

A discussion paper by WWF-UK and the Food Ethics Council

About WWF-UK

WWF is the world's leading independent conservation organisation. And we're tackling the most serious conservation challenges facing the planet, building a future where people and nature thrive together.

That's why we're passionate about sharing the planet's resources more sustainably, taking action on climate change and protecting endangered wildlife.

In January 2009, we launched our One Planet Food programme, which aims to work collaboratively with other key stakeholders to reduce the environmental and social impacts of UK food consumption, and to begin building a sustainable food system that can help people and nature thrive using their fair share of the planet's natural resources.

For further information on the work of the One Planet Food programme visit our website: wwf.org.uk/food

About the Food Ethics Council

The Food Ethics Council provides independent advice on the ethics of food and farming. We:

- help guide the way through difficult issues by analysing problems, challenging accepted opinion and creating a space for dialogue; and
- build tools to put ethics at the heart of decisions about food in business, policy and civil society.

Our Council members include bioethicists and moral philosophers, farmers and food industry executives, scientists and sociologists, academics and authors. Our work has covered topics including the personalisation of public health, the control of food research, the use of veterinary drugs and the growing challenge of water scarcity.

Find out more about our work, including the members of the Council, our Business Forum, and our must-read magazine, Food Ethics, on our website at www.foodethicscouncil.org

We're very grateful to the Esmeé Fairburn Foundation for funding this work.

"The Greenhouse Gas Action Plan for agriculture shows the industry's commitment to tackling climate change. Crucially, we need to make sure the UK's lead in raising standards doesn't just push up costs for farmers and 'export' our emissions to other parts of the world. I welcome this contribution by WWF-UK and the Food Ethics Council, which explores whether enabling consumers to choose more sustainable diets could help address this challenge."

Tom Hind, director of corporate affairs, National Farmers Union

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We welcome comments on this discussion paper. Please email your comments to Tom MacMillan, executive director, Food Ethics Council (tom@foodethicscouncil.org).

Summary

The coalition government has pledged to be the 'greenest government ever', and has made it clear that this ambition extends to our food. Working with the food and farming industries, it is taking welcome steps to reduce the sector's environmental footprint. Yet, like its predecessor, it has been cautious about what sustainability means for British eating habits and, in particular, whether our appetite for meat can be reconciled with long-term targets to cut greenhouse gas emissions.

With the Committee on Climate Change and Foresight now making the case for consuming food more sustainably, this challenge will not go away. However, addressing it threatens to hurt the farming industry when it is already squeezed by high input costs and cheap competition. And it smacks of telling people what to eat.

WWF-UK and the Food Ethics Council have been working with the farming industry and environmental groups, in the UK and other countries, to try and find a way through this issue. This paper explores how the government can play its part in enabling consumers to eat more sustainably in ways that will help farming to thrive and respect people's freedom to eat what they like. We focus on measures that fit the government's priorities on the environment, farming and the Big Society. While the coalition can take most of the steps we propose without breaking stride, they must be underpinned by a clear commitment to encourage greener eating.

The greenest government

On taking office, David Cameron promised that the coalition would become "the greenest government ever". The goal is to mainstream sustainable development across government, setting the UK on the path to a greener economy.

Leading the international climate agenda

The UK government has shown global leadership on climate change by setting targets to reduce greenhouse gas emissions 50% by 2025 and 80% by 2050. UK and international rules on emissions require us to apply standards to the products we export, but not to those we import. Since the UK has stricter targets for reducing emissions than other countries, this could put UK businesses at a disadvantage by 'off-shoring' production.

Off-shoring is a global problem: while emissions associated with production have been falling in the rich countries committed to reporting and reductions under the United Nations Framework Convention on Climate Change (UNFCCC), increases in consumption within those countries, met mainly by imports from China, India and Brazil, have contributed to an overall increase in global emissions. The Committee on Climate Change (CCC) highlighted this challenge in the fourth carbon budget.

Extend international leadership on climate change by seeking the CCC's advice on consumptionrelated emissions and pursuing its recommendations through the UNFCCC.

Draw on UK technical expertise to coordinate research and develop common footprinting protocols to support demand-side mitigation measures.

Valuing the natural environment

The government's Natural Environment White Paper recognises that we can no longer afford the costs to our economy and quality of life that arise from a degraded natural environment. For example, the annual cost of soil erosion in the UK is estimated at £40 million, while insect pollinators are estimated to contribute around £440 million a year to the UK economy.

Valuing ecosystem services more accurately in the economy would help to align prices and consumption patterns more closely with environmental impacts, by raising the cost of relatively resource-intensive activities. However, a particular issue in the food sector, including in meat supply chains, is whether producers are in a strong enough bargaining position to pass higher environmental costs on to retailers and consumers, and so influence their behaviour.

Implement the Groceries Code Adjudicator (GCA) to police the new Groceries Supply Code of Practice, intended to stamp out abuses in supply chain power.

Investigate further whether the structure of food supply chains is sustainable.

Raising government buying standards

Historically, the fact that the government has not been buying sustainable food for its own catering, has hindered efforts to encourage greener eating – missing an opportunity for market leverage, and sending the public a mixed message. The new Government Buying Standards (GBS) for food procurement, centred on sustainability and nutrition, are a welcome step in correcting this. ⁶

The present GBS include a best practice standard that "menu cycles are analysed to meet stated nutrient based standards", which could be developed to incorporate sustainability standards. Modelling for the Committee on Climate Change suggests that reducing consumption of meat – particularly red meat – could achieve very substantial reductions in greenhouse gas emissions, while complementing nutritional advice. However, the sustainability of individual food consumption practices depends on current and projected patterns of land use across the UK, for example the balance between forest, pasture and arable land.

Further develop the GBS to require that menu cycles are analysed to meet sustainability standards.

Provide the strategic basis for rational menu planning by following a recommendation of the Foresight report to develop and apply an 'effective, climate resistant' land use strategy. ⁸

A productive countryside

Eating less meat on sustainability grounds would be compatible with more profitable farming if a larger share of the meat consumed in the UK were produced here; UK producers exported more; and farmers received a higher return for their meat or for other farming activities that substitute for income lost from meat production.

