Background papers for meeting on climate and the environment with Brian Mathew MP.

12.10.24. Ref. BM00420

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Q4. How can you act to ensure the Local Nature Recovery Strategy fulfils its purpose? Kate Nottage, Climate Friendly Bradford on Avon (CFB), Biodiversity/ Environment group lead

The Local Nature Recovery Strategy was enacted, with other legislation under the Environment Act, such as ELMS and SLI, to halt the catastrophic loss of Biodiversity in England. We are among the most nature-depleted countries in the world. Wiltshire and Swindon is No.36 of 48 Areas instructed under the Policy Paper published on 30th June 2023 to set up and enact LNRS. That document states 'For Nature to recover, targeted, coordinated, and collaborative action will be needed'.

At Westminster level the LNRS deserves and requires support but also scrutiny over its application. Too often, biodiversity renewal and increased housing supply are presented as 'either/or'. This does not have to be the case, and is an outmoded approach.

It seems constituencies are finding a perverse outcome of 'Biodiversity Net Gain' in which local communities lose established natural environments when they are destroyed for development but 'replaced' by improved biodiversity elsewhere. This commercial market of trading in biodiversity needs very close examination.

Brian, until May 2025 you will fulfil two roles: both a Wiltshire Councillor and a Westminster MP. You are therefore in a vital position to coordinate the **instructions** of Westminster, delineated in the LNRS with the practicalities and economics of **implementing** the legislation at County level. You are in a position to 'target, coordinate, and enable collaboration' for LNRS to fulfil its purpose and prevent LNRS being an expensive and futile nationwide exercise in 'virtue signalling'.

At present the LNRS for Wiltshire and Swindon is at the mapping stage, and that is the bulk of its task. At this current stage it is rather weak on including our rivers in the mapping - this is a huge omission. Improved river water quality is a Liberal Democrat manifesto commitment. This is not only a matter of preventing water pollution, it is also the preservation of 'blue-green corridors' so vital to our biodiversity. There are two locations in Bradford on Avon which exemplify how LNRS should be used in collaboration with Wiltshire Planning: The Old Golf Course/Town Tip, and Avonleigh Orchards organic farm. Further up river, purposeful collaboration is vital to protect the Avon at the Cooper Tires site in Melksham, and this is also an issue in Chippenham. Wiltshire Council need to be aware of what Westminster, and Nature, require of them. Please help them come together.

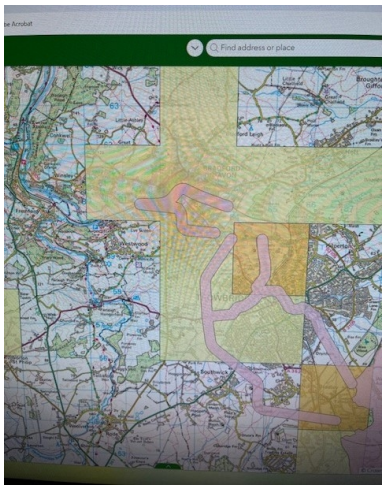
Details of the LNRS for Wiltshire and Swindon can be found on the Wiltshire Council website at

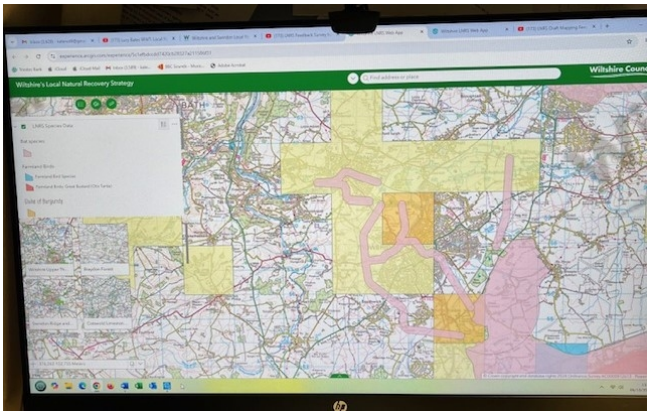
https://www.wiltshire.gov.uk/article/8288/Wiltshire-and-Swindon-Local-Nature-Recovery-

Map of LNRS Areas: (Compare with Liberal Democrat constituencies and talk to your colleagues about their experience of LNRS. Is it working?).
https://assets.publishing.service.gov.uk/media/649db1de45b6a2000c3d45bf/Map_of_local_nature_recovery_strategy_areas_and_responsible_authorities.pdf

Extract of LNRS map for Bradford on Avon: *The pink zones indicate presence of **bats** for conservation. Clearly the Old Golf Course/Tip should not be built on as it is a delicate 'pink' route which needs conservation. Yellow is Arable Land for conservation*

*Please note, '**Nature friendly Farming** is an unmapped priority and will sit under all areas, including those identified for other priorities' says the LNRS website. Wiltshire needs to add Horticulture to LNRS maps.*

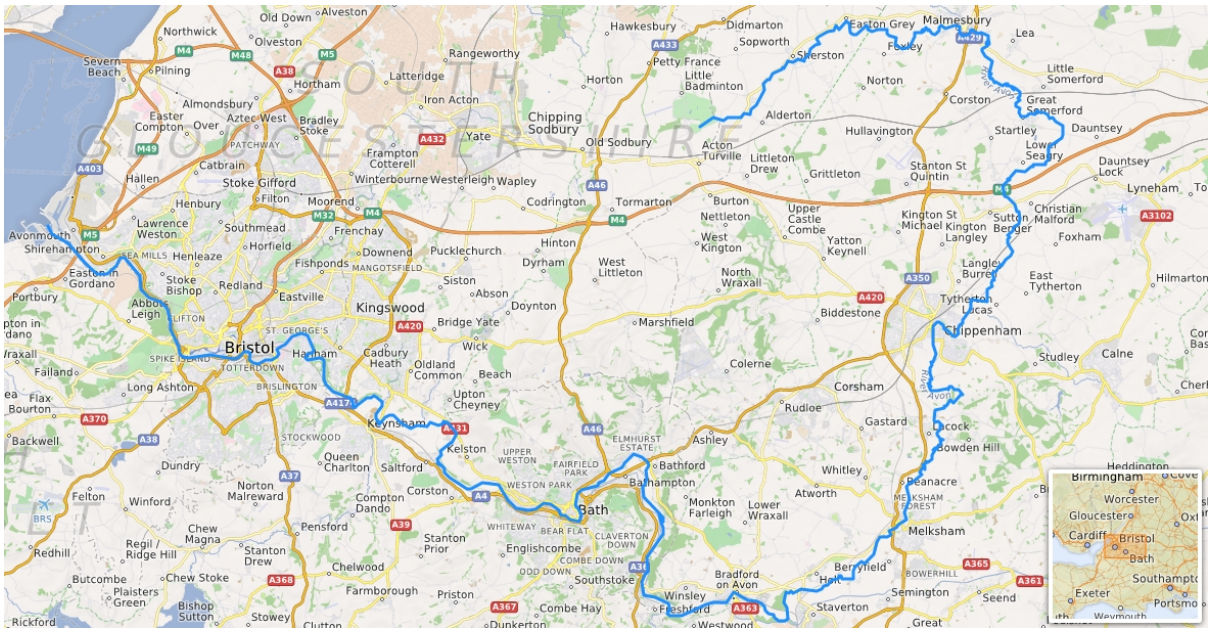




For inspiration: listen to BBC Radio 4 Open Country
https://www.bbc.co.uk/sounds/play/m00237zj

Map of the Bristol Avon river.

Imagine an ‘Alderton to Avonmouth’ corridor of biodiversity !


Bristol
Bath
Kingswood
Chippenham
Melksham
Bradford on Avon
Keynsham
Corsham
Malmesbury
Avonmouth
Shirehampton
Portbury
Long Ashton
Backwell
Yate
Chipping Sodbury
Old Sodbury
Dyrham
Marshfield
Colerne
Rudloe
Biddestone
Tytherton Lucas
Sutton Benger
Kington St Michael
Lacock
Melksham
Berryfield
Semington
Staverton
Winsley
Freshford
Monkton Farleigh
Batheaston
Englishcombe
Southstoke
Combe Hay
Priston
Farmborough
Chelwood
Pensford
Stanton Prior
Stanton Drew
Chew Magna
Chew Stoke
Redhill
Felton
Winford
Dundry
Queen Charlton
Saltford
Keynsham
Kelston
Upton Cheyney
Wick
Bridge Yate
Doynton
Siston
Abson
Oldland Common
Cadbury Heath
Hanham
Fishponds
Downend
Frenchay
Southmead
Henbury
Stoke Gifford
Hallen
Catbrain
Almondsbury
Olveston
Alveston
Old Down
Northwick
Severn Beach
Pilning
Hortham
Latteridge
Rangeworthy
Iron Acton
Frampton Cotterell
Winterbourne
Westerleigh
Wapley
Codrington
Tormarton
Acton Turville
Littleton Drew
Grittleton
Alderton
Horton
Hawkesbury
Didmarton
Sopworth
Petty France
Little Badmington
Easton Grey
Sherston
Norton
Hullavington
Stanton St Quintin
Startley
Lower Seagry
Dauntsey
Dauntsey Lock
Lyneham
Christian Malford
Foxham
Langley Burrell
East Tytherton
Hilmarton
Studley
Calne
Corsham
Gastard
Whitley
Atworth
Beanacre
Bowden Hill
Heddington
Worcester
Gloucester
Cardiff
Exeter
Portsmouth
Weymouth
Seend
Bowerhill
Berryfield
Upper Castle Combe
West Kington
North Wraxall
Yatton Keynell
Burton
Nettleton
West Littleton
Hinton
Pucklechurch
Mangotsfield
Eastville
Redland
Stoke Bishop
Henleaze
Easton-in-Gordano
Horfield
Filton
Moorend
Lawrence Weston
Avonmouth
Shirehampton
Failand
Flax Bourton
Abbots Leigh
Clifton
St George's
Spike Island
Totterdown
Brislington
Stockwood
Upton Cheyney
Elmhurst Estate
Fairfield Park
Weston Park
Upper Weston
Claverton Down
Combe Down
Bear Flat
Whiteway
Odd Down
Ashley
Batheaston
Bathampton
Claverton
Monkton Farleigh
Lower Wraxall
Melksham Forest
Bowerhill
Berryfield
Hilperton
Staverton
Trowbridge
Bradford on Avon
Winsley
Freshford
Westwood
Great Somerford
Little Somerford
Corston
Malmesbury
Lea
Easton Grey
Foxley
Sherston
Norton
Alderton
Hullavington
Startley
Dauntsey
Lyneham
Christian Malford
Foxham
Langley Burrell
East Tytherton
Hilmarton
Tytherton Lucas
Sutton Benger
Kington St Michael
Langley
Lacock
Bowden Hill
Heddington
Studley
Calne
Corsham
Gastard
Whitley
Atworth
Beanacre
Melksham
Melksham Forest
Berryfield
Bowerhill
Semington
Seend
Staverton
Great
Trowbridge
Bradford on Avon
Winsley
Freshford
Westwood
Monkton Farleigh
Lower Wraxall
Batheaston
Bathampton
Claverton
Englishcombe
Southstoke
Combe Hay
Priston
Farmborough
Chelwood
Pensford
Stanton Prior
Stanton Drew
Chew Magna
Chew Stoke
Redhill
Regil / Ridge Hill
Butcombe
Plaisters Green
Bishop Sutton
Stowey
Clutton
Dunkerton
Rickford
Felton
Winford
Dundry
Queen Charlton
Saltford
Keynsham
Kelston
Upton Cheyney
Wick
Bridge Yate
Doynton
Siston
Abson
Oldland Common
Cadbury Heath
Hanham
Fishponds
Downend
Frenchay
Southmead
Henbury
Stoke Gifford
Hallen
Catbrain
Almondsbury
Olveston
Alveston
Old Down
Northwick
Severn Beach
Pilning
Hortham
Latteridge
Rangeworthy
Iron Acton
Frampton Cotterell
Winterbourne
Westerleigh
Wapley
Codrington
Tormarton
Acton Turville
Littleton Drew
Grittleton
Alderton
Horton
Hawkesbury
Didmarton
Sopworth
Petty France
Little Badmington
Easton Grey
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Hilmarton
Studley
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Corsham
Gastard
Whitley
Atworth
Beanacre
Bowden Hill
Heddington
Worcester
Gloucester
Cardiff
Bristol
Bath
Exeter
Portsmouth
Weymouth
Seend
Bowerhill
Berryfield
Melksham
Melksham Forest
Lacock
Rudloe
Biddestone
Tytherton Lucas
Sutton Benger
Kington St Michael
Langley
Yatton Keynell
West Kington
North Wraxall

Q5. **Will you ask the Rt Hon Steve Reed OBE MP to give the Environment Agency more resources to sufficiently monitor water quality and uphold any breaches of water pollution, increasing fines so that they are not part of Q5. 'Business As Usual' Accounting costs? Assuming it will reconvene and given your PhD in Water and Sanitation, will you be joining an All Party Parliamentary Water Group?**

Sarah Kearney, Winsley Parish Council's Climate & Nature Group (lay member).

Our rivers need protection as they help to mitigate against flooding and pollution - they bolster native ecosystems and biodiversity resilience. However, they are in biodiversity decline and much of this is due to sewage outlet overflows.

According to 'WaterShed', we've had several storm overflows from the sewage network in Bradford on Avon, chemical class failures in our ground water at the River Avon and Kennet and Avon Canal.

According to the Rivers Trust, only 15% of English rivers are in good ecological health, no river has a good chemical rating and it has rated the River Avon 'Poor' in its State of Our Rivers 2024 report.

River Action's response to the Environment Audit Committee suggestion that the Water Restoration Fund (£11m) ringfence the fines to help with water pollution, was that since the money paid out in dividends is magnitudes higher (£1.2b), fines equate to 1% of what they give to shareholders. Instead the amount should follow the Environmental Principles Policy Statement updated by Defra in 2023 states on the "Polluter Pays" principle that *"the amount the polluter pays should be proportionate to the wider costs and benefits to society of the activity in question".*

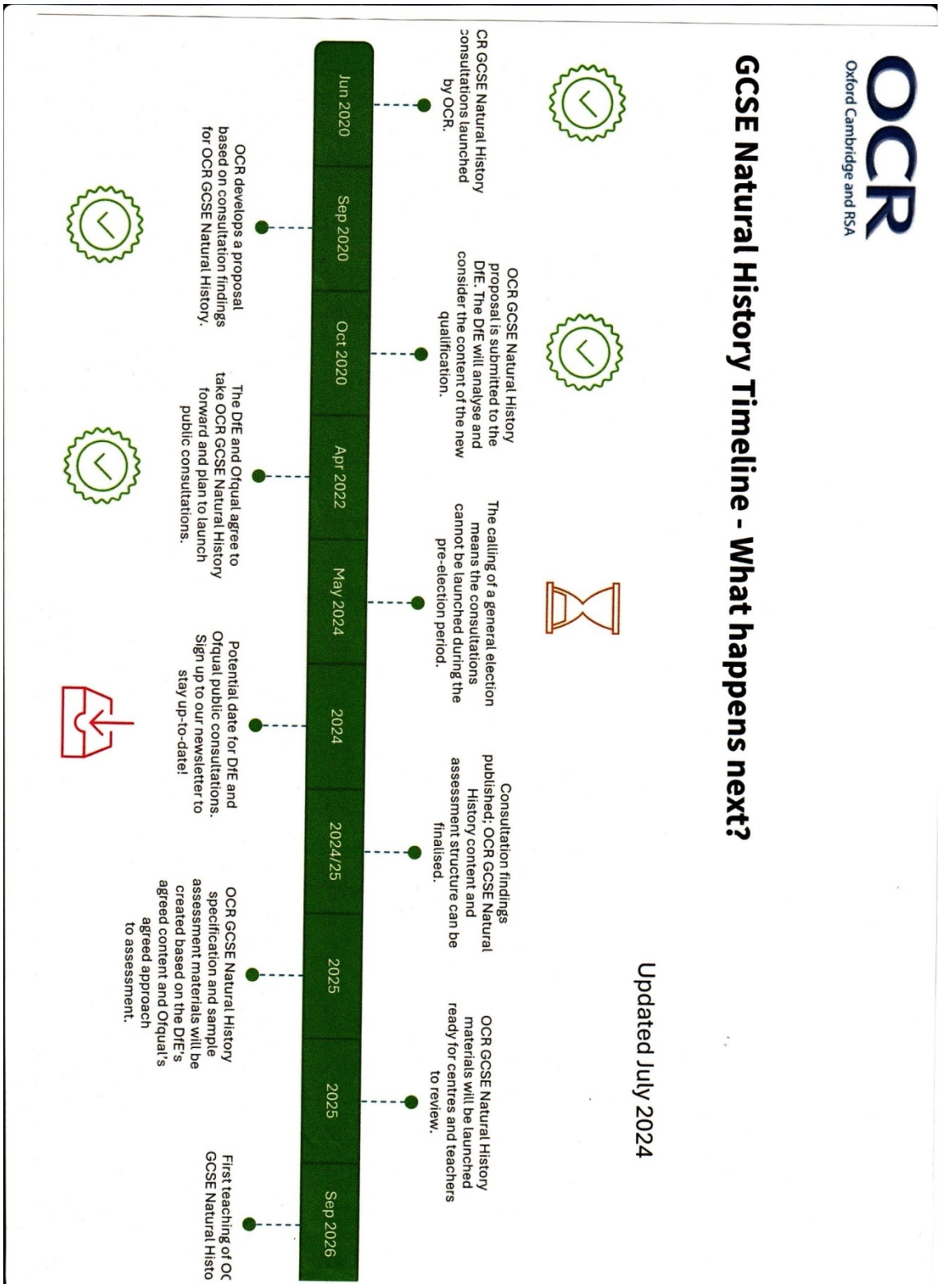
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1. **Rivers Trust -** https://theriverstrust.org/rivers-report-2024
2. **Watershed -** https://watershedinvestigations.com/home/find-out-whats-polluting-your-local-rivers-lakes-and-coast/
3. **River Action** - https://committees.parliament.uk/writtenevidence/130608/pdf/
4. **Environment Principle Policy Statement (Jan '23)** - https://www.gov.uk/government/publications/environmental-principles-policy-statement/environmental-principles-policy-statement

Q8. Can Brian support progress on the Natural History GCSE?

Dorothy Robertson, Wild Colerne and Colerne Parish Council Climate and Biodiversity working group

Proposed timeline



Q.9. **What will you do to ensure the transition to zero carbon housing in our constituency is fit for purpose and not just a half hearted move, that will potentially be led by the major developers?**

Clive Spencer, Wild Colerne and Colerne Parish Council Climate and Biodiversity working group

I have already asked the question, in a full council meeting on the 20th of February this year, whether Wiltshire Council could be proactive in pushing for a high standard to be set in the the new Future Homes Standard, so that it will have a realistic chance of meeting the zero carbon goals that have been set by the government. A number of the national organisations who operate in the field of sustainable construction have voiced concerns over a potential watering down of the suggested targets that the FHS would be aiming for. One such organisation is Bioregional, a sustainability consultancy who works with local authorities. They have already pointed out that just before Christmas, the UK government published it's preferred options for the new FHS, proposing the two weakest recommendations made by the Future Homes Hub's Ready for Zero task force. As you may be aware, the FHH is a not for profit organisation run by the 40 larger developers in the country, chaired by a chief executive of Barrett Homes.

Scotland has already passed legislation that will be introduced in December of this year, that requires new homes to be built to a Passivhaus equivalent standard, which equates to the highest option for future homes. Although initially the new standard will be optional, by 2028 it will become mandatory.

As I pointed out in my question to Wiltshire council, they could be on dodgy ground, as their local plan states that 'energy performance in new and existing, residential and non-domestic buildings is maximised.' This would mean that they too should be aiming for the highest Passivhaus option.

My concern is that we will choose an inferior standard, which will be especially bad news, as the new labour government has stated that it intends to increase the number of new homes built annually to 300,000. It has been estimated, that from the time the last low carbon building standard, the code for sustainable homes, was abolished in 2015 and the implementation of the new FHS, the cost of retrofitting the homes built in that period, to be zero carbon compliant, will cost £40 billion. We must not be adding to this onerous task by building more substandard homes.

The FHH website itself makes the statement that: Rather than coming to any firm conclusions, we wanted to work together to provide evidence to the policymakers, asking ourselves, 'What should the Future Homes Standard 2025 look like?' Whist it is important to make the new standard achievable, to me, this sounds like the FHH has the potential to weald a lot of persuasive power and steer the standard in the direction they want, which is backed up by the mostly very mediocre selection of trial homes that are displayed in the Low Carbon Trials section of their website.

My question to the Wiltshire council in February 2023: *The Government's climate change advisor, the Committee on Climate Change, has assessed that all new buildings must be "zero carbon" by 2025. Your 2030 carbon pledge shows Wiltshire Council to be forward thinking and as such, do you feel confident that this requirement for new buildings will be met by the 2025 deadline?*

If not, could Wiltshire Council be proactive and push to adopt the necessary planning policy that would deliver Passivhaus standard buildings, in a similar manner to that adopted by the Scottish Government. This would make the "zero carbon" goal realistically achievable. With each revision of the planning system, planning policy slowly edges towards the Passivhaus standard. Why not fully adopt it as a matter of urgency and prevent the completely unacceptable task of having to retrofit new housing in order to meet this 2025 requirement and ultimately the legally binding emissions target, set by the Climate Change Act, for 2050. The challenge of retrofitting existing housing stock is enormous and we must not be adding to it. The Future Homes Standard may be on the horizon, but why reinvent the wheel when there is already a globally recognised standard, which has been proven over decades, in tens of thousands of buildings.

And the supplementary question:

Quoting from Bioregional sustainability consultancy: "Just before Christmas, the UK government published its preferred options for the new Future Homes Standard, proposing the two weakest recommendations made by the Future Homes Hub's 'Ready for Zero' task force."

Having monitored the energy performance of a Passivhaus myself, over many years, which would approximate the strongest recommendation of the task forces contender specification, I find the governments preference very worrying.

In addition, using the link to the Wiltshire Local Plan, that you included in your response to my original question, you state that: "This Plan will contribute to the UK's legally binding target of net zero carbon by 2050. To achieve this, it is critical that energy performance in new and existing, residential and non-domestic buildings is maximised". This would imply that your preference would be for the strongest performing contender too.

Q.10. **What action will you take to address the economic barriers to retrofitting our homes at scale?**

Amy Starr, chair, CFB Energy Group

The plans for Great British Energy to decarbonise the electricity grid by 2030, need to be accompanied by incentives and support for people to **decarbonise their homes.**

Heat pumps are claimed to be the fastest way of decarbonising a home, by instantly providing an 85% reduction in carbon emissions from heating and hot water. This reduction is more achievable if their installation is accompanied by retrofitting energy efficiency measures, to address the thermal performance of the building fabric.

Barriers to retrofit require lengthy discussion, so the following points relate to key areas that need to be implemented in government policy:

- Interest-free loans for energy efficiency measures
- Removal of VAT on DIY retrofit materials
- Updates to EPC methodology to encourage a switch from gas
- A fairer price for electricity compared to gas

Key Economic Barriers:

1. High upfront costs

Currently there are disincentives to switching to electrified heating, despite the Boiler Upgrade Scheme offering grants to cover part of the cost for Air Source Heat Pumps, for example. Households still need to finance the remainder of the cost, plus the expense of improving the fabric of their homes to make the heat pump run efficiently. In Scotland, homeowners can apply for a combination of grants and interest-free loans to install clean heating systems and energy efficiency measures - why not in England?

New builds are VAT-exempt but people retrofitting their homes themselves pay VAT on energy efficiency measures, such as insulation and replacement doors and windows.

2. EPC ratings are cost-based and favour gas

Despite the government planning to phase out gas boilers, Energy Performance Certificates (EPC) rarely recommend heat pumps.
EPC recommendations are determined by a block in the methodology, which was set when gas was not only cheaper than electricity, but it produced less carbon emissions.

Currently, EPCs only recommend a fuel switch, if this is a switch to gas. For example, for those currently using oil, the recommended will still be to switch to a gas boiler rather than a heat pump. A review of the methodology keeps getting delayed, so action is required now to ensure it is updated to reflect the decarbonisation of the grid.

