Report

Working Group 6 Food Safety and Net Zero Carbon Review Terms of Reference

Introduction

The Food Standards Agency's (FSA) Science Council is an independent expert committee of the Food Standards Agency, comprising a Chair and seven members. It provides high-level, expert strategic insight, challenge and advice to the FSA's Chief Scientific Adviser and to the Board and executive of the FSA on the FSA's use of science to deliver FSA objectives. Its purpose is to help ensure that the FSA identifies, sources, integrates and uses the best scientific evidence and expertise from all relevant disciplines to inform and evaluate its work.

This Science Council review will investigate the question:

'What are the possible food safety implications of changes to achieve net zero carbon (NZC) affecting the food system over the next decade?'

The review will consider changes to help achieve NZC (whether domestic or international) which are likely to have the most significant implications in the next decade for the FSA delivering its role ensuring UK food safety and that warrant further investigation by the Agency. The focus will be the implications of changes to reduce carbon emissions, not the effect of climate change itself. The food safety implications of disruption to the food chain caused by, amongst other things, climate change, is planned to be covered by separate, but linked, future reviews.

The FSA needs to consider changes that will occur across the whole food system, but to provide initial focus, the Science Council will first consider primary production (agriculture) and primary processing (such as milling wheat to make flour, pasteurisation of milk and preparing and packaging vegetables for sale), with the expectation that subsequent reviews will cover all elements of the food supply chain from farm to fork.

Note that this document may be revised over the course of the project lifetime in light of new information or experience. Any notable changes will result in a new version being produced and changes will be recorded in the change log (see Appendix).

Background

The Science Council has expressed a keen interest in pursuing a review of the effect of moving to a net zero carbon economy on the food system, since clean growth is one of the four Grand Challenges set out by the UK Government.

Whilst achieving net zero impacts on all sectors, four key government departments have responsibility for sectors that will be critical for delivery of these targets:

1. Department for Business, Energy & Industrial Strategy (BEIS)
2. Department for Transport (DfT)
3. Department for Environment, Food & Rural Affairs (Defra)
4. Ministry of Housing, Communities & Local Government (MHCLG)

The National Audit Office (NAO) published a report in December 2020 called Achieving net zero which considered the scale of the challenge, coordination arrangements between departments and the government plan to achieve net zero and the risks it needs to manage.

In 2021 there are also several major events and FSA initiatives around climate change mitigation (which includes net zero) and adaptation, for example the:

- United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) 26 will take place in November 2021 (delayed from last year due to COVID-19) and G7 countries are considering how their economies can achieve net zero carbon in June 2021.
- Climate Change Committee published its latest Climate Change Risk Assessment Evidence report in June 2021, which brought together experts to review the potential risks due to climate change to inform Defra's own risk assessment (that will be published in early 2022).
- The second part of the National Food Strategy was published in July 2021 and sets out ambitious proposals for a sustainable food system.
- The Advisory Committee for Social Science (ACSS) are taking forward their Climate Change and Consumer Behaviour (CCCB) review in the summer to look at how consumers respond to climate change.

Consequently, a deeper understanding of potential impacts of achieving net zero on food systems (or identifying areas of uncertainty) would be of considerable value to FSA in pre-empting policy needs in this area.

This is a potentially extensive topic, which means that clear definition and setting of boundaries will need to be placed on the scope of the review to avoid it becoming un-manageable.

The focus of any review should align with the overarching goal of the FSA to ensure that food is safe (including that it is labelled accurately to show any food safety risks (e.g. allergens)). The intention is not necessarily to propose 'solutions' but rather to highlight potential changes that may have a significant impact on the FSA's remit and warrant further investigation by the FSA.

Overall Timeline

The Science Council confirmed it would move forward with the review in its current scope at its 9th open meeting (June 2021). The Science Council has planned for WG6 to last no longer than 18 months in total. The overall duration may be less or, if considered necessary, extended depending on several factors that will be explained in more detail in the Approach section of these ToR. Any extension to the review will need to be agreed by the Science Council in collaboration with FSA's Chief Scientific Advisor (CSA).

There will be internal review points to manage the direction and duration of the work and an interim update is planned for delivery to the FSA Board in mid-2022. The review itself is expected to finish by the end of 2022 with the final report presented to the FSA Board at its meeting in March 2023 (provided no extension is agreed before then).