Campaigning for clear country-of-origin-labels

By clarifying country-of-origin labelling, the government has sought to ensure that consumers can reward British farmers for investing in higher production standards. ⁹ This call for 'honest labels' has

been supported by the food and drink industry which, with Defra, has developed voluntary principles on country-of-origin information for meat and dairy products.¹⁰

This may help to address concerns that UK welfare standards are undercut by overseas competition, particularly for processed meat products. While country of origin is not a proxy for environmental performance, clarifying labelling places an onus on British farmers to improve quality, sustainability and animal welfare standards ahead of the competition – to continually justify consumers' trust and preference for buying British.

Clarify country-of-origin labelling, including for processed meat products, to complement voluntary and regulatory initiatives to raise domestic production standards.

Ensuring a fair and competitive market

The government could help supermarkets develop their producer groups to support sustainable consumption and production. In principle, such groups allow retailers to ensure that participating farmers would receive a viable return and be able to invest in sustainable production, *even if* overall consumption were falling because of companies 'choice editing' to encourage sustainable consumption.

However, sustainable consumption initiatives of this sort present a first mover disadvantage. In practice, producer groups can only play a part in raising consumer prices to reflect environmental costs, or in eliminating the least sustainable products, if supermarkets are allowed to collaborate with each other. Such collaboration poses competition regulators with a dilemma: to protect the long-term consumer interest in sustainability, or the short-term interest in choice and low prices. Retailers are nervous about collaborating because their previous attempt to ensure a higher return for dairy farmers was penalised by the Office of Fair Trading (OFT).¹¹

Strengthen the consumer interest case for voluntary agreements that promote sustainable food supply chains by stating that promoting sustainable diets is a national policy objective.

Convene a meeting involving supermarkets, ministers, senior officials from the OFT and other relevant stakeholders to develop a responsibility deal on sustainable food consumption.

Enabling sustainable investment

The freedom that meat producers have to achieve reductions in greenhouse gas emissions and make other environmental improvements, and to remain profitable in scenarios where people were to eat more sustainably, is shaped by the capital they have invested in animal housing and processing infrastructure. Like changes in consumption, capital investments in livestock production are made over a timescale of decades rather than years or months. In looking forward to a profitable and sustainable future for farming, the government should seek to ensure that its influences on investment in the industry create opportunities to promote sustainable consumption rather than locking businesses and consumers into unsustainable practices.

Ensure policies relating to food and farming promote efficient investment in the context of future constraints on land use and non-renewable resources.

In promoting reform of the CAP, introduce one-off capital investment grants to encourage the rapid innovation of farming systems that can flourish under sustainable consumption scenarios.

Sustainable behaviour in the Big Society

Understanding society's attitudes and behaviour towards sustainable consumption is integral to the government's commitment to freedom, fairness and responsibility. ¹² Before becoming prime minister, David Cameron commented:

"We're not going to get people to cut every aspect of their consumption. But I believe it is realistic to change the culture of consumption..." ¹³

Opportunities for the government to enable civil society and business to encourage sustainable consumption lie in improving and simplifying government advice about food, reducing waste and lifting the barriers to businesses doing more choice editing.

Simplifying government advice

When it comes to sustainable food consumption, the message from Defra is clear: it is the government's job, working in partnership with others, to make it easy for people to purchase food products that are produced more sustainably. ¹⁴ A crucial opportunity to do so lies in simplifying the advice that the government already provides to consumers about food – combining information on healthy eating and sustainability.

The Livewell Plate, developed by WWF-UK and the Rowett Institute, takes a first step in addressing this need. ¹⁵ Based on the Food Standards Agency's 'Eatwell plate', it proposes a weekly menu that's good for both human health and the planet. It promotes the simple principles of eating more fruit, vegetables and cereals, but less meat and fewer highly-processed foods.

Use the Livewell Plate as a basis for updating official food advice.

Take a lead in further refining existing definitions of a sustainable diet and convening a process open to all stakeholders, including retailers, farmers, civil society, communities and civil servants.

Cutting waste out of the system

A strong consensus has emerged over the need to reduce the 16 million tonnes of food and drink currently wasted in the UK each year. ¹⁶ Of the 8.3 million tonnes wasted by households, 5.3 million are avoidable. The total emissions associated with this avoidable food waste are estimated at 20 $MtCO_2e$, of which 6.5 $MtCO_2e$ are attributable to UK agricultural emissions from soils and livestock. ¹⁷ The objective of reducing this waste is shared by government, civil society, and the food and farming industries.

The effect on food and farming businesses of reducing household food waste would be a reduced demand for their products. This is comparable to the effect of making changes towards healthier and more sustainable eating patterns. We invite producers and the government to see unsustainable food consumption in the same terms as food waste, and to see addressing that as another way to encourage consumers to respect the full value of farmers' work and products. An opportunity to

bridge these two issues – similar, yet perceived so differently – lies in initiatives to encourage the consumption of less popular meat cuts.

Convene and coordinate industry and campaigners in initiatives to promote better domestic carcase utilisation, to create higher value markets for the whole animal.

Lifting barriers to sustainable business

The government can also play a crucial role in reducing the barriers that businesses face in choice editing. Consumers want and expect the brands that they trust to ensure the products they sell are sustainable. Research for the IGD found that 80% of consumers are comfortable with ethical choice editing. ¹⁸ As outlined above, however, efforts by retailers to create a framework for consumer choice that's consistent with the broader public interest can run up against competition law. The government can work with the OFT and consumer groups to develop publicly-accountable mechanisms whereby businesses can collaborate to make progress on sustainability in the public interest.

Promote Short Form Opinions, whereby the OFT can advise businesses on the legality of collaborative agreements.

In creating a new UK Consumer and Markets Authority, merging the OFT and the Competition Commission, ensure that sustainability and health considerations are formally recognised in the implementation of competition policy.

Government mandate

The work that WWF-UK and the Food Ethics Council have been doing with producer organisations has found that the government has a mandate from business to play an active role in helping to negotiate the environmental, social, economic and animal welfare issues relating to the consumption of food, including meat. ¹⁹ Government-funded public and consumer research has found that it also has permission to do so from citizens. ²⁰

In both cases, however, that mandate is conditional. Businesses will support government interventions that are fair, based on solid evidence and sensitive to the practical complexities of their industry. The public will only accept changes if the government also does its bit: the overwhelming message is 'we will if you will'.²¹

1 Introduction

The coalition government has pledged to be the greenest ever, and has made it clear this ambition extends to our food. However, like its predecessor, it has been cautious about what this means for British eating habits and, in particular, whether our appetite for meat can be reconciled with long-term targets to cut greenhouse gas emissions.

