



Dear Llyr,

I would like to thank you for the opportunity to respond to the consultation on the Committee's priority areas during the next Senedd term. I also look forward to discussing my advice further with you on the 30th of September.

Several of my recommendations and commentaries below are relevant to other Senedd Committees, but I wanted to flag them to you too because efforts should be made across Committees to integrate respective areas of work. Better integration of policy areas will ensure collective scrutiny, the ability to identify implementation gaps and offer solutions across the Senedd's work. You can find my letters to other Committees [here](#).

I would also like to suggest to you and to other Committees a cross-cutting area, which can be looked at jointly and in collaboration by some, or ideally all, Senedd Committees: Skills for a Green Recovery. A prosperous, equal, green recovery from the impacts of COVID-19 means delivering good quality livelihoods to all, whilst supporting rapid decarbonisation and improving biodiversity. This is reliant on having the right skills and training for our population. This is an area my own team has recently explored, and you can find our latest publication [here](#).

In May 2020, I published the first ever Future Generations Report, which considered the progress made by public bodies in implementing the Well-being of Future Generations Act. It also set out the actions and recommendations public bodies should adopt as they further implement the legislation. I have highlighted for the Committee below the relevant findings and recommendations of the report for your consideration (Annex 1). I would encourage all Committee Members to consider the report and in particular the Sections on [A Prosperous Wales](#), [A Resilient Wales](#), [A Globally Responsible Wales](#), [Planning](#), [Transport](#) and [Decarbonisation](#).

I have highlighted the relevant findings and recommendations, which emerged from my work, to help the Committee select the specific areas they will focus on during the next Senedd term. My team and I would be happy to meet with Committee Members or clerks to discuss this further, if you think that would be useful.

The climate and nature emergencies are the two biggest challenges facing our future generations - hence, green recovery and decarbonisation are cross-cutting themes central to ensuring the environmental, social, cultural and economic well-being of Wales.

Wales was the first country to declare a climate emergency in 2019, thus stating its ambitions to be a leader in decarbonisation. In February 2021, the Welsh Government laid regulations before the Senedd, which commit Wales to targets for net-zero emissions by 2050 but declared its ambitions to reach net-zero before 2050.

The Senedd also became one of the first parliaments globally to declare a nature emergency, recognising the critical condition of the environment in Wales and globally, calling for legally binding targets to limit biodiversity loss.

The COVID-19 pandemic has given us an opportunity to rethink the way we do things and build back better in a green and just way that addresses both the climate and nature crises, along with other challenges facing our current and future generations.

It is now time to back these declarations with bold action to ensure that targets are met, with Wales becoming a global leader in tackling the climate and nature crises.

Following the Future Generations Report, I have also published a paper, [Future Fit Programme for Government](#), which highlights the importance of the environment for recovery and building back better.

I would also suggest you consider the [upcoming second iteration of the Future Trends Report](#), which will be published later this year by Welsh Government. Annex 2 below provides you with some of the relevant future trends which could impact the Committee's remit.

I would also advise all Committees to consider how their chosen priority areas align with the well-being objectives and steps within the published [Programme for government](#).

Your consultation notes that you will be focusing the Committee's work around the Minister and Deputy Minister's priorities, so I have structured my response accordingly, focusing on the areas on which I have provided advice and undertaken research - I have, for example, not undertaken specific work into the Marine Energy Programme.

Climate Change and Net Zero

Following the COVID-19 pandemic, much of my recent work has been focused on building back differently and creating a greener, just and carbon positive economy, environment, culture and society in Wales. This is a main theme in the recent reports I have published, including [Skills through Crisis: Upskilling and \(Re\)Training for a Green Recovery in Wales](#); my paper, '[A Fit For the Future Programme for Government](#)'; and my recent report on financing a national retrofit programme, [Homes fit for the Future](#).

I will also be publishing a report on future trends in the Autumn in relation to inequalities, which specifically examines the impact of climate change on particular groups of the population, which may be of interest to the Committee. I will also continue to challenge Government on how they are making fiscal decisions relating to decarbonisation through their annual budget process and stress the importance of scale and pace to meet the challenges ahead.

Following the Future Generations Report, my team has undertaken significant work into specific facets of decarbonisation.

