



## Request for Tender

# CIEL Report: Carbon net zero & UK livestock systems

### CONTEXT

The impact of farmed animal food systems on the environment has been very much in the headlines. Different groups talk about the impact, but there's a lot of rhetoric, emotive language and contradictory facts. In order to inform the debate and help direct a constructive path forward to deliver the improvements needed to deliver Net Zero, CIEL is commissioning a report.

We aim to produce a concise summary of what we currently know about the carbon impact of the main farmed livestock systems in the UK. What is the best science and evidence we have now? How is it best interpreted for the various audiences interested? – farmers, food businesses, policymakers and, of course, consumers. With an alliance of the UK's leading research universities and institutions working together within CIEL, we will define where we are now. This will provide a baseline from which to identify gaps in our understanding and measure future improvements across our animal protein supply chains.

### TENDER FOR WORK

The aim is to characterise UK livestock systems for their current position relative to carbon net zero in order to:

- inform debate about livestock systems, land use and the environment,
- identify areas where significant changes can be made quickly and easily,
- identify areas where research is needed to fill in knowledge gaps.

We are seeking tenders from research institutions who can:

1. Manage the project and input from a group of experts and specialists from across the CIEL research alliance. The expectation is that a sub-group of experts, with a lead partner, will work together and gain endorsement from the alliance of 12 research members (details can be found on CIEL website: [cielivestock.co.uk](http://cielivestock.co.uk).)
2. Summarise current knowledge for carbon net zero in livestock systems, identify critical gaps in this knowledge, and recommend one system for carbon assessment to use across livestock production systems.
3. Characterise the main farmed livestock systems in the UK for current carbon efficiency: so, chicken for eggs and meat, cattle for dairy and meat, pigs and sheep for meat. Consideration needs to be given to some hybrid systems (e.g. beef from dairy bred calves).
4. Produce the "CIEL Summary Report" – this will be a concise, clearly laid out MS Word document, with key data, charts and key messages.
5. The cost for production of a professional published document can be separately costed where the capability is available in-house. So, the same institution can produce both, or CIEL can run a tender process for a design agency to design and print the finished report.

There is a relatively short time frame for production of this report which is needed by 31 August 2020. However, as predominantly a desk-based exercise it is hoped that this is achievable under the Covid-19 situation constraints.



## SCOPE

Topics that should be covered are as follows:

- A brief description of the main carbon accounting systems available and a recommendation on the one to use across livestock production systems as the baseline measurement.
- A description of major carbon transactions for the supply chains of each livestock type. A general appreciation of the complete supply chain is required – with detail for farm inputs, on-farm production and the primary processing operation.
- Major differences between alternate production systems: e.g. pastoral based dairying vs. indoor high yielding dairying, or free-range poultry vs. housed poultry.
- Major differences in grass-based systems in different geographic locations e.g. Scottish hill land versus West Country lowland grass.
- A summary of carbon impacts for the main livestock types, using the current state of knowledge.
- Consideration to be taken in account of:
  - carbon cost of inputs (e.g. fertilizer production, manufacture & transport of feeds, infrastructure such as buildings and plant) and outputs,
  - major areas of “carbon recycling” (i.e. where carbon is not lost to system, such as pasture sequestration),
  - waste streams from the supply chain identified and quantified,
  - carbon cost of animal ill-health.
- Identify areas where carbon efficiency can be improved (e.g. genetic selection for feed efficiency).
- Reference, without critical analysis, to the comparison of UK systems to some international competitors and non-animal protein alternatives.

### *What is not wanted*

- Detailed analysis of arguments in the debate on differing measurement systems, such as GWP vs. GWP\*.
- Consideration of issues related to food security, human health or animal welfare – although impacts on these may be commented on.

## PROCESS

- Tender (including cost quotation) submitted to Dr Mark Young ([mark.young@cielivestock.co.uk](mailto:mark.young@cielivestock.co.uk)) by 20 April.
- Tender submissions reviewed by a panel of 3 people comprising:
  - A member of the CIEL executive team.
  - A CIEL Board member.
  - An external farming or food industry expert.
- Notification of successful award by 30 April.
- Draft Report due to CIEL for consideration by 31 July.
- Final version due 2 weeks after CIEL return with comments and questions.
- CIEL must have final report by 31 August, so work needs to be scheduled and managed to deliver this.
- Nominated experts from the project team need to be available for communications associated with publishing of the final Report, including answering questions from media or government.