance with EPC project criteria. • New label issued and status updated on the register. • Further case study added as permitted.

*Reduced registration and audit fees for ICPEU accredited project developers and IREE certified projects.

3.3 Main features

The main features of the QualitEE business model are found in the following table:

Table 1 - Main features for UK EPC Quality Assurance Scheme – Revised Proposal

	UK EPC Quality Assurance Scheme
Principal action	Quality Label based on verified capability to deliver EPC and annual sample audit of one delivered project
Country	United Kingdom
Type	Voluntary
Target user	EPC Provider
Authority / Administrator	Trade Association (ESTA)
Phases	1. Establishment of quality criteria for EPC providers and EPC projects 2. Initial application by EPC provider to demonstrate capability 3. Evaluation of application. If successful, ESTA requests sample project submission (project to be post first savings reconciliation) 4. EPC provider submits project and documentation 5. Evaluation of sample project. If successful, ESTA adds EPC provider to register of accredited providers (online) 6. Biennial review of capability to maintain accreditation. If failed, remedial action agreed. If not met within the required timeframe label revoked 7. Biennial review of a project (not the same one) to maintain accreditation. 8. Regular review of quality criteri
Stakeholders involved	1. Trade Association (ESTA) & appointed expert board 2. EPC Providers 3. Specialist Independent Auditors
Market penetration/uptake strategy	Website, events, articles in relevant trade publications, use of labels by EPC providers to drive customer demand. Also expect to explore further opportunities to increase demand – e.g. requirement of public procurement, pre-requisite for funding schemes, etc
Year of implementation	Not Applicable - in development
Income	Registration and audit fees paid by EPC providers upfront annually
Expenses	Website/software, PR & Marketing, admin staff, expert board costs, auditor costs, general overheads

3.4 Canvas analysis

3.4.1 Business Model Canvas Analysis

Table 2 - Canvas analysis

<table>
<tr>
<td rowspan="2">KEY PARTNERS
• EPC provider: energy service provider who delivers energy services in the form of EPC
• ESTA: institution that grants its label to quality assured EPC providers
• Expert board: independent EPC experts to set quality criteria and review special cases
• Independent auditors: third parties that conduct the evaluation to assess if ESTA requirements are met
• Public bodies and financial institutions: set requirements for quality labels in procurement and to access finance / preferential finance terms</td>
<td>KEY ACTIVITIES
• Establishment and review of quality criteria for providers and projects.
• Auditing of service provider capability submissions and sample projects.
• Issuing accreditations for successful providers.
• Maintaining a public list of accredited providers on a website.</td>
<td rowspan="2">VALUE PROPOSITION
• Standardisation and assurance of best practice EPC providers and their services
• Economical yet robust: company accreditation with sample project audit.
• Objective criteria established by a national and respected institution (trade association)</td>
<td>CUSTOMER RELATIONSHIP
• Contact via email or phone
• Regular newsletters
• Regular meetings of registered EPC providers (as part of established ESTA meeting structure)
• Co-creation, consumers provide feedback</td>
<td rowspan="2">CUSTOMER SEGMENT
• (Primary) EPC providers: ‘buyers’ of scheme
• (Secondary) EPC clients: beneficiaries of scheme and information
• (Secondary) Public bodies and financial institutions: beneficiaries of scheme and information</td>
</tr>
<tr>
<td>KEY RESOURCES
• Quality criteria
• Association staff
• Expert board
• Independent auditors
• Website / registration database</td>
<td>CHANNELS
• Awareness: webpage, events and PR
• Partners</td>
</tr>
<tr>
<td colspan="3">COST STRUCTURE
• Fixed costs: Website, PR & Marketing, general administration and overheads. Expert board
• Variable costs: Registration, audit costs and associated administration</td>
<td colspan="2">REVENUE STREAMS
• Initial registration fee (first year)
• Annual registration fee (subsequent years)</td>
</tr>
</table>