The findings that have emerged through this work include:

- We're not acting quickly enough to reduce greenhouse gas emissions. Welsh Government monitors the level and sources of emissions in Wales at a national level but there isn't sufficient focus on how all sectors, organisations and individuals across Wales can support our carbon reduction targets.
- Decisions made as part of the annual budget process should be supported by transparent assessments of carbon impact so that people can clearly understand whether funding and infrastructure investment is leading to an increase or decrease in emissions.
- All public bodies need to take action to divest their pension funds from fossil fuels.
- Over 60,000 jobs could be created in the green economy by 2022 with infrastructure investment. However, the current skills pipeline is not prepared for this demand.
- Regional growth deals, businesses and others must demonstrate how their investments are reducing emissions - these also provide an opportunity to grow skills and industry in the 'green economy'.
- Over half of Wales' emissions are currently derived from the power, business and industry sectors; decarbonising these sectors will have significant impacts on people and communities highlighting the importance of a just transition.
- The latest Climate Change Risk Assessment report highlights the key risks to Wales from the impacts of climate change and our capacity to adapt needs to be given much higher priority and resource.

I am also aware that Welsh Government will publish their next low carbon delivery plan – Net Zero Wales – next month and this will set out the key policies and commitments to deliver the second carbon budget and ambitious 2030 target for a 63% reduction in Wales' emissions.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on climate change around the following themes:

- **Tackling the climate and nature crises through a holistic approach, capitalising on the role of young people.**
- **Understanding our emissions across all sectors including where to prioritise action at all levels.**
- **Investing more in tackling the Climate Emergency supported by a carbon assessment to capture carbon impact of all investment decisions.**
- **Delivering an urgent and just transition to a low carbon society that works within its environmental limits.**
- **Taking advantage of new environmental industries in Wales and improve alignment and action towards the nature and climate emergencies.**
- **Investment in skills, training and sector development that are low carbon locking wealth and jobs into local areas.**

More detail and advice in relation to the economy can be found in the Sections on [A Prosperous Wales](#), [A Globally Responsible Wales](#), and [Decarbonisation](#) in the Future Generations Report.

Nature, biodiversity and tree planting

My findings in relation to the environment include:

- Biodiversity has seen an overall 60% decline in species across the globe since 1970.

- There is growing recognition at a local and national level of the benefits of increasing tree cover.
- There is recognition of the role unsustainable agricultural management plays in the lack of biodiversity in our natural environment, but key policy developments are in progress which support sustainable land management.
- There is a need for programmes and approaches which help ensure everyone can live in and access a healthy, wildlife-rich natural world.
- Public bodies and Public Services Boards need to recognise healthy resilient ecosystems are fundamental to our health and well-being and working with nature is an important part of the solution to addressing many of the significant challenges we face.
- Public bodies should seek ways to reduce air pollution to meet Wales' climate change commitments and ensure clean air for current and future generations.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on the environment around the following themes:

- **Maintaining and enhancing the natural environment through managing land and sea appropriately to create healthy functioning ecosystems.**
- **Making the most of natural green and blue space to support well-being.**
- **The urgent need for a better knowledge of nature.**
- **Clean air and water for wildlife and people.**

The main body of my advice in relation to the environment is contained in the Section on [A Resilient Wales](#), but this is also highlighted in most of the advice I have published since the Future Generations Report, including my paper, [A Fit For the Future Programme for Government](#).

I am also part of **Wales' Green Recovery** Group, chaired by Sir David Henshaw. The group's letter to Government in late May 2021 ('Agenda for Action: Priorities for a Green and Just Recovery'), sets out 10 priorities. This included the call to establish a National Nature Service, reiterated in my 'Fit for the Future Programme for Government', which is a skills and employment scheme focused on restoring nature and providing good quality jobs and livelihood opportunities across Wales.

To date, there has been no response from Government. However, I stress how important it is for Welsh Government to consider the need to invest in bold ideas like the National Nature Service, as a way to integrate and help deliver many of the well-being objectives and steps set out in its new programme for government.

Housing

My findings related to housing can be found in the section on [Housing](#) and in my recent report and include:

- Our ambition on decarbonising homes is not matched by actions - Wales is still building homes which do not support our carbon emission targets.
- A Welsh Housing Decarbonisation Programme could create 26,500 new jobs in Wales by 2030 but securing these jobs for Welsh people can only be achieved by guaranteeing long-term investment linked

to prioritisation of apprenticeships and reskilling the existing (and future) workforce in necessary trades to address the skills gap.

