Building a zero-carbon economy – Call for Evidence

Background

On 15 October 2018 the governments of the UK, Scotland and Wales asked the Committee on Climate Change (CCC) to provide advice on the UK and Devolved Administrations' long-term targets for greenhouse gas emissions and the UK's transition to a net zero-carbon economy. Specifically: when the UK should reach net zero emissions of carbon dioxide and/or greenhouse gases as a contribution to global ambition under the Paris Agreement; if that target should be set now; the implications for emissions in 2050; how such reductions can be achieved; and the costs and benefits involved in comparison to existing targets.

The advice has been requested by the end of March 2019.

The UK's long-term emissions target is currently for at least an 80% reduction in greenhouse gas emissions from 1990 to 2050. It covers all sectors, including international aviation and shipping and is measured on a 'territorial' basis (i.e. based on emissions arising in the UK). On a comparable basis, emissions in 2017 were estimated to be 38% below 1990 levels.

The current target was set in 2008 based on advice from the Committee. That advice considered that to avoid the worst impacts of climate change, the central expectation of global temperature rise should be limited "to, or close to, 2°C", while the probability of crossing "the extreme danger threshold of 4°C" should be reduced to an extremely low level. That meant global emissions would roughly have to halve by 2050. The 2008 advice made the assumption that the UK should not plan to have a higher level of per capita emissions in 2050 than the global average.

The long-term target guides the setting of carbon budgets (sequential five-year caps on emissions that currently extend to 2032 and require a reduction in emissions of 57% from 1990 to 2030). Both the 2050 target and the carbon budgets guide the setting of policies to cut emissions across the economy (for example as set out most recently in the 2017 Clean Growth Strategy).

Any change to the long-term targets would therefore be expected to have significant implications, not just in the long-term but on current policies to drive the transition.

The CCC will advise based on a thorough consideration of the relevant evidence. We expect that to cover:

- The latest climate science, including as contained in the IPCC Special Report on 1.5°C.
- The terms of the Paris Agreement.
- Global pathways (including those reported by the IPCC) consistent with limiting global average temperature rise in line with the goals of the Paris Agreement.

- International circumstances, including existing plans and commitments to cut emissions in other countries, actions to deliver on those plans and opportunities for going further.
- An updated assessment of the current and potential options for deep emissions reductions in the UK and emissions removals from the atmosphere, including options for going beyond the current 80% target towards net zero.
- An appraisal of the costs, risks and opportunities from setting a tighter long-term target.
- The actions needed in the near term that would be consistent with achieving the long-term targets.

This Call for Evidence will contribute to that advice.

Responding to the Call for Evidence
We encourage responses that are brief and to the point (i.e. a maximum of 400 words per question, plus links to supporting evidence, answering only those questions where you have particular expertise), and may follow up for more detail where appropriate.

You do not need to answer all the questions, please answer only those questions where you have specific expertise and evidence to share. It would be useful if you could use the question and response form below and then e-mail your response to: communications@theccc.gsi.gov.uk using the subject line: 'Zero carbon economy – Call for evidence'. Alternatively, you can complete the question and answer form on the CCC website, available here.

If you would prefer to post your response, please send it to:

The Committee on Climate Change – Call for Evidence
7 Holbein Place
London
SW1W 8NR

The deadline for responses is 12 noon on Friday 7 December 2018.

Confidentiality and data protection
Responses will be published on our website after the response deadline, along with a list of names or organisations that responded to the Call for Evidence.

If you want information that you provide to be treated as confidential (and not automatically published) please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

All information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

Question and response form

When responding, please provide answers that are as specific and evidence-based as possible, providing data and references to the extent possible. Please limit your response to a maximum of 400 words per question.

About Sustain: the alliance for better food and farming. Sustain advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, enrich society and culture and promote equity. We represent around 100 national public interest organisations working at international, national, regional and local level. We work with our members and others to promote integrated healthy and sustainable policies and practices for food, farming and fishing.

About Eating Better. Eating Better is an alliance of over 50 civil society organisations working to build consensus and develop collaborative practical approaches to engage policy makers, food businesses and civil society to catalyse shifts towards healthy and sustainable eating patterns. Eating Better encourages a culture where we place greater value on the food we eat, the animals that provide it and the people who produce it.