3.4.2 Value proposition

Table 3 - Value proposition

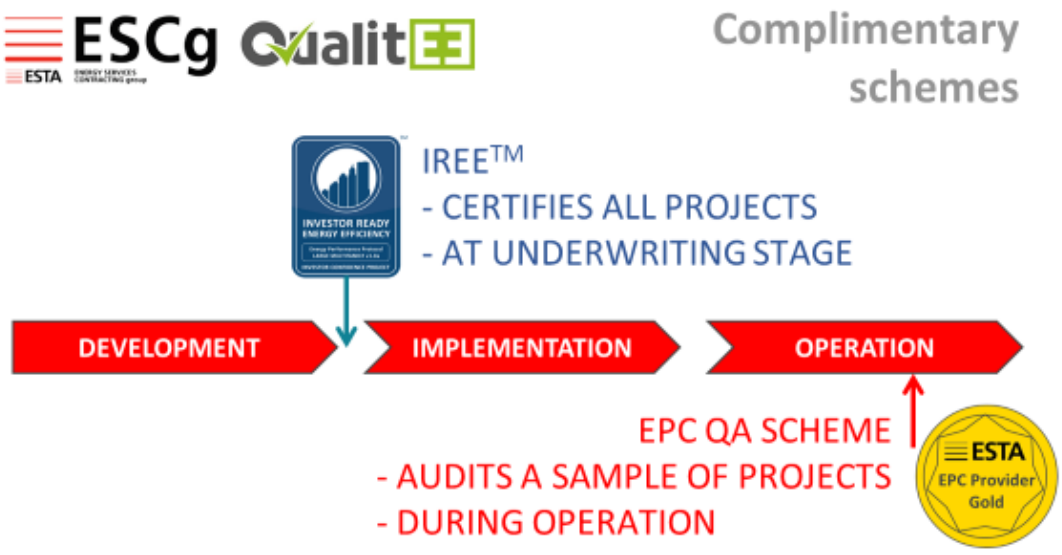
<table>
<tr><th colspan="2">ACCREDITED EPC PROVIDER</th><th colspan="2">CLIENT OF THE ACCREDITED EPC PROVIDER</th></tr>
<tr><td rowspan="2">SERVICES
Externally verified capability to deliver EPC projects
Demonstration of externally verified successful delivery of EPC projects</td><td>GAIN CREATORS
Improve image by offering a quality service with pre-established guidelines by a national and respected association</td><td>GAINS
Demonstrated selection of EPC provider based on externally verified scheme</td><td rowspan="2">CUSTOMER JOB(S)
Select high quality EPC provider and project to minimise risk
Understand aspects of best practice EPC provision</td></tr>
<tr><td>PAIN RELIEVERS
Availability of external best practice quality criteria for EPC companies and projects that can be shared with the client
Externally verified case studies.</td><td>PAINS
Project development time and costs
Difficulty in procurement – lack of standardisation/comparability of offers
Lack of independent best practice information and case studies</td></tr>
</table>

4 IMPLEMENTATION STRATEGY

4.1 Business opportunities

Market research and consultation under the QualitEE project in the UK has identified the following business opportunities:

- **Market barriers** – the research shows that barriers around trust, complexity, lack of information and high project development costs for EPC are present in the UK (see figures below). This indicates that there are opportunities for quality assurance schemes that offer independent performance verification, which can improve information availability to reduce client due diligence costs and ensure quicker decision making, as well as published quality criteria to drive market standardisation. A focus on information provision and standardisation is required as trust in the ESCO industry appears to have reduced as an issue in 2019 - only identified by 30% of respondents to the QualitEE survey in 2019 when compared to 52% in 2017.
- **Gaps in the current quality assurance landscape** – there is no general scheme for accreditation of EPC providers or EPC projects in the UK. In the public sector, four main procurement frameworks provide a level of company capability assurance as part of the tender exercise to appoint EPC providers to their schemes. The Investor Confidence Project's Investor Ready Energy Efficiency™ (IREE) is well known and is starting to be used to provide quality assurance for energy efficiency projects in general. IREE certification focusses on assuring a project at the underwriting stage. There are gaps in assuring projects in operation, and accrediting EPC providers with verified experience of delivering them (beyond the potential capability to do so), particularly for the wider market of EPC providers beyond those serving the public sector frameworks.



- **Market drivers for a voluntary scheme** – consultation with Government and public sector bodies found there was no appetite at present to make a quality assurance scheme for EPC

a prerequisite for accessing tenders and business opportunities. Therefore, any scheme needs to have other drivers of uptake. Consultation with EPC providers showed that there are a set of providers that see value in a scheme that can distinguish them – on a nationally recognised and independent platform supported by independent expert verification - as experienced in delivering successfully operating projects. Clients see similar value in a national and trusted source of performance information that can help them justify business cases. Further support and drivers for a quality assurance scheme are outlined in the figures below.

