

Tackling Climate Change:-The Hot Debate

Report of meeting held on Friday 27th October at the University of Essex, Colchester



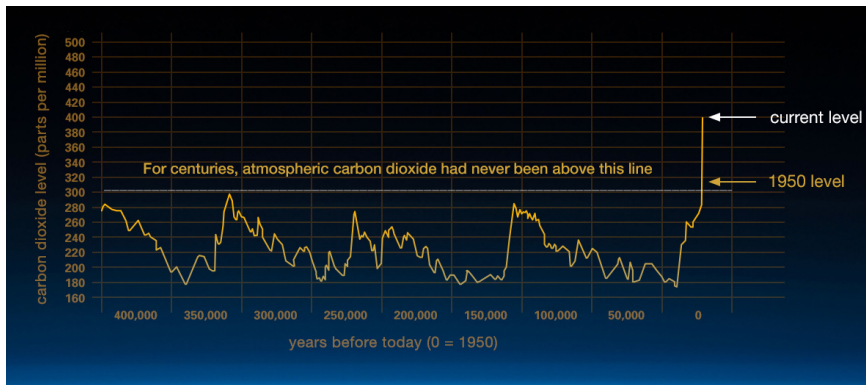
Background

Following the General Election in June 2017, there was some concern that the Conservative Manifesto did not resonate sufficiently with the electorate. The Conservative Policy Forum is working with the electorate to better understand their concerns and needs, to formulate policies that address those concerns and needs.

Essex Climate is a group of members of The Climate Coalition, largely but not all members of the WI, in Bernard Jenkin MP's constituency, who have been working with him since 2015 to better understand the effects of climate change locally, nationally and globally. "Tackling Climate Change:-The Hot Debate" is the fourth local public meeting he has been involved in during that time, and the third which he has chaired.

Further details of these meetings can be found at essexclimate.weebly.com

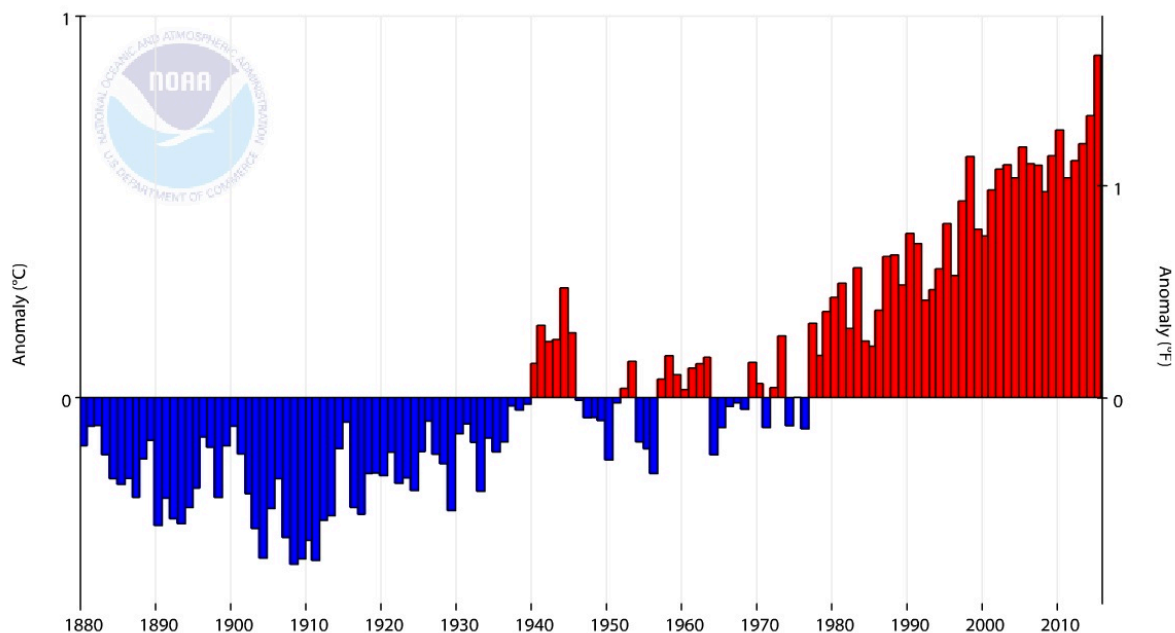
NASA data shows that atmospheric carbon dioxide levels have risen dramatically as we burn more fossil fuel in order to drive more cars, take more flights, eat more meat, and heat more homes that leak warmth. Excess atmospheric carbon dioxide acts like a blanket, causing global warming and climate change. In 2016 carbon dioxide levels reached a new peak of over 400ppm, partly due to human activity and partly due to El Nino. We cannot control El Nino so we must increase our efforts to control human activity.



In an ever more threatening and dangerous world, climate change is the surest threat we face. Climate change does not posture and make empty threats. It will continue to inexorably change the world we live in until it becomes a world we can no longer live in. And we have nowhere else to go. That is the hard reality our generation faces. If we do not control climate change, we leave nowhere that our children and grandchildren can safely live, and our old age will be far less secure than that of our parents. This is an imminent threat. Already our wildlife, from hedgehogs and water voles to kingfishers, puffins and kittiwakes are declining as a result of climate change. Our food crops will soon be affected, and these changes are irreversible for many generations. Younger voters are understandably particularly concerned about climate change as their lives will be most affected

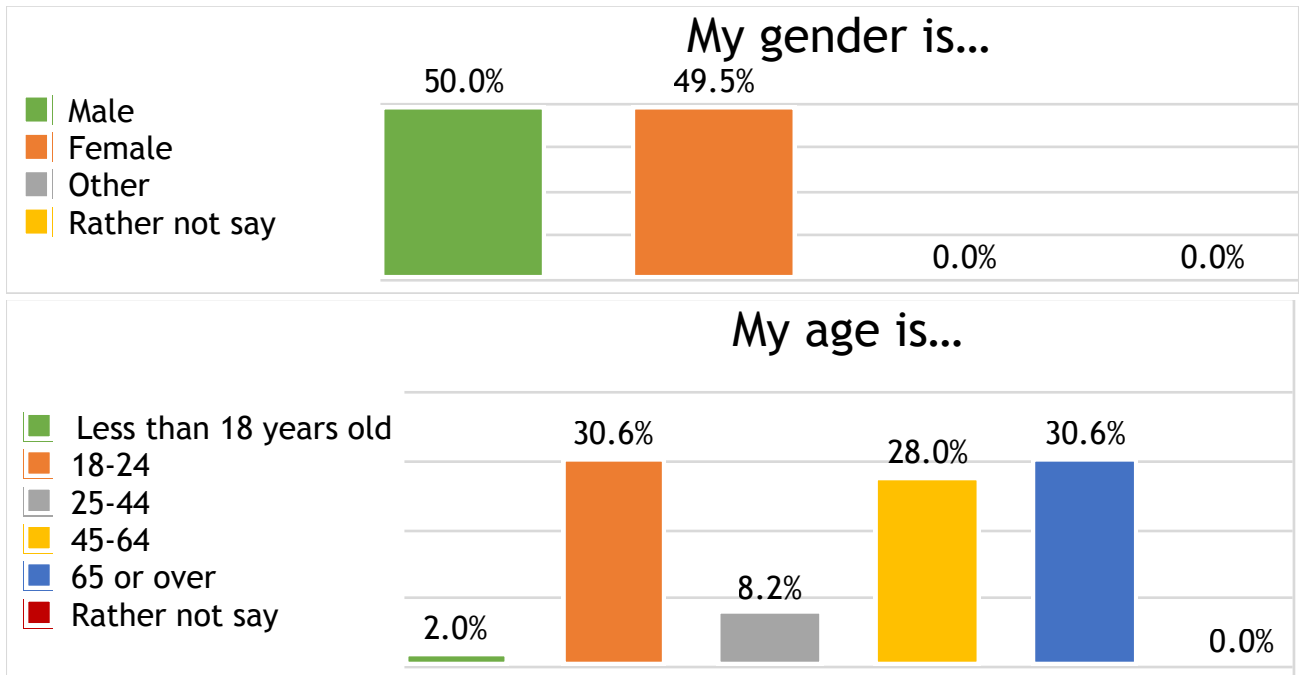
Fortunately there are ways in which we can control climate change, but they will only work if implemented, and implemented decisively. Already, as the Clean Growth Strategy notes, the conversation has moved on. As the public become better informed and more concerned they are becoming increasingly engaged in this topic and want to know how they should change their lifestyles and, importantly, what actions the Government is taking. We are seeing more delegates attending meetings on climate change, and those delegates are asking for more changes to tackle climate change. It is unrealistic to expect the electorate to be forgiving of a Government that was fully informed of an imminent threat but failed to take sufficient action to protect the country.

