**INVITATION TO TENDER**

**Invitation to tender for the provision of analysis to consider the policy framework required to support deep emissions reductions and increased carbon removals in agriculture and land use in the UK**

**Ref: IT/0719[02]**

**Contents**

|  |  |
| --- | --- |
|   |  |
| Instructions for Submission of Tenders | Part A |
| Specification (including the Preamble, Background, Requirement) | Part B |
| Information to be provided by the Bidder / Supplier Questionnaire | Part C |
| Pricing Information to be provided by the Bidder | Part D |
| Conditions of Contract for Services  | Part E |

# Part A

**Invitation to tender for the provision of analysis to consider the policy framework required to support deep emissions reductions and increased carbon removals in agriculture and land use in the UK**

**INSTRUCTIONS FOR Submission of TENDERS**

1. The CCC project manager will be Indra Thillainathan

Address: 7 Holbein Place, London, SW1W 8NR. Tel: 020 7591 6247

Email: Indra.Thillainathan@theccc.org.uk.

Indra Thillainathan should be contacted with any queries on the content of the project.

Further information and clarification about the tendering process can be obtained from:

Sean Taylor, e-mail: sean.taylor@theccc.org.uk Tel 020 7591 6093.

1. Bidders are required to submit two copies of their bid via email to finance@theccc.org.uk. also copying in sean.taylor@theccc.org.uk One version should contain no pricing information. The other version must be costed and identified as **"PRICED"**. The email subject should read:

“**Invitation to tender for the provision of analysis to consider the policy framework required to support deep emissions reductions and increased carbon removals in agriculture and land use in the UK**

**Bids should be sent in time in time for receipt by 1 pm on 31st July**

1. If required, interviews will take place in London on the **5th or 6th August**. If you are invited for interview, you will be notified of the address and time in the letter of invitation, sent out by email.
2. In practice, we welcome suggestions from consultants around what is feasible within the available timescales and budget (up to £ 50-60,000 excluding VAT).
3. We emphasise that the project should draw on existing literature/data rather than primary research.
4. We are looking for consultants’ expertise and experience in policy development.

# Part B

**Invitation to tender for the provision of analysis to consider the policy framework required to support deep emissions reductions and increased carbon removals in agriculture and land use in the UK**

**SPECIFICATION**

# Introduction

The Committee on Climate Change (CCC) is an independent, statutory body established under the 2008 Climate Change Act. The Adaptation Committee (AC), is also established under the Act to advise and report on progress on adaptation to climate change. The CCC is tasked with:

* Providing independent advice to Government on setting and meeting carbon budgets and reporting to Parliament on the progress made.
* Providing independent advice to the Government on risks and opportunities to the UK from climate change, in part through the UK Climate Change Risk Assessment, and reporting to Parliament on progress in adapting to climate change.

The CCC past reports are available from <http://www.theccc.org.uk/publications/>.

1. **Background and context**

**2.1. Overview of this project**

In June this year, the UK Government accepted the Committee’s advice and Parliament legislated the setting of a more ambitious target to reduce UK GHG emissions to net-zero by 2050.[[1]](#footnote-1) Achieving net-zero in the UK would lead the global effort to limit the rise in global average temperature to 1.5°C above pre-industrial levels. This replaces the previous legislated 2050 UK target which required at least a 80% reduction by 2050.

The new legislated net zero target requires contribution from all sectors of the economy, including the agriculture and land use, land use change and forestry (LULUCF) sectors. In our scenarios consistent with the net zero advice (‘*further ambition scenario’),* we estimated combined emissions from these two sectors declining by 60% by 2050 compared to 2017.[[2]](#footnote-2)

These estimates were informed by analysis undertaken for the Committee’s 2018 Land Use report[[3]](#footnote-3). The report demonstrated that deep emissions reduction in agriculture and land use could be achieved, although it would require significant change in the way land is used and managed in the UK.

The aim of this project is to assess policy mechanisms needed to deliver the net-zero ambition for agriculture and land use. The findings from this project will feed into a second land use report which will focus on policies needed to deliver transformational change in land use on the path to net-zero. The aim of that report is to influence on-going work on:

* Design of the Environmental Land Management Scheme (ELM) in Defra and the devolved administrations (DAs) as the UK prepares to leave the Common Agricultural Policy (CAP).
* The policy framework required to reduce emissions in agriculture and land use to meet the UK Clean Growth Strategy. Defra’s Farm Emissions Reduction Plan and Scotland’s updated Climate Change Plan are both due out next year, while the Welsh Government is working on plans for meeting its ambition for agriculture by 2030.[[4]](#footnote-4)

**2.2 Recent CCC work on climate change mitigation in agriculture and land use by 2050**

The Committee’s 2018 Land use report demonstrated that significant change in the use of land and a wider uptake of low-carbon farming practices could deliver significant emissions reductions and increased carbon removals in agriculture and the LULUCF sector by 2050.

The results were based on the modelling of *‘what-if’* scenarios (‘pathways’), which focused on the emissions impact of adopting three different levels of ambition on the conversion of agricultural land for alternative uses to increase carbon sequestration (e.g. tree planting) and reduce emissions (e.g. peatland restoration); and the take-up of management practices and technologies on-farm to reduce non-CO2 emissions (Box 1).