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Part 1: Climate Science

Question 1 (Climate Science): The IPCC's Fifth Assessment Report and the Special Report on 1.5°C will form an important part of the Committee's assessment of climate risks and global emissions pathways consistent with climate objectives. What further evidence should the Committee consider in this area?

ANSWER:

Very significant changes in the food system are required to achieve the desired reduction in emissions, both in terms of production and consumption. Climate-friendly consumption would include less and better meat and much less food waste Climate-friendly production would improve productivity and invest in more domestic and sustainable production of fruit, vegetables and pulses. This could also support public health objectives, reduce nitrate and ammonia emissions, and enhance biodiversity. Seeing through the lens of achieving a 'climate-friendly food system' would prioritise emission reductions and help achieve other policy objectives (1).

GHG emissions from the food system could reach 20.2 billion tonnes of CO2e per year by 2050, including land-use change. In this scenario, GHG emissions from agriculture alone takes nearly the full 1.5ºC target emissions allowance by 2050 for all sectors, including energy, industry, transport. (2)

The Special Report on 1.5ºC acknowledges that emissions could be reduced by reducing demand for meat and dairy, particularly where consumption is above recommended levels. The UK is clearly in this position, with a mis-match between what we currently eat and what we should be eating. Meat products contribute to over-consumption of saturated fat

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and salt in the diet. Around 64% of men and 43% of children exceed recommended levels of red and processed meat consumption per day. A simple shift from red meat to poultry and pork is no clear pathway to improve health or climate. Much of the meat we consume is processed and high in fat and salt; an increase in poultry and pork production would require more land to grow soy and other crops. Conversely, UK consumers are not eating enough fruit, vegetables and pulses. 90% of secondary school children are not eating the recommended '5 a day'. This mismatch is mirrored in food production. The UK horticulture sector receives the lowest agricultural subsidies and most fruit and around half of all vegetable supply in the UK is imported. Many studies reviewing the environmental impacts of dietary recommendations support the environmental benefits of reduced consumption of animal products and increased consumption of plant-based food. (3)

The Special Report on 1.5ºC emphasises lack of evidence on effective policy interventions to tackle consumption but there is a growing body of evidence and research and pioneering food industry action that is starting to fill this gap. But sufficient change will not happen if left to individual choice or voluntary industry initiatives. (4)

(1)
Global Food Security (2018), Policy Brief - Food Systems Approaches to a Sustainable Future https://www.foodsecurity.ac.uk/news/181130-n-paris-compliant-healthy-food-systems-policy-brief-for-united-nations-climate-change-conference/

(2)
Bajželj, B., et al. 2014. Importance of food-demand management for climate mitigation. Nature Climate Change, 4: 924–929 quoted in Tirado, R., Thompson, K.F., Miller, K.A., Johnston, P. 2018. Less is more: Reducing meat and dairy for a healthier life and planet. Greenpeace Research Laboratories Technical Report (Review) 03-2018. ISBN: 978-1-9999978-1-6. 86 pp.

(3)
The Committee should consider the findings of the SUSDIET project, a 3-year (2014-2017) research project involving 14 teams from 8 European countries. It confirms that it is possible to reduce the climate impact of one's diet while leading to substantial population health gains.

Reynolds, C. J., Buckley, J.D., Weinstein, P., Boland, J., 2014 , Are the Dietary Guidelines for Meat, Fat, Fruit and Vegetable Consumption Appropriate for Environmental Sustainability? A Review of the Literature. Nutrients, 6, 2251-2265.

UK Health Forum (2018), A framework for healthy and sustainable diets in the UK – Situational analysis

(4)
Chatham House Report Laura Wellesley, Catherine Happer and Antony Froggatt November 2015 Changing Climate, Changing Diets Pathways to Lower Meat Consumption

Garnett T, Mathewson S, Angelides P and Borthwick F (2015) Policies and actions to shift eating patterns: What works? A review of the evidence of the effectiveness of

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interventions aimed at shifting diets in more sustainable and healthy directions. Food Climate Research Network, University of Oxford.

Springmann, M., et al. (2017) Mitigation potential and global health impacts from emissions pricing of food commodities, Nature Climate Change 7, 69–74, https://www.nature.com/articles/nclimate3155

Springmann, M., et al. (2018) Health-motivated taxes on red and processed meat: A modelling study on optimal tax levels and associated health impacts. PLoS ONE 13(11): e0204139. https://doi.org/10.1371/journal.pone.0204139

UK Health Forum (2018), A framework for healthy and sustainable diets in the UK – Policy Options Review

Question 2 (CO_2 and GHGs): Carbon dioxide and other greenhouse gas gases have different effects and lifetimes in the atmosphere, which may become more important as emissions approach net-zero. In setting a net-zero target, how should the different gases be treated?

ANSWER:

Part 2: International Action

Question 3 (Effort share): What evidence should be considered in assessing the UK's appropriate contribution to global temperature goals? Within this, how should this contribution reflect the UK's broader carbon footprint (i.e. 'consumption' emissions accounting, including emissions embodied in imports to the UK) alongside 'territorial' emissions arising in the UK?

ANSWER:

It is essential to take into account emissions from 'consumption' and therefore the UK's 'global footprint' as well as 'territorial' emissions, particularly for meat and dairy consumption. We import considerable levels of meat directly and the total land use and land-use change emissions associated with those imports need to be included in consumption emissions. Policy must prioritise reduction in meat and dairy consumption, as a proportionate response to the high levels of GHG emissions and other environmental impacts associated with livestock production.

The main source of GHG emissions in food is in the production stage and the UK imports a substantial amount of food. Around one fifth of direct UK food chain emissions occur outside the UK, but if land use and land-use change emissions are included, as much as half of total food system emissions arise outside the UK. Land use change (mainly deforestation) driven by agricultural expansion is a vast source of emissions attributable to

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the global food system that feeds the UK. By far the biggest contributors are meat and dairy. Livestock account for over 57% of agricultural emissions and are responsible for over three quarters of land-use change emissions – conversion to grazing land or to arable land for feed production. (1)

No single solution will not lead to the desired emissions reduction. The UK food chain must make a proportionate contribution to the UK's emission reduction target. Hence, policy makers and industry must initiate a combination of measures that change not only how we produce and consume food, but also what it is that we consume. It's not simply about reducing beef and sheep production (with a higher carbon footprint) to be replaced by poultry and pork. The latter are much more dependent on protein crops, particularly soy, the majority imported from South America where there are concerns around soya's impact on de-forestation, rural conflict and environmental pollution (2). The amount of soy meal needed for the consumption of different types of livestock products in the EU is highest for poultry (967 grams/kg) and pork (648 grams/kg) compared to other meat and livestock products (3). So a simple replacement of one type of meat for another will increase our dependency on imported protein crops and do little to reduce emissions.

UK and EU dependency on imported protein crops to feed livestock is currently in the EU political agenda with plans for an EU-wide protein plan. (4)

(1)
Audsley, E., Brander, M., Chatterton, J., Murphy-Bokern, D., Webster, C., and Williams, A. (2009). How low can we go? An assessment of greenhouse gas emissions from the UK food system and the scope to reduce them by 2050. WWF-UK.

(2)
Friends of the Earth Europe (2018), Soy Alert - How to increase the EU's plant protein production in a sustainable and agroecological way?
http://www.foeeurope.org/sites/default/files/agriculture/2018/soyalert_report_fv_web.pdf

(3)
van Gelder et all (2008), Soy consumption for feed and fuel in the European Union. A research paper prepared for Milieudefensie (Friends of the Earth Netherlands) by Profundo
https://www.foeeurope.org/sites/default/files/press_releases/profundo20report20final1.pdf

(4)
https://ec.europa.eu/agriculture/cereals/development-of-plant-proteins-in-europe_en

Question 4 (International collaboration): Beyond setting and meeting its own targets, how can the UK best support efforts to cut emissions elsewhere in the world through international collaboration (e.g. emissions trading schemes and other initiatives with partner countries, technology transfer, capacity building, climate finance)? What efforts are effective currently?

ANSWER:

Question 5 (Carbon credits): Is an effective global market in carbon credits likely to develop that can support action in developing countries? Subject to these developments, should credit purchase be required/expected/allowed in the UK's long-term targets?

ANSWER:

Part 3: Reducing emissions

Question 6 (Hard-to-reduce sectors): Previous CCC analysis has identified aviation, agriculture and industry as sectors where it will be particularly hard to reduce emissions to close to zero, potentially alongside some hard-to-treat buildings. Through both low-carbon technologies and behaviour change, how can emissions be reduced to close to zero in these sectors? What risks are there that broader technological developments or social trends act to increase emissions that are hard to eliminate?

ANSWER:

The 2015 Paris Agreement commitments to keep global temperature rise within safe limits cannot be met without including dietary change. Crucial to achieving this goal is to reduce the high level of meat and dairy in high consuming countries such as the UK by at least 50% by 2030. When reducing emissions in food we should do it through a food system lens so unintended consequences are avoided.

Eating 'less' is vital. Choosing 'better' for the meat and dairy that we do eat is also important, with benefits for farm animal welfare, the environment, fair resource use, health and farming livelihoods. It also makes the messaging more palatable to different stakeholders uncomfortable with the 'less' message on its own. This concept is gaining traction among organisations, industry and researchers, for example through the concept of Safe Operating Space articulated by the RISE Foundation (1).

Recent modelling of the impacts of halving meat and dairy consumption on health and the environment in the EU reveals the benefits: 25-40% lower GHG emissions; saturated fat intake lowered to the recommended level; 40% lower nitrogen emissions; reduction in feed use making the EU a net cereal exporter; and a 75% reduction in soymeal. (2)

In terms of risks, a switch from red meat to pork and poultry can lead to increased reliance on imported soymeal and can lead to land change elsewhere (see answer to question 3).

Switching meat with plant based substitutes or lab-grown meat is promising but more evidence is needed about the climate impacts and indeed other impacts such as land use and land-use change. A study found that a switch from (UK-produced) beef and milk to processed plant-based substitutes such as tofu could actually increase the arable land needed to supply the UK (3). Another study finds that, in general, lab-grown meat and mycoprotein-based substitutes have higher environmental impacts than chicken and dairy and that insect and soy-based substitutes have the lowest impacts. Variations between brands and future technological developments are likely to lead to variations in impacts. (4)

Intensification of livestock production to reduce emissions can lead to unintended consequences to food security (5), animal welfare (6), water pollution (7), biodiversity, antibiotics use and more frequent disease in intensive livestock production. (8)

A switch to plant based products through an increase in the intake of cereals, vegetables

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and pulses is more sustainable.

(1)
Buckwell, A. and Nadeu, E. 2018. What is the Safe Operating Space for EU Livestock? RISE Foundation, Brussels.

(2)
Westhoek, H., Lesschen, J.P., Rood, T., Wagner, S., De Marco, A., Murphy-Bokern, D., Leip, A., van Grinsven, H., Sutton, M.A., Oenema, O., 2014. Food choices, health and environment: Effects of cutting Europe's meat and dairy intake. Glob. Environ. Change 26, 196–205. https://doi.org/10.1016/j.gloenvcha.2014.02.004

(3)
Audsley, E., Brander, M., Chatterton, J., Murphy-Bokern, D., Webster, C., and Williams, A. (2009). How low can we go? An assessment of greenhouse gas emissions from the UK food system and the scope to reduce them by 2050. WWF-UK.

(4)
Smetana, S., Mathys, A., Knoch, A. et al. (2015), Meat Alternatives: Life Cycle Assessment of Most Known Meat Substitutes Int J Life Cycle Assess 20: 1254. doi:10.1007/s11367-015-0931-6

(5)
Karl-Heinz Erb, Andreas Mayer, Thomas Kastner, Kristine-Elena Sallet, Helmut Haberl, 2012: The Impact of Industrial Grain Fed Livestock Production on Food Security: an extended literature review. Commissioned by Compassion in World Farming, The Tubney Charitable Trust and World Society for the Protection of Animals, UK. Vienna, Austria

(6)
Guy JH et al, (2002), Health conditions of two genotypes of growing-finishing pig in three different housing systems: implications for welfare, Livest Prod Sci, 75, 233-43,

FAWC (2016), Independent report: FAWC advice on sustainable agriculture and farm animal welfare Sustainable agriculture and farm animal welfare

(7)
Gerbens-Leenes, P.W., Mekonnen, M.M., Hoekstra, A.Y. (2012). A Comparative study on the water footprint of poultry, pork and beef in different countries and production systems, Value of Water Research Report Series No. 55, UNESCO-IHE, Delft, the Netherlands

(8)
Murphy D et al, (2017), EMA and EFSA Joint Scientific Opinion on measures to reduce the need to use antimicrobial agents in animal husbandry in the European Union, and the resulting impacts on food safety (RONAFA), EFSA Journal, 15 (1), 4666

Van Boeckel et al, (2015), Global trends in antimicrobial use in food animals. Proc Natl Acad Sci USA, 112, 5649-54

Question 7 (Greenhouse gas removals): Not all sources of emissions can be reduced to zero. How far can greenhouse gas removal from the atmosphere, in the UK or internationally, be used to offset any remaining emissions, both prior to 2050 and beyond?

