

Energy Saving Trust's response to the Senedd Finance Committee's call for evidence in regard to the Welsh Government Draft Budget proposals for 2021-22

We have chosen to respond to question 6 of the budget proposal call for evidence and in particular to the sub questions related to the role of climate alleviation and 'building back better'. Welsh Government investment between now and the end of the 2021-22 budget period will be essential to address both the impacts of COVID-19 and make the necessary progress towards Welsh decarbonisation. The available evidence strongly suggests that investing in 'green' projects and programmes will return sizeable dividends, far above those which could be achieved through traditional stimulus programmes¹. This was the case after the 2008 recession and the factors in play a decade ago have only been exacerbated in the interim. It is false to claim that economic recovery and investment in climate change alleviation and energy transitions is a zero-sum game where one or other must be decided upon.

We firmly believe that Wales is well placed to capitalise on a number of green recovery opportunities over the next 18 months and beyond that will address both the economic fallout of Covid-19 and the climate crisis in a manner that is socially just and which aligns with the well-being goals in the Well-Being of Future Generations Act. We will touch on some of these opportunities below, in particular related to: home energy and retrofit, low carbon transport, and renewables.

Home energy

A recent IPPR report² into the potential of a green recovery highlighted that in Wales expanding home energy efficiency retrofits as well as renewable heat installations (heat pumps and heat networks) could offer significant job creation potential.

¹ <https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf>

² <https://www.ippr.org/files/2020-07/transforming-the-economy-after-covid19-july2020.pdf>

Document Number:		Revision:	Version 6	Page 0 of 9
Uncontrolled document if copied or printed.				

Recent analysis by Frontier Economics³ has suggested that, across the UK, 100,000 jobs could be created through the retrofitting of the housing stock to EPC ‘C’, while other recent estimates have put the figure at over 220,000 jobs⁴. Given that Wales has some of the poorest housing in Western Europe⁵, having the lowest percentage of dwellings in EPC Band ‘C’ or above of any of the UK nations (28%)⁶, and a significant proportion of ‘hard-to-treat’ homes we believe the potential for job creation in the energy efficient retrofit and renewable heat sectors in Wales could be significant.

Virtually all of the available economic models calculate the potential for new jobs at the UK level. This can make it challenging to understand the particular context in Wales and the opportunity that may exist. We can however offer a rough proxy calculation of the number of jobs that could be created in Wales by undertaking a widespread policy of retrofit by considering the proportion of Welsh homes that are below EPC Band ‘C’ relative to the UK total. For example, it has been estimated that there are approximately 12 million UK homes below EPC Band ‘C’, of which approximately 1.12 million are in Wales^{7, 8}. Therefore, we can assume that 9.33% of new UK-wide jobs in this sector might be located in Wales. There are of course several caveats to consider, including how effective a proxy this is in regards to renewable heat installations, the makeup of the housing stock, the fact that homes will ultimately need to be retrofitted to above EPC ‘C’ to achieve net zero etc. But as a rough approximation this 9.33% figure could correlate to 9,330 jobs if we consider the Frontier Economics figure or more than 20,500 new jobs if we take the Parity Projects estimate. In July of this year EST analysed the green recovery and job creation potential of energy efficiency retrofit out to 2030 arriving at the figure of 161,000 jobs across the UK⁹. Taking the 9.33% figure this would equate to over 15,000 Welsh jobs. Given the caveats mentioned above these figures act merely

³ <https://www.theeig.co.uk/media/1026/fe-energy-efficiency-final-clean-250917.pdf>

⁴ <https://parityprojects.com/net-zero-housing-workforce/>

⁵ <https://www.taado.com/t/en/uk-homes-losing-heat-up-to-three-times-faster-than-european-neighbours/>

⁶ <https://gov.wales/sites/default/files/statistics-and-research/2019-10/welsh-housing-conditions-survey-energy-efficiency-dwellings-april-2017-march-2018-795.pdf>

⁷ <https://stats.wales.gov.wales/Catalogue/Housing/Dwelling-Stock-Estimates/dwellingsstockestimates-by-localauthority-tenure>

⁸ <https://gov.wales/sites/default/files/statistics-and-research/2019-10/welsh-housing-conditions-survey-energy-efficiency-dwellings-april-2017-march-2018-795.pdf>

⁹ <https://energysavingtrust.org.uk/about-us/news/home-energy-efficiency-should-be-central-covid-recovery-package>

Document Number:		Revision:	Version 6	Page 1 of 9
Uncontrolled document if copied or printed.				

as a rough guide but the likelihood is that they are an underestimate, particularly over the longer term and when we consider that reaching net zero will require the vast majority of existing and new Welsh homes to go beyond EPC ‘C’.