Global Land and Ocean Temperature Anomalies, January-December



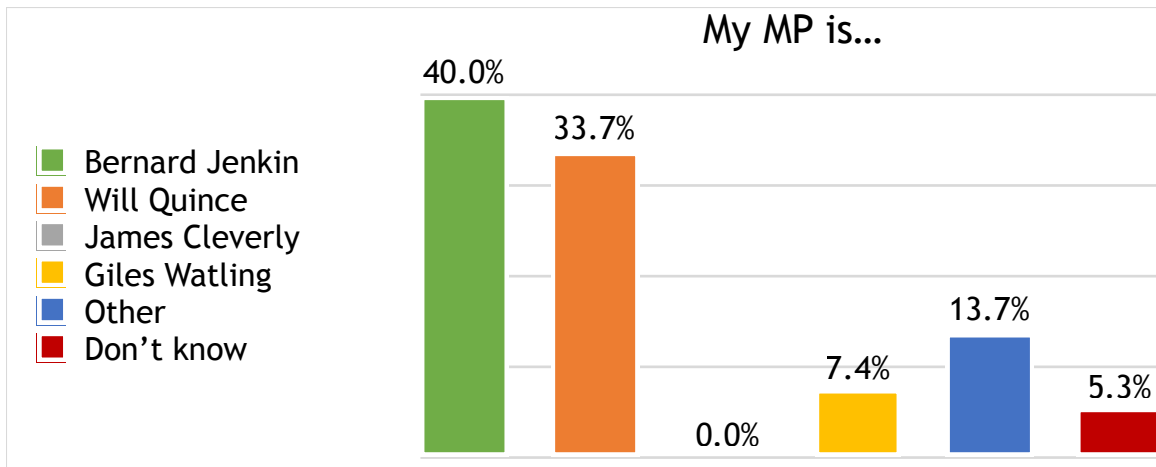
Aims

The aim of this meeting was for expert speakers to present credible policies to an audience representing a cross section of the general public, and for that audience to indicate which policies they wanted to see implemented. This was a well informed audience, self selected in that they had chosen to attend the meeting, and further informed by the speakers. The wider electorate is rapidly becoming better informed on climate change, whether through widely watched programmes such as Blue Planet 2, Countryfile and the News, or by social media or other means, so we should expect wider public opinion to rapidly follow that of our audience. There was equal representation at the meeting between men and women, and almost equal representation of ages 18-24 and 45-64 and 65 and over. We believe the shortfall in attendance of age 25-44 reflects the level of domestic commitment making meeting attendance challenging during child rearing years.



Meeting summary

Hon. Bernard Jenkin MP opened the meeting by welcoming all who attended.



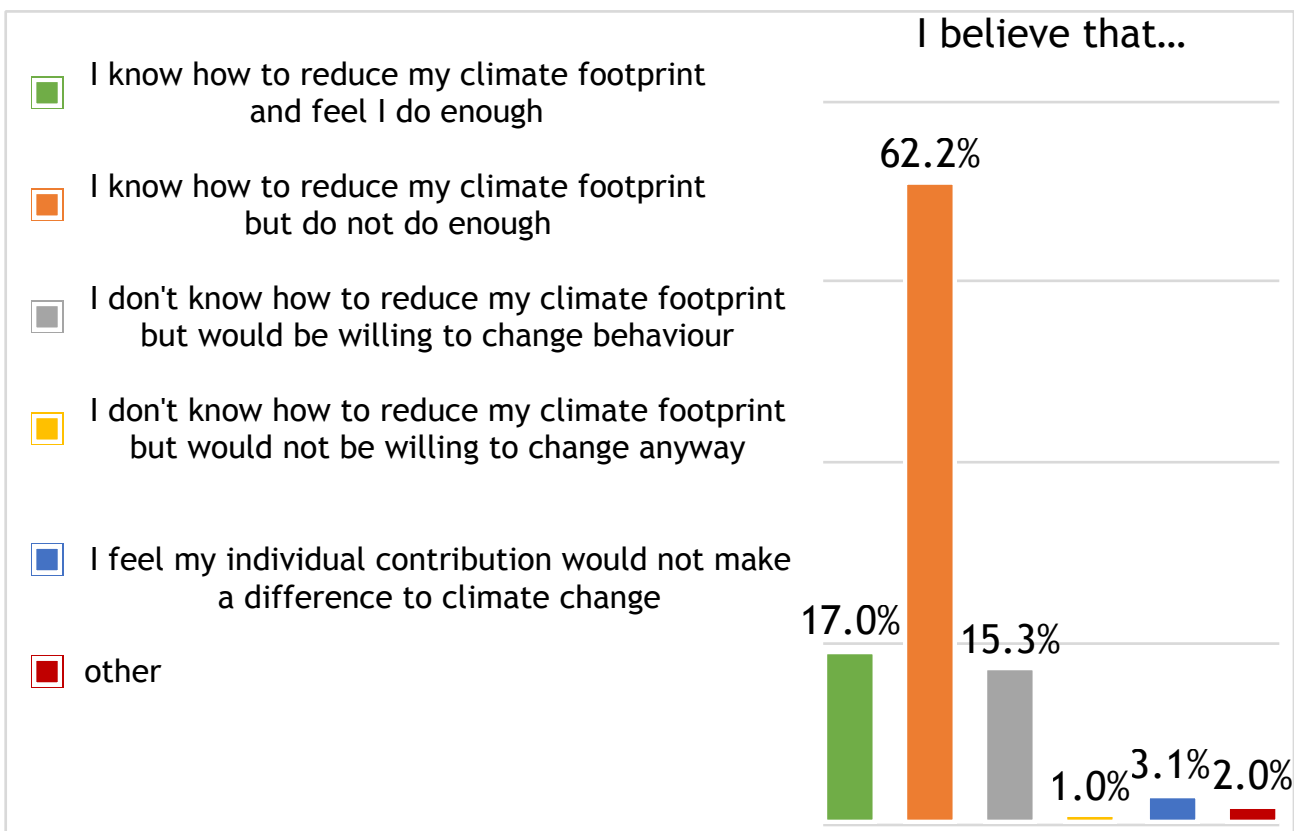
Forty percent of the 95 respondents to question 3 identified Hon. Bernard Jenkin as their Member of Parliament; 34% of respondents were members of Hon. Will Quince's constituency; Hon. Giles Watling was the MP for a further seven percent; and 14% of respondents came from other constituencies. Five percent of respondents did not know who their MP was.

