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Llywodraeth Cymru  
Welsh Government

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Llyr Gruffydd MS  
Chair of Climate Change, Environment & Infrastructure  
Committee Senedd Cymru  
Cardiff Bay  
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11 November 2021

Dear Llyr,

I am writing in advance of my attendance at the Climate Change, Environment and Infrastructure Committee in relation to the Net Zero Wales Plan, published on 28 October 2021.

The Net Zero Wales Plan is our second statutory decarbonisation plan. Building on Prosperity for All: A Low Carbon Wales (2019), it is our first plan to be published since accepting advice from the Climate Change Committee (CCC) in December 2020, which for the first time, articulated an achievable and affordable route to net zero emissions in Wales. The Net Zero Wales Plan focuses on our second carbon budget (2021-2025), but looks beyond to start building the foundations for Carbon Budget 3 and our 2030 target, as well as net zero by 2050.

In March 2021, the Senedd passed a suite of regulations to increase Wales' decadal emissions targets from those set in 2018 and to set Carbon Budgets 2 and 3 in line with them. The targets and budgets set in law followed the CCC's recommendations:

- Carbon Budget 2 (2021-25): 37% average reduction with a 0% offset limit<sup>1</sup>.
- Carbon Budget 3 (2026-30): 58% average reduction<sup>2</sup>.
- 2030: 63% reduction.
- 2040: 89% reduction.
- 2050: at least 100% reduction (net zero).

<sup>1</sup> The CCC's recommendation for CB2 was a 37% average reduction in law with a commitment to outperform it. This is the minimum required to meet the CCC's Balanced Pathway. The Senedd has legislated for a 0% offset limit for Carbon Budget 2. This means that all emissions reductions between 2021-25 must take place in Wales.

<sup>2</sup> There is no statutory deadline for setting each offset limit. We will set the CB3 offset limit no later than 2025.

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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

The CCC concluded this pathway is consistent with global pathways to meet the Paris Agreement 1.5°C goal.<sup>3</sup> However, despite being more ambitious, there is still a very significant degree of risk. We will continue to see the impact of rising temperatures, intense weather events and extreme pressures on the natural environment for decades to come.

The Plan focuses on the need to “outperform” the second carbon budget of 37% average reduction in emissions, in line with the CCC’s recommendation. This is because the third carbon budget (2026-2030) requires an average reduction of 58%, reflecting the huge step change we need to make here and now if our actions are to have time to take effect.

Therefore, whilst this plan focuses upon the Carbon Budget 2, it also seeks to lay the groundwork for emission reduction we will see in future years. For example, we want to see rapid reductions in emissions from housing, but we must build upon existing efforts and appropriately test our approach – local area energy planning, technology trialling, supply chain development and so on in the near term.

This Plan has five parts:

- **Part 1 – Setting the context** – the overall vision for Wales in 2025 and beyond to 2050, an overview of the reduction trajectory, the latest emissions data, and a broader view of our consumption emissions and global responsibilities.
- **Part 2 – Setting the conditions** – capturing those actions and policies which do not reduce emissions on their own, but which enable the transition we wish to see.
- **Part 3 – The emissions sector chapters** – setting out the pathways for each emissions sector, describing what is in scope, where the emissions come from, progress to date, our ambition for the future and then details of the policies and proposals together with the all-Wales approach to drive the changes we need.
- **Part 4 – Monitoring and reporting** – setting out our governance structures, performance indicators, financial costings and finally a section on how the Plan was developed in line with the Well-being FG Act and how it will maximise our contribution to the wellbeing goals.
- **Part 5 – Next Steps** – highlighting key engagement and emissions reducing deliverables over this carbon budget, and the timeframe for developing our third delivery Plan to meet Carbon Budget 3.

Alongside the Plan, we also published a Sustainability Appraisal, an All Wales Plan, capturing the actions being taken by business, communities, individuals, the public and third sectors in Wales and also a Net Zero Wales Summary document.

The Plan contains 123 policies and proposals for action. However, there are number of themes outlined below, which I wish to draw your attention to. I believe these themes run through the plan and create a unique approach in Wales to the essential task of achieving the net zero targets.