Meddling in meat-eating touches on two sensitive issues. It threatens to harm livestock farmers, taking custom away when many are already squeezed by high input costs and cheap foreign competition. It also smacks of telling people what to eat, which runs against the shared commitment of Conservatives and Liberal Democrats to minimise state intervention in personal affairs.

This paper takes both concerns seriously. Yet we also challenge the crude notion that encouraging greener eating must dent farmers' margins and intrude in people's lives. We describe how efforts to enable sustainable food consumption can fit with the government's ambitions on the environment, farming and the Big Society.

1.1 Can sustainable consumption help producers?

UK and international frameworks to reduce greenhouse gases cover emissions from production. ²² They therefore require us to apply emissions standards to the products we export, but not to those we import. Since the UK has stricter targets for reducing emissions than other countries, this could put UK businesses at a disadvantage. Encouraging sustainable consumption can help address that risk.

The UK's strict targets are welcome. The government has taken a global lead in tackling climate change by setting a legally-binding target to cut greenhouse gas emissions 50% by 2025, keeping the UK on track for an 80% reduction by 2050. The danger of being ahead of the international pack is that production gets pushed off-shore, damaging the UK economy and doing little for the planet. Defra reports that a 20% rise in UK consumption-related emissions since 1990 has outstripped reductions in emissions from domestic production, and that a quarter of emissions from the food chain derive from net imports.²³

There are top-down and bottom-up solutions to off-shoring. The top-down solution is diplomacy: persuading other countries to follow the UK with equally bold targets, and pushing to bring reporting on consumption-related emissions within the scope of the UNFCCC.²⁴ The bottom-up solution is a transformation in consumer behaviour and norms to value quality British products and reward investment in sustainable production. By this thinking, we need to consume sustainably not only in the sense of reducing our resource footprint, but also by ensuring that sectors which have a place in a 'one planet' economy remain viable.

Farming and food production, including animal husbandry, is one such sector. Farming animals is integral to British land management, potentially valuable in recycling food waste, and plays a crucial role in most visions of a sustainable future. Yet meat is relatively resource-intensive. Globally, as the government's Foresight report on the future of food and farming has emphasised, it's one of the greatest challenges among efforts to bring food production and consumption into a sustainable balance.²⁵

The farming and food industries in the UK are cutting greenhouse gas emissions through changes in technology and management practices, launching welcome strategies for reducing their impact.²⁶ For now, these are increasing resource efficiency and cutting costs. However, as we approach 2020, that low-hanging fruit will be exhausted and British farmers will need to adopt measures that carry a net cost, putting them at an economic disadvantage, in order to keep track with emissions reduction commitments.²⁷

To meet the target of reducing emissions by 80% by 2050, the government's Committee on Climate Change proposes changes in consumption towards foods that are less emissions-intensive. But is it also possible to make an economic case? A culture of food consumption that rewards farmers for investing in sustainable husbandry, even while people eat a lower volume of resource-intensive foods, could reduce the risk of off-shoring and help to ensure that the rural economy thrives. The continued upsurge in concern for provenance, in spite of the recession, already points in this direction. The government cannot force this transition, but it does have opportunities to reduce the barriers that stand in its way. Doing so – by taking a global lead in enabling sustainable food consumption – need not harm British producers and could even benefit them.

1.2 The scope of this paper

This discussion paper explores those opportunities to enable more sustainable consumption of food. We focus particularly on meat, because it has proved the most sensitive aspect among people's eating habits that affect the planet. Making progress on this issue is crucial to wider efforts to reduce the environmental footprint of food consumption. In practice, we find that many of the measures one could take to enable more sustainable meat consumption are not targeted directly at consumers nor specifically at meat, livestock or, in some cases, even the food sector. Most have broader rationales – for example to treat consumers honestly or help farmers get a fair return – which our discussion here serves to strengthen.

Our focus in this paper is on the UK. While we support the UK taking a lead on global environmental issues, notably climate change, we're aware of concerns that this will disadvantage UK producers. As outlined above, however, these concerns don't necessarily apply to leadership in enabling sustainable consumption, and it's possible that taking such a lead could be economically advantageous. In any case, WWF-UK is also working with European partners to support sustainable food consumption in other countries, including France, Spain and Sweden.

In parallel to this paper, we're working to develop the business case for food retailers to promote consumption that's more sustainable, and seeking to engage campaigners and producers in an informed and constructive dialogue. Here, though, our attention is on the government. In particular, we look for steps that the government can take without breaking stride: measures that complement existing policies on the environment, farming and society. Instead of offering a critique of those policies, which we do elsewhere, our aim here is to credit and make the most of their potential.

1.3 The story so far

This paper builds on two previous reports about livestock and climate change by WWF-UK and the Food Ethics Council.³⁰ They responded to a row over the role of meat consumption in mitigating climate change: calls to eat less meat from Lord Stern, climate scientists and health experts had been

rejected by the livestock industry and some politicians, with Boris Johnson calling their proposals "a load of bull". ³¹ Our first report argued that this stalemate served neither farmers nor the environment, and offered a framework for a more constructive dialogue. The second put that framework to the test and included detailed feedback from EBLEX, the organisation for beef and lamb levy payers in England.

Our approach in both papers was to consider the pros and cons of potential interventions case by case, exploring how they might influence eating habits and examining their possible unintended consequences. Instead of being caught in an insoluble debate over whether or not changing consumption was important in principle, this practical approach allowed producers and environmental groups to find some areas of agreement and to be precise about their differences.

That work with producer organisations found a strong endorsement of the government's recognition that a consumption approach to accounting for greenhouse gas emissions in general is a legitimate and a valuable adjunct to production-based targets in addressing concerns over off-shoring. ³² Producer organisations also accepted that if consumers lowered their greenhouse gas emission footprint by eating less meat, this would not automatically threaten the profitability of livestock farmers: the volume of domestic sales is only one factor in profitability, alongside export markets, input costs and farm gate prices. They were cautious about the prospects of achieving higher margins in practice because the trend has been towards tighter margins, with profits driven by volume.