Approach

The review will initially be split into several phases:

Phase 1: Scoping key decarbonisation changes affecting the food system in the next decade (~June-Sept 2021)

- This will involve the Science Council holding structured **interviews of 3-4 experts** about the broad landscape of carbon reduction efforts (UK and international) to, or affecting, the food system.
- It will then **commission a survey** of experts (UK and international) to identify key carbon reduction changes now and anticipated in the next decade. The discussions will be broad ranging to capture knowledge about changes to **the whole food system**, to contribute to our thinking for subsequent reviews.

Phase 2: Review Primary Food Production

Stage 1: Identify decarbonisation changes affecting primary production which may have food safety implications (~Sept-Nov 2021)

- A **workshop** to establish which of the key changes up to 2030 to reduce carbon emissions to or affecting primary food production may have implications for food safety.
- This workshop will consider the food-water-power nexus more widely to identify any second or third order potential effects on food safety.

Stage 2: Review of evidence to prioritise key changes based on their effect on food safety (~Nov 2021-Mar 2022)

- A review that will use the workshop results to prioritise those changes based on evidence of how significant their effect may be on food safety (by e.g., **Rapid Evidence Assessment and**/or **expert interviews**) to inform future FSA science and policy development.

Phase 3: Final report or additional Phases (~Mar-Dec 2022)

This phase will either be delivering:

- **June 2022- A final report on primary production** if the evidence review is completed by March 2022 and it is decided to no longer continue the work or;
- **March 2023: A final report on primary production (with an interim report in June 2022)** if the changes associated with primary food production which may affect food safety are greater than expected and a decision is made to use the remaining time to fully scope this part of the food chain; or

- **The review continues to move onto other parts of the food supply chain,** if the outputs from Phase 1 give sufficient justification (and there is agreement between the Science Council and the CSA). A second update to the FSA Board would be provided. For each additional part of the food system we will iterate a new phase which will draw on the existing outputs from Phase 1 but then repeat the stages in Phase 2 to identify changes that may affect food safety and delve into our understanding of those risks or opportunities.

Anticipated Output(s)

The output from this review will be a roadmap for the FSA that will identify key changes to reduce carbon emissions that are likely to have implications for food safety and warrant further considerations and exploration by the Agency.

The hope is that this output will strengthen FSA's capability in addressing impacts felt by changes made along the food system to meet net zero carbon targets.

The FSA customer for this review and any recommendations will principally be the FSA Strategy Unit, but specific issues may fall within the remit of FSA teams that look after microbiological safety, food contact materials etc so as these potential overlaps emerge the Council will engage with the relevant teams.

Governance

Working Group 6 will be chaired by Claire Nicholson of the Science Council, with Prof Jonathan Wastling acting as deputy Chair.

Steering Group

This review will have a steering group chaired by Claire Nicholson, with Jonathan Wastling as deputy chair. Members of the Science Council will be welcomed to participate in the steering group.

This governing group will meet regularly (depending on pace) to discuss progress and make key decisions about the direction of the work. The Chair of WG6 will report progress to the plenary of the Science Council on a regular basis.

Secretariat

- Manisha Hartigan (Science Council Project Officer)

- Paul A. Nunn (Science Council Secretariat Lead)
- Chun-Han Chan (Secretary to the Science Council)

FSA Participants

- Robin May (Chief Scientific Adviser)
- Strategic Insights Team (Greg Wasinski)
- Advisory Committee on Social Sciences secretariat (Rebecca Gillespie)

FSA Inputs

Procurement and finance input to commissioning of the any preparatory work needed to provide support materials for the planned workshops.

The Science Council will co-opt external experts as needed to assist with the delivery of this project.

Other inputs as required by the WG, but likely to include:

- Draw on leads/contacts in other government departments (including GO-Science and Defra), additional expertise from the FSA register of specialists and from Science Council members professional networks.
- As an ongoing task - considering what other inputs the Working Group needs in terms of expertise/insight/commentary as well as of written material.

SAC Inputs

We envisage working with the Advisory Committee on Social Science (ACSS) to coordinate this work with their own Working Group on Climate Change and Consumer Behaviour.

Partnerships

For this review, the focus will initially be on primary production and as such we will work closely with Defra. We will also look to engage with partners and experts within government, academia, NGOs and industry.