## The Pathway

The advice of the CCC has been invaluable. The advice considered the two broad levers of innovation and behaviour change to develop four net zero pathways which were then combined to form a ‘balanced pathway’. It is from this balanced pathway the targets agreed by the Senedd are derived. However, despite the CCC doing an excellent job in taking the

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<sup>3</sup> Advice Report: The path to a Net Zero Wales (CCC, 2020), p.9

Welsh context and available evidence in to account in developing their advice to us, in developing the Plan, we have looked at alternative pathways. This may be in areas where we think either we may be able to decarbonise faster, areas where we think there are constraints on meeting the ambition set out by the CCC, or indeed where the evidence may have already changed.

Therefore, in constructing our pathway to 2050 we have further developed our Wales 2050 calculator, building on the work undertaken in preparation for our first statutory decarbonisation plan. The calculator has allowed analysis of different pathways based on different shares of effort across society. This approach is an ongoing process. We will need to develop and refine further evidence to continually inform the strategic pathway to net zero and the policies required to meet our targets. We will continue to develop our calculator to ensure it remains current to policy developments, the emerging evidence and of course the global context (for example taking into account the pandemic, spiking gas prices).

The calculator shows that by meeting the ambition set out in the Plan will see emissions fall by an average 44% against the baseline over the period of Carbon Budget 2. As previously described, we seek to outperform this level of decarbonisation.

## **Engagement**

The Net Zero Wales Plan was required, by the Environment (Wales) Act 2016, to be published before the end of 2021. We very deliberately published the Plan to coincide with COP26, COP Cymru events in every region in Wales and the forthcoming Wales Climate Week series of events. Engagement with the public, businesses and organisations of Wales will be crucial to achieving our ambitions.

Reaching net zero emissions requires everyone to play their part. The emission reduction seen to date has in the main, been achieved in areas where little public engagement was necessary. For example, the changes in the electricity grid have not required the people of Wales to use energy differently. Achieving our net zero targets will require us all to consider and change, the way we live our everyday lives.

Nearly 60% of the abatement in the CCC's scenarios to 2035 involved large numbers of people acting or choosing differently, whether that is adopting new low-carbon technologies (for instance driving an electric car, or installing a heat pump) or choosing to eat lower carbon foods, fly less and choosing products that last longer<sup>4</sup>. Many of these changes can of course bring economic, social and health benefits to Wales.

The scale of the changes required means we need to move to facilitating a society-wide dialogue and education. On the basis engagement with the public in decision-making will provide a stronger basis for behaviour change, we will consult on a Public Behaviour Change Engagement Strategy in 2022, which will set out how we can involve society in the changes individuals and communities can make to help Wales meet net zero.

Prior to this engagement strategy, we are using the opportunity offered by COP26, to engage widely. COP Cymru is a series of events being held in Wales in November, largely coinciding with COP26, which will provide an opportunity for stakeholders and the public to engage in important conversations about climate change.

Commencing on 22 November, Wales Climate Week will be a five-day nationwide conversation on the Net Zero Wales Plan and the collective action needed to ensure Wales meets its targets. Open to all, the programme of virtual events will help people understand

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<sup>4</sup> <https://www.theccc.org.uk/wp-content/uploads/2020/12/Advice-Report-The-path-to-a-Net-Zero-Wales.pdf> Page 145

what Wales has already achieved, the changes we can expect in the next five years and how together, we can shape the future. The week will reflect on important outcomes from COP26 and the contents of the Net Zero Wales plan – and will aim to build a shared sense of direction and unity in achieving our national mission of achieving net zero.

Wales Climate Week 2020 featured 80 speakers over five days, with over 2,000 participants and I hope this year's event will be even more successful.

Registration to events is through the following links:

<https://freshwater.eventscase.com/CY/COPCymru21>

<https://freshwater.eventscase.com/EN/COPCymru21>

I recognise this approach is not in complete harmony with the recently published UK Net Zero Strategy, which places much greater emphasis on technology rather than behavioural changes. I will return to the UK Government role later in this paper.

## **Climate Justice**

A just transition will ensure we leave no-one behind as we move to a cleaner, stronger, fairer Wales. The changes driven by the need to decarbonise our economy will have impacts on industries, sectors of the workforce and socio-economic groups in different ways, depending on the pathways, policies and actions we choose. It could help to resolve existing inequalities, but there is a risk it could also exacerbate them. Over the period covered by this plan we will work closely with our key partners such as employers, the Well-being of Future Generations Office and Wales TUC to develop our evidence base and further improve our understanding of how to achieve a just transition.