What will be essential for the success of a Welsh approach to home retrofit is the need for long term policy signals to give more certainty to a SME supply chain left struggling after previous policy changes (e.g. FiT). A Welsh retrofit scheme has the potential create tens of thousands of good quality jobs across the country but to make a success of any future programme the timescale must be made as long as possible, with consideration given to how easy it will be for installers and suppliers to participate. Our experience has been that existing tradespeople have an appetite to diversify into more low- and zero-carbon technologies and approaches – but they need certainty to invest. Further certainty could be provided by the setting of a 2030 target for heat pump installations that aligns with the Climate Change Committee assessment of what is required to reach Welsh climate targets.

We are seeing a slower than hoped for uptake of the Green Homes Grant (GHG) by installers in England, in part because for SMEs there is no upfront Working Capital Finance. For an SME relying on the delivery of a GHG voucher perhaps many months after installation, with limited cash reserves, and no bank or government funding available to cover initial purchase or labour costs the risks of participating in such a scheme may be too high. A Welsh approach to retrofitting private homes should seek to learn lessons from our neighbours as well as from the excellent approach taken to the consultation on and creation of the Optimised Retrofit Programme for social housing.

Energy efficiency retrofit and the rollout of renewable heat is particularly beneficial due to being geographically dispersed, ‘shovel-ready’, reliant on pre-existing knowledge and skills in Wales resulting from current Welsh Government policy (i.e. Warm Homes Programme and Welsh Housing Quality Standard), labour intensive, and would primarily support Welsh traders and SMEs. The significant co-benefits that would arise in terms of improved public health, the alleviation of fuel poverty, and the comfort and well-being of the people of Wales are also vital considerations.

Document Number:		Revision:	Version 6	Page 2 of 9
Uncontrolled document if copied or printed.				

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Transport

We have welcomed the publication of the Llwybr Newydd - Welsh Government's new Wales Transport Strategy and look forward to responding to it and to the further detailed proposals which are due to follow. A recent IPPR report¹⁰ into the potential of a green recovery highlighted that in Wales various forms of low carbon transport projects appeared particularly promising ventures for achieving a job-focused green recovery.

We especially look forward to hearing the Welsh Government's plans regarding EVs, charging infrastructure, and vehicle fleets.

In Wales, 80% of commutes are made by car, the highest proportion in Great Britain, while the majority of trips in Wales are short, illustrating that significant opportunities exist to rebalance this situation and accelerate the transition towards zero carbon transport¹¹. In the first instance, better provision of services (including 'work hubs' for remote working) close to people's homes and situated within their communities would reduce the number of trips that would need to be taken by car when offices reopen. Encouraging these "15 or 20 minutes neighbourhoods" has several co-benefits including the regeneration of towns and suburbs, improvements in physical and mental health as a result of more active travel, and more cohesive communities. Coupled with this, the Welsh Government should build on the positive steps already underway and enhance active travel infrastructure provision so that choosing to walk or cycle is safe and easy, becoming the natural choice. To ensure the benefits of infrastructure are realised, numerous projects¹²

¹⁰ <https://www.ippr.org/files/2020-07/transforming-the-economy-after-covid19-july2020.pdf>

¹¹ <https://gov.wales/sites/default/files/consultations/2020-11/supporting-information-transport-data-and-trends.pdf>

¹² For just one example among many, Sustrans' Introductory Guide for low traffic neighbourhood design emphasises community engagement <https://www.sustrans.org.uk/for-professionals/infrastructure/an-introductory-guide-to-low-traffic-neighbourhood-design/>

Document Number:		Revision:	Version 6	Page 3 of 9
Uncontrolled document if copied or printed.				

have demonstrated that it is vital to invest in community and workplace engagement and training to shift habits, grow awareness of local routes and build confidence in cycling.

For those longer journeys that cannot practically be taken using active travel options, effective and low-carbon public transport must become the priority. While Covid-19 has dented the perception of public transport and the public's willingness to use it, these challenges can be overcome with the right investment and assurances of safety, especially in the context of an effective vaccination programme. Given that so many journeys are taken by car in Wales and, at present, our public transport network is unable to serve everyone, battery electric vehicles will be a crucial piece of the low carbon transport puzzle in Wales. This is particularly true of rural areas where there is high car dependency to ensure there is a fair transition for all.

The news earlier this year, that the UK's first battery gigafactory would be situated in Wales was very welcome and illustrates what Welsh industry and its skilled workforce can offer to international and domestic green investors.

These first wins must be built on with seed funding for R&D and proactive efforts to incentivise EV uptake and install infrastructure at the pace required to reach decarbonisation targets.

Community electric car clubs could help fill a gap underserved by public transport, help to reduce private car ownership and enable access to EVs for those unable to afford the higher upfront purchase costs.¹³ Energy Saving Trust has supported several projects in Wales¹⁴.

Investment in reliable, affordable, convenient public charging infrastructure underpins the transition to electric vehicles. Progress is being made in Wales – it has 1,177 chargepoints, 3% of the UK's total¹⁵, but there is a long way to achieve an effective network. Charging infrastructure is one of the net-zero aligned opportunities for job

¹³ <https://como.org.uk/shared-mobility/shared-cars/why/>

¹⁴ <https://energysavingtrust.org.uk/grants-and-loans/street-residential-chargepoint-scheme/>

¹⁵ <https://www.zap-map.com/statistics/#points>

Document Number:		Revision:	Version 6	Page 4 of 9
Uncontrolled document if copied or printed.				

creation and the recovery from Covid-19 identified by LSE researchers¹⁶ and by the TUC.
17

The private sector has an important role but government investment is needed to ensure an equitable distribution of chargepoints and to serve particular user groups, such as rural villages or residents without off-street parking unable to install their own home chargepoint. Targeted grant funding, for example to fund grid connection costs and tailored, impartial support for local authorities to enable them to deliver installation projects and share knowledge would have impact. Similar schemes have been successful in England and Scotland. Such infrastructure schemes can generate jobs throughout the supply chain and by their very nature, can be geographically spread, allowing Wales to build back better while addressing the climate crisis.

Fleets and businesses are a major purchaser of new vehicles across the UK, for example, accounting for over 50% of car registrations in 2020 YTD¹⁸. The significantly lower running costs of EVs (about a third of a comparable diesel or petrol vehicle, depending on various assumptions) can make electric vehicles an excellent financial choice for many organisations. Efforts to bolster the knowledge and confidence of Welsh businesses and local authority fleet managers in EVs can deliver a step change in EV uptake. Through our experience delivering an extensive fleet support programmes over several decades, we've seen the clear benefits of tailored, impartial advice for fleet managers to give them the confidence and business case they need to switch vehicles to electric, often in significant numbers. Additionally, fleet EV uptake grows the visibility and familiarity of electric vehicles among employees and the wider public, and due to the higher turnover of fleet vehicles, fleet sales drive the second-hand market, improving the affordability of EVs for private buyers. Welsh Government, NHS and local authority fleets should also demonstrate leadership in the transition, leading by example. Investment in engaging closely with Welsh fleet managers could therefore deliver results quickly, while triggering a cascade of benefits.

¹⁶ <http://cep.lse.ac.uk/pubs/download/cepcovid-19-010.pdf>

¹⁷ https://www.tuc.org.uk/sites/default/files/TUC%20Jobs%20Recovery%20Plan_2020-06-17_proofed.pdf

¹⁸ <https://www.smmr.co.uk/vehicle-data/car-registrations/>

Document Number:		Revision:	Version 6	Page 5 of 9
Uncontrolled document if copied or printed.				

Renewables

The most recent Welsh Government statistics on energy generation in Wales suggest that we are already generating 51% of our electricity from renewable sources¹⁹. This is likely to now be significantly higher as a result of the early closure of the Aberthaw coal-fired power plant which had accounted for 14% of emissions and 51% of power sector emissions in 2015²⁰. Wales is also a net exporter of electricity to the rest of the UK generating twice as much electricity as we use domestically. The Welsh Government's current target for renewable generation is 70% by 2030. This broadly aligns with the Committee on Climate Change 'Max Scenario'. We believe that this could be surpassed if Welsh Government shows ambition in this area²¹, especially as a recent Welsh Government report found that "an additional 2 GW of offshore wind power could be delivered by just 2-3 projects in Wales, if site extensions and new site leases can be secured in Welsh waters and grid connected in Wales. Taking total offshore wind capacity to 2.8 GW could meet nearly all (68%) of Wales' 70% renewable energy target by 2030"²².

Whilst obviously having a significant impact on our carbon emissions, investment in renewable technologies in Wales could create thousands of jobs and could position Wales as a first mover in a number of emerging fields such as battery technology, ocean energy, floating wind, demand side response and flexibility markets, and new community energy business models.

A central plank of 'building back better' must be that the energy transition (and wider transition to a net-zero society) is just, ensuring that all of the people of Wales are brought along and benefit from the tremendous opportunities such a transition offers. Communities must not feel that the transition is something that is being done to them but is something that involves them and that they have bought into. The Welsh Government recognised this in their recently launched 'Local Ownership of Energy Generation' (LOEG)

¹⁹ <https://gov.wales/sites/default/files/publications/2020-11/energy-generation-in-wales-2019.pdf>

²⁰ <https://www.theccc.org.uk/wp-content/uploads/2017/12/CCC-Building-a-low-carbon-economy-in-Wales-Setting-Welsh-climate-targets.pdf>

²¹ https://www.iwa.wales/wp-content/media/2019/03/IWA_Energy_WP6_Digital-2.pdf

²² <https://gov.wales/sites/default/files/publications/2019-07/future-potential-for-offshore-wind.pdf>

Document Number:		Revision:	Version 6	Page 6 of 9
Uncontrolled document if copied or printed.				

policy statement²³ which sets out the Government's expectation that all future energy projects should include an element of community ownership and has a target for 1GW of renewable electricity and heat to be in local ownership by 2030 – a target which it is well on course to meet. Local ownership of, and benefit from, energy resources whether through shared ownership, a community energy model, or through community benefit funds has proven itself to be an effective means of engaging communities in the energy transition, achieving better public acceptance, and creating local jobs and economic development. Communities need experienced, impartial support to benefit as much as possible from the green energy transition. They need assistance to strengthen their capacity and capabilities as well as trusted sources of guidance for more technical issues and considerations. The Welsh Government Energy Service provides this support and must be allowed to continue so that communities do not lose out and the promising opportunities for Wales are not lost. As we build back better the support offered through the Welsh Government Energy Service should be maintained and enhanced.

An effective approach to encouraging the community or local renewable energy sector could be the adoption of Power Purchase Agreements (PPAs) between these groups and the public sector as part of an explicit Welsh Government policy. While there can be challenges on a building by building basis, Welsh Government could set a strategic priority to develop a standardised approach, creating template agreements which are still customisable to reflect the complexities of individual buildings and sites. This approach is already being deployed by Egni Coop with Welsh Government Energy Service support, a Welsh Government commitment to such a programme would be a matter of scaling up an existing model.

This prioritisation of PPAs would work to increase renewable energy deployment on public sector properties (helping to meet decarbonisation and Local Ownership of Energy Generation targets) while normalising the process through greater standardisation and likely saving the public sector money through reduced energy costs. It could offer the opportunity to provide leadership to public sector contractors (e.g. rail companies²⁴) and the wider private sector as well as to the rest of the UK and Europe²⁵. Due to the

²³ <https://gov.wales/sites/default/files/publications/2020-02/policy-statement-local-ownership-of-energy-generation-in-wales.pdf>

²⁴ <https://www.ridingsunbeams.org/ourwork/greenvallylines>

²⁵ <https://www.euheroes.eu/wp-content/uploads/2020/09/Project-Findings-1.pdf>

Document Number:		Revision:	Version 6	Page 7 of 9
Uncontrolled document if copied or printed.				

requirement for community ownership the benefits of decarbonising the public sector would be distributed more widely. This could be an opportunity to build on the ground-breaking work already being delivered through the Welsh Government Energy Service.

Wales is well-placed to benefit from the next, green, industrial revolution with more of the benefits retained in Wales than in the previous, coal-based industrial revolution. We have a nation abundant in natural resources such as wind, waves, and the tides as well as world-leading academic institutions and private sector firms poised to capitalise on them for the benefit of the Welsh people and the world. As we recover from the economic and public health crises we should keep the climate crisis at the forefront of our minds and remember that investing in warm homes, clean transport, and green energy is good for the economy and society as well as for the climate.

Document Number:		Revision:	Version 6	Page 8 of 9
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