ANSWER:

Question 8 (Technology and Innovation): How will global deployment of low-carbon technologies drive innovation and cost reduction? Could a tighter long-term emissions target for the UK, supported by targeted innovation policies, drive significantly increased innovation in technologies to reduce or remove emissions?

ANSWER:

A long-term emissions target is essential in the framework of an integrated food strategy to:

- Facilitate transition from current production to a healthier and sustainable food system in line with the emissions target and the government's Eatwell Guide: transition to producing more fruit, vegetables and pulses and less and better meat.
- Improve efficiency of production and reduce waste.
- Invest in land use and farming practices that can help achieve lower carbon emissions and carbon sequestration.

Replacing some meat with vegetables and pulses could reduce emissions if done sustainably. Some horticulture can have big carbon impacts (heated greenhouses, ploughing for field veg, etc.) and transition needs to be carefully managed. Fruit trees can help soil carbon sequestration. Meanwhile, fruit and vegetables have the biggest trade deficit of all our food, presenting a useful business case. We need to significantly scale up and diversify production, with more small and medium-scale horticultural enterprises producing fruit and vegetables sustainably for local and regional markets. Greater pulse production and consumption would also be beneficial, with lower GHG emissions, fertiliser and water footprints than meat. (1)

Promising technologies include small-scale machinery allowing precision fertiliser application and plant protection; multi-cropping; hydroponics. Their development should be supported by training, education and promotion to farmers, including support for transition. There is ample room to increase urban and peri-urban agriculture (2). To realise this potential we need a programme to rapidly increase the number of growers, recruitment, training and access to land, plus start-up capital.

Some countries, such as Japan, have shown that modern treatments can make it safe to return to the sensible practice of feeding pigs food waste instead of soymeal (www.thepigidea.org). Targeted support packages for food businesses can also lead to substantial reduction in food waste (www.foodsave.org).

There are many land-use and farming practices that can enhance carbon sequestration and reduce emissions without involving expensive new technology. These need to be supported via new farm policy: agroforestry and sustainable woodland creation, investing in healthy soils and ecosystems, protecting and restoring peatland soils, permanent grassland restoration and tackling nitrogen use.

Many UK farmers are taking climate change action. The Farm Carbon Cutting Toolkit

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(https://www.farmcarbontoolkit.org.uk/) supports farmers and growers to cut farm GHG emissions, increase farm energy resilience and improve business at the same time. An EU-wide group of farmers and researchers are assessing the climate adaptation and mitigation potential of four key farming practices (http://solmacc.eu/).

(1)
The Food Foundation (2017), FARMING FOR 5-A-DAY Brexit Bounty or Dietary Disaster? file:///S:/CCC%20Submission%202018/Question%208%20-%20Tech%20and%20innovation/Farming-for-five-a-day-final.pdf

UK Health Forum (2018), A framework for healthy and sustainable diets in the UK – Situational analysis

(2)
Clinton, N., Stuhlmacher, M., Miles, A., Uludere, N., Wagner, M., Georgescu, M., Herwig, C., & Gong, P. (2018). A Global Geospatial Ecosystem Services Estimate of Urban Agriculture, Earth's Future, 6,40–60, https://doi.org/10.1002/2017EF000536

Question 9 (Behaviour change): How far can people's behaviours and decisions change over time in a way that will reduce emissions, within a supportive policy environment and sustained global effort to tackle climate change?