The following summarises relevant results from the QualitEE project's market research in 2017 and 2019:

Figure 3 - What are the main barriers to EPC business based on the activities of the last 12 months? (Respondents may have selected multiple answers. The chart shows the proportion of respondents selecting each answer out of overall respondents to the question. Results therefore do not sum to 100%. Sept 2019)

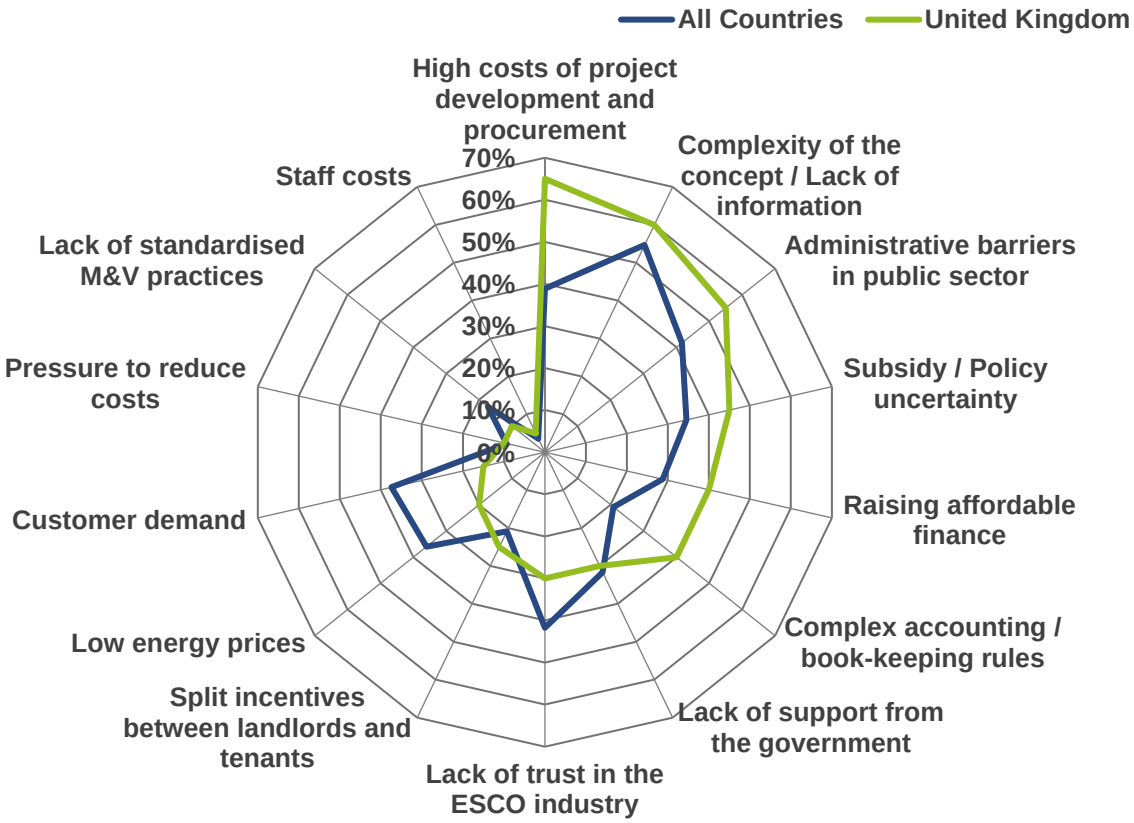
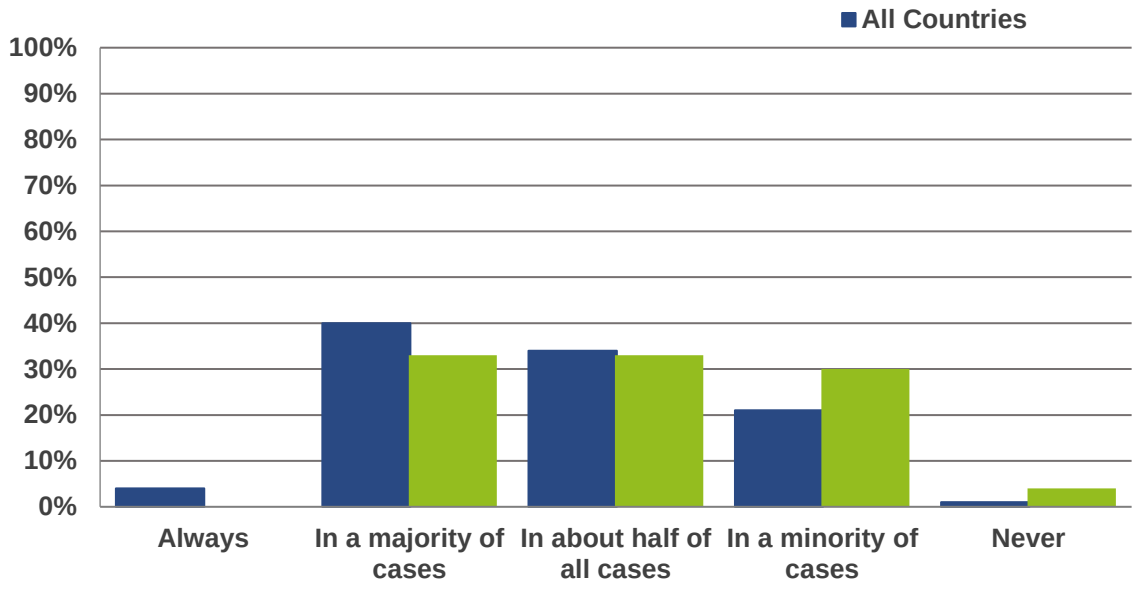
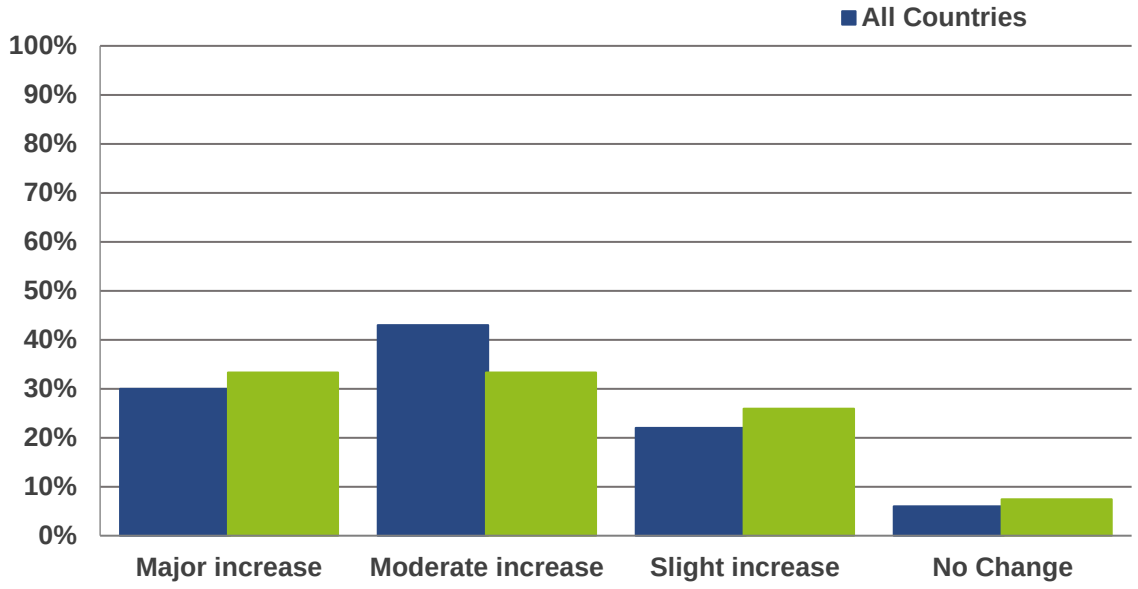