- The age and condition of Wales' housing stock presents a particular challenge for decarbonisation. My recent [research](#), in collaboration with the New Economics Foundation, demonstrated that of the £14.75bn of investment needed to decarbonise and improve the quality of Welsh homes, £3.6bn should come from UK and £1.7bn from Welsh Government, with 64% of total investment coming from private finance, energy companies or self-funding by property owners. Addressing this challenge needs to be a shared endeavour across many stakeholders with Welsh Government leading the way.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on housing around the following themes:

- **Setting out a longer-term plan for funding the decarbonisation of our homes.**
- **Increasing the skills needed to carry out a national housing / buildings retrofit programme.**
- **Improving the way we plan and design houses as well as places and communities.**

Town Centre Regeneration

Information and findings in relation to this can be found in the sections on [Planning](#) and [A Wales of Cohesive Communities](#), including:

- While there is an important focus on carbon reduction in Planning Policy Wales 10 (and subsequently, 11), related land use planning policies are lacking specific analysis on how they will contribute to carbon reduction.
- Integration of policies and services relating to the built environment causes confusion and could be improved.
- Access to key well-being services in communities is unequal across Wales.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on town centre regeneration around the following themes:

- **Ensuring the updated Planning Policy Wales is properly implemented.**
- **Greener town and city centres for people and wildlife.**
- **Ensuring everyone has access to key services.**
- **Working with the creative and cultural sector to support the regeneration of towns and cities.**
- **Capitalise on the increase in remote working during the pandemic to repurpose buildings in village, town and city centres to support cross-sector shared working and community-use spaces, housing and other uses that benefit people, communities and well-being.**

Transport

My findings related to transport can be found in the section on [Transport](#) and include:

- Decisions on transport infrastructure need to be based on the needs of current and future generations, supporting environmental, social, economic and cultural well-being, rather than being based on outdated approaches and the needs of the past.
- Improving public transport in rural areas is key to enable young people to access skills and training opportunities.
- Wales has one of the lowest per capita spend on public transport in the UK leading to a lack of affordable and accessible sustainable transport options.
- Some public bodies have started investing in improving active travel infrastructure and electric vehicles charging infrastructure but more needs to be done to encourage modal shift.

The commitments and focus on climate change within the new transport strategy – ‘Llwybr Newydd’ and the recent announcement of a pause to road spending is welcomed but will need to be followed up with clear delivery plans to support implementation.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on transport around the following themes:

- **Decisions on transport infrastructure and investment must reflect the climate and nature emergencies.**
- **Ensuring that decisions on transport-based interventions, using the updated Wales Transport Appraisal Guidance (WelTAG), improve environmental, social, economic and cultural well-being.**
- **Achieving the commitment to modal shift within Llwybr Newydd, and reducing our reliance on cars, will require significant support and societal change.**
- **Embracing technology whilst ensuring equality of opportunity.**

Digital Infrastructure

My findings related to digital infrastructure can be found in the section on [A Prosperous Wales](#) and [A Wales of Cohesive Communities](#):

- Digital connectivity has the potential to transform the rural economy, helping people and communities in rural areas address some of the key challenges they face.
- The COVID-19 crisis has highlighted the importance of digital technology. However, 13% of households in Wales do not have access to the internet.

I would encourage the Committee to carefully consider these findings and use them to inform their priorities and work in relation to digital infrastructure in the next Senedd term.

Circular Economy

My findings related to the circular economy can be found in the sections on [A Prosperous Wales](#). These include:

- We are using our natural resources faster than can be replenished.

- Wales is leading the way on recycling, but all public bodies now need to find innovative solutions to reduce and reuse waste and promote a circular economy, to reach the ambition of becoming a zero-waste country.