The report demonstrated that deep emissions reduction in agriculture and land use were possible, but would require transformational change in the way land is used in the UK. That work set out feasible pathways for emissions reduction whilst maintaining other essential goods and services that land provides and highlighted the key co-benefits and trade-offs for mitigation, adaptation and wider environmental goals. A summary of the key findings on how land can be used to deliver GHG reduction is in Box 1 below.

| Box 1. Key messages from the land use report |
| --- |
| The key mitigation messages from the 2018 CCC land use report are:* Fundamental changes in how land is used are needed to deliver significant emissions reduction to meet climate goals.
* Take-up of low-carbon farming practices such as better soil and livestock management go some way to reduce emissions but their scope is limited.
* Achieving significant cuts in land based emissions rests on strong ambition to release agricultural land for alternative uses. These include: improving sustainable agricultural productivity; promoting healthy eating through government nutritional guidelines which could reduce consumption and production of the most carbon intensive foods; reducing food waste along the supply chain; and increasing forest productivity.
* Using land released from agriculture for carbon sequestration and restoring natural habitats can deliver deep emissions reduction to 2050. This would require the release of 20-30% of agricultural land currently used for food production to other uses such as afforestation and improved forest management, biomass, and peatland restoration.
 |

**2.3 The policy framework**

As the UK prepares to leave the EU, Defra and the DAs are now considering proposals on the replacement of the CAP framework. As we stated in the net zero report, this represents an opportunity to design a new framework that incentivises the take-up of low-carbon farming practices and transformational change in land use, rewarding land owners and managers for deep emissions reduction and removals, while delivering wider ecosystem benefits. Defra’s proposals include:

* The development of a new regulatory baseline reflecting the 'polluter pays' principle.
* A new Environmental Land Management Scheme (ELM) will provide public money for the provision of public goods, for actions above the regulatory baseline. Climate change mitigation and adaptation is one of the government's six proposed public goods. As yet, there is no detail on the specific outcomes and measures that will be eligible.
* Additional mechanisms and sources of funding to incentivise farm managers and land owners to improve environmental outcomes. These could include the use of reverse auctions and tendering to encourage private investment.

Separately to development of the post-CAP framework, Defra and the DAs are also considering policies to reduce emissions in agriculture and land use to help meet the ambition of the UK Clean Growth Strategy. For agriculture, this is expected to move away from the current policy framework that is based on a voluntary approach (e.g. GHG Action Plan in England).

1. **Aims and objectives**

The main aim of this project is to identify a range of feasible policy options that can drive increased emissions reductions and carbon removals within existing agricultural systems and alternative uses of land. The work should cover the following measures:

1. The uptake of management practices and technologies on-farm to reduce non-CO2 emissions from soils, livestock and waste and manure management, and CO2 emissions from operating field machinery.
2. Higher afforestation rates, improving the yield class (productivity) of new trees, and increasing management of existing broadleaf woodlands.
3. The planting of trees on-farm (agro-forestry) and extending lengths of hedgerows.
4. The planting of perennial energy crops (e.g. miscanthus and short-rotation coppice) and short-rotation forestry, and improving yields.
5. Restoration of upland and lowland peatland, and the adoption of management practices on lowland peat that remains in agricultural production.

In addition, we would like to understand how the existing regulatory baseline in agriculture (e.g. cross compliance rules) could be strengthened to include mitigation measures for better management of soils and livestock that represent cost-effective and low-regret options that represent standard good-practice.

1. **Methodology and Tasks**

You are expected to draw upon existing literature sources (including the CCC’s land use, biomass and net zero reports), and current work being undertaken by Defra’s sustainable intensification and management of lowland peat projects set out in Box 2. Defra has indicated that it will be willing to share any preliminary findings with the contractor of this project. We would also expect the contractors to draw on work and case studies from overseas.

Consultants will have to demonstrate strong expertise in agriculture and the different components that make up the land use sector (e.g. forestry, peatland and energy crops). In addition, it is important that they can demonstrate expertise in policy development.

The bulk of the work should focus on Task 2.

**Task 1. How can the regulatory baseline be strengthened to include options to reduce emissions?**

**4.1** **The regulatory baseline**

Land owners and managers who are paid under Pillar 1 of the CAP are currently required to adhere to a set of cross-compliance rules. These rules comprises standards under ‘Good agricultural and environmental conditions’ (GAEC) and ‘Statutory Management Requirements’, and includes for example, measures to prevent soil erosion and pollution of water courses. Some of these measures are also captured by existing environmental legislation (e.g. the Nitrates Directive).

The aim of this task is to explore the scope to strengthen this baseline to include industry-wide standards for farming practices that reduce emissions. At a minimum, contractors should consider the following:

* Which on-farm mitigation measures included in the CCC net-zero advice could be included in a new baseline. This should focus on low-cost measures that are low-regret and that farmers should be applying as standard good-practice. This should consider both farming practices to reduce non-CO2 emissions and low-cost alternative uses of land such as agro-forestry and hedgerow creation. Measures that reduce emissions and have wider environmental benefits should also be identified.
* To what extent could the measures aimed at reducing emissions already be captured by existing legislation (e.g. the Nitrates and Water Framework Directives) and proposals for new legislation (e.g. through the Clean Air Strategy). The extent to which there is a potential overlap should be identified.
* How the new baseline will be monitored and enforced.

In considering this task, the contractors should look at evidence of the effectiveness of current regulations for meeting their objectives, and apply lessons learnt from these to an assessment of how it can be strengthened. An assessment of how standards are set and applied in other countries would also be useful. The tender should set out how this task will be delivered, the evidence base considered and any particular challenges involved.

**Task 2. Consider a range of feasible policy options to deliver GHG mitigation in agriculture and land use.**

The Government’s Agriculture Bill sets out how the new agricultural policy will be underpinned by payment of public money for the provision of public goods. The key purpose of the Bill is to deliver the transition from the CAP to policies that deliver environmental outcomes such as clean air, thriving plants and wildlife, and helping to mitigate climate change; and will support the delivery of enhanced animal health and welfare. These payments will be provided where actions are beyond the regulatory baseline.

The aim of this task is to consider how payment for measures to mitigate climate change can best be delivered in this framework. The project does not need to consider the amount of money that would need to be allocated to emissions reduction, but the appropriate mechanisms under which potential funding can be delivered. In order to evaluate different options, the contractor should set out key criteria that would need to be met. These could include, for example: value for money and avoidance of deadweight costs; ease of monitoring and implementation; minimising risks; maximising co-benefits; over-coming barriers.

Beyond the provision of public goods for public money, the contractor should also identify a wider set of policies appropriate to deliver each of the measures identified in para 3 above. Issues that would need to be considered around each of these are set out below.

**4.2 Uptake of low-carbon farming practices**

The Committee’s scenarios assume that take-up of low-carbon farming practices could reduce GHG emissions on-farm by 42% by 2050. These measures are aimed at increasing take-up of low-carbon practices aimed at reducing soil, livestock and manure management emissions and innovative options such as the use of genetics and methane inhibitors for cattle.

In order to achieve this, a range of social, economic and behavioural barriers will need to be overcome. These include: inertia, lack of knowledge, experience and skills in applying farming techniques and practices, contractual terms that may constrain uptake amongst the 30-40% of farms that are tenanted.[[5]](#footnote-5) More generally, while there is considerable new funding for R&D in agriculture (including from Government), there are issues associated with translating research into market commercialisation to allow farmers to adopt the latest technology driven solutions for crops and livestock breeding.

A policy framework that is fit for the future and delivers the emissions reduction path we have identified would need to address the above and other issues. Areas that the contractor may want to explore in more detail include:

* Whether provision of information and advice supported by skills training could de-risk take-up of more innovative practices and technologies.
* How public money could be delivered, e.g. grants, subsidies, reverse auctions etc.
* Whether there is a role for the use of regulation, for example in introducing emissions standards or limits from agricultural practice or restricting/banning certain farming practices as is being proposed in the Clean Air Strategy.
* Reputational incentives: use of benchmarks and farmer to farmer learning to compare performance against good practices to promote efficiency improvements.
* Farm tenancy constraints, which may dissuade famers from investing in technologies and innovative practices that have a long payback.
* How can farmers and land managers work with third parties (e.g. water companies) to deliver emissions reductions? How can the private sector be leveraged to fund some of these measures to provide emissions reduction that represents true additionality? What are the opportunities for blending private funds with public funds from the ELM?
* How technology driven solutions, such as crop and livestock breeding options, can be brought to market.
* How the Monitoring, reporting and verification (MRV) framework will work.

**4.3 Forestry**

Woodlands currently account for 13% of UK land area. Scenarios for the Committee’s land use report assumed annual afforestation rates of 30,000 and 50,000 hectares, which would increase woodland cover to between 17-19% by 2050. The high ambition (50,000 hectares) is comparable to planting levels achieved in the early 1970s across England, Scotland and Wales (when including both afforestation and restocking of existing forested areas), while the lower figure was achieved in the 1980s across the UK through afforestation alone under a generous tax regime.

Improved management of existing woodland can also improve the amounts of CO2 sequestered in forests. Around 80% of broadleaf woodlands in England are in an un-managed or under-managed state. In the further ambition scenario for the net zero report, approximately 80% of broadleaf woodlands are assumed to be managed by 2030.

Improving the yields of new woodland can also increase the amount of CO2 sequestered and the volume and quality of the harvested wood. In our scenarios, tree yields were assumed to increase by 10-20%. This can be achieved by adopting best practice in management and breeding:

* Good preparation of the soil and site for planting, while successful establishment will require protecting young trees against damage from deer and managing the surrounding vegetation to reduce competition.
* Selecting the right tree species for the right site, which takes account of the changing climate (by taking account of the level of nutrients and moisture in the soil) can improve yields.
* Breeding can improve the nursery stock with a focus on improving growth rate, form and resilience to disease and a warming climate. The choice of techniques available to breeders includes controlled fertilisation, cutting and vegetative propagation and hybridisation (where two different species are crossed). In the future, use of genetic modification could potentially lift yields even further.