The challenge of climate change and the importance of taking action now

*Professor Graham Underwood,
Executive Dean, Faculty of Science and Health,
Professor of Marine and Freshwater Biology, University of Essex*

An abstract has not been submitted for this talk.

Question 4 Result (answer text shortened from that presented to audience – full questions listed in Appendix to Meeting Report will be made available online at EssexClimate.weebly.com).



Great British Energy: Powering Forward

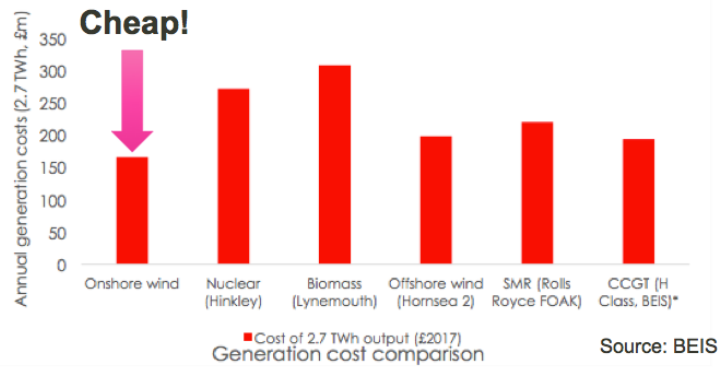
Max Wakefield, Lead Campaigner, 10:10

Abstract

We've made great strides in decarbonising electricity supply in the UK over the last decade. But we've got lots more to do to meet our carbon budgets – and there are key areas of policy that can unlock even more clean power for our homes and businesses. The great news is that renewables are now cheap getting cheaper – meaning that we can protect citizens from high bills in future while doubling down on our climate change commitments.

Onshore wind: what we know

It's the cheapest source of energy, bar none. It can pay for itself and bring down bills.

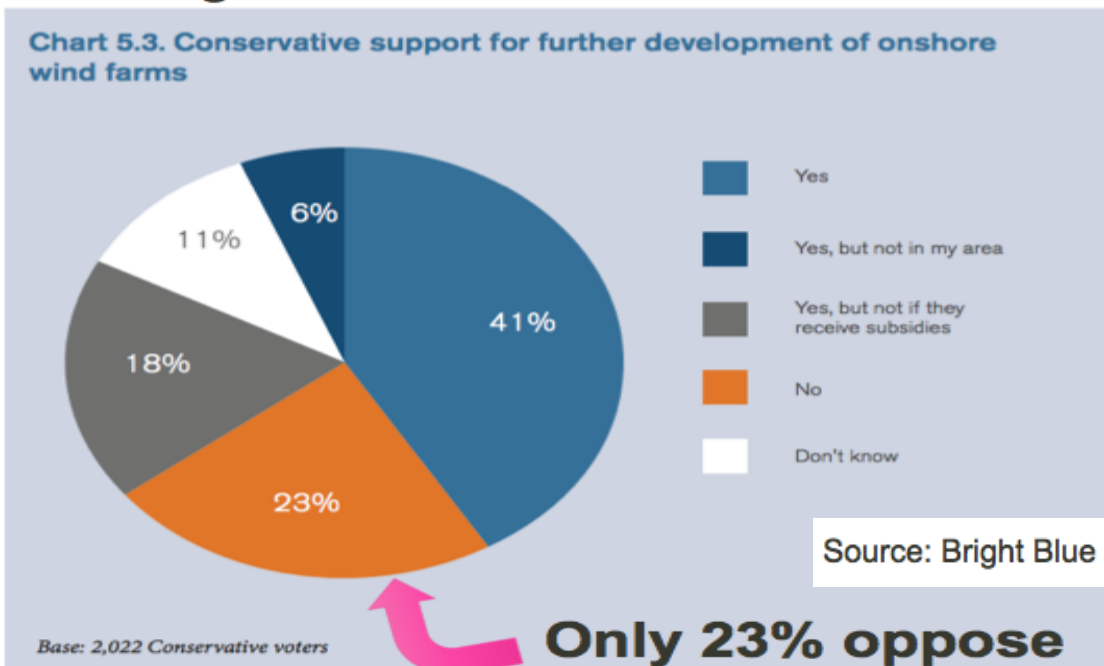


Specifically, 10:10 are calling for:

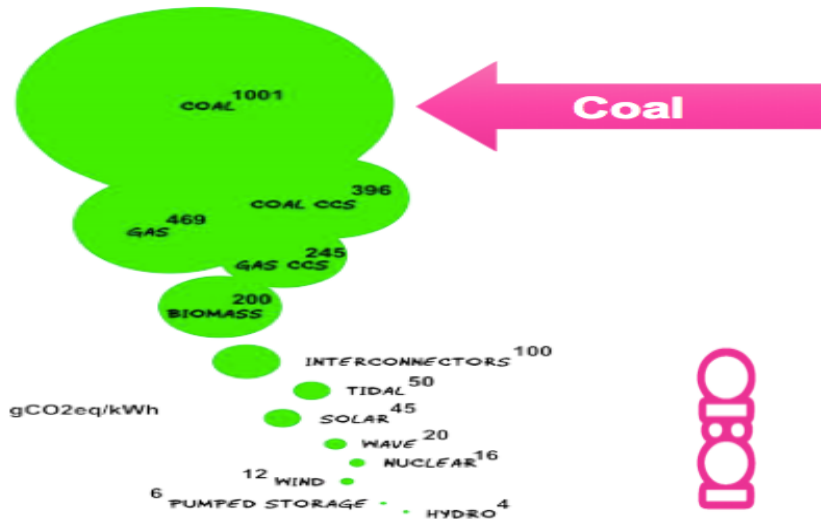
- The ending of the ban on onshore wind, the cheapest new energy source, in England and Wales – and renewed government support across the UK.
- Changes to allow local residents to buy renewable energy directly from local renewable generators for cheaper than they can buy energy from utilities.
- The extension, and increase, of the carbon tax to make sure the UK ends coal power as soon as possible and brings more clean power online.

