

Project Specification: Review of climate vulnerability assessment of Scotland's marine environment and marine economy

REVISED September 2021

1. The need for this research

ClimateXChange wishes to commission research to review climate vulnerability assessments of Scotland's marine environment and marine economy.

Climate vulnerability assessments have been applied to a wide range of natural and social systems to identify those most susceptible to adverse effects of climate change (as per the IPCC definition of vulnerability¹). These assessments involve looking at the exposure, sensitivity and adaptive capacity. Impacts of climate change on the marine environment and activities within it have recently been documented in the MCCIP² and Scotland's Marine Assessment publications³.

This review will be part of the evidence informing the climate change theme within Scotland's Fisheries Management Strategy 2020-2030⁴ and will subsequently contribute to the delivery of the Blue Economy Strategy aims – "to support a green recovery and just transition, with sustainable growth of the blue economy underpinned by environmental protection (Programme for Government 2021/22⁵)".

2. Project scope and aim

This project will bring together information of existing climate vulnerability assessments in natural and socio-economic marine systems in Scotland and internationally, identify evidence gaps, and suggest how this evidence may be used to strengthen assessments in Scotland. Knowledge of climate vulnerability of Scotland's marine environment and marine economy will support prioritisation of adaptation planning.

Insights into the use of climate vulnerability assessments in natural and socio-economic marine systems will provide direction on how policies within the SCCAP can be strengthened. This will ensure those parts of the marine and coastal environment, and the sectors most active within it, (aquaculture, fisheries, energy) at highest risk of the negative impacts from climate change could be prioritised. It directly addresses sub-outcome 6.2 *Scotland's marine and coastal environment and its contribution to wider societal adaptation is enjoyed, valued and maintained* and outcomes could support policies under sub-outcome 3.1 *Scotland's businesses based on natural resources are informed and adaptable to climate change*.

The research should respond to the following questions:

¹ https://www.ipcc-data.org/guidelines/pages/glossary/glossary_uv.html

² <http://www.mccip.org.uk/impacts-report-cards/full-report-cards/2020/>

³ <https://marine.gov.scot/sma/>

⁴ [Scotland's Fisheries Management Strategy 2020-2030](#)

⁵ [A Fairer, Greener Scotland: Programme for Government 2021-22 - gov.scot \(www.gov.scot\)](#)

1. What climate vulnerability assessments exist relating to the marine environment at a level relevant to Scotland, and what focus/spatial gaps can be identified?
2. What examples exist in the UK and internationally of use of vulnerability assessment methodologies relating to the marine environment, including the strengths and weaknesses of these methodologies?
3. How may the above methodologies be applied to strengthen vulnerability assessments of the marine environment and marine economy in Scotland?

Based on the findings, the report should make recommendations on next steps for developing a methodology for Scotland to track the vulnerability of the marine environment and marine economy.

3. Audience

The work is commissioned on behalf of the Scottish Government, and of particular interest to marine research and policy.

The findings must be presented in a format and language that can be easily understood by readers without an academic background. Written outputs must be well presented and written in Plain English. We welcome visualisations and use of infographics.

4. Methodology

Tenderers are invited to put forward proposals on how to best meet the research aims within the budget available, including inclusion criteria for vulnerability assessments to be reviewed. We expect the research to include a desk based rapid evidence assessment.

A full explanation of your chosen approach, including any limitations, should be provided.

5. Outputs

We expect the research to be presented in a short report with accessible visuals. The report must be written in plain English, follow the CXC house style, and should comprise:

- a) an executive summary of no more than two pages, detailing the key findings, the aim of the project and the value to a policy audience; and
- b) a full report of the project, of no more than 25 pages to include:
 - i) Key findings
 - ii) Recommendations
 - iii) Annexed detailing the methodologies used and underlying assumptions
 - iv) References
 - v) A glossary if needed

The ownership of the research material including the final report and any data produced as a result of the research lies with ClimateXChange on behalf of Scottish Ministers. The research may be published on the ClimateXChange website, the date and format of which will be determined by the Scottish Government and ClimateXChange. The draft report will be subject to review by the steering group and discussed at project review meeting. One or more drafts may be required before a final version is agreed. A final report incorporating comments will be subject to sign-off by the steering group.