The contractor should consider new policies to address the following barriers to accelerate afforestation rates, whilst simultaneously improving the management of existing broadleaf woodlands and improving yields of new trees:

* Scaling up the whole forestry supply chain, from increasing seed production and nursery capacity to source and grow the saplings, to having a skilled workforce required to plant and manage the trees.
* Identifying appropriate sites for further planting, which could include more remote areas which might require building infrastructure including access roads. The Forestry Commission has identified 3.7 million hectares of low risk areas for afforestation in England.[[6]](#footnote-6)
* Given the high upfront costs and long payback periods compared with annual an income stream derived from agriculture, attractive investment opportunities for tree planting must be created. Tenant farmers should be considered, as policy will be required to address their needs regarding contractual restrictions on changing the use of land, and not being able to realise the economic benefits within the period of their tenancy.
* The disincentive associated with the loss of land value in converting farmland to woodland, which represents a permanent land use change
* Approvals processes for planting trees are currently considered to be bureaucratic, complex and time-consuming, which can deter potential investors from applying.
* Forest yields must also be improved by adopting best practice in forest management, as well as selecting area appropriate species and species resilient to the impact of climate change. Given the long lifespan of a tree, in deciding when and where to plant it is important to consider future susceptibility of different areas to drought and the risk of pests and diseases for certain tree species.
* Funding for R&D in breeding and genetics to improve yields and resilience to the impacts of climate change.
* Land owners and managers will need support to address the lack of knowledge, experience and skills on how land can be used differently. An advisory service could be a possible option to address this.

The project should consider whether the existing UK Forestry Standard is appropriate in light of the Committee’s much more ambitious planting rates and whether the monitoring and reporting arrangements are fit for purpose in a scheme that provides public money for afforestation. Additional mechanisms and sources of private funding and/or carbon credits to incentivise land use change should also be considered, such as the proposed Forestry Investment Zones (Box 2) and existing Woodland Carbon Code.

**4.4 Bioenergy crops and short rotation forestry (SRF)**

Our scenarios for biomass imply the planting of between 0.7m to 1.2m hectares of perennial energy crops (e.g. miscanthus and short-rotation coppice (SRC)) and short-rotation forestry (SRF) by 2050 across the UK. Growing of perennial energy crops is currently very limited, accounting for around 0.2% of UK arable area. SRF for bioenergy is almost non-existent.

Scaling up of bioenergy crops and SRF is required to reach net-zero alongside afforestation give the significant time lag for newly planted trees to reach maturity. Perennial bioenergy crops and SRF can also provide a range of benefits alongside GHG mitigation, including increased biodiversity if planted on arable land, and flood risk mitigation. However, there could be a range of potential negative impacts for biodiversity, if planted in the wrong area.

Consideration of an appropriate policy framework to incentivise the uptake of energy crops and SRF must address a number of financial and non-financial barriers:

* The high establishment costs and delayed revenues from harvestable biomass can discourage production of both energy crops, although banks may be able to account for these factors when providing support to farmers. The upfront costs for planting perennial energy crops can be twice that of annual arable crops, due to the cost of the planting material (e.g. rhizomes for miscanthus).
* Short-term contracts among tenant farmers (who represent around 30-40% of farmers) means that the full benefits of longer growing SRF are unlikely to be realised during their tenancies, which are typically three to four years, if not renewed. Even for energy crops, the first harvest will typically be two to three years after planting.
* Lack of long-term policy certainty and low confidence in future market demand can lead to land managers often viewing biomass production as a high risk endeavour.
* A lack of relevant agronomic advice and guidance for farmers on planting and management can lead to poor outcomes, such as poor energy crop establishment and loss of revenue.
* Misconceptions that perennial energy crops are difficult to remove if the landowner choses to revert the land back to arable or grassland.
* Planting crop and SRF species most suited to the future climate and soil conditions can increase yields, but local expertise on the likely impacts from the changing climate can be lacking.
* Farmers are unfamiliar with tree planting and energy crops and may struggle to adapt, especially given a cultural attachment to their perception of themselves as food growers not energy providers.

The policy design should address these barriers and consider appropriate policy levers needed to deliver the CCC level of ambition[[7]](#footnote-7)[[8]](#footnote-8)). This would need to consider:

* The governance framework needed to ensure the biomass is sustainable. This would require applying best practice on where it is grown (e.g. on low-grade agricultural land and avoiding high-risk areas such as priority habitats for biodiversity and high carbon soils, including peatlands).
* Different elements of the policy needed to incentivise uptake, including, but not limited to: the level at which the policy should be targeted (e.g. land holding level); whether the policy should be bundled into payments for other public goods; key elements of a monitoring, reporting and verification scheme; how to achieve best value for money for the public and avoid deadweight costs; the pros and cons of different financial incentives (e.g. taxes, contracts, market guarantees, levies); the role of third parties (e.g. external advisors).
* What clear signals government needs to give to kick start the sector and provide long-term investor certainty.
* What more needs to be done to support R&D to increase yields and develop new varieties, cheaper planting medium (e.g. hybrid seeds instead of rhizomes), build domestic supply chains and create markets for biomass products.

**4.5. Agro-forestry and hedge creation**

There are no official estimates on the amount of land used for agroforestry, but a reasonable proxy would be the use of trees and hedges for buffer strips alongside water courses, which account for about 1% of UK agricultural land. The current area of hedgerows on farms in the UK is around 120,000 hectares.