If and when the review extends to other parts of the food system we will review the stakeholder list to ensure it includes representative organisations and expertise.

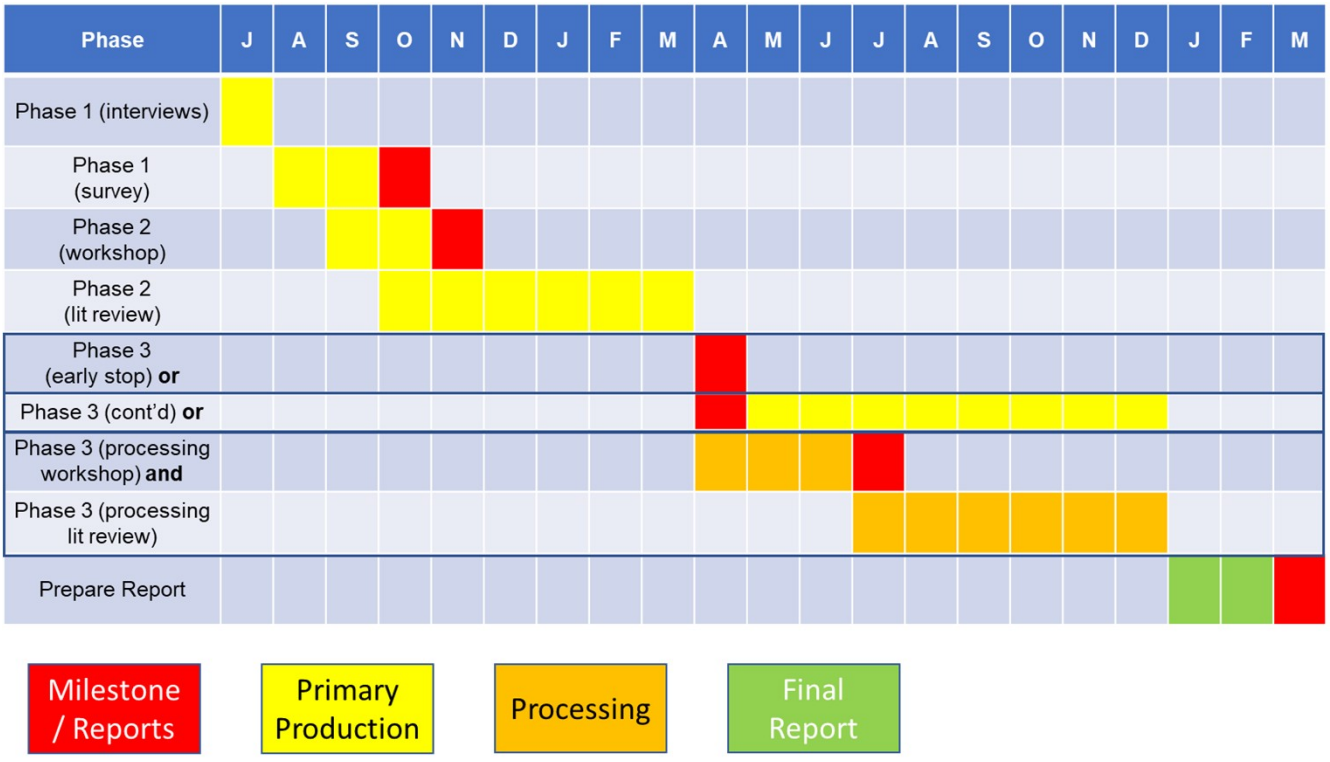
Funding

Funding for this preparatory work can be drawn from either the existing Science Council budget, the Strategic Evidence Fund, or through a bid for new funding from the FSA Investment Board (IB). The current estimate of contracted costs (not including time invested by FSA staff or Science Council members) is (excl. VAT):

- **Survey**: Ipsos/MORI through existing social science call-out contract & independent facilitator input
- **Workshop**: Ipsos/MORI through existing social science call-out contract & independent facilitator
- **Review of Literature and interviews**: Open tender.

Estimated £30,000-£40,000 (excl. VAT).

Annex: Timeline for Working Group 6: Food safety and net zero carbon review



Appendix: Change Log

Version	Date	Changes
1.0	28/10/2021	Original version agreed by the Science Council