Our approach will also be supplemented by further strengthening our internal integrated impact assessment processes, when we develop policy.

In particular we must understand how impacts layer upon each other. For example, rural agricultural communities will see changes to agricultural practices and land use. These communities may have a high proportion of homes which are challenging to decarbonise. People living in these areas, where more dispersed patterns of settlement mean public transport and digital infrastructure are less concentrated, tend to have to travel greater distances for essential purposes than those living in urban areas. The changes we make in agriculture, transport, buildings, the public sector and land use will all affect these communities and need to be integrated and coherent.

## **Collaboration across sectoral and geographical boundaries and interdependence with the UK Government**

As indicated in the approach to climate justice and engagement above, we will not be successful unless we collaborate. This is at the heart of our approach to climate justice and engagement. Internationally we will continue to play an active and leading role in international networks such as Regions 4SD and the Under 2 Coalition. Closer to home, we must significantly improve our collaboration with the UK Government.

The CCC assessed, by 2050, around 60% of the changes needed in Wales are influenced by powers mostly reserved to Westminster. We therefore make a number of calls on the UK Government to take the action needed to unlock a green future in Wales, for example in supporting our industries to transition to clean and sustainable futures. While the UK cannot

reach its targets without Welsh action, we cannot reach our ambition without the UK Government playing its fair part.

Despite this imperative, the UK Government remains distant, opaque and unhelpful in many areas. Despite the Minister of State for Business, Energy and Clean Growth offering to share a draft of their Net Zero Strategy, in July, that commitment was never fulfilled. Instead in the early hours of the publication date, we were sent an embargoed copy. On the same day, a slew of other policy was published, such as the long delayed Heat and Buildings Strategy, little of which has had engagement with Welsh Government or other stakeholders in Wales.

As a consequence, our own Net Zero Wales Plan has not been able to properly consider policies announced by the UK Government in their strategy. I repeat the calls contained in our plan for the UK Government to work with Welsh Government for the benefit of Wales.

## **The cost of the transition**

In their advice, the CCC indicate capital investment associated with delivering net zero in Wales may need to increase by around 0.5% (or £360 million) of GDP in 2022, reaching 1.7% of GDP (£1.4 billion) in 2025, peaking at 3.8% of GDP (£3.6 billion) in 2034, before falling to a more-or-less steady state figure of just under 2% of GDP (£2.3 billion) in 2050<sup>5</sup>. Due to the uncertainty of estimating future costs, these figures should be seen as illustrative rather than an accurate forecast. In the long-term, the CCC also project significant savings in fuel costs in a variety of areas, which may offset a large proportion of the additional investment costs.

In the short term over Carbon Budget 2 (2021-2025), the CCC indicate that additional capital investment associated with the low-carbon transition in Wales will need to increase steadily over this period. According to the CCC's balanced pathway, over this 5 year period, the total additional investment cost is estimated to be approximately £4.2 billion, compared to a baseline of no further climate action.

Almost 40% of the total additional capital investment over this period is expected to be in the surface transport sector. The majority of these costs will likely be private sector investment in zero-emission vehicles. Just under 30% of total additional investment is expected to be in buildings, with the majority of this investment going into improving energy efficiency via retrofitting and installing low carbon heat in existing residential homes and non-residential buildings. Finally, approximately 20% of the total additional investment is expected to be in electricity supply, installing low-carbon generation, mostly in variable renewables such as wind and solar photovoltaics.

Whilst the majority of the costs will not fall directly to Government, we need to consider how we will focus our financial resources to stimulate investment from others.

With a UK Government Spending Review on 27 October, our Net Zero Wales Plan was based upon a situation where we had not received our financial settlement beyond 2021-22. Despite this, the Welsh Government intend to demonstrate our commitment to delivering that aims of the Net Zero Wales Plan as part of the forthcoming 2022-23 Draft Budget.

We need the UK Government to recognise the gravity of the climate emergency, and make funding available, which reflects the seriousness of the climate emergency.