EPC reform is required to give equal prominence to a home's carbon emissions, energy consumption, and energy cost. Currently, EPC ratings are based on a cost-based metric, calculated by the cost of fuel (for heat, light and water) for each square metre of floor area of the home. This will not help reduce carbon emissions when the cheaper fuel: gas, has higher carbon emissions, and a heat pump can actually lower the EPC rating.

3. The Spark gap

The **high cost of electricity compared to gas**, needs to be addressed to encourage households to make the switch.
In the UK, the electricity and gas price ratio, or 'Spark Gap,' is 3.97, meaning electricity is almost four times as expensive than gas per kilowatt-hour. This is the highest Spark Gap in Europe. The European Heat Pump Association recommends a spark gap of 2. Unsurprisingly, countries with the highest spark gap have the lowest total sales of heat pumps.

The cost of producing electricity is often linked to the price of gas because a lot of our electricity comes from gas-powered plants. Therefore, the gas used to produce the electricity, drives up the price. Additionally, power plants must pay taxes on the pollution they produce, which adds to the cost of the electricity they generate – but this doesn't apply to gas used directly in homes. Extra charges on electricity for environmental and social initiatives are not added to gas bills, which makes electricity even more expensive.

Currently, Standing Charges are set regardless of consumption, which does not provide an incentive to use less, and makes up a larger proportion of the fuel bill for low- consumers of energy.

As the grid decarbonises, policy makers need to be lobbied to consider removing the current charges from electricity bills and changing how electricity prices are set, so they're less tied to gas prices. This should not translate into an increase in gas bills instead, which would exacerbate fuel poverty and penalise those who cannot afford to switch. But the imbalance

Final note

For broader discussion beyond the remit of this meeting is the need for a large enough, skilled needs to be addressed

workforce for the installation of effective fabric improvements and energy efficient technologies, if the barriers discussed here can be reduced for greater uptake.
Further reading:

Why does my EPC not recommend a heat pump? - Elmhurst Energy

New European Heat Pump Market Report highlights need to solve UK's electricity and gas price disparity.

Why we need to close the UK's Spark Gap

Q11. **How can you further support community energy?**

Jane Laurie janeslaurie@gmail.com

Community Energy organisations, such as Bath and West Community Energy, a community benefit society whose area of interest includes Bradford on Avon, have the potential to play a key role in developing public support for renewable energy installations. BWCE currently employs over 20 staff (at least two live in Bradford on Avon), has enabled investment of £20million+ of investment and has a wide ranging portfolio of activities from energy efficiency to solar panels on schools, as well as solar farms. It is supported by local volunteers and organisations, which in turn have benefitted from the BWCE community fund: this has included funding for Bradford on Avon. Minimum investment to become a member is £100, helping to ensure a widespread sense of ownership.

The rise of community energy organisations throughout the UK was supported by the introduction of the Feed In Tariff (FIT), which provided long term security for investment. This was essential for small organisations, many of which were hit hard by the FIT abolition.

In the last Parliament , the Local Electricity Bill would have set a minimum price guarantee for sale of electricity to large supply companies, with a requirement for large energy suppliers to work with local projects. It was supported by 326 MPs at its second reading, including the Lib Dems. Its provisions would help community energy organisations to sell their power to local people, with the potential to bring down prices.

How can best practice in wildlife management of solar farms be promoted, for example by a requirement for all solar farms to provide and implement a wildlife management plan in the National Policy Planning Framework?

Recent research has shown that solar farms can provide a haven for Red and Amber List birds (eg linnets, yellow hammers, skylarks), mammals (eg brown hares) and invertebrates. While all solar farms provide some wildlife benefit, about half of solar farms were actively focused on management for wildlife, including avoiding herbicide use, providing a variety of habitats and seasonal grazing and these were able to make a big difference. See Solar Habitat: Ecological trends on solar farms in the UK. 2023.

The Wiltshire Wildlife Trust, based in Devizes, has been a pioneer in this area, through the establishment of Wiltshire Wildlife Community Energy, which has two solar farms in north Wiltshire.