Based on my existing advice and work, I would encourage the Committee to consider focusing their work on the circular economy around the following theme:

- **Ensuring we use natural resources efficiently, recognising the limits of the global environment, and contribute to global well-being.**

Energy

My findings related to energy can be found in the sections on [A Prosperous Wales](#) and [Decarbonisation](#). These include:

- Wales has a major opportunity to make renewable energy part of its identity: a cleaner, greener chapter in our industrial story.
- Public bodies can go further in supporting community and local energy initiatives especially where they are able to improve environmental, social, economic and cultural well-being.
- There are promising signs of progress on the shift to clean energy, but all opportunities should be embraced if Wales is to meet its targets.

I would encourage the Committee to carefully consider these findings and use them to inform their priorities and work in relation to energy in the next Senedd term.

You may also be interested in some of the case studies of good practice that I have been collecting, which are available [here](#). In particular, you might like to look at:

- [Transforming the way we move around Cardiff](#);
- [Swansea's approach to housing](#);
- [Making connections to improve environmental sustainability](#);
- [Beyond Recycling: our path to a circular economy](#);
- [Cardiff and Vale enhancing biodiversity](#).

We have also produced bite-sized versions of the Future Generations Report, setting out the key parts of the vision, context and the relevant recommendations. You can find bite-sized versions for Welsh Government in relation to the sections on:

- [Planning](#)
- [Transport](#)
- [Addressing the climate and nature emergencies](#)

Once again, I would like to thank the Committee for the opportunity to feed into their priorities for the next Senedd terms and look forward to building on this submission at the upcoming committee appearance.

Yours sincerely,



Sophie Howe
Future Generations Commissioner for Wales

Annexe 1

Relevant Recommendations from the Future Generations Report 2020

Decarbonisation

Key Recommendation

Welsh Government should set out a long-term investment plan of how they will fund the climate emergency and support more ambitious commitments and targets for sectors within their control.

Policy Recommendations

Welsh Government should:

- Assess the carbon impact of their spend, especially capital spend, and should also publish details on the overall carbon impact of their budget and major investment/infrastructure decisions.
- Require all publicly funded buildings to be carbon neutral: urgently amend the building regulations (Part L and Part F) and enforce stricter building and infrastructure standards to ensure that we are not building “old” new schools, hospitals and other infrastructure that will contribute to climate change and not be fit for future generations.
- Resource and prioritise carbon and eco-literacy training for all politicians, elected members and senior officers of public bodies in Wales to ensure we have the necessary skills and understanding to make the right decisions for the climate.
- Ensure the new “National Strategy for Flood and Coastal Erosion Risk Management” provides a comprehensive and holistic plan for responding to flooding and coastal erosion, with adequate funding that is focussed on preventative measures including nature based solutions.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Providing funding any new housing programmes or developments which are not at least carbon neutral.
- Supporting and funding carbon intensive infrastructure.
- Encouraging habitat loss and deforestation.
- Encouraging carbon intensive agriculture.
- Putting pressure on our natural resources.
- Encouraging the use of fossil fuels

In their day to day actions Welsh Government should start:

- Securing investment for a national retrofit programme to improve the energy efficiency of Wales’ housing stock.
- Continuing to promote and incentivise local renewable energy schemes.
- Establishing a Climate Justice Advisory group to involve relevant stakeholders in decisions on how Wales’ transition is providing funding and support for the delivery of sustainable and active travel.
- Acting on the health impacts relating to climate change, particularly the disproportionate impact on the most vulnerable.

- Ensuring that all decisions including pension fund investments are compatible with climate emergency.
- Promoting and incentivising individual solutions to support behaviour change, that people can adopt at home and/or work to deliver a wider cultural shift in communities across Wales.
- Restoring forests and peatland and encourage more sustainable land-use to protect nature.
- Taking action to address the climate and nature crisis together

A Prosperous Wales

Key Recommendation

In line with the Well-being of Future Generations (Wales) Act (2015), Welsh Government should demonstrate how they are applying well-being economics in all of their policy, funding arrangements and interactions with the public, private and voluntary sector. Welsh Government should ensure they are meeting the Act's aspirations of equitable distribution of wealth, health and well-being, while protecting the planet's resources for future generations and other species.

Policy Recommendations

Welsh Government should:

- Adopt a whole government approach and work collectively with businesses, trade unions, the voluntary sector, communities and people across Wales to implement a low carbon society for current and future generations that leaves no one behind.
- Demonstrate how the natural environment is incorporated into all economic and political decision-making.
- Continue to lead the way on recycling, and implement its ambition to become a zero waste, net-zero carbon country.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Commercialising and selling off natural resources, regardless of the social, environmental and cultural impacts.
- Seeing low carbon technology as expensive and high risk.