This paper describes ways to challenge that trend, and to create a market that favours patterns of meat consumption that are both environmentally and economically sustainable. As this means tackling market failure, it is appropriate to focus on the government's role. The following three sections describe how existing government commitments and areas of endeavour present opportunities to tackle key barriers to sustainable consumption:

- Section 2 shows that some of the wider measures government is taking to become the greenest ever can help create the market conditions for sustainable consumption, including in the food sector.
- Section 3 describes how the government's commitments to UK farmers can stimulate investment in production systems that can flourish in a future where consumers eat more sustainably.
- Section 4 identifies ways the government can help nudge people towards sustainable consumption in the context of its commitments to the Big Society.

Section 5 closes by exploring the extent of the government's mandate to encourage greener eating.

2 The greenest government

The coalition government has been vocal in its commitment to preserve the environment for future generations. On taking office, the prime minister promised that this would become "the greenest government ever" and pledged to cut carbon emissions across the government estate by 10% in 12 months. ³³ The government's long-term thinking on climate change and environment, set out in its Green Economy Roadmap, combines top-down changes to legal and market frameworks with bottom-up efforts to engage all of society. ³⁴ Ministers have highlighted the need for an integrated approach to global issues, tackling biodiversity loss, climate change, global deforestation, food security and poverty in concert. ³⁵

The goal is to bring sustainable development into the mainstream across government, setting the UK on the path to a greener economy. ³⁶ At the heart of this is a commitment to multilateralism and an emphasis on recognising the real value of natural capital, ensuring that all costs to the environment are paid for rather than written off. ³⁷

This approach presents opportunities to address three important barriers to sustainable consumption, including in the food sector. Namely that:

- consumption-related greenhouse gas emissions are not covered within the international framework for climate change mitigation;
- consumers do not pay the full environmental costs of production, meaning that price signals have perverse consequences for sustainable behaviour; and
- to date, the government's own purchasing has not been consistently guided by sustainability criteria.

2.1 Leading the international climate agenda

In the introduction we highlighted the problem that off-shoring poses to the credibility of the UK's carbon reduction claims and to the economy. However, off-shoring is also a global problem. While emissions associated with production have been falling in the rich countries committed to reporting and reductions under the UNFCCC, increases in consumption within those countries, met mainly by imports from China, India and Brazil, have contributed to an overall increase in global emissions. While food currently accounts for a relatively small proportion of this net transfer in emissions, it is nevertheless an issue in this sector.

The credibility of the undertakings that the UK and other rich countries have made through the UNFCCC depends on addressing this loophole, while respecting the principle that countries should mitigate emissions based on "equity and in accordance with their common but differentiated responsibilities and respective capabilities". ³⁹

The coalition government's international leadership in committing the UK to bold, long-term cuts in greenhouse gas emissions, and its commitment to multilateralism on environmental issues, put it in a strong position to be at the vanguard in dealing with this issue.⁴⁰ In addition to the domestic

targets to reduce emissions by 34% below 1990 levels by 2020, 50% by 2025 and 80% by 2050, the government is supporting an EU emissions reduction target of 30% by 2020 and seeking to ensure advances through the UNFCCC.

In the fourth carbon budget, the Committee on Climate Change highlights this issue, concluding that its:

"assessment of emissions reduction from diet rebalancing raises broader questions about production- versus consumption-based emissions accounting approaches, which we believe it would be useful for the Committee to investigate in detail, both as regards agriculture and more generally." ⁴¹

The government should seek such advice from the Committee and act on its recommendations as a priority.

As well as raising this concern over consumption-based approaches to emissions accounting, the Committee on Climate Change also notes that some of the policies it suggests to encourage consumption-based approaches to emissions reduction require footprinting methodologies to be standardised. While approaches to assessing greenhouse gas emissions are developing fast, important gaps and uncertainties remain, particularly concerning soil sequestration and the effects of land use change. This is a second front on which the government can show international leadership, drawing on the UK's technical expertise in this field to coordinate research and develop common protocols. The Product Research Forum (PRF) convened by the Waste and Resources Action Programme (WRAP) is an important initiative in this regard, and it's crucial to ensure that sustainable consumption remains within the PRF's remit. The PRF and other complementary initiatives should insist that the evidence requirements of regulatory or fiscal measures are precisely specified, so that knowledge gaps cannot be misused as a generic excuse to delay intervention.

2.2 Valuing the natural environment

While reducing the deficit and stimulating economic recovery are the government's top priorities, the coalition has also recognised that we can no longer afford the costs to our economy and quality of life which arise from a degraded natural environment. ⁴⁵ The Natural Environment White Paper highlights that ecosystems underpin the nation's economic prosperity, health and well-being. ⁴⁶

The government puts the value of natural resources extracted for use in the UK economy in 2007 at £41 billion, while also highlighting the costs to the economy and society from environmental degradation. ⁴⁷ For example, the annual cost of soil erosion in the UK is estimated at £40 million, while insect pollinators are estimated to contribute around £440 million a year to the UK economy. ⁴⁸ These costs and benefits are not adequately reflected in the way we make decisions that affect our natural environment, leading us to undermine natural capital.

Valuing ecosystem services more accurately in the economy would help to align prices and consumption patterns more closely with environmental impact, by raising the cost of relatively resource-intensive activities. On the face of it, simply ensuring that farming and food production are not singled out as exceptions to this rule should enable food consumption to become more sustainable.

There are general concerns over the appropriateness and effectiveness of this approach to protecting ecosystems and promoting sustainability. ⁴⁹ However, a particular issue in the food sector, including meat supply chains, is whether the structure of the supply chain will allow producers to pass higher environmental costs on to retailers and consumers. Farmers in the UK and internationally are in a weak bargaining position within food supply chains, yet the viability of efforts to place a higher value on natural resources, and their effectiveness in promoting sustainable consumption, depends on ensuring that costs and rewards are shared fairly along the value chain. In the UK this requires speedy implementation of the Groceries Code Adjudicator (see Section 3.2), and further investigation into whether the structure of the market is sustainable.