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<sup>5</sup> These figures are based on the CCC's recommended pathway, the Balanced Pathway. Total investment varies in the other scenarios

## **Integration of Policy for Multiple Benefits**

Delivering policies to ensure a fair and prosperous transition to net zero will be largely dependent on our ability to identify and maximise connections between policies, to maximise the contribution towards the seven well-being goals of the Wellbeing of Future Generations Act. Our net zero pathway requires us to decarbonise across all sectors, and therefore it is important we make the most of every policy and action. We need to think about a joined-up system and integrate our work, continuing to seek multiple benefits from every action we take, embedding our response to the climate and nature emergency in everything we do.

Whilst the Net Zero Wales Plan is predominately concerned with climate change mitigation, significant and irreversible changes to our climate and weather patterns are predicted to continue to develop over the next few decades. Crucially, the changing climate could put at risk some of the measures needed to achieve net zero emissions. Integration of our adaptation and mitigation policies is therefore essential.

The Sustainable Development principle in the Well-being of Future Generations Act will steer our policy responses so we continue look to the long term; involve people in the decisions that affect them; collaborate with partners to deliver; integrate our thinking to drive multiple benefits; and seek out opportunities to address the underlying causes of change.

## **Resource efficiency and a circular economy**

To effectively tackle the climate emergency and nature crisis we must address the unsustainable consumption of resources as a root cause. Given 45% of global emissions come from the goods and products made and used every day, we need an approach, which keeps resources in use and avoids all waste: a circular economy. This means accelerating actions to increase resource efficiency, re-use, repair and re-manufacture across all sectors of the economy, seeking to retain and increase good quality jobs across Wales, and where appropriate, substitute high carbon, energy intensive materials with sustainable ones, including natural materials.

Over the last 20 years, Wales has become a world leader in recycling and waste management, transforming into a high recycling society. In 1999, less than 5% of municipal waste was recycled and in 2020, this has reached over 65% supported by a billion pound investment in collections infrastructure and wide-ranging action by the Welsh Government. Every household in Wales has played their part in this success meaning that the foundations are in place to develop a circular economy.

The Programme for Government has committed to progress our transition to a zero waste, net zero carbon circular economy through using resources more efficiently, so that by 2050, we use only our fair share of the planet's resources and have 100% recycling (zero waste). The global biodiversity and climate systems will be the key beneficiaries, but the environment of Wales itself will also benefit, for example, from reductions in direct plastic pollution.

Moving towards a circular economy will also have significant, long-term positive impacts on the economy, and the people, communities and culture of Wales. Moving to a circular economy can benefit our economy by retaining value in more resilient and shorter supply chains and enabling people and communities to come together through taking collective action on resources like running repair cafes or redistributing surplus food.

## **The Leadership Role of the Public Sector**

The Welsh Government has consistently highlighted the public sector has a significant leadership role. The public sector in Wales should not only reduce direct emissions. The public sector should use its unique position to influence wider emissions reduction, whether that be in its workforce, supply chain, or through its statutory responsibilities. This is why in 2017 we set the ambition for the Welsh public sector to be collectively net zero by 2030. Accurately measuring direct and indirect emissions is vital, as is setting a routemap for making the change. We have therefore worked with partners across the public sector to co-create a toolkit of support, which includes a route map for decarbonisation across the Welsh public sector:

<https://gov.wales/sites/default/files/%20publications/2021-07/a-route-map-for%20decarbonisation-across-the-welsh-public%20sector.pdf>

and Welsh public sector net zero carbon reporting guide:

[https://gov.wales/sites/default/files/publications/2021-05/welsh-public-sector-net-zero-reporting-guide\\_1.pdf](https://gov.wales/sites/default/files/publications/2021-05/welsh-public-sector-net-zero-reporting-guide_1.pdf)

This guidance encourages the public sector to take the widest view of its impact and put in place plans to act.

I believe the Net Zero Wales Plan is a step forward in ambition and action. However, I must reinforce the point, it is a point in time. I will work resolutely with my Cabinet colleagues, partners and stakeholders within and outside Wales. Together we will develop further policies which achieve our net zero targets and create a more prosperous, equal and healthy nation. I look forward to attending the committee on the 25 November, to discuss the points above and the contents of the Net Zero Wales Plan more broadly.



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