In our further ambition scenario in the net zero report, we assume that by 2050, trees are grown on 10% of UK farmland (both arable and grassland) and hedges are extended by 40%. Management of hedgerows is also assumed to increase. Maintaining and extending hedges are currently incentivised under mandatory cross-compliance rules.

Barriers to increase agro-forestry include:

* Lack of incentives. Farmers in England currently risk losing their direct subsidy under CAP if planting trees above a certain density, while CAP rules in Scotland allow the planting of trees on grassland.
* Lack of knowledge on agro-forestry and insufficient information available in existing advice and guidance.
* Given the long term returns on investment in trees on farms, farmers (especially those on short term tenancies) can struggle to recoup their investment. Tenancy agreements with landlords may also prevent investment in new uses of land.

Policy should be designed to address these barriers to increasing agro-forestry and hedgerows within the UK. Key elements that the policy will need to tackle are:

* How to raise awareness, communicate multiple benefits of agro-forestry and hedgerows and spread expertise and knowledge of the best trees to plant.
* Given long paybacks, create financial incentives to plant. Secure farm tenure to ensure the benefits can be realised by those incurring the cost.
* Provide incentives and advice on best practice in planting and management.
* Create a system that is predictable, long-term, and consistent with clear government commitment.

**4.6. Peatland restoration and management practices in lowland peat**

Peatlands account for around 12% of UK land area, but only around a quarter is in a near-natural or re-wetted state. The remaining peatland area is in various states of degradation due to a variety of practices such as moor burning for grouse shooting, afforestation, peat extraction for horticultural use and agriculture.

Our land use scenarios assume we restore 55-70% of total peatland area by 2050:

* Upland peatland. We assume restoration of between 50-75% of this area.
* Lowland peatland. This covers both grassland and cropland that is intensively managed for agricultural use. By re-wetting the land, conventional agricultural production is no longer viable, therefore we assume a lower level of restoration of between 25-50% of lowland peat.
* Afforested peatland. Around 9% of UK peatland area has been afforested, mainly with conifer plantations. We assume that 25-50% of the area with low productive trees (less than YC 8) is deforested.
* Peat extraction. We assume extraction, mainly for horticultural use ceases by 2030.

Most of the restoration activity to date has taken place in the uplands, where there are less competing uses compared to lowland peat. In addition, there may be no requirement to pay for income forgone for those upland areas that are already under environmental stewardship schemes, which require the cessation of damaging practices (e.g. heather burning for grouse shooting). The up-front capital costs however can be significant and can vary widely according to the level of degradation, accessibility of the site and restoration technique. This means that although restoration from a carbon perspective may not be cost-effective, the wide range of benefits (e.g. water quality, flood alleviation and biodiversity) it can deliver will support restoration projects as recognised by Defra’s £10 million Peatland Grant.

As lowland peat represents prime agricultural land (which includes high value horticultural crops), rewetting has a high opportunity cost associated with the loss of conventional crop production. This loss of agricultural income represent one of the largest barriers for lowland restoration. There are options however to mitigate this by allowing for on-going agricultural production, while reducing peat emissions:

* Management of lowland peat. Management practices such as seasonal re-wetting (the water-table is raised in the winter months when there are no crops on the ground) could reduce carbon losses from lowland peatland that remains in agricultural production. In the CCC high ambition scenario, we assume that 50% of the unrestored land is rewetted during the winter.
* Wet-farming (paludiculture): The loss of conventional agriculture that full restoration entails can be offset by switching to food and non-food crops that can tolerate being grown in water (e.g. blueberries, reeds, spaghnum), while the rearing of water buffalo is possible on rewetted grassland.

Increasing the level of peat restoration in the upland and lowland areas, combined with the uptake of innovative management practices on lowland peat that remains in agricultural production requires policy development to address the range of economic and technical challenges:

* Upland restoration: Ensuring the full range of benefits that good functioning peatland can deliver are fully recognised when making the economic case for restoration. A recent study of the economics of peatland restoration in Scotland found that benefits exceeded costs and supported the economic rationale of climate mitigation through peatland restoration.[[9]](#footnote-9)
* Lowland peat restoration and lowland management.
* High upfront costs of restoration options and variability of the condition of different sites makes it difficult for landowners to accurately estimate costs and impacts.
* The high opportunity costs associated with lost agricultural production. The nature of the benefits of restoration means they are not obvious and visible to farmers.
* Seasonal re-wetting of the water tables may be constrained by the need to keep land permanently drained for continued flood management, while better understanding of the hydrology of the surrounding area is required to ensure that practices undertaken by one farmer do not impact a neighbouring farmer.
* Lack of knowledge and skills among farmers and landowners to use and manage land differently (e.g. shifting from conventional crops to 'wet-farming').

Defra have agreed to share their outputs from their lowland peatland project, and specifically the practicality of these lowland management measures given socio-economic barriers.