2.3 Raising government buying standards

Alongside these efforts to create a trading and fiscal milieu that safeguards the environment and promotes sustainable production systems, the coalition has also made clear that promoting sustainable consumption is central to its commitment to be the greenest government. This includes changes to the way we all travel and heat our homes. Historically, the fact that government departments have not been buying sustainable food has presented a barrier to efforts to encourage greener eating. Not only does it miss an opportunity for market leverage, but it also sends the public a mixed message. The new Government Buying Standards (GBS) for food procurement, centred on sustainability and nutrition, are a welcome step in correcting this. The government has said that it's committed to buying food that meets the UK farming industry's standards.

The GBS, which are mandatory only for central government, would have a higher impact if they extended to all public institutions, reducing the footprint of up to a billion meals a year, and offering the opportunity to communicate and engage with millions of consumers about environmental issues. The standards also need to be strengthened to ensure they're consistent with the government's own policy commitments, including under the fourth carbon budget.

To comply with the advice of the Committee on Climate Change on how to reduce emissions within the targets set by the Climate Change Act, the GBS should not only encourage the procurement of resource-efficient ingredients, but also ensure that menus are balanced to be sustainable. The present GBS include a best practice standard that "Menu cycles are analysed to meet stated nutrient based standards relevant to the major population subgroup of the catering provision". The standards should be developed to require that menus are also analysed to meet sustainability standards. Modelling for the Committee on Climate Change suggests that reducing consumption of meat – particularly red meat – could achieve very substantial reductions in greenhouse gas emissions, while complementing nutritional advice. Similarly, the Livewell Plate, developed by the Rowett Institute for WWF-UK, offers menu guidance and meal planning suggestions for healthy and sustainable food consumption.

Public authorities in the UK and internationally have shown that it's possible to reduce meat consumption in ways that are acceptable to the public and meet nutritional standards. ⁵⁵ This poses central government with two challenges: first, to enable and support caterers across a very disparate public sector to heed and adapt such initiatives to local circumstances; and second, at least as important, to ensure such efforts achieve their potential to reduce greenhouse gas emissions and do not result in unintended consequences. For example, emissions savings could be squandered if caterers chose products from more resource-intensive production systems, while cutting back on

red meat consumption could destroy fragile farming systems in upland areas where grazing may be a sustainable land use.

The government has two opportunities to mitigate this second challenge, which may arise from the independent efforts of public sector caterers even in the absence of central initiatives to promote sustainable menus. The first is to provide a budgetary framework that encourages public sector caterers to invest savings from reduced meat consumption in supporting high-quality and sustainable livestock production systems. In keeping with the current GBS commitment to meet UK or equivalent standards "subject to no overall increase in costs", the ambition should be that changes to balance menus sustainably are cost-neutral, potentially providing producers with a higher return per unit volume. ⁵⁶

However, what counts as a sustainable production system depends not only on the practices of individual farmers – it's also relative to patterns of land use across the country. For example, rewilding upland areas at the expense of pasture, allied with a shift in consumption from red meat to white meat, could in theory contribute to reducing net greenhouse gas emissions; however, substituting red meat for poultry does not directly drive re-wilding, and the net emissions from grass-based systems might be considered sustainable depending how other land was used. Therefore, the second ingredient the government needs to provide in order to underpin sustainable menu planning by public sector caterers and sustainable purchasing by consumers is greater clarity on likely future land use across the UK. The Natural Environment White Paper does not provide this. It focuses instead on equipping the planning system to protect biodiversity.⁵⁷ Advice from the Committee on Climate Change suggests that the government may need to adopt a more strategic national framework for land use if it's also to meet its greenhouse gas reduction targets.⁵⁸ This would be in keeping with the recommendation of the Foresight report that national governments should "Develop and apply effective, climate resistant land use and water resource strategies and policies for national food systems, to ensure rational, efficient and sustainable allocation and use".⁵⁹

3 A productive countryside

The government wants farming to thrive. Supporting and developing British farming and encouraging sustainable food production are priorities in Defra's Business Plan. ⁶⁰ This includes helping to enhance competitiveness and resilience in the whole food supply chain, in order to ensure a secure, environmentally-sustainable and healthy supply of food with improved standards of animal welfare.

As Jim Paice, the minister of state for agriculture and food has explained, this is a goal shared with the farming industry and consumers:

"One of Defra's core aims is to support British farmers so they can continue to deliver the best produce sustainably, and it's clear this is what consumers want too." ⁶¹

The government has pledged to remove unnecessary barriers to this. It has set up a Task Force on Farming Regulation to find ways to cut the red tape that affects farming businesses. ⁶²

However, removing obstacles that UK farmers face is only part of the government's approach. It also promotes a liberal stance on international trade, including the elimination of EU support that has led to cheap agricultural exports being 'dumped' in poor countries, undercutting local farmers. Welcoming the Foresight report on global food and farming, Caroline Spelman, secretary of state for Defra, said:

"[W]e must open up markets. We must boost trade, and ensure that the benefits of increased trade are felt by everyone; by making reforms that help the poorest, by avoiding trade restrictions at times of scarcity, by removing distorting and environmentally harmful subsidies". 63

The government aims to realise this ambition – for the nation's farming to thrive in spite of less subsidy and protection – by encouraging efficient production systems, and by enabling consumers to identify and buy British produce.

Thus, the government's efforts to reduce greenhouse gas emissions from agriculture focus on promoting resource efficiency. Its *Carbon Plan*, published in March 2011, identifies farming as responsible for around 8% of the UK's greenhouse gas emissions – mainly from livestock, fertilisers and fuel use in farming.⁶⁴ It's taking a partnership approach in which the farming sector leads efforts to meet this challenge.⁶⁵

The sector has responded by launching a joint Greenhouse Gas Action Plan, setting out how the agricultural and horticultural industries in England will reduce their greenhouse gas emissions by three million tonnes of CO₂ equivalents from 2018-22 – the target set for the sector by the UK government – without compromising domestic production. ⁶⁶ The government has said it will review the progress that the industry makes by 2012. It's also funding a pilot project to trial methods of providing integrated environmental advice for farmers, including advice on reducing greenhouse gas emissions, with a view to subsequent wider delivery by government and industry advisers. ⁶⁷

Section 1.1 reported the suggestion of the Committee on Climate Change that changes in consumption, including eating less meat, would additionally be necessary in order to meet the UK's

target to cut greenhouse gas emissions 80% by 2050. While it's natural to assume that reducing meat consumption would threaten farmers in a nation where livestock are so prominent, it's possible to envisage conditions under which eating less meat could go hand in hand with a thriving agriculture. These include scenarios where a larger share of the meat consumed in the UK has been produced here, UK producers increase exports, farmers receive a higher return for their meat, or other farming activities substitute for income lost from meat production.

Whether these scenarios arise depends on many factors. For example, the UK's success as an exporter depends on the industry's competitive advantage. Currently, UK sheep meat exports are more competitive than beef exports, whereas Ireland has a thriving beef export business. Whether consumers will pay a green premium depends on the overall state of the economy – in the current climate of austerity, many are trading down. So, none of these scenarios will come about overnight. However, they are plausible in the medium to long term and it's important to ensure the obstacles to them arising are reduced. These obstacles include:

- Unclear country-of-origin labelling, particularly for processed meats, which frustrates efforts by consumers to reward British producers for investing in high sustainability standards.
- The scope and enforcement of competition law, which compromises efforts to gain farmers a viable return for the products. This could otherwise support investment in sustainable systems.
- The long legacy of investments in production and processing infrastructure, which can limit producers' opportunities to benefit from more sustainable consumption patterns.

The main areas of existing policy where the government has opportunities to address these barriers are in improved country-of-origin labelling, the implementation of the Groceries Code Adjudicator, and the reform of measures including the Common Agricultural Policy that influence investment in sustainable supply chains.

3.1 Campaigning for clear country-of-origin labels

The government has sought to ensure that consumers can reward British farmers for investing in higher production standards by clarifying country-of-origin labelling:

"We've brought retailers, manufacturers and caterers together to ensure that if it's labelled 'British', it means it... Shoppers want to know where food comes from – and the customer is always right!" 68

This call for 'honest labels' has been supported by the food and drink industry, which has developed, with Defra, voluntary principles on country-of-origin information for meat and dairy products. ⁶⁹ This may help to address concerns that UK welfare standards are undercut by overseas competition, particularly for processed meat products. It also places an onus on British farmers to improve quality, sustainability and animal welfare standards ahead of the competition, to continually justify consumers' trust and preference for buying British. While country of origin is not a proxy for environmental performance, clarifying labelling complements voluntary and regulatory initiatives to raise domestic production standards.

3.2 Ensuring a fair and competitive market

The government faces a twin challenge in ensuring that competition in the grocery market is regulated fairly and promotes the long-term interests of consumers in sustainability: first, to prevent abusive buying practices that compromise the viability of farm businesses and the resources they have to invest in sustainable production; second, to allow businesses to pursue the overriding consumer and public benefits that can derive from enterprises collaborating in efforts to promote sustainable production and consumption.

The government's strategy to help farmers ensure their businesses are well-equipped to achieve a fair return includes supporting rural-based food businesses through Local Enterprise Partnerships (LEPs). To It's also advanced a bill to establish a Groceries Code Adjudicator (GCA) to police the new Groceries Supply Code of Practice, which is intended to stamp out abuses in supply chain power. The GCA should help more farmers receive a viable return for their products, particularly if the bill is strengthened to allow the GCA to instigate investigations based on evidence from third parties such as trade associations, and to impose proportionate financial penalties. However, the scale of the challenge is enormous – meat prices have frequently fallen below the cost of production To and these measures are unlikely to add up to a sufficient solution.

In addition to supporting farmers through LEPs and the GCA, the government could help supermarkets develop their producer groups to support sustainable consumption and production. In producer groups, farmers gain some security of sale in return for meeting defined standards of production and performance. This provides a mechanism for supermarkets to channel investment towards more sustainable production systems. In principle, such groups allow retailers to ensure that participating farmers would receive a viable return and be able to invest in sustainable production *even if* overall consumption were falling because of companies choice editing to encourage sustainable consumption.

However, sustainable consumption initiatives of this sort present a first-mover disadvantage. In practice, producer groups can only play a part in raising consumer prices to reflect environmental costs, or in eliminating the least sustainable products, if supermarkets are allowed to collaborate with each other. Such collaboration poses competition regulators with a dilemma: to protect the long-term consumer interest in sustainability, or the short-term interest in choice and low-prices. Retailers are nervous about collaborating because their previous attempt to ensure a higher return for dairy farmers was penalised by the Office of Fair Trading (OFT). The prime minister has recognised this issue, saying in a speech to Business in the Community:

"I get the message loud and clear, and we will do everything we can to tackle those barriers head on – whether it is the red tape you face... whether it is being able to collaborate as businesses without having the competition authorities throwing you in jail. I understand the barriers. We are going to work with you to get rid of them."

In this context, the government can facilitate a collaborative approach by being explicit that promoting sustainable diets is a national policy objective, and by convening a meeting involving supermarkets, ministers, senior officials from the OFT and other relevant stakeholders to develop a responsibility deal on sustainable food consumption. ⁷⁴ Opportunities to address this challenge are discussed further in Section 4.3, below, from a consumer perspective.

3.3 Enabling sustainable investment

The freedom that meat producers have to achieve reductions in greenhouse gas emissions and other environmental improvements, and to remain profitable in scenarios where people were to eat more sustainably, is shaped by the capital they've invested in animal housing and processing infrastructure. Indeed, like changes in consumption, capital investments in livestock production are made over a timescale of decades rather than years or months. In looking forward to a profitable and sustainable future for farming, the government should seek to ensure that its influences on investment in the industry create opportunities to promote sustainable consumption rather than locking businesses and consumers into unsustainable practices.

The policy framework set by the government influences capital investment in agriculture, as it becomes a factor in private sector assessments of return on investment, while public subsidy has historically been capitalised in land values.⁷⁵ This presents two opportunities for the government to promote agricultural investment strategies that will enable sustainable diets over the long term.

The first is to proof policies relating to food and farming to ensure they promote investments that will be efficient in the context of future constraints on land use and non-renewable resources, and to equip farmers and investors with methods of estimating their future return that are attuned to resource constraints and to likely future policy trends. Adopting Foresight's recommendation to develop a climate resistant land use strategy to "ensure rational, efficient and sustainable allocation and use", highlighted in Section 2.3, would support this. ⁷⁶

The second opportunity lies in reform of the Common Agricultural Policy. We endorse the recommendation made elsewhere by WWF and other environmental organisations to introduce one-off capital investment grants to help "where a lack of capital acts as an obstacle to farming practices or systems delivering public goods, for the maintenance of farming systems capable of such delivery, or for rapid adoption of innovative sustainability practices". 77

4 Sustainable behaviour in the Big Society

Understanding society's attitudes and behaviour towards consuming in more sustainable ways is integral to the coalition government's commitment to freedom, fairness and responsibility. ⁷⁸ Before becoming prime minister, David Cameron commented:

"People recognise that the mindless consumption and materialism of the past decade has neither left them more fulfilled nor served our planet. So they want to enter an age of more mindful consumption – where they think more about the consequences of their consumer behaviour.