Project governance

A small steering group will be established to support delivery of the project. The role of the steering group will be to give feedback on approach and report drafts as the project progresses. It will include representatives from Scottish Government and ClimateXChange. External members will be considered depending on the methodology/approach.

The lead contact for ClimateXChange will be Anne Marte Bergseng, CXC Knowledge Exchange Manager, who will liaise with the contractor. Regular update calls will be scheduled fortnightly between the principal investigator and the CXC Knowledge Exchange Manager to discuss progress and address any issues, escalating to steering group for consideration where necessary.

6. Project timetable

Milestone	Completed by
Project kick-off meeting, to agree <ul style="list-style-type: none"> • Detailed methodology • Scope and boundaries further to this specification • Detailed project plan 	26 November
Short catch-up calls (Principal investigator and CXC Project Manager)	TBC, usually fortnightly
Presentation of interim findings task 1 and 2 to steering group	21 January
Submission of draft report	11 February
Steering group meeting to discuss comments on draft	TBC
Submission of final report	11 March

7. Award criteria

Price 20%

Quality 80%

Quality Criteria	Descriptor	Weight
Understanding the research specification and the policy environment	The proposal should include an introduction which demonstrates a clear understanding of the research requirements. This should include an understanding of the policy environment and the supporting role of research; the cross-sectoral nature of the project; the need for this research; the research aim; and how the proposal will address this need.	15%
Research methodology	The proposal should demonstrate a high quality and workable research methodology (including how the evidence will be identified, reviewed and assessed) which will address the research objectives and produce the outputs in the timescales required.	35%

Quality Criteria	Descriptor	Weight
	It should explain the suitability, robustness and limitations of the proposed methodology.	
Project management and staff resource	<p>The proposal should</p> <ul style="list-style-type: none"> • Include a clear project plan, that captures the key steps required to deliver the desired output within scope and to time; this should include reference – where relevant – to mechanisms for compliance with regulations (e.g. GDPR) • provide details of individual staff members who will work on this project and demonstrate how they will meet the project requirements, specifically: <ul style="list-style-type: none"> - general research experience and expertise; - specific experience & expertise in the evidence review topic; - experience and expertise in inter-disciplinary team-working • provide a commitment that named staff members will be available to work on the contract if the bid is successful. • set out the management arrangements for the project. 	10%
Communication and report writing	<p>The proposal should describe the approach to writing the report, which will be published on the ClimateXChange website. This should including data-visualisations.</p> <p>It should detail who will take lead responsibility for report-writing and overall report quality. It should provide examples of previously published literature or evidence reviews in which they have been involved.</p>	10%
Quality control and assurance	<p>The proposal should provide details of quality assurance procedures to demonstrate how the contract will be continuously delivered to a high standard.</p> <p>It should specifically address issues of quality control at different stages of the project, including evidence gathering, analysis and report writing, and include a timetable for delivery of tasks, project milestones and allocation of staff and staff time against each task, covering the duration of the contract.</p>	5%
Risk	<p>The proposal should provide a risk assessment matrix detailing any risks identified in relation to the delivery of this contract, and proposed mitigation measures to minimise their probability and impact.</p> <p>This should include risks arising from changing restrictions due to Covid-19</p>	5%

8. Submitting a proposal

Please send a brief work plan (no more than six pages excluding CVs) responding to the award criteria above and with deadlines, CVs for the proposed delivery team, applicable day rates, relevant research experience, examples of previous work and the number of person days' work proposed.

You should highlight any potential conflicts of interest in your proposal.

Proposals need to be submitted to lee.callaghan@ed.ac.uk and cc'd to annemarte.bergseng@ed.ac.uk for evaluation by noon on Friday 22 October. We expect to contact the successful bidder by 12 November.

The costs of proposals for this project are expected to be no more than £30k (including VAT). However, ClimateXChange would welcome proposals for less than this amount. We welcome consortium bids.

Depending on the quality of proposals received, CXC may choose not to appoint any contractor.

CXC Secretariat

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climateXchange

Scotland's centre of expertise connecting
climate change research and policy

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