ANSWER:

Strong evidence now exists of the need to shift diets towards less and better meat and livestock products among high consuming countries like the UK to help address climate change, prevent deforestation, promote public health and help feed the world more fairly and humanely. But understanding how to achieve this dietary behaviour change has not yet received the attention it deserves. Policy makers seem unwilling to implement more 'robust' measures, partly due to the inadequacy of evidence of what works; and partly out of a cultural fear of the response from the public, media and industry. Our long experience of working on large-scale dietary change (salt, sugar and sustainable fish) shows that successful behaviour change requires a systemic approach that goes beyond persuading or 'nudging' individuals to change their behaviour, to include government policies and practices, new and different business practices, recipe changes, and civil society initiatives working in synergy to facilitate the desired system-wide behaviour change and cultural acceptance. (1)

A literature review (2) of policies and actions to shift eating patterns categorised interventions in 5 types and concluded that for too long the focus of interventions has been on the individual but this alone had limited impact:

- Disincentivise or incentivise choices through fiscal measures (taxes, subsidies, trading)
- Change the governance of production or consumption (macroeconomic policies and agreements, public procurement and planning policies, regulations)

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- Encourage collaboration and shared agreements (voluntary industry agreements, certification schemes)
- Change the context, defaults and norms of production or consumption (architecture, nudge, store layouts, catering provision)
- Inform, educate, promote or empower (labelling, community gardening and cooking, media campaigns, education programmes)

All such interventions should inform a single strategy on sustainable diets that covers industry and government action. To facilitate this, government must officially recognise and prioritise the need to reduce meat and dairy consumption.

The 2015 Chatham House report (3) makes a similar point that markets are failing and governments must lead.

Recent voluntary action by companies (4) and a public shift to meat reduction (5) are positive signs that with a supportive policy environment, people's behaviours and decisions can change over time.

Although there are few precedents for government intervention to discourage meat and dairy consumption (6), effective policy approaches have been widely adopted to influence diets and behaviour in other ways, for example smoking cessation, sugar reduction, sustainable fish buying and promotion of Fairtrade. There is a lot to learn from.

(1)
Eating Better (2014), Let's talk about meat: changing dietary behaviour for the 21st century https://www.eating-better.org/uploads/Documents/LetsTalkAboutMeat.pdf

(2)
Garnett T, Mathewson S, Angelides P and Borthwick F (2015) Policies and actions to shift eating patterns: What works? A review of the evidence of the effectiveness of interventions aimed at shifting diets in more sustainable and healthy directions. Food Climate Research Network, University of Oxford.

(3)
Laura Wellesley, Catherine Happer and Antony Froggatt November 2015 Changing Climate, Changing Diets Pathways to Lower Meat Consumption

J. Poore and T. Nemecek (2018), Reducing food's environmental impacts through producers and consumers, Science 360 (6392) 987-992, 01 Jun 2018, doi: 10.1126/science.aaq0216

(4)
Eating Better (2017) The future of eating is flexitarian – Companies leading the way.

http://waitrose.pressarea.com/pressrelease/details/78/PRODUCT%20NEWS_12/10203

http://www.unicen.cam.ac.uk/files/cambridge_sustainable_food_policy_2016_0.pdf
Cambridge University's sustainable food policy has taken a ground-breaking approach by removing all ruminant meat from catering outlets, and providing vegan training for chefs. In a series of novel experiments the University has generated evidence on the effectiveness

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of achieving this from different choice architecture interventions. These showed that doubling vegetarian availability was more effective than placing vegetarian options first, increasing vegetarian sales by 42-97%. The University has demonstrated significant greenhouse gas emissions savings from its policy change, while engaging with other national partners to share best practices.

(5)
https://yougov.co.uk/topics/food/articles-reports/2017/04/06/over-half-happy-have-meat-free-meals

(6)
The Dutch government-funded healthy eating agency Voedingscentrum has launched a new campaign encouraging men who eat a lot of meat to reduce their consumption.
https://www.voedingscentrum.nl/nl/nieuws/voedingscentrum-lanceert-er-is-meer-dan-vlees-en-geeft-100-shirts-weg.aspx

Question 10 (Policy): Including the role for government policy, how can the required changes be delivered to meet a net-zero target (or tightened 2050 targets) in the UK?

ANSWER:

For too long, government food policy has been compartmentalised. Yet responsibility for a healthy, sustainable food system spans health, food standards, agriculture, the environment and the economy. We urgently need a cross-departmental, food systems approach to normalise the route towards climate-friendly, healthy and sustainable food production and consumption.