"We're not going to get people to cut every aspect of their consumption. But I believe it is realistic to change the culture of consumption, so we live in a country where it's not just about the quantity of money, but the quality of life, where we get more value despite using less resources, and where we continue to generate wealth for our economy while also protecting our environment."

Meanwhile Nick Clegg, the Liberal Democrat leader, was reported to be "considering cutting down his meat consumption, using the train more, using his laptop instead of his desktop computer and switching to a greener taxi company" under his commitment to the 10:10 climate change campaign. ⁸⁰ Now in government, the coalition's efforts to support changes in consumption include measures to promote more sustainable travel and incentives to improve home energy efficiency, alongside improvements in the government's own food purchasing (see Section 3.1). ⁸¹

While clear and honest labels and information are important in promoting sustainable consumption, there's also a role for choice editing. According to Chris Huhne, the energy and climate change secretary, "[w]e need to get over the barriers stopping consumers from going green." Alternatives to regulation are being explored by the Cabinet Office's Behavioural Insights or 'nudge' unit, which is charged with supporting government departments in designing policy that better reflects how people really behave. In addition, the government's focus on different ways of working means an enhanced delivery role for the private and third sectors, for example through 'responsibility deals' with business.

The Public Health Responsibility Deal developed by the coalition is intended to bring together public health bodies, businesses and voluntary organisations to pledge the actions they'll take to improve public health and tackle health inequalities through their activities related to food, alcohol, physical activity and health in the workplace. Andrew Lansley, secretary of state for health, has stated that the responsibility deal will be:

"Less a government campaign, more a social movement. Less paid for by government, more backed by business. Less about costly advertising, more about supporting family and individual responses." 85

Ambitious targets and robust monitoring and reporting on progress would enhance the effectiveness of these deals. The Courtauld Commitment, the responsibility deal with business to reduce packaging and waste, has demonstrated the effectiveness of such targets and reporting.

Opportunities for the government to enable civil society and business to encourage sustainable consumption lie in improving and simplifying government advice about food, reducing waste and lifting the barriers to businesses doing more choice editing.

4.1 Simplifying government advice

When it comes to sustainable food consumption, the message from Defra is clear: it is government's job, working in partnership with others, to make it easy for people to purchase food products that are more sustainable. ⁸⁶ A crucial opportunity to do so lies in simplifying the advice that the government already provides to consumers about food.

While information does not determine people's behaviour, the government recognises that consumers must have the information they need to make more sustainable food choices – and that the messages must be consistent. The Defra secretary of state has reiterated the coalition's commitment to empowering people to "make choices about food that will bring real change. [The government] should do this, working with all our partners – the EU, international organisations, schools, charities, industry – to provide clear, trusted information that is consistent worldwide". 87

Consumers already look to the government for advice on healthy eating. So it makes sense to reflect sustainability issues in dietary advice, as recognised in *Food 2030*. 88 Foresight is also clear about the need to communicate to consumers, stating:

"There is little dispute about the importance of a balanced diet and the role of a moderate intake of livestock products; communicating this to the consumer should be a priority for public health (recognising the power of vested interests in promulgating contrary messages)." 89

The Livewell Plate, developed by WWF-UK and the Rowett Institute, addresses this need. ⁹⁰ Based on the Food Standards Agency 'Eatwell plate', it proposes a weekly menu that's good for both human health and the planet. It promotes the simple principles of eating more fruit, vegetables and cereals, but less meat and fewer highly-processed foods. The Livewell Plate should be used as a basis for updating the information that the government provides.

While the Livewell Plate is valuable as proof of concept and in providing interim advice, it doesn't provide final guidance on healthy and sustainable food consumption: it is a first attempt based on information in the public domain. We've found a clear and explicit demand from stakeholders, including food retailers and manufacturers, for the government to play a central role in further developing the concept, including integrating other social and environmental criteria besides greenhouse gas emissions. Current Defra-commissioned research on 'Evidence to define the sustainability of a healthy diet' can contribute to addressing this need. However, we additionally recommend that Defra and the Department of Health should lead the government in further refining existing definitions of a sustainable diet and convening a process open to all stakeholders, including retailers, farmers, civil society, communities and civil servants.

4.2 Cutting waste out of the system

A strong consensus has emerged over the need to reduce the 16 million tonnes of food and drink currently wasted in the UK each year. ⁹² Of the 8.3 million tonnes wasted by households, 5.3 million

are avoidable. The total emissions associated with this avoidable food waste are estimated at 20 MtCO₂e, of which 6.5 MtCO₂e are attributable to UK agricultural emissions from soils and livestock. ⁹³ The objective of reducing this waste is shared by the government, civil society, and the food and farming industries.

It's instructive to compare this consensus over the need to reduce food waste with the controversy over other efforts to encourage more sustainable food consumption behaviour. The effect on food and farming businesses of reducing household food waste — a reduced demand for their products — is comparable to the effect of changes towards more sustainable diets. Indeed, inasmuch as changes towards healthier and more sustainable eating patterns would shift demand between categories (for example from meat to protein crops), they are less threatening to the industry as a whole than waste reduction, which simply eliminates food demand. We appreciate that farmers abhor the notion of their products and work being wasted, and we applaud their commitment to reducing food waste in spite of the risks that this poses to their bottom line. We invite them to see sustainable food consumption in the same terms as waste reduction, and to see addressing that as another front on which to encourage consumers to respect the full value of farmers' work and products.