In their day to day actions Welsh Government should start:

- Implementing the actions as set out in 'Prosperity for All: A Low Carbon Wales', and supporting public bodies and others to follow their lead.
- Framing the narrative on climate change as a wider well-being and economic activity.
- Support local initiatives on stewardship of land and renewable energy, to help Wales' transition to a low carbon society and bring a wide range of benefits to local communities.

A Globally Responsible Wales

Key Recommendation

Welsh Government should create a vision and plan to ensure Wales becomes the most eco-literate country in the world.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Investing in fossil fuels.

A Resilient Wales

Key Recommendation

Welsh Government should commit to large-scale habitat restoration, creation and connectivity throughout Wales, which includes setting statutory targets for nature recovery and specific species recovery measures to help prevent extinction.

Policy Recommendations

Welsh Government should:

- Work with the Office of the Future Generations Commissioner for Wales to ensure there is guidance and effective accountability mechanism on the reporting of the Section 6 duty and the well-being goal of a Resilient Wales.
- Prohibit the use of pesticides by public bodies and set annual targets towards phasing out the use of chemical pesticides on land.
- Increase spending year on year in line with the recommendations of the UK Committee on Climate Change and as set out in my 10-point plan on the climate and nature emergency (also a recommendation in Chapter 2).
- Develop a food system strategy for Wales linking together all parts of the food system from farm to fork.
- Work with public bodies to deliver 20% tree canopy cover in every town and city in Wales by 2030.
- Set standards to ensure people can access natural green space within 300 metres of their home.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Prioritising economic growth over the natural environment with environmental damage seen as 'collateral damage' for short-term growth.
- Implementing short-term grants for environmental initiatives.
- Funding programmes which cannot clearly demonstrate that they are maintaining or enhancing biodiversity.
- Seeing green infrastructure as only relevant to 'environment' departments.
- Permitting development within the protected site network.
- Failing to plan and design for biodiverse green infrastructure at the start of programmes and projects

In their day to day actions Welsh Government should start:

- Assessing opportunities for biodiverse green infrastructure in all policies and across all departments.

- Putting in place mechanisms so all policy officials understand and implement the Environment (Wales) Act 2016, Sustainable Management of Natural Resources (SMNR), State of Natural Resources Report 2016 (SoNaRR), Natural Resources Policy and Planning Policy Wales.
- Implementing accessible, longer-term funding programmes to restore the natural environment that go beyond single government terms in Wales.
- Ensuring a transition to sustainable land management, as proposed in 'Sustainable Farming and our land', while ensuring Wales' farmers have the resilience they need to thrive, and are front and centre in efforts to help restore the natural environment.
- Fully implementing the Sustainable Use of Pesticides Directive in Wales.
- Completing and protecting the protected site network.
- Analysing the provision of and access to nature by socio-economic disadvantage, particularly in respect of nationally funded programmes.
- Taking steps to raise public awareness about the impact of consumption on climate and nature, and promote sustainable community and individual action.
- Increasing investment in nature based solutions to alleviate flooding and other challenges.
- Taking urgent action at a pace and scale to combat the loss of biodiversity

Transport

Policy Recommendations

Welsh Government should:

- Allocate at least 50% of capital transport spend on improving bus and train services, providing long-term funding wherever possible.
- Adopt an approach to transport planning that supports 20-minute neighbourhoods i.e. with good local, sustainable transport and active travel options.
- Fully integrate transport, housing and land use planning to minimise the need for people to travel.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Prioritising investment in building new roads.
- Allowing plans for car-dependent, out of town buildings and developments with poor access to public transport links.
- Allowing incorrect implementation of the WeTAG Guidance and only provide funding for schemes that have applied WeTAG properly.
- Prioritising car travel over other modes, including allowing developments and office spaces with large car parks, focussing on car parking space while neglecting to support people to take public transport and provide high-quality cycle facilities.

In their day to day actions Welsh Government should start:

- Prioritising support and investment in bus and train services across Wales to offer affordable public transport.
- Measuring the carbon impact of transport investