



Policy Briefing

What individual and collective actions relating to food and farming can we take, to hit our crucial climate targets?

Key facts

- The UN IPCC says that the world needs to reach **net zero CO₂ emissions by 2050**, and net zero other GHG emissions (such as methane and nitrous oxide) by 2070.¹
- **GHG emissions are 'baked into' global systems**: many people cannot avoid generating significant emissions at present.
- **Co-ordinated and substantive actions by Governments** – and the largest institutions, corporations, and land managers – **are vital** for net zero emissions.
- The Joseph Rowntree Foundation found that **the richest 10% of households in England are responsible for three times more CO₂ emissions** from transport, travel and household energy use than the most deprived 10% of UK households.²
- **People living below a Real Living Income have less freedom to make GHG cuts.**
- **If you are able to commit to a plant-based diet, you make a major contribution.**

Climate emergency

We are facing a climate emergency. Food holds one of the keys to a solution. Our food system accounts for a large portion of our emissions. Any effective response to the climate emergency involves removing the unnecessary emissions from food.

We must achieve net zero emissions, as set out by the UN Intergovernmental Panel on Climate Change (IPCC). According to the IPCC, this means that *all* sectors must make “deep emissions reductions”.³ Offsetting is required *in addition* to strong action in every sector, rather than in place of it.⁴ Collectively, we need to make radical changes.

How can we respond?

Moving toward plant-based farming and food systems is essential for good, low carbon food. Plant-based diets tend to have lower GHG emissions than low meat, pescatarian, or vegetarian diets, and half the emissions of typical British ‘meat, dairy and egg’ based diets.⁵ Adopting plant-based diets could be one of the “single biggest things” individuals can do for the planet.⁶

Why? First, ruminant animals (such as cattle and sheep) release large amounts of methane, a powerful greenhouse gas. With so many cattle and sheep being farmed, this produces a large climate impact.

Second, British farmers often rely upon imported food such as soya for the animals which they farm, and this generates a climate impact. Cows farmed for their milk may be fed considerable quantities of extra

¹ United Nations Intergovernmental Panel on Climate Change [IPCC] (2018) ‘Special Report: Global Warming of 1.5 °C, SR15 Summary for Policy Makers’ <https://www.ipcc.ch/sr15/chapter/summary-for-policy-makers/> (accessed 28/052019)

² Joseph Rowntree Foundation (2013) ‘Distribution of Carbon Emissions in the UK: Implications For Domestic Energy Policy’ https://www.cse.org.uk/downloads/file/distribution_of_uk_carbon_emissions_implications_for_domestic_energy_policy.pdf (accessed 29/032019).

³ p.17, IPCC (2018)

⁴ Harwatt H & Hayek M (2019) ‘Eating Away at Climate Change with Negative Emissions’, <http://animal.law.harvard.edu/wp-content/uploads/Eating-Away-at-Climate-Change-with-Negative-Emissions%E2%80%933%E2%80%933Harwatt-Hayek.pdf> (accessed 31/052019)

⁵ Scarborough, P., Appleby, P.N., Mizdrak, A. et al. (2014) ‘Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK’, *Climatic Change* 125: 179. <https://doi.org/10.1007/s10584-014-1169-1> (accessed 30/05/2019).

⁶ Poore, J., & Nemecek, T. (2018) Reducing food’s environmental impacts through producers and consumers. *Science*, 360(6392), 987-992. (accessed 30/052019)

protein in the form of soya. Chicken and pigs cannot digest grass at all, so are fed soya and other food crops. Only a small portion of crops fed to animals in farming, 12 percent on average, is retained in meat, milk, and eggs.⁷ This means more land use, water use, fertiliser use, and emissions per calorie of animal-source food. Plant-based food production – eating crops first-hand ourselves – is usually more efficient, and therefore produces fewer GHG emissions.

Opportunity

Sustainable plant-based diets can be good for public health. Healthy eating guidelines generally recommend that people eat more health-promoting plant foods like wholegrains, beans and pulses, fruit, vegetables and nuts. The British Dietetic Association and the NHS recognise that well-planned vegan diets are suitable for every age and life stage. Plant-based diets can help lower some disease risks.

Also, plant-based foods represent a rapidly growing area of the economy.⁸ And UK oat milk products, for instance, could soon give an important boost to rural economies.

Plant-based production frees up land. The UN highlights the need for reforestation. Uplands and other marginal land in the UK could be well-suited to this. Growing trees sequesters carbon, enhances biodiversity, tackles floods risks and provides recreational opportunities. Governments can support the same farmers at the same rates, to farm plants not animals.

Can livestock farming be sustainable?

There is no realistic technology that can 'fix' our farming of animals. Recent research in the journal *Science* indicates that 'animal product free diets are likely to deliver greater environmental benefits than changing production practices'.⁹

Why the UK Government must act

Our farmers have not been able to significantly cut their GHG emissions so far. Governments have the power to co-ordinate our support for sustainable rural communities and livelihoods.

Moreover, there is broad support for such measures. The National Farmers Union's policy is for the whole of agriculture in England and Wales to be carbon neutral by 2040. The Soil Association backs a mandatory, entirely plant-based day in school canteens for the health of pupils, staff, and our planet because "current... [Government] advice for a meat-free day is too weak". Chatham House found that "Publics expect government leadership... to spearhead efforts to address unsustainable consumption of meat".¹⁰

Conclusion

We have to change our food system to end the climate emergency. And time is running out. But food is a huge opportunity, attitudes are changing, and the evidence is there. The time for the UK Government to implement world-leading improvements is now.

Contact us

Founded 75 years ago, The Vegan Society is an educational charity Registered in England and Wales that provides information and guidance on various aspects of veganism, and carries out campaigns and policy work.

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⁷ Cassidy, E. S., West, P.C., Gerber, J.S. & Foley, J.A (2013) 'Redefining agricultural yields: from tonnes to people nourished per hectare'. *Environmental Research Letters*, 8: 034015. Available at: <http://iopscience.iop.org/article/10.1088/1748-9326/8/3/034015/pdf> (Accessed 20/07/2017)

⁸ Mintel, 2019. 'UK overtakes Germany as world's leader for vegan food launches'. <https://www.mintel.com/press-centre/food-and-drink/veganuary-uk-overtakes-germany-as-worlds-leader-for-vegan-food-launches> (accessed 04/06/2019).

⁹ University of Oxford (2018) 'News: New estimates of the environmental cost of food' <http://www.ox.ac.uk/news/2018-06-01-new-estimates-environmental-cost-food> (accessed 04/06/2019)

¹⁰ p. viii, Wellesley, L. and Froggatt, A (2015) 'Changing Climate, Changing Diets: Pathways to Lower Meat Consumption', Chatham House.