An opportunity to bridge these two issues – similar, yet perceived so differently – lies in initiatives to encourage the consumption of less popular cuts of meat. In practice, meat cuts that are underused in the UK can attract a viable export price, so the primary effect of encouraging better domestic carcase utilisation would be to create higher value markets for more of the whole animal, rather than to reduce waste. ⁹⁴ The industry's experience of such campaigns in the past is mixed, and success depends on promoting the right cuts and on how consumers substitute them for other foods. So there's a need for a coordinated approach between campaign groups, retailers and producers. The government is well-placed to play this coordinating role, and can support such an approach through its own food procurement practices.

4.3 Lifting barriers to sustainable business

The government can also play a crucial role in reducing the barriers that businesses face in choice editing. Consumers want and expect the brands that they trust to ensure that the products they sell are sustainable. Research for the IGD found that 41% of consumers support greater ethical choice editing, and only a fifth object to the practice. ⁹⁵ As outlined in Section 3.2, however, efforts by retailers to create a framework for consumer choice that's consistent with the broader public interest can run up against competition law.

Where voluntary agreements can be shown directly to contribute to achieving formal government objectives, for example in public health or greenhouse gas emission reductions, they should be relatively well-placed to be able to demonstrate that they're benefiting consumers. ⁹⁶ In order to create an environment in which businesses can promote sustainable choices securely, the government must say what its overarching policy objectives mean for food consumption practices, including that changes in consumption towards a less resource-intensive diet are important to meeting targets for greenhouse gas reductions beyond 2020.

The government can also work with the OFT and consumer groups to develop publicly-accountable mechanisms whereby businesses can collaborate to make progress on sustainability in the public interest. An immediate opportunity lies in promoting Short Form Opinions, a facility recently

introduced by the OFT to provide guidance to businesses seeking to make an agreement. ⁹⁷ The experience of the Public Health Responsibility Deals and resource efficiency initiatives such as the Courtauld Commitments will also hold lessons for agreements to enable sustainable consumption. The likely creation of a new UK Consumer and Markets Authority – merging the OFT and the Competition Commission – offers an opportunity to ensure that sustainability and health considerations are formally recognised in the implementation of competition policy.

5 Government mandate

The work that WWF-UK and the Food Ethics Council have been doing with producer organisations has found that the government has a mandate from business to play an active role in helping to negotiate the environmental, social, economic and animal welfare issues relating to the consumption of food, including meat. ⁹⁸ Government-funded public and consumer research has found that it also has permission to do so from citizens. ⁹⁹

In both cases, however, that mandate is conditional. Businesses will support government interventions that are fair, based on solid evidence and sensitive to the practical complexities of their industry. The public will only accept changes if the government also does its bit: the overwhelming message is 'we will if you will'. 100

These conditions should not be misunderstood to mean that the government lacks a mandate: many businesses across the food sector want government action because they've been perplexed by mixed messages on this issue and find it very difficult to operate in an uncertain policy environment. ¹⁰¹

The previous sections have outlined action the government could take to address barriers to sustainable food consumption that would respect the limits of its mandate from business and the public, and fit the coalition's priorities. Table 1 summarises those barriers and the actions we recommend.

The majority of the opportunities that we highlight are concerned with creating the broader conditions for sustainable supply chains. In many of these areas, the government is already taking action, and we suggest how that can best be developed to enable sustainable food consumption. Nevertheless, businesses also need ministers to endorse efforts to encourage sustainable food consumption, to strengthen the case that their collaborative efforts on this issue are in the interests of consumers and the public. Furthermore, consumers and the industry want help working out what eating sustainably entails. Both these opportunities call for the government to make a clear commitment to encourage greener eating.

Table 1: Summary of opportunities for the coalition government to address barriers to sustainable food consumption

Section	Barrier	Opportunities for government action
2.1	Consumption not addressed through the UNFCCC	Extend international leadership on climate change by seeking the Committee on Climate Change's advice on consumption-related emissions and pursuing its recommendations through the UNFCCC. Draw on UK technical expertise to coordinate research and develop common footprinting protocols to support demand-
		side mitigation measures.
2.2	Consumers don't pay the	Ensure the rapid implementation of the GCA, and further
	full environmental costs of	investigation and reform of the groceries market, recognising

	producing food	that this is needed so measures to pay the full environmental
		costs of food production can influence consumer behaviour.
2.3	The government has until now not procured food sustainably	Further develop the GBS to require that menus are analysed to meet sustainability standards. Follow Foresight's recommendation to develop and apply an effective, climate resistant land use strategy. This will provide the strategic basis for rational decision-making on sustainable food consumption.
3.1	Consumers can't reward British producers for acting unilaterally to reduce emissions	Clarify country-of-origin labelling, including for processed meat products, to complement voluntary and regulatory initiatives to raise domestic production standards.
3.2	Competition law enforcement undermines producer investment in sustainable systems	As for 2.2 above, plus: State that promoting sustainable diets is a national policy objective. This will strengthen the consumer interest case for voluntary agreements that promote sustainable food supply chains. Convene a meeting involving supermarkets, ministers, senior officials from the OFT and other relevant stakeholders to develop a responsibility deal on sustainable food consumption.
3.3	Existing infrastructure limits producers' opportunities to benefit from greener eating	Proof policies relating to food and farming to ensure they promote efficient investment in the context of future constraints on land use and non-renewable resources. In promoting reform of the CAP, introduce one-off capital investment grants to encourage the rapid innovation of farming systems that can flourish under sustainable consumption scenarios.
4.1	Official food advice is inconsistent	Use the Livewell Plate as a basis for updating official food advice. Take a lead in further refining existing definitions of a sustainable diet and convening a process open to all stakeholders, including retailers, farmers, civil society, communities and civil servants.
4.2	Industry finds it harder to support changes in eating patterns than waste	Convene and coordinate industry and campaigners in initiatives to promote better domestic carcase utilisation, to create higher value markets for the whole animal.

	reduction	
4.3	Competition law frustrates collaborative choice editing initiatives	As for 3.2 above, plus: Promote Short Form Opinions, whereby the OFT can advise businesses on the legality of collaborative agreements.

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Sustainable diets in numbers

20%

The rise in UK consumption-related greenhouse gas emissions since 1990

100%

30%

The proportion of UK greenhouse gas emissions generated by the food sector



£440 MILLION

The estimated annual contribution of insect pollinators to the UK economy

48%

Proportion of greenhouse gas emissions from the UK diet arising from meat dishes

1 BILLION

The number of people worldwide suffering from hunger and malnutrition. The same number are overweight or obese



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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