Figure 4 -- In your experience, is there a lack of trust in EPC/ESC service providers? (Percentage share of responses by providers and facilitators Sept 2017)



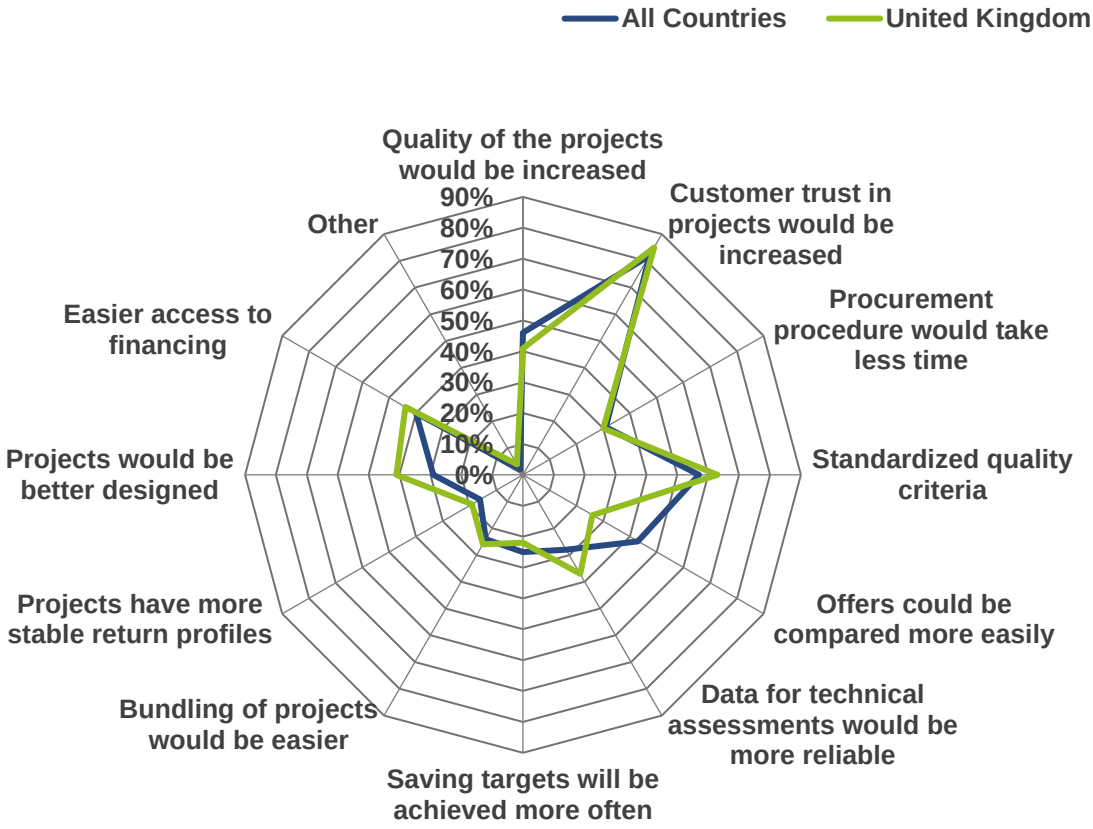
Responses indicate that there is marginally greater trust in EPC/ESC service providers in the UK than across All Countries in the survey. Still, 33% of UK respondents identified a lack of trust in a majority of cases which highlights that the issue is far from resolved.

Figure 5 - To what extent would a quality assurance scheme increase client trust in EPC/ESC services and providers? (Percentage share of responses by providers and facilitators Sept 2017)



Most respondents in the UK (67%) and across All Countries (73%) in the survey felt that a quality assurance scheme would result in a 'moderate' or 'major' increase in trust in energy efficiency services and their providers.

Figure 6 - In your opinion, what would be the added value of a quality assurance scheme like this? (Respondents may have selected multiple answers. The chart shows the proportion of respondents selecting each answer out of overall respondents to the question. Results therefore do not sum to 100%. Sept 2017)



The majority of respondents in the UK and across All Countries in the survey agreed that the main benefits of quality assurance scheme would be an increase in customer trust and standardised quality criteria providing a benchmark for quality in the industry. Considering the latter, it is perhaps surprising that UK respondents did not recognise the benefits to the client in the ease of comparing offers as much as their counterparts across All Countries in the survey. This may be as service providers at this point see adherence to standardised quality criteria or a quality label as a sales tool to distinguish from the competition rather than a procurement tool for clients.

A good number of UK respondents also identified the benefit of easier access to funding (44%) and several benefits relating to the technical design and final quality of services.

Neither respondents from the UK or across All Countries in the survey strongly recognised benefits to the ease of bundling smaller projects. As this was set as a desirable outcome of the QualitEE project in the project development stage it would be useful to understand this result in more detail during the consultation stages of the project.

4.2 Implementation strategy

May 2020	Publish first draft of UK national quality assurance criteria for EPC
May / June 2020	Further consultation with EPC providers on the scheme proposal to collect further 'buy-in' in principle. To date, seven EPC providers have been interviewed and six have confirmed they would consider using the scheme at the current proposed cost level
May / June 2020	Presentation of revised scheme proposal to key stakeholders; EPC providers as primary targets of the scheme, Government bodies and ESTA. Receive further feedback. Sign up pioneer EPC providers
June 2020	Build feedback into final proposal/business case and present it to ESTA Council. Seek agreement to publish draft UK criteria on the website
June-Sept 2020	ESTA review, decision to proceed and identification of start-up funding sources
Oct 2020 – Feb 2021	Final development and consultation of national quality criteria and EPC provider capability criteria Development of resources for evidence submission – questionnaire and document lists Drafting of Non-Disclosure Agreement Shortlisting of independent auditors Appointment of staff resources Website development
March / April 2021	Appointment of pioneer EPC providers for accreditation Accreditation of pioneer EPC providers
May / June 2021	Launch website/register of EPC providers (including accredited pioneers) along with a series of launch events

5 MARKETING STRATEGY

5.1 Target groups & communication strategy

The target groups and market penetration strategy for the quality assurance scheme are as follows:

- Established / pioneering EPC providers – the primary target of the scheme will be leading ESCOs with strong portfolios of operational projects. They have an interest in differentiating themselves with independently verified proof of performance, which they can signpost potential clients on the website of a nationally recognised trade association. The label and accreditation can be identified as a key selling point in marketing, proposals and tender returns. This target group will be reached through direct marketing and engagement through workshops in the development of the scheme and criteria. Several of these EPC providers have already been engaged, with further meetings anticipated.
- Clients – the secondary target of the scheme will be potential clients of EPC services. They have an interest in seeking independent proof of performance to support their internal business cases, to build confidence to proceed with an EPC service and / or a particular EPC provider. They will be reached by established EPC providers highlighting the scheme in their marketing, proposals and tender returns. They will also be reached through targeted events, a website hosting the quality criteria and best practice guides, and through the established ESTA mailing list and social media. As knowledge of the scheme grows amongst end users, it is anticipated that information on the scheme will be shared across networking groups and industry associations. Ideally, clients will begin to specify, or award additional points in bid scoring for EPC providers accredited under the scheme.
- Developing / later adopting EPC providers – once client awareness and demand for accredited providers develops, this will encourage more EPC providers to apply. Once the scheme becomes saturated with EPC providers the pioneers will have lost their key benefit of being distinguished from the crowd. It is anticipated that this could play out in one of two ways; either a further level of accreditation will be required for the pioneers, or the scheme will become something they cannot afford not to have.

- **Financial institutions** – there is no current plan to directly target financial institutions, although they may be reached via website, social media, events and mailing similar to clients.
- **Public institutions** – will be engaged through direct marketing and will be encouraged to support the scheme. Some of the framework providers have expressed an interest in aligning their tendering process with the quality criteria and / or becoming an accredited framework although these opportunities have not been discussed in detail to date.

5.2 Price

Pricing is expected to be as follows:

- Initial registration fee per EPC provider = £2,200
- Annual fee per EPC provider = £4,750
- Discounts will be available for ICP accredited project developers with IREE accredited projects. Pilot testing of auditing in these circumstances will be required before the discount can be defined as the reduction in auditing time needs to be assessed in practice.
- Discounts will be available for existing ESTA members, and ESTA can use the opportunity to sell accreditation and membership as a package. This will be agreed when the final proposal is presented to the ESTA council.
- The pricing is designed to ensure comfortable not-for-profit operation. The pricing is largely driven by the project auditing costs. These were estimated by testing the retrospective auditing process in a pilot project carried out as part of the QualitEE project. This projected that the audit would likely take 3-4 days, and therefore a reasonable budget is expected to be c. £3,500.
- Prices have been tested through consultation with EPC providers. No objections to the pricing level have been raised.

6 ECONOMIC PLAN

6.1 Revenue sources (market demand analysis)

There are estimated to be 30 active EPC providers in the UK[4]. It is anticipated that 12 of these providers will be interested in being pioneers of the scheme over the first 2 years i.e. the first cohort of accredited providers.

As described in section 5.1 it is anticipated that clients will start to recognise the scheme and start specifying as a requirement or awarding additional marks in bid scoring for accredited providers. This will drive further but more gradual uptake of the scheme. It is also anticipated that as EPC services have greater market penetration, new EPC providers will join the market.

	2021	2022	2023	2024	2025
OPTIMISTIC SCENARIO	£69,500	£89,200	£96,850	£111,100	£125,350
# EPC Providers	10	16	19	22	25
BASE SCENARIO	£55,600	£65,800	£70,900	£80,400	£89,900
# EPC Providers	8	12	14	16	18
PESSIMISTIC SCENARIO	£41,700	£42,400	£44,950	£49,700	£54,450
# EPC Providers	6	8	9	10	11

[4] Page 31 https://qualitee.eu/gb/wp-content/uploads/sites/4/QualitEE_2-04_CountryReport_UK_2018-02-12_FINAL.pdf

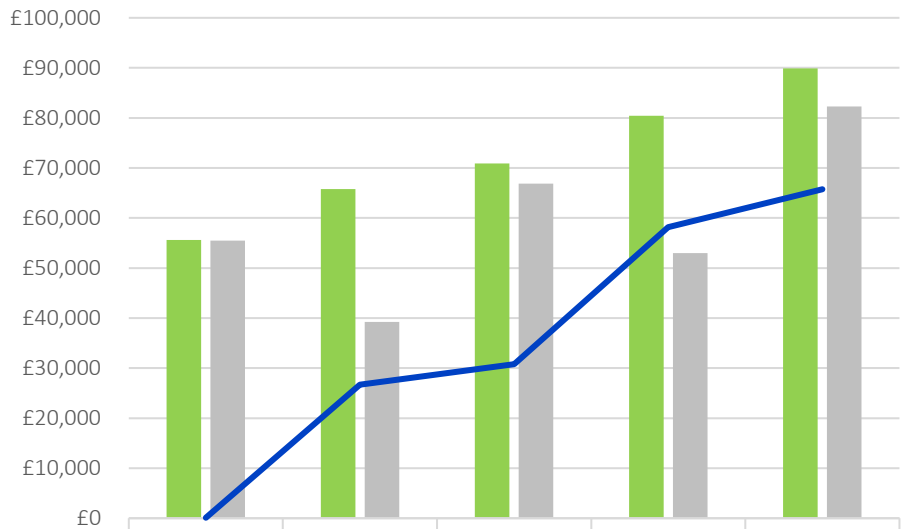
6.2 Potential expenses

When implementing the business model, certain expenses need to be taken into account to determine whether the quality assurance scheme is economically viable. These expenses are outlined below.

Fixed costs	2021	2022	2023	2024	2025
Website	£3,000	£500	£500	£500	£500
Events	£2,000	£4,000	£4,000	£4,000	£4,000
Staff (x1 part time)	£11,000	£13,200	£15,840	£19,008	£22,810
Other marketing costs	£500	£500	£500	£500	£500
Expert board	£3,000	£3,000	£3,000	£3,000	£3,000
Variable Costs					
Initial audit	£8,000	£4,000	£2,000	£2,000	£2,000
Project audit	£28,000	£14,000	£35,000	£21,000	£42,000
Maintenance audit	£0	£0	£6,000	£3,000	£7,500
Total	**£60,500**	**£60,000**	**£65,500**	**£65,500**	**£74,000**

6.3 Financial analysis

Figure 7 - Cashflow analysis



	2021	2022	2023	2024	2025
Revenues	£55,600	£65,800	£70,900	£80,400	£89,900
Costs	£55,500	£39,200	£66,840	£53,008	£82,310
Cumulative Cashflows	£100	£26,700	£30,760	£58,152	£65,742

7 CONTINGENCY PLAN

7.1 Identification of potential risks

Table 5 - Potential risks

Type of risk	Risk	Likelihood	Impact
Technical	Auditors cannot assess criteria within budget	Low	Medium
Financial	Low uptake of scheme	Medium	High
Other	Low acceptance by clients	Medium	Critical

7.2 Risk management

Table 6 - Risk management

Risk	Mitigation measure
Auditors cannot assess criteria within budget	Recommend taking a sample approach for time consuming criteria
Low uptake of scheme	Look at other potential revenue sources. Facilitation services. Project audits requested by clients
Low acceptance by clients	Target consumer groups and media to highlight benefits