Onshore wind: what we know

Including 59% of conservative voters



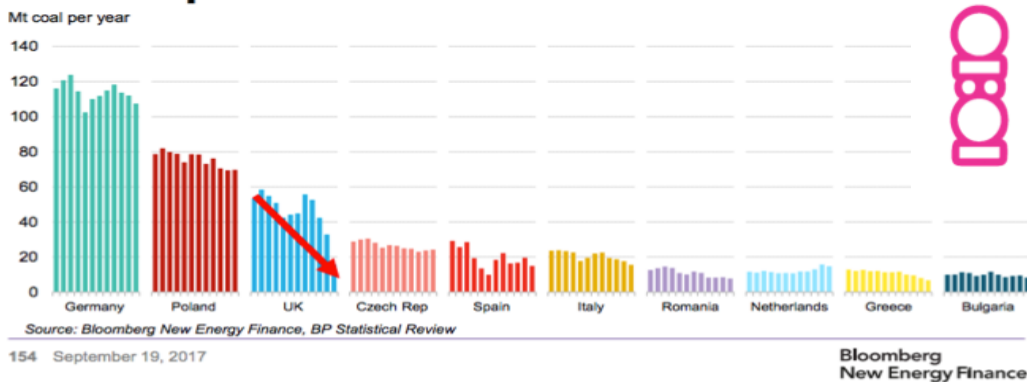
Carbon tax: the impact



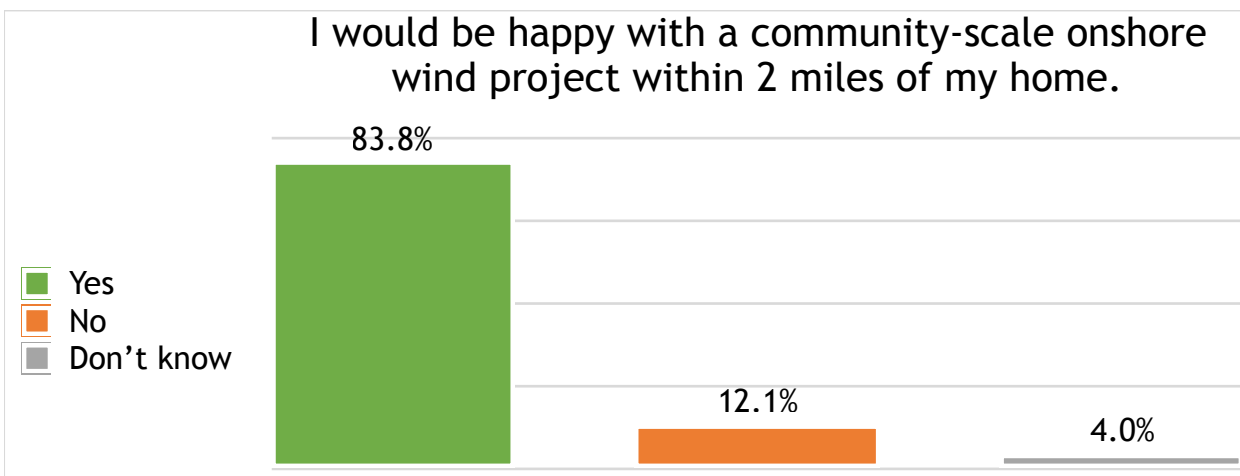
Carbon tax: the impact

Transformational effect on UK electricity generation

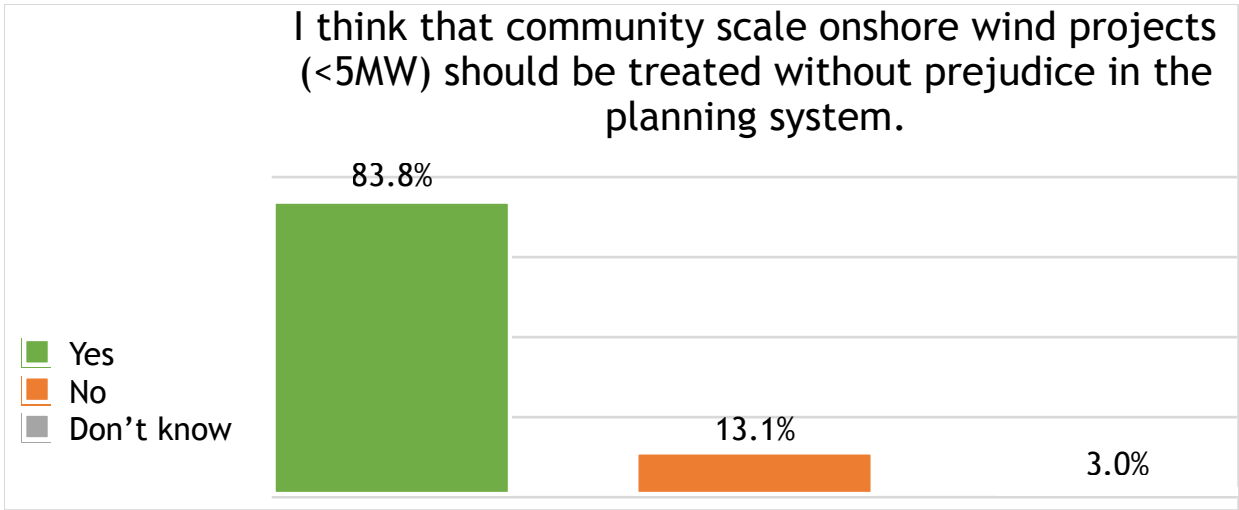
EU member state coal consumption 2000-16