A list of potential literature sources that the contractor may wish to consider is given at Annex A. There is on-going work by Defra to consider barriers up uptake across some of these areas (Box 2). Defra has indicated that they will be willing to share this literature review with the contractors.

| Box 2. Work by Defra on identifying and addressing barriers |
| --- |
| * **Sustainable intensification project**: As part of the project being run by SRUC, SAC Ltd. and NIAB to identify abatement in agriculture to deliver sustainable growth in the sector,[[10]](#footnote-10) work has completed on a series of stakeholder engagements (including farmers) to understand the barriers for mitigation in agriculture. This work builds on insights from the Sustainable Intensification Platform (SIP), in terms of barriers to implementation and delivery of options.[[11]](#footnote-11) The SIP platform developed a range of decision support tools to support changes in management practices at the farm and landscape scales.
* **Lowland management practices on peat[[12]](#footnote-12):** The project being led by CEH and ADAS are considering a range of management practices such as ‘wetland’ farming and management of the water table that can reduce emissions, while still allowing land to remain in agricultural production. The scope will also assess the practicality of these mitigation measures including the presence of socio-economic barriers.
* **Cumbria forestry pilot:** Launched last year, the two-year pilot will trial the Forestry Investment Zone (FIZ), which is a Defra and Forestry Commission backed mechanism to attract more private investment into the planting of large-scale productive forestry. The pilot will look to address some of the barriers associated with applying for large woodland creation schemes such as the application and approval process, which can lead to unduly delay. The appointment of a FIZ officer to offer tailored advice to land owners and investors is expected to provide confidence in the application process.
 |

1. **Outputs Required**

The outputs from this project are:

* A report setting out the findings of Tasks 1, and 2. The report should clearly set out the evidence, methodology and conclusions drawn in each of the areas described in 4 above, and justify their preferred choice of policy or policies. Please note that we would expect both tasks to run concurrently.
* Presentations of the interim and final results of the project to the CCC secretariat and other interested parties.

It is expected that there will be close working with the contractor and the CCC throughout the project, including the sharing of data and inputs from existing CCC scenarios at the start of the project.

1. **Ownership and Publication**

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

1. **Quality Assurance**

This project must comply with the ‘CCC – Quality Assurance of Evidence and Analysis’ guidance and bidders must set out their approach to quality assurance in their response to this ITT.

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

* Include a quality assurance (QA) plan that they will apply to all of the research tasks and modelling,
* Specify who will be responsible for quality assurance and ensure that this is done by individuals who were not directly involved in the research, analysis or model development,
* Provide a QA log to demonstrate the QA undertaken, including who undertook the QA and the scope, type and level of QA that has been undertaken (e.g. a log entry only stating ‘the data was checked’ will not be sufficient)

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

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

For primary research, contractors should be willing to facilitate CCC research staff to attend interviews or listen in to telephone surveys as part of the quality assurance process.

1. **Timetable**

The proposed timetable for the project is set out in the following table. The project is expected to run until mid/end October. It is critical that the timelines are met so that we are able present the findings to the Committee and obtain their feedback, which will be needed to inform the forthcoming CCC Agriculture and Land use policy report.

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

|  |  |
| --- | --- |
| **Date** | **Action** |
| 31th July 2019 | Deadline for response to ITT |
| 5th or 6th August 2019 | Interviews |
| 15th or 19th August 2019 | Inception meeting |
| 18th or 19th September 2019 | Interim meeting (present and discuss interim results/findings for Tasks 1-2 |
| w/c 7th October 2019 | Final project meeting (present and discuss results and findings) |
| w/c 14th October | Circulate full draft report & excel spreadsheet |
| w/c 21st October | Final report  |

# Challenges

Bids should set out how risks and challenges will be managed to successfully undertake this work.

# Ethics

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

We expect contractors to adhere to the following GSR Principals:

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

# Working Arrangements

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

# Skills and experience

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

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

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

# Consortium Bids

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

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

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

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

# Budget

The budget for this project is £50- £60,000 excluding VAT.

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

Cost will be a criterion against which bids which will be assessed

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

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

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

# Evaluation of Tenders

Contractors are invited to submit full tenders. Tenders will be evaluated by at least three CCC staff.

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

**EVALUATION CRITERIA AND SCORING METHODOLOGY**

|  |  |  |
| --- | --- | --- |
| Criterion | Description | Weighting |
| 1 | **UNDERSTANDING OF REQUIREMENTS/EXPERIENCE / DEMONSTRATION OF CABABILITY** | 30% |
| 2 | **METHODOLOGY, ABILITY AND TECHNICAL CAPACITY** | 30% |
| 3 | **PROJECT TEAM – SKILLS AND KNOWLEDGE** | 20% |
| 4 | **RISK AND CHALLENGES** | 10% |
| 5 | **QUALITY ASSURING THE SERVICES YOU PROVIDE** | 10% |
|  | 100% |

**Scoring Method**

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

The total score will be calculated by applying the weighting set against each criterion, outlined above; the maximum number of marks possible will be 100. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

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

**Structure of Tenders**

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

**Evaluation for Interviews, if held**

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

Should interviews go ahead, CCC will shortlist the top three suppliers with the highest marks from the written proposals. Interviews are provisionally expected to be held on 2nd and 3rd January. If this date changes, CCC will notify applicants.

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

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

**Feedback**

Feedback will be given in the unsuccessful letters or emails.

