**Early engagement notice – Industrial scenarios under Net Zero**

**A Pre-Procurement Notice from the Climate Change Committee**

**Background**

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

Part of the CCC’s role is to advise the Government on the appropriate level for each carbon budget – a cap on the amount of greenhouse gases emitted in the UK over a five-year period. The budgets describe the cost-effective pathway to achieving the UK’s long-term climate change objectives. They take account of economic, social and technological factors.

We are about to start our work programme for the Seventh Carbon Budget (the period from 2038-2042). As part of this we would like to explore the interaction between industrial decarbonisation and UK industrial production.

**Potential project**

The CCC is considering how to explore the impact of different policies and wider economic conditions on the output and composition of UK industry as it decarbonises. For example, exploring scenarios in which industrial output falls, grows or stays the same, and under which conditions these scenarios could credibly occur. Scenarios could look at UK industry[[1]](#footnote-1) as a whole, as well as specific industrial sub-sectors, and could also consider refineries. We are primarily interested in the big industrial emitting sectors, but are open to considering wider industries.

Scenarios could take account of factors such as:

* prices of energy including electricity, biomass, hydrogen and fossil fuels in the UK and internationally, and factors that could influence those prices in future (e.g. expansion of renewables, policies to rebalancing policy costs between gas and electricity)
* other UK climate policies (actual and potential) such as UK ETS, carbon border adjustment mechanism, minimum products standards, public procurement rules and other incentive schemes
* international climate policies (actual and potential) such as the EU’s carbon border adjustment mechanism, EU’s Green Deal and the United States’ Inflation Reduction Act.
* wider UK and international drivers and policies (actual and potential) such as international competitiveness, trade policy, industrial policy, urbanisation.
* the potential for, and effects of, technological advancement and innovations, and of energy efficiency and resource efficiency.
* future infrastructure planning and constraints for UK industry including supply chain constraints / resilience.
* potential future demand for industrial products, and how that might be influenced by factors such as consumer preferences, the need to decarbonise and improve the resilience of other economic sectors.
* the UK’s territorial emissions vs consumption emissions associated with industrial products.

Outputs for these scenarios could include:

* GVA by sector, total GDP, number of industrial plants and employment under each of the alternative scenarios
* Description of the necessary conditions to result in these scenarios, both qualitative and quantitative (e.g. CBAMs in place, level or range of electricity prices)

Before deciding whether to put a project out to tender, we are inviting feedback on the idea outlined above to gauge the feasibility of undertaking credible and robust analysis. We are open to suggestions on the appropriate methodology for undertaking this work, and to alternative ideas on its potential outputs.

We are inviting suppliers who may be interested in this project, have ideas on how to refine or tighten its scope, or want further information to get in touch with Bianca de Farias Letti (bianca.letti@theccc.org.uk) and Michael Lord (michael.lord@theccc.org.uk) by 9 August 2023.

1. The CCC’s definition of industry includes manufacturing of vehicles, non-ferrous metals, food and drink, iron and steel, glass and other minerals, cement and lime, paper, chemicals, cement and line, chemicals, paper and other manufacturing, as well as non-road mobile machinery. [↑](#footnote-ref-1)