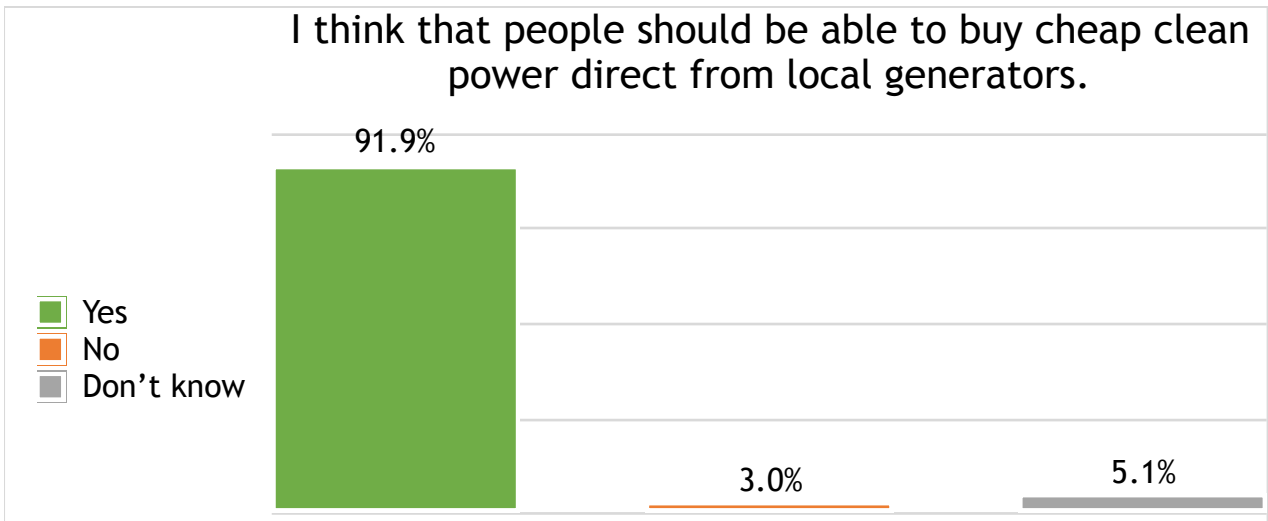
Voting results



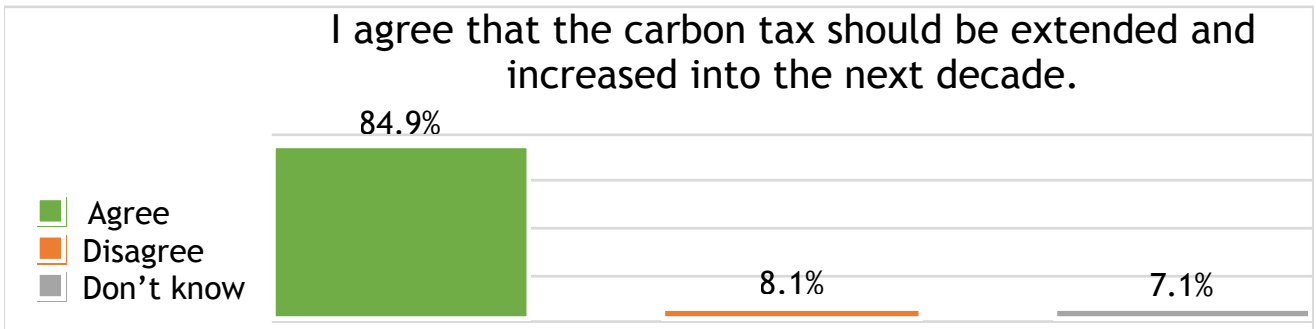
In line with national poll results, a large majority, 84% of this audience, were happy to have a community scale onshore wind project within 2 miles of their home. This contrasts sharply with community resistance to local fracking projects



The same proportion, 84%, thought that onshore wind projects should be treated without prejudice in the planning system, and even more, 92%, thought that the local population should benefit from renewable energy produced locally. This can help reduce fuel poverty as locally produced energy can be sold at a price that is better for both producer and consumer by cutting out the big 6 middle men. This has already been shown to work well at pilot projects. Please contact 10:10 for more information.



85% want to see the carbon tax extended and increased into the next decade to support the phase out of coal, as coal is by far the worst polluting fossil fuel.



Making Transport part of the solution

Dr Doug Parr

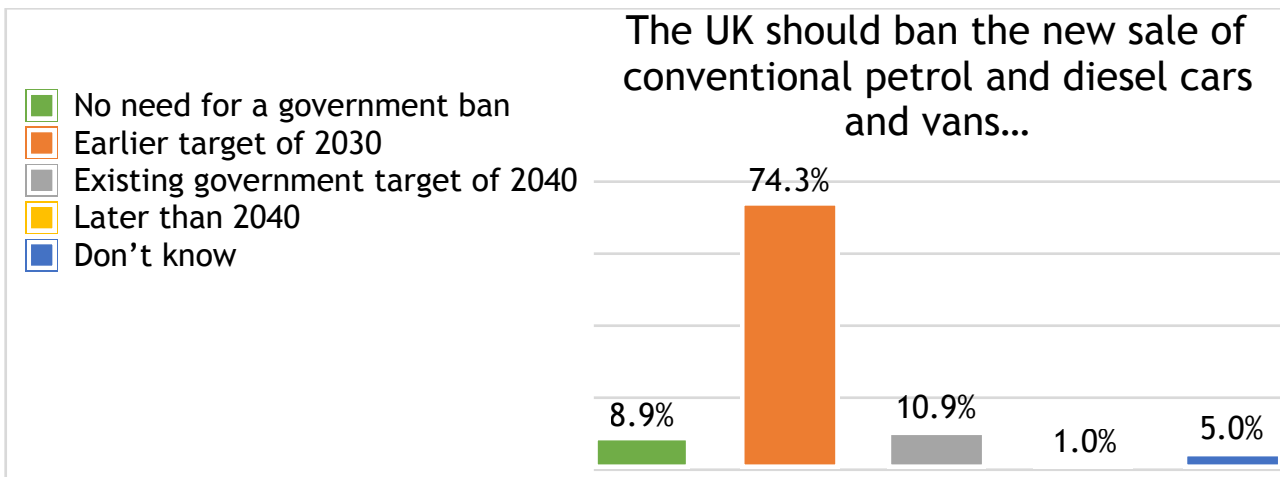
Oxford DPhil, Atmospheric Chemistry

Chief Scientist and Policy Director, Greenpeace

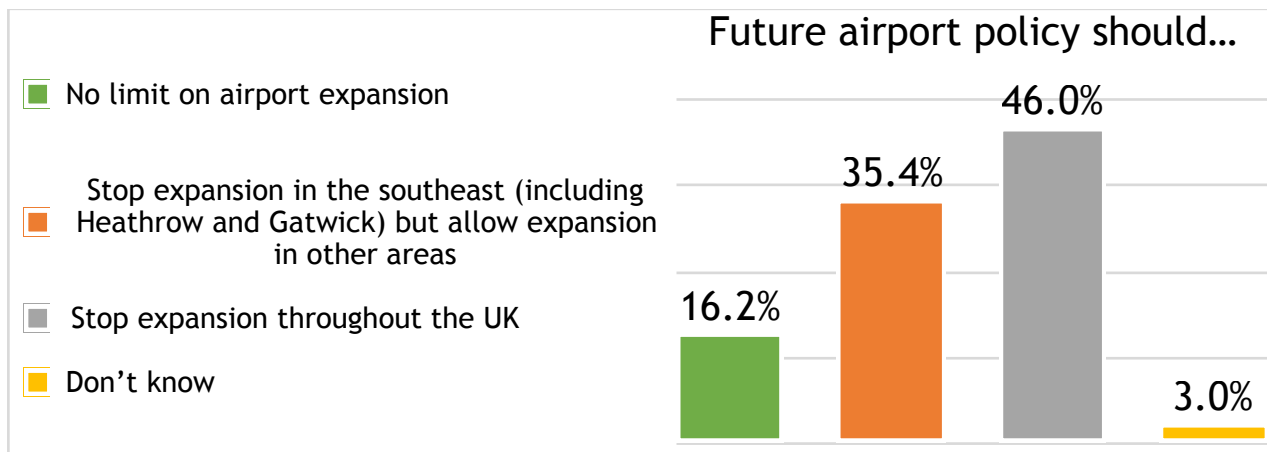
Abstract

This talk focused on the opportunities to cut emissions from the transport sector. In some cases there was economic opportunity to go alongside it – the UK has an aspiration to be a major global powerhouse in electric vehicles and currently has a planned phase-out date of 2040 for conventional fossil-fuelled cars and vans. But the speed of movement of other countries, most especially China, but also India and some EU countries, means that keeping any leadership momentum behind the industry would mean UK bringing forward that phaseout date to 2030, otherwise faster-moving economies will be the ones to get the jobs and manufacture to go with the transition away from petrol and diesel. Another opportunity is to regulate emissions of HGVs and buses after Brexit – again the UK has a global leadership role in low-emission buses and judicious regulation could drive that forward. Finally not everything about cutting emissions can be purely opportunity. Since 1990 the biggest growth in emissions from the transport sector has come from aviation, and it is difficult to see how anything close to the Paris Agreement targets or Climate Change aspirations can be met with unfettered growth in aviation emissions. So absent any breakthrough in aviation technology – and for all the hype there isn't really one in prospect - no new runways should be permitted in South East UK, or indeed anywhere else.