Agricultural policy: Brexit enables us to ensure new UK farm policy supports farmers to produce food whilst delivering public benefits ('public goods'): measures to change farming and land-use practices to reduce GHG emissions and increase the availability and affordability of UK-grown and sustainably produced fruit and vegetables, nuts and pulses.

Regulation of food industry practice: mandatory standards and voluntary certification to require sustainable sourcing, and reformulation of products to reduce environmental footprint and improve nutritional value (with plant-based ingredients).

Enhanced waste reduction and management: prevention first, in line with the Food Waste Hierarchy, a legal requirement since the EU Waste Framework Directive (2008): tackling retailers' wasteful trading practices (order cancellations; cosmetic specifications to reject produce), and new legislation to re-allow catering waste for animal feed. (1)

Change to food environments: improved public food procurement policy (national and local) to support climate-friendly, healthy, sustainable catering and reformed Government Buying Standards. This could be supported through the UK's Sustainable Food Cities network (2); see Malmö example (3). One option could be a requirement that public sector catering achieves Food for Life Served Here gold standard. Another is advertising restrictions on foods with greater carbon footprints.

Consumer information to promote sustainable diets: education campaigns, challenges,

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alignment of dietary guidelines with climate impact, and improved sustainability labelling on packaging and menus. (4)

Economic and fiscal measures: allocation of multi-annual farm support budgets to delivering GHG reduction on farm – this is proposed in the new Agriculture Bill but as a power not a duty to deliver this. Crucially, 25-Year Environment Plan and Environment Act land measures must include specific climate objectives and timelines. On consumption, measures such as carbon taxes or meat taxes may be more effective than voluntary and consumer-focused measures, especially to prompt reformulation (the experience of the sugary drinks tax). When framed as a matter of public interest, people support such measures. New polling suggests people are more receptive to such interventions than politicians often suppose, demonstrated by the sugar tax (5).

Change to social norms and food culture: social marketing to normalise plant-based healthy diets, encouraging dietary change and waste reduction.

Global Food Security (2017), Insight: Paris-compliant healthy food systems, Issue 6 September 17

Sustain (2017), Briefing Beyond 2020 New farm policy
https://www.sustainweb.org/resources/files/reports/beyond_2020.pdf

(1)
Feedback (2018), FARMERS TALK FOOD WASTE Supermarkets' role in crop waste on UK farms

Feedback (2018), Feeding surplus food to pigs safely: a win-win for farmers and the environment London: Feedback.

(2)
Sustainable Food Cities (SFC) is a network of over 50 cities and local areas across the UK. The SFC approach involves developing a cross-sector partnership of local public agencies, businesses, academics and NGOs committed to working together to make healthy and sustainable food a defining characteristic of where they live.
http://www.sustainablefoodcities.org/

(3)
Malmö adopted a Policy for Sustainable Development and Food with the objectives of serving good quality food, sourcing 100% organic and cutting emissions by 40%, mostly from a reduction of meat consumption in public procurement. They have achieved a 20% reduction to date
City of Malmö (2010), Policy for sustainable development and food - The City of Malmö
http://malmo.se/download/18.d8bc6b31373089f7d9800018573/Foodpolicy_Malmo.pdf
Sustainable Food in Malmo website (with updates on progress):
https://malmo.se/Nice-to-know-about-Malmo/Sustainable-Malmo-/Sustainable-Lifestyle/Sustainable-food-in-Malmo.html

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Question 10 (Policy): Including the role for government policy, how can the required changes be delivered to meet a net-zero target (or tightened 2050 targets) in the UK?

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Part 4: Costs, risks and opportunities

Question 11 (Costs, risks and opportunities): How would the costs, risks and economic opportunities associated with cutting emissions change should tighter UK targets be set, especially where these are set at the limits of known technological achievability?

ANSWER:

Question 12 (Avoided climate costs): What evidence is there of differences in climate impacts in the UK from holding the increase in global average temperature to well below 2°C or to 1.5°C?
ANSWER:

Part 5: Devolved Administrations

Question 13 (Devolved Administrations): What differences in circumstances between England, Wales, Scotland and Northern Ireland should be reflected in the Committee's advice on long-term targets for the Devolved Administrations?
ANSWER:

Part 6: CCC Work Plan

Question 14 (Work plan): The areas of evidence the Committee intend to cover are included in the 'Background' section. Are there any other important aspects that should be covered in the Committee's work plan?
ANSWER: