

Achieving our low-carbon pathway to 2030

Consultation questions

You can respond online at www.gov.wales/consultation.

1. Are you responding as an individual or on behalf of an organisation? If you're responding on behalf of an organisation, please provide the organisation's name.

Individual

Organisation

Name of organisation: Energy Saving Trust

Energy Saving Trust is the UK's leading, impartial sustainable energy organisation. We help tens of thousands of Welsh households each year to change the way they use energy in their homes and in their transport choices. We work with Welsh Government, community groups, local authorities and businesses across the country. Specifically, for Welsh Government we manage:

- Working with British Gas, the Nest fuel poverty programme (EST delivers the householder advice and engagement aspects of the programme).
- The Arbed programme (which we deliver with the Carbon Trust) – the area based energy efficiency and renewable energy programme
- The Welsh Government Energy Service (also delivered with the Carbon Trust) – which supports community and public sector to develop decentralised, low carbon energy.

At UK wide level we provide consumer energy advice, and work with energy suppliers to support the delivery of the ECO energy efficiency programme. On behalf of the Department of Transport and the Office for Low Emissions Vehicles, we deliver extensive support programmes (information and grants) for businesses and local authorities in the transition to electric vehicles.

Our work therefore plays an important part in supporting achievement of Wales's national carbon targets which require the reduction of energy use in buildings and transport, as well as the promotion of community energy. The benefits of our work go beyond carbon saving, supporting the Welsh Government's commitment to deliver policies that promote the wellbeing of future generations. The programmes we manage address fuel poverty, promote cleaner air, and deliver local community development.

As well as our work in Wales, our response is also informed by our experience in delivering programmes on home and community energy and clean transport in other parts of the UK, particularly Scotland. We are the Scottish Government's main delivery partner on home and community energy, managing advice capacity building and financial support programmes. We also manage extensive programmes for Transport Scotland, again providing advice, capacity building and financing.

Our expertise is mainly in the sectors of buildings, community energy, transport, and certain parts of the public sector which link to the aforementioned sectors. Hence, our consultation response will focus on those sectors and the potential actions within them.

2. Do you live in Wales?

Yes

No

We've identified some potential actions to reduce emissions between now and 2030 but want to know how you think we should take these ideas forward and what else could be done. We also want to understand where to focus efforts in the short-term and understand how we might enhance the relationships between sectors to reduce emissions.

When we talk about sectors we mean the emission reduction sectors (such as Transport, Power, Waste, Industry, Agriculture, Land use and Forestry, Buildings and Public sector) and cross-cutting areas (such as Innovation, Skills, Planning, Procurement and wider enabling mechanisms).

3. Overall, to what extent do you agree with the potential actions for reducing emissions set out in this document? (1=completely agree, 5=completely disagree)

1

2

3

4

5

Please explain the reasons for your answer:

The potential actions are a strong starting point for meeting Wales's 2030 decarbonisation targets. However, there are a number of areas in which more detail is required and there are several other potential actions that are not considered within the consultation document. We will go into further detail on these below.

4. Please tell us if you have any ideas for how we should deliver the potential actions for reducing emissions.

Power

Develop and implement Wales' policy position around the extraction and combustion of fossil fuels in power generation

We certainly support the development of a policy position on the extraction and combustion of fossil fuels, as this is a key driver of climate change. We would encourage the Welsh Government to use its new powers over fossil fuel extraction under the Wales Act (2017) to limit the extraction of fossil fuels wherever possible.

Accelerate the deployment of renewable generation whilst encouraging local ownership

We strongly support the development of renewable energy projects and the encouragement of local ownership in such projects. Welsh Government is aiming for 1GW of renewable energy to be locally owned by 2030, and for all renewable energy projects to

have at least an element of public ownership by 2020. We would advocate flexibility in the amount of local ownership in local energy projects, as the optimal level of local involvement may vary from project to project. It is essential that renewable energy projects with local ownership maximise the benefits to the community, both financial and non-financial; however, this must be balanced with the need to attract commercial partners, who may be put off by the complexity of shared ownership projects.

In Scotland, Energy Saving Trust has been involved in the Scottish Government's Local Energy Challenge Fund¹, which aims to support innovative low carbon energy projects that link local energy generation to local energy use, including those that develop energy distribution and storage solutions. Over two phases the fund offers support for feasibility and development and capital funding for the delivery of such projects. A similar scheme in Wales could encourage capital investment in innovative local energy projects and encourage the development of holistic energy systems.

Transport

Develop a charging network that encourages early take-up of electric vehicles (EVs) and explore the merits of other measures, including access to bus lanes and free municipal parking

We support the development of a charging network that encourages uptake of EVs, as an organisation we have worked closely with devolved Scottish Government and Transport Scotland on the development of charging infrastructure, so we have considerable insight and experience which informs our response to this action. What we would like to see from Welsh Government is an ambition to build a charging network that in time covers all of Wales.

The Welsh Government cannot depend on the market to provide the charging infrastructure needed to encourage uptake of EVs across the whole of Wales, and particularly in more rural locations. A wider infrastructure is essential to give those living in and visiting Wales the confidence that their car journeys can be undertaken using EVs without worrying about where they will be able to charge them. In Scotland, the Scottish Government set up ChargePlace Scotland² and, working with EST, funds, co-ordinates and facilitates the deployment of charging infrastructure to enable the deployment of charging infrastructure across Scotland on one network. Transport Scotland began by installing rapid chargepoints at key points on the trunk road network and expanded the network out from there. A similar approach could be adopted in Wales, installing rapid chargepoints along key routes such as the M4 and the A55. It would also be beneficial to work with existing sites such as tourist attractions, hotels, petrol stations, etc. to install chargepoints in these locations as well.

Where possible the Welsh Government and Welsh local authorities should seek to take advantage of funding available from the UK Government for charging infrastructure. For example, the Office of Low Emissions Vehicles has an On Street Residential Parking Scheme³ which provides financial support to local authorities across the UK for the installation of on-street residential chargepoints and which is administered by EST. To date only one Welsh local authority (Cardiff) has applied for support under the scheme.

Charging infrastructure is necessary, but not, on its own, sufficient to encourage the large scale uptake of EVs. Advice identifying the benefits of EV adoption and financial support targeted at both fleet operators and consumers is required to drive EV adoption and the

¹ <https://www.localenergy.scot/funding/local-energy-challenge-fund/>

² <https://chargeplacescotland.org/>

³ <http://www.energysavingtrust.org.uk/transport/street-residential-chargepoint-scheme>

utilisation of new charging infrastructure. Financial support is also important: interest free loans have proved to be a cost-effective mechanism for encouraging EV uptake by businesses⁴ and consumers⁵ in Scotland and evaluation carried out by EST in 2016 indicated that 35% of loan recipients would not have purchased an EV without access to the loan and a further 29% would have purchased an EV but less quickly.

In terms of lower cost measures, free municipal parking can be a useful local incentive, on its own it is unlikely to be a key factor encouraging EV adoption. We are not convinced that access to bus lanes, proposed in the consultation, is the right approach, as we believe the Welsh Government should continue to prioritise public transport use over private car use.

Reduce the carbon footprint of taxis and buses to zero within 10 years to achieve the aim in the Economic Action Plan

We appreciate the strong ambition set out in this proposal. It should also be implemented alongside measures to improve the provision of bus services within Wales and encourage public transport use to magnify the benefits of low-emission buses. In the case of buses, it may be cost effective to retrofit existing vehicles rather than rely on costlier fleet renewal. This is another area in which EST has expertise as we run the Bus Emissions Abatement Retrofit (BEAR) Programme⁶ in Scotland for Transport Scotland, which provides funding for emissions reducing retrofit technologies to bus operators who operate within one of Scotland' proposed low emissions zones; and the Clean Vehicle Retrofit Accreditation Scheme (CVRAS)⁷ for the UK Department for Transport (DfT), a certification scheme for manufacturers of emission abating retrofit technologies to ensure they are LEZ compliant.