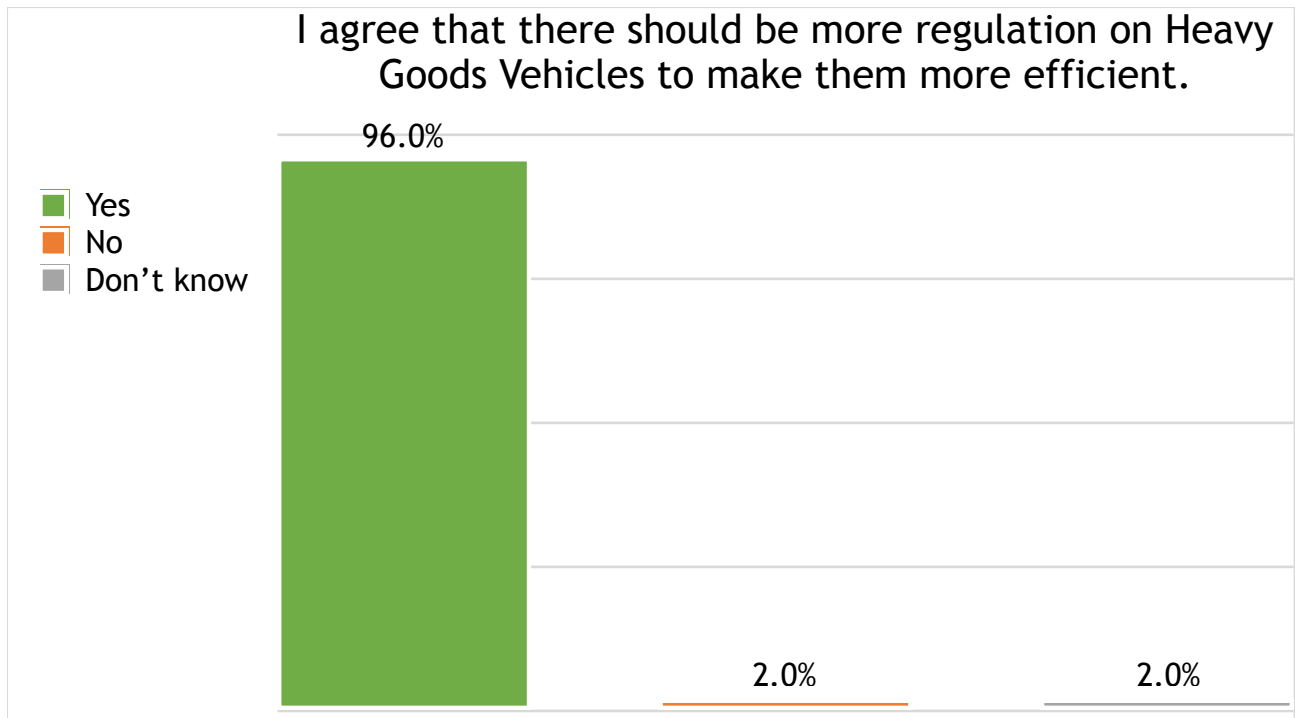
Voting results



A big majority of this audience, 74%, thought the existing target of 2040 lacked ambition and was out of step with our aspiration to be a major global powerhouse for electric vehicles, especially as China, India and some European countries are moving more quickly.



There was very little support for any airport expansion, with 81% of this audience voting against further expansion in the South East, and nearly half, 46%, voting against expansion throughout the UK. This may be an area where Government assumptions are out of step with public opinion



More regulation on HGVs to make them more efficient was a very popular proposal with 96% support. This policy could support public health measures to improve poor air quality as well as helping to limit climate change.

Warm homes, cool planet

Ron Bailey, Head of Parliamentary Affairs, Sustainable Energy Association

Abstract

Our buildings are a bigger part of the climate change problem than most people realise.



Heating and hot water **buildings** make up 40% of our energy consumption and 20% of our **emissions**

4% of heating comes from low carbon sources



4 million households in **fuel poverty** = increased risk of **illness**

Choosing between heating and eating



Need to **build 275,000 new homes**, currently building 160,000 per year

Average home emits **2.6x more carbon** than designed



As we try to achieve our 2050 carbon reduction targets we need to be aware of the huge impact of heating our homes. Over 80% of the buildings we will live in in 2050 have already been built. Over 85% of existing homes are over 20-years-old and many are inefficient, expensive to heat, carbon intensive (using fossil fuel heating) and cold.

We are currently seeing a huge push to build new homes which will last decades if not centuries. Our money (as tax payers) is helping to boost house sales through the 'help to buy scheme' BUT many are not fit for the future or low carbon despite this being the cheapest time to fit sustainable technologies. Many of these homes will need expensive retrofit to be 2050-ready and house buyers will find their energy bills are higher than expected.

An Energy Performance Certificate gives a property an energy efficiency rating from A (most efficient) to G (least efficient). Only 1 in 5 new homes are rated Energy Performance band C. New homes far from making it easier to meet our carbon targets and tackle fuel poverty are making it harder. This is unacceptable.



So what are the solutions?

The cheapest energy is the energy we don't use so making our homes energy efficient is crucial. We also need to encourage deployment of low carbon technologies and build new homes to high, low carbon standards.

A long term framework needs to be developed to allow homeowners to plan for future home improvements and reduce the risk of homeowners carrying out incremental improvements.

The Government has committed to bring all fuel poor homes up to EPC band C by 2030 in the Clean Growth Strategy and has cited its aspiration to bring all homes up to EPC band C by 2035.

Domestic Energy Efficiency Bill 2017

An Act to require the Secretary of State to ensure that all households are upgraded to Energy Performance Certificate Band C by 2035

1. Purposes

The purposes of this Act are to

- (i) Reduce domestic fuel bills; and
- (ii) Reduce emissions of carbon dioxide

by bringing domestic premises up to EPC band C.

2. Domestic Energy Efficiency: Duty of Secretary of State

(1) The Secretary of State must subject to subsection (2) ensure that all households are upgraded to EPC Band C by 2035 where it is practical, cost effective and affordable to do so.

(2) Where the occupant of a household refuses to have works carried out to upgrade his home to EPC Band C, the duty in subsection (1) shall not apply.

(3) In this Act:

'EPC' means Energy Performance Certificate

3. Citation Commencement and Extent

(1) This Act may be cited as the Domestic Energy Efficiency Act 2017.

(2) This Act shall commence on the day on which it receives Royal Assent.

(3) This Act extends to England only.

We at the Sustainable Energy Association are promoting a bill to ensure that the Governments aspiration to upgrade households to EPC Band C becomes a reality. The benefits of this would be widespread:

- Cut fuel bills
- Average energy bill saving for a low-income family is £245 per year by bringing homes up to EPC Band C
- Tackle climate change
- Domestic emissions are projected to rise by 5% over the next 20 years
- Heating our homes is a significant contributor to climate change
- Address fuel poverty
- Reduced illness, more comfortable homes, better learning environment
- £1 spent on dealing with cold homes will save the NHS 44p

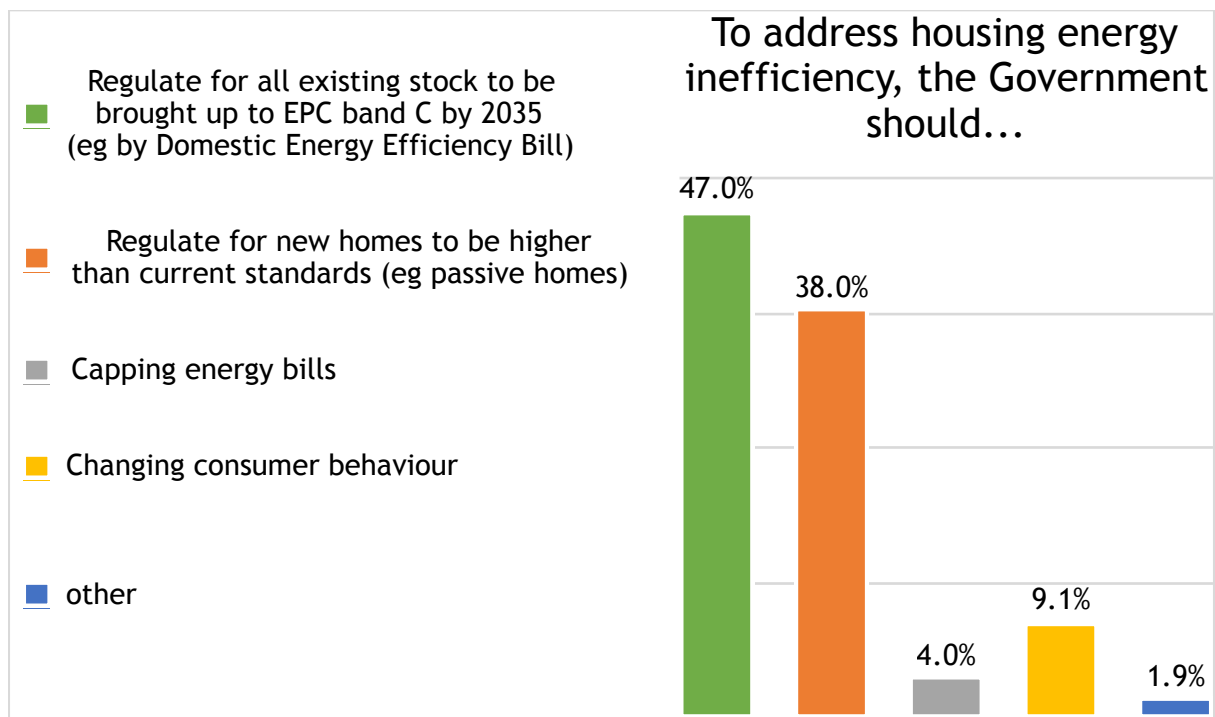


We also need to ensure our new homes are built to improved standards such as Passive House, a voluntary standard for energy efficiency in a building, reducing its ecological footprint. Currently new homes are making it harder to meet our carbon targets and tackle fuel poverty.

Voting results

85% of this audience want regulation to ensure all our homes are much more energy efficient, at least EPC Band C, and almost half, 47%, of this audience say the first priority is regulation to ensure existing housing stock is properly retrofitted. Only 4% thought capping energy bills made sense. However, a further 38% believe the first priority is for regulation to ensure that all new build is at least EPC Band C.

Currently only 20% of new homes are rated EPC Band C, meaning that 80% will need retrofit as soon as they are completed, and until they have that retrofit they are causing more fuel poverty, poor health and climate change. Retrofit is far more costly than improving new build standards. There is already planning permission granted for over 24,000 new homes in this constituency, and if they are built to current standards we will have missed a huge opportunity. Passive Houses, re-



quiring 80% less energy, can be built at about the same price as those built to current standards, and are the standard in other European countries. There is no reason, beyond the intransigence of some of our developers, why Britain should suffer from inferior housing stock. Failure to bring in the needed regulation makes Government look weak, ineffective, and unable to stand up to big business on behalf of the electorate.

Why food matters for climate change

Presentation provided by Sue Dibb, Executive Director, Eating Better Alliance

Presentation given by Jill Bruce, WI Climate Ambassador, Chappel and Wakes Colne WI

Abstract



Achieving a Paris Compliant healthy food system

The global food system as a whole is responsible for around 30% of total human-induced greenhouse gases. It will be impossible to meet commitments of Paris Climate Agreement to avoid dangerous climate change & keep temperature rise below 2 degrees C (ideally 1.5 degrees C) unless we significantly reduce food-related GHG emissions. That means:

Producing food more sustainably

Wasting less food (including over-consumption leading to obesity)

Reducing our consumption of meat & dairy. Livestock are a particular GHG hotspot.

We need to do all 3 – we can't cherry pick.

GHG impacts of livestock

Globally, livestock production is responsible for around 15% of greenhouse gas (GHG) emissions – that's more than the emissions from all vehicles in the world. Already, livestock production accounts for 70% of all the world's agricultural land and 30% of the land surface of the planet. Livestock production is the largest source of the powerful greenhouse gasses: methane and nitrous oxide, plus growing crops like soy for animal feed, particularly for chicken and pigs not only results in the loss of high value habitats, such as forests, it also releases substantial emissions of greenhouse gases – a double whammy for climate change.



Greenhouse
Gas emissions
from livestock
>
Emissions from
transport



Healthy & sustainable eating

Just one meat-free meal can save enough carbon emissions to boil a kettle 388 times. Just imagine the impact if your whole family, your town or your workplace did the same – not just for one day but every week. It's a simple, affordable, healthy change that everyone can make that is already aspirational for many British people: YouGov research shows that 44% are willing to or already cutting down on their meat eating.

Better Livestock Farming

That's not to say all meat production is a bad thing. Raising livestock can be an efficient way to use poor quality farmland that could not otherwise grow crops and to provide livelihoods. Keeping some livestock on semi-natural habitats such as plant and wildlife-rich meadows and pastures is an important conservation tool and helps maintains valued landscapes. And permanent pasture for grazing can act as a carbon sink. But the only way we can encourage such extensive, environmentally sensitive livestock farming, is by reversing the global trend towards increasingly intensive animal production – with consequent animal welfare concerns. The result may be abundant 'cheap' meat but it comes with an unaffordable price tag for our animals, our planet and our health. We need to encourage a 'less is better' approach to meat eating and fast. Eating less but choosing better – produced to higher welfare and environmental standards – means its affordable for consumers, and provides better economic returns for farmers producing to higher standards.



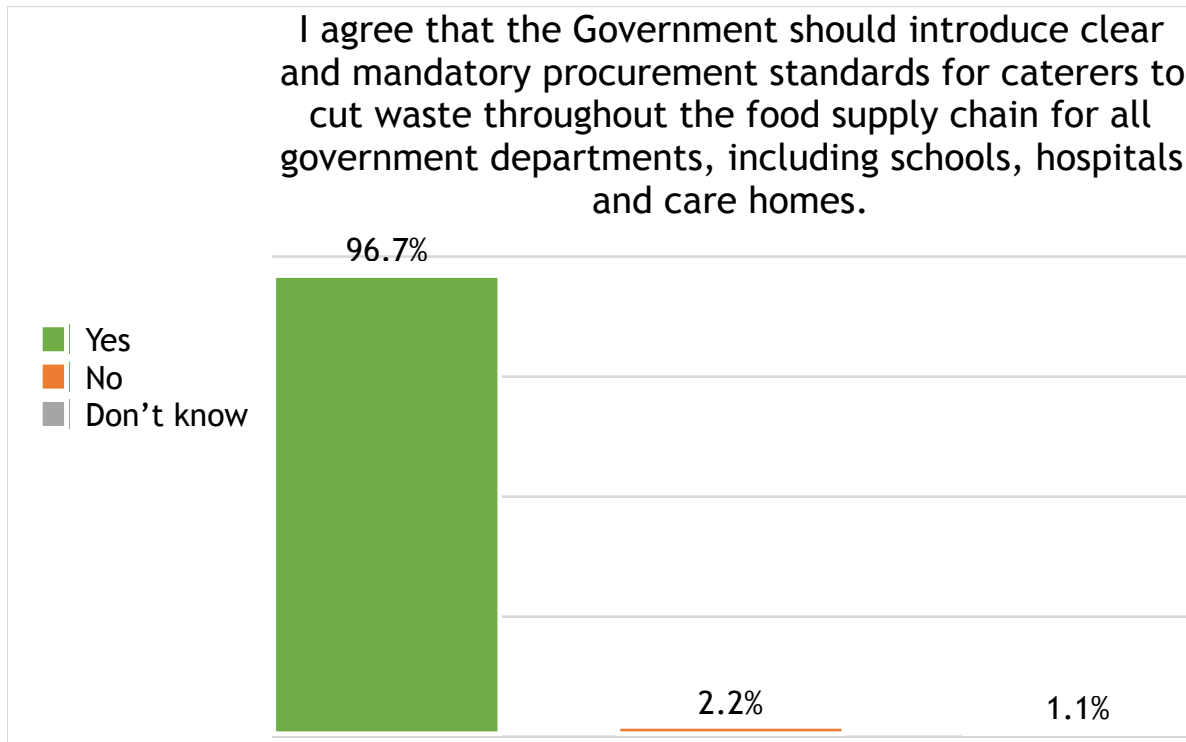
3 Policy Asks of Government to:

Make food and farming central to delivering the Paris Climate Agreement.

Promote healthy & sustainable eating patterns – in our health and education systems

Introduce clear and mandatory procurement standards for caterers to ensure that meals paid for by taxpayers in schools, hospitals, prisons, care homes and all government departments are healthy & sustainable.

Voting results



The public are very aware of the issue of food waste. It is one of the WI Resolutions this year, Jamie Oliver has mounted a TV campaign against food waste, and the East of England Co-op shops have introduced a scheme where dried and tinned goods are being sold for 10p for a month after their best before date. In the context of many households making real efforts to avoid wasting food themselves, it was not surprising that this audience was almost unanimous in expecting the Government to ensure that the caterers they employ are also very careful to minimise food waste.

What is 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. We bring together environmental, public health, animal welfare, international development, research and professional bodies.

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. Eating Better supports farmers who produce meat and dairy in a sustainable way. Moderating our dairy and meat consumption – whether red, white or processed meats – while also choosing ‘better’ meat and dairy that is naturally fed, has a known provenance and is produced to high animal welfare, environmental and quality standards can help support farmers livelihoods without being more expensive for the public.

Useful references:

Eating Better Policy Briefing 2016: https://www.eating-better.org/uploads/Documents/EB_policy-briefing_2016.pdf

Global Food Security Programme: Paris Compliant Healthy Food Systems

Food Climate Research Network <http://www.foodsource.org.uk/>

see Food Systems and greenhouse gas emissions: <http://www.foodsource.org.uk/chapters/3-food-systems-greenhouse-gas-emissions>

Chatham House: Changing Climate, Changing Diets: Pathways to Lower Meat Consumption
<https://www.chathamhouse.org/publication/changing-climate-changing-diet>

Summary

The Clean Growth Strategy as it stands acknowledges that it falls short of meeting our Paris Climate Change agreement, but there are policies, discussed at this meeting, which could be added which would be relatively easy to implement and popular with the electorate. The audience at this meeting voted overwhelmingly for the following policies which, if implemented, would fully enable the Government to meet its Climate Change commitments.

97% want the Government to introduce clear, mandatory procurement standards to cut waste in taxpayer funded kitchens. *The climate change objectives of more vegetables with less meat and dairy fits exactly with government advice for a healthier diet, making people healthier and saving NHS money.*

96% want more regulation to make HGVs more efficient

92% think we should be able to buy cheap, clean power direct from local generators. *This policy would cut household fuel bills and benefit entrepreneurs. Only the big energy companies would lose. It is hard for the electorate to understand why this is not a government priority*

85% say the Carbon Tax should be extended and increased into the next decade

85% want to see better insulated homes, with 47% prioritising retrofit and 38% more efficient new build eg passive house standard. Only 4% voted for an energy price cap. *There are health benefits to properly insulating older homes, with consequent savings for the NHS. With the current massive housebuilding programme it clearly makes no sense to be building new homes that will soon need to be retrofitted. Zero carbon homes can be cheap to build, retrofit has a much higher cost. This just looks like bad management and weakness in dealing with the construction industry.*

84% say that community wind projects should be treated without prejudice in the planning system. *Fracking is far less popular than onshore wind and yet appears to have far more government support, a clear example of government out of step with the wider population*

84% would be happy to have a community wind farm project within 2 miles of their home. *Early issues with light flicker have now been solved*

80% say there should be no further airport expansion in the south east, including Heathrow and Gatwick, with 45% saying no further expansion throughout the UK

74% say the ban on conventional petrol and diesel cars should be brought forward to 2030

For more information please contact

Jill Bruce

WI Climate Ambassador, Chappel and Wakes Colne WI

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