# Part C

**SUPPLIER INFORMATION**

Please complete the following information:-

All information supplied will be treated as **Strictly Private and Confidential**. The information will be reviewed by the Evaluation Panel only and will not be divulged to other parties during the de-briefing stage, or at any other time.

|  |  |
| --- | --- |
| Supplier InformationConcerning the **provision of analysis to consider the policy framework required to support deep emissions reductions and increased carbon removals in agriculture and land use in the UK** |  |
| **Name of Company:** |  |
| **Address:** |  |
|  |  |
|  |  |
|  |  |
| **Contact Name:** |  | **Telephone Number:**(Including STD Code) |  |
| **Contact Title:** |  | **Facsimile Number:**(Including STD Code) |  |
| **Email and website Address:** |  |
| **Signed:** |  | **Dated:** |  |

|  |
| --- |
| **SECTION C1 : ORGANISATION, MANDATORY AND FINANCIAL INFORMATION** |
| **Note: Where a consortium bid is proposed, please present the information for each consortium member individually.** |
| GENERAL INFORMATION **Please enclose details of your organisation’s internal structure. A diagram would be helpful to support your answer.**  |
| 1. **Is your organisation: (Please tick a box)**
 |
|  |  |  |  |
|  | i) a public limited company; |  | Registration No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  |  |
|  | ii) a limited company; |  | Registration No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  |  |
|  | iii) a sole trader; |  |  |
|  |  |  |  |
|  | iii) a partnership; |  |  |
|  |  |  |  |
|  | iii) other, please specify; |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| **SECTION C2: MANDATORY INFORMATION REQUIREMENTS** |
| Note: The information required in this section is a mandatory requirement for this quotation. Failure to provide the information may result in your bid being eliminated. Where a consortium bid is proposed, please present the information for each consortium member individually. |
| **FINANCIAL REQUIREMENTS**1. **Please note we will request from the proposed winner a set of the last year’s audited accounts (if these accounts are required under the law of the state in which your organisation is established) for your own organisation and the holding and/or ultimate parent and your organisation’s subsidiaries (if applicable). If you cannot provide the last year’s audited accounts, please provide a copy of your most recent business plan, budget or similar document.**

**OR** **If the audited accounts are available online, please provide details of the web page address where the accounts are held so that the Authority can access the information.**  **Web address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (your organisation)**  **Web address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (holding / ultimate parent company)**  |

|  |
| --- |
| **SECTION C3: Evaluation Criteria and weighting**  |
| **UNDERSTANDING OF REQUIREMENTS/EXPERIENCE / DEMONSTRATION OF CAPABILITY - 30%**1. **Please provide a detailed description of your understanding of the requirements of the project and what is needed to deliver it. Please outline the experience that your business can bring to the project and describe previous projects that you have been involved with that would demonstrate your suitability and capability to undertake this project. Please give dates of key projects in the past 5 years.**
 |
|  |
| **METHODOLOGY, ABILITY AND TECHNICAL CAPACITY – 30%**1. **Please provide a detailed methodology of how you propose to deliver the project the analysis you will provide in each of the tasks in the ITT. List key data sources and literature that you plan to use in fulfilling the requirements.**
 |
|  |
| **PROJECT TEAM – SKILLS AND KNOWLEDGE – 20%**1. **Please provide details of the full project team, including a team structure, with an outline of roles and responsibilities. Please identify a team leader and how contact between them and the CCC will be maintained.**

**Please outline the experience of the project team and attach team CV’s and set out a table showing the number of working days each team member will provide on the project.**  |
|  |
| **RISKS AND CHALLENGES – 10%**1. **What do you consider to be the key risks and challenges involved in the project and how do you propose to overcome them?**
 |
|  |
| **QUALITY ASSURING THE SERVICES YOU PROVIDE – 10%****5. Please provide a brief plan of how you would monitor and maintain the quality of the services delivered (e.g. relevant Key Performance Indicators, risk management arrangements), including a statement of how you would ensure the key dates and deliverables are met. Please indicate whether in your opinion our timescales can be achieved.** |
|  |

# Part D

**Pricing Information to be provided by bidder**

Please provide a pricing schedule for the following:

1. Consultancy Charge per day - Please indicate here staff level (i.e. junior consultant, partner etc.), rate per day, the number of days the individual would be allocated to the contract and the number of hours worked per day.
2. Any other costs – (please specify).
3. Any discounts offered.
4. Total cost of the Contract.

Notes:

1. Please note that all Travel and Subsistence will be as per the Civil Service Standard i.e. standard class.
2. V.A.T. will be separately indicated
3. All priced bids must be in pounds sterling and any subsequent invoices resulting from a successful bid must also be in pounds sterling.

#

#  Part E

**CCC CONDITIONS OF CONTRACT FOR SERVICES**

Please see the attachment referring to the Committee on Climate Change standard terms and conditions. Potential bidders are requested that they must *make clear* any issues they have with these standard terms by the 24th July 2019.