We also have experience of supporting the rollout of ultra-low emission taxis funded by OLEV and by Transport Scotland. With this funding we have provided technical support to licencing authorities and taxi and private hire operators and provided funding for both charging infrastructure and EVs in both urban and rural locations across the UK. One of the most frequently encountered barriers to the adoption of EVs as taxis and private hire vehicles is local licencing conditions that inadvertently preclude the use of EVs. For example, a local licencing condition that requires a licenced vehicle have an engine with cylinders with a minimum cubic capacity of 1600 when an EV power train lacks cylinders. Welsh Government should encourage local authorities to change such legislation in order to facilitate a transition to EV taxis and private hire vehicles.

Double the percentage of adults making cycling journeys at least once a week and increase the percentage of people making walking journeys at least once a week by 25% from the 2016 baseline

We strongly support this goal, the provision of advice to consumers about the benefits of active travel and the most effective ways to do it would be helpful.

Provision of interest free loans for pedal assisted e-bikes could encourage uptake of cycling and make longer cycling journeys easier to undertake⁸, research suggests that the health benefits of e-bikes are similar to those of regular bicycles. We've run (on behalf of Transport Scotland) a successful e-bike grant and loan scheme in Scotland.

⁴ <http://www.energysavingtrust.org.uk/scotland/grants-loans/low-carbon-transport-business-loan>

⁵ <http://www.energysavingtrust.org.uk/scotland/grants-loans/electric-vehicle-loan>

⁶ <http://www.energysavingtrust.org.uk/scotland/businesses-organisations/transport/scottish-bus-emissions-abatement-retrofit-programme>

⁷ <http://www.energysavingtrust.org.uk/transport/clean-vehicle-retrofit-accreditation-scheme-cvras>

⁸ <http://www.energysavingtrust.org.uk/scotland/grants-loans/ebike-loan>

Explore the relationship between speed limits and greenhouse gas emissions, with a view to considering environmental factors in speed limit reviews

There is already a well-established link between driving speeds and greenhouse gas emissions, which would extend to a link between speed limits and GHG emissions. Our own research, based on DfT data supports the UKCCC finding, shows that driving at 60mph, rather than 70mph brings fuel savings of 9%. It would also seem that the Welsh Government already accepts that there is a link between speed limits and emissions, given reducing the speed limit on the most polluted trunk roads from 60 to 70mph was a key aspect of their recent NOx reduction strategy. Of more use may be researching the relationship between speed limits and emissions (as well as air quality and accident rates) in urban areas, which may provide an evidence base for local authorities to reduce speed limits from 30 to 20mph where appropriate.

All new cars and light goods vehicles in the Public Sector fleet are ultra-low emission by 2025 and where practicably possible, all heavy goods are ultra-low emission by 2030

We support and encourage the strong ambition set out in this proposal. We would add that introducing ultra-low emission vehicles (ULEVs) such as EVs into transport fleets should be accompanied by the provision of technical support for fleet managers to identify the vehicles readily replicable with ULEVs and training of employees to ensure familiarisation with EVs and support successful adoption. EST provides this support to fleets and drivers in England funded by DfT and in Scotland funded by Transport Scotland.

Buildings

Set higher energy efficiency standards for new builds through reviewing Building Regulations Part L (Conservation of Fuel and Power)

We strongly support higher energy efficiency standards for new builds. We are somewhat concerned that a review of Part L was first proposed in Wales' Energy Efficiency Strategy (2016) two years ago and has still not taken place, this should be conducted as a matter of urgency. We would also strongly recommend that higher energy efficiency standards are similar to the zero carbon homes policy originally planned by the UK government before being scrapped in 2015. Much of the groundwork for how to meet a zero carbon homes standard has already been undertaken, which should limit the disruption caused by adopting an ambitious zero carbon homes standard.

Develop a long-term, evidence-based residential retrofit programme

We are encouraged that the Welsh Government is committing to a long term retrofit programme, it is essential that we bring the existing housing stock up to better energy efficiency standards in order to meet our carbon reduction targets. We welcome the fact that an evidence based approach is being taken. We note that both the UK and Scottish Governments have introduced energy efficiency targets for buildings, for example, the UK government is aiming – where cost-effective - for all rented properties to have an EPC C rating by 2030, and for all properties to reach a C rating by 2035, and wonder if the Welsh Government is planning to introduce similar targets for Wales. Such targets, if well publicised, can send clear signals to homeowners, landlords and industry on the direction of travel.

A key aspect of any energy efficiency programme is the incentivisation of "able-to-pay" households (i.e. those households who can afford to invest their own money in energy efficiency upgrades) so we appreciate Welsh Government investigating ways to do this. We published a white paper on this subject last year, which examined possible

incentivisation methods including council tax and stamp duty rebates, which could be trialled in Wales, and low/zero interest loans and grants for energy efficiency. Home Energy Scotland, which EST manages on behalf of Scottish Government is already making effective use of grants and loans to incentivise homeowners to invest in energy efficiency.

Wales has already taken strong action on improving the energy efficiency of homes on low incomes through schemes such as Nest, though we agree that there is scope to go beyond this. One way of increasing energy efficiency investments in low income households is to increase the amount of ECO funding coming into Wales. Welsh Government should ensure that Wales is maximising ECO investment by supporting local authorities to take advantage of flexible eligibility programmes (where local authorities can recommend eligible households to energy companies). A centralised Welsh support programme to help local authorities to take advantage of ECO could be highly cost-effective in attracting a greater share of UK-wide ECO funds.

On the subject of both evidence based retrofit and maximising ECO funding, we would like to highlight that for a number of years EST has delivered a Home Analytics service to provide address-level data for the targeting of energy efficiency programmes. Home Analytics combines publicly available facts about the home (location, shape, size, and EPC data) and then uses analysis based on multiple other datasets to generate the best possible picture of the home's energy efficiency and socio-demographic characteristics. (These other datasets include the HEED database of energy efficiency installations that took place under previous supplier obligation programmes which EST developed and maintained on behalf of government.) In England and Wales EST sells Home Analytics data to private companies, such as energy suppliers working on ECO; local authorities and housing associations. It has also been used by Welsh government schemes such as Nest and Arbed.

The Scottish Government funds EST to provide Home Analytics services to local authorities around Scotland to assist them in targeting energy efficiency programmes, included those funded through ECO. We believe this could be readily adapted to Wales.

Scope out the challenges and opportunities around low-carbon heat

Decarbonising the heating sector presents a considerable challenge. The key barriers to low-carbon heating are cost, awareness, confidence in the technology, the ability of installers to install it, and lack of a long term direction of travel on the part of governments.

In the short term one of the key interventions that could be undertaken to support low-carbon heat is promotion of energy efficiency measures, these will reduce heat demand (and thus carbon emissions) as well as preparing homes for the installation of low-carbon heating systems that perform better in homes with high thermal retention (such as heat pumps).

In order to drive a transition to low carbon heat, a long term regulatory vision will need to be set out by the UK Government, and Welsh Government should work with the UK Government on the development of this. However, there are some regulatory steps Wales can take on its own, such as using the review of Part L of the Building Regulations to consider preventing the installation of fossil fuel heating in new build homes. The Welsh Government could also announce its intention to use the Building Regulations to prevent the installation or replacement of fossil fuel boilers in existing buildings after a certain date, in order to decarbonise heating in the long term. Such a policy could incentivise households and industry to develop and invest in low-carbon heating options.

The Welsh government should also aim to provide advice and support (which may consist of financial incentives) to encourage switching to low-carbon heating options in the short to medium term.

Welsh Government can also support local communities which are developing communal low-carbon heating options, such as heat networks, and could encourage the linking of such schemes to local renewable energy projects.

5. What other ideas do you have for reducing emissions between now and 2030?

Power

In addition to the proposed actions on renewable energy generation it could be beneficial to have a programme to encourage the development of local energy “Hubs” which would link up domestic/local renewable energy with low carbon heat solutions, demand side response projects and electric vehicle/vehicle-to-grid projects to encourage a cross sectoral and holistic approach to low-carbon energy and transport development.

Transport

Whilst the proposed actions include measures to reduce emissions from buses, we would also like to see proposals for encouraging increased public transport use in Wales, which would contribute not only to reducing transport emissions but also assist in reducing congestion in urban areas and help make existing services more financially sustainable.

Support for fleet operators in the public and private sector to reduce their fleet emissions and introduce EVs would also be beneficial, through provision of advice on fuel efficient driving and the most cost effective ways to introduce ULEVs into their fleets. This should be undertaken alongside training for employees on the benefits of ULEVs, in order to support ULEV uptake.

In addition to this, more advice and incentives to encourage ULEV uptake amongst consumers in Wales would provide the Welsh Government with the best possible chance of realising its targets of ULEV uptake.

6. Considering the opportunities and challenges in each sector, what are your views on whether action should be prioritised in some sectors over others?

Given that the decarbonisation of both transport and heating will rely to at least some extent on electrification, it will be essential to decarbonise the power generation sector in order to then achieve carbon reductions in other sectors. The transport sector is one where emissions have flatlined for several years, and where Wales is behind other parts of the UK in terms of the development of the electric vehicle market and associated infrastructure, so this could also be a priority.

7. How could we encourage more collaboration and innovation between sectors?

We have touched on this in some of our responses to previous questions. But some further options would be to work with Network Rail and rail providers to explore opportunities power electric rail in Wales through community renewables, as well as looking for opportunities to create local energy hubs with co-located EV charging infrastructure, community renewables and energy storage, potentially with links to heat networks as well.

Through our actions to reduce emissions, we want to maximise the wider benefits and minimise adverse effects for the people of Wales, both now and in the future.

When we talk about potential actions we mean the ideas in this document and any other ideas you have mentioned in Question 3.

8. How do you think the potential actions to reduce emissions might affect you or the organisation you work for?

If the potential actions lead to increased demand for advice engagement and support actions, we would hope that EST, as the leading impartial sustainable energy organisation operating across the UK, will play a part in delivering those alongside Welsh government.

9. How do you think the potential actions to reduce emissions might affect the following?

- Public health
 - Measures to reduce emissions from transport, especially in urban areas could bring benefits in terms of reduced respiratory problems resulting from transport emissions.
 - Measures to improve energy efficiency could bring benefits by reducing the number of health complaints that result from living in cold homes or homes with damp and mould.
- Communities
 - Local energy projects can bring benefits through communities, potentially improving community finances as well as providing jobs and education opportunities.
- The Welsh language
 - No comment
- Equality
 - Development of community renewables can help equality by bringing the benefits mentioned above to disadvantaged communities who receive support for local energy projects.

- Continuing to support energy efficiency schemes in low income households will help equality by reducing the number of households in fuel poverty.
- Children's rights
 - No comment

10. How do you think the potential actions to reduce emissions might contribute to achieving the national well-being goals? You can read descriptions of the goals at <https://futuregenerations.wales/about-us/future-generations-act>.

Any measures to tackle climate change and reduce our carbon emissions in line with international obligations will contribute to creating a **globally responsible Wales** and a more **resilient Wales**. Some of the benefits mentioned in section 9 show how the proposed actions can contribute to creating a **healthier and more equal Wales**. The development of local energy projects and improved public transport links can help develop **cohesive communities**, as well as bringing **prosperity**. Reducing the amount that households spend on fuel bills through energy efficiency and local energy projects can also help create a **prosperous Wales**.

11. Do you have any other comments about this consultation?