Annex A

Literature sources:

1. **Policies:**
* [Defra (2018) Health and Harmony summary of responses](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741461/future-farming-consult-sum-resp.pdf)
* [Green Alliance (2019) *Cutting the climate impact of land use*](https://www.green-alliance.org.uk/Cutting_the_climate_impact_of_land_use.php)*.*
* [Green Alliance (2019) *New routes to decarbonise land use with Natural Infrastructure Schemes.*](https://www.green-alliance.org.uk/new_routes_to_decarbonise_land_use.php)
* [Energy Systems Catapult (2019) Rethinking Decarbonisation Incentives: Sectoral Assessment for Agriculture, Forestry and Other Land Use.](https://es.catapult.org.uk/impact/projects/rethinking-decarbonisation-incentives/)
* [Ricardo Energy and the Environment (2018) Rethinking decarbonisation: Policy case studies](https://es.catapult.org.uk/wp-content/uploads/2018/10/RDI-Policy-Case-Studies-FINAL.pdf): draws lessons from international experience of policies
* [New Zealand Government’s Biological Reference Group](https://www.mpi.govt.nz/protection-and-response/environment-and-natural-resources/biological-emissions-reference-group/)  assessed the costs and barriers of potential policy options
* [Results-Based Agri-environment Payment Scheme (](https://www.gov.uk/government/publications/results-based-agri-environment-payment-scheme-rbaps-pilot-study-in-england)RBAPS) pilot study in England
* [New Zealand Government – One billion trees programme by 2028](https://www.mpi.govt.nz/funding-and-programmes/forestry/planting-one-billion-trees/): policy options to drive tree planting rates
* [IEEP (2019)](https://ieep.eu/uploads/articles/attachments/eeac4853-3629-4793-9e7b-2df5c156afd3/IEEP_NZ2050_Agriculture_report_screen.pdf?v=63718575577) *Net zero in agriculture – how to get there.*
* Energy Technologies Institute (ETI) (2018) *Bioenergy crops in the UK: Case studies on successful whole farm integration evidence pack.*
1. **Barriers**
* [CCC (2018) *Land use: Reducing emissions and preparing for climate change*](https://www.theccc.org.uk/publication/land-use-reducing-emissions-and-preparing-for-climate-change/)
* [CEH (2018) *Steps to scaling up UK sustainable bioenergy supply (report for the CCC).*](https://www.theccc.org.uk/publication/steps-to-scaling-up-uk-sustainable-bioenergy-supply-ceh/)
* [CCC (2019) *Net zero technical report*](https://www.theccc.org.uk/publication/net-zero-technical-report/)
* [D. Moran, A. Lucas and A. Barnes (2013) *Mitigation win-win in Nature Climate Change*](https://www.nature.com/articles/nclimate1922?proof=true&platform=oscar&draft=journal)
* [K. Glenk et al (2014) *Adoption of greenhouse gas mitigation in agriculture: an analysis of dairy farmers' perceptions and adoption behaviour.*](http://openaccess.sruc.ac.uk/handle/11262/10541)
* Astely Hasting et al (2017) [*Economic and environmental assessment of seed and rhizome propagated miscanthus in the UK*](https://www.ncbi.nlm.nih.gov/pubmed/28713395)
* [Confor (2019)](http://www.confor.org.uk/media/247302/confor-evidence-on-draft-environment-bill-jan-2019.pdf) *Written evidence submitted by Confor on the draft Environment (Principles and Governance) Bill*
1. [CCC (2019) *Net zero – the UK’s contribution to stopping global warming.*](https://www.theccc.org.uk/2019/05/02/phase-out-greenhouse-gas-emissions-by-2050-to-end-uk-contribution-to-global-warming/) [↑](#footnote-ref-1)
2. LULUCF includes all sources of peatland emissions. [↑](#footnote-ref-2)
3. CCC (2018) *Land use: Reducing emissions and preparing for climate change*. [↑](#footnote-ref-3)
4. Welsh Government (2019) *Prosperity for All: A Low Carbon Wales* [↑](#footnote-ref-4)
5. |  |
| --- |
|  D. Moran, A. Lucas and A. Barnes (2013) *Mitigation win-win in Nature Climate Change;* K. Glenk et al (2014) *Adoption of greenhouse gas mitigation in agriculture: an analysis of dairy farmers' perceptions and adoption behaviour.*  |

 [↑](#footnote-ref-5)
6. Excludes Best and Most Versatile (BMV) agricultural land (Grades ALC 1, 2, 3 and 3a) and protected landscapes. [↑](#footnote-ref-6)
7. [CCC (2018) *Biomass in a low-carbon economy.*](https://www.theccc.org.uk/publication/biomass-in-a-low-carbon-economy/) [↑](#footnote-ref-7)
8. [CEH (2018) *Steps to scaling up UK sustainable bioenergy supply (report for the CCC).*](https://www.theccc.org.uk/publication/steps-to-scaling-up-uk-sustainable-bioenergy-supply-ceh/) [↑](#footnote-ref-8)
9. Klaus Glenk & Julia Martin-Ortega (2018) The economics of peatland restoration, Journal of Environmental Economics and Policy. [↑](#footnote-ref-9)
10. Delivery of Clean Growth through Sustainable Intensification. [↑](#footnote-ref-10)
11. <http://www.siplatform.org.uk/> [↑](#footnote-ref-11)
12. SP1218 (2018-2020) *Managing agricultural systems on lowland peat for reduced GHG emissions* [↑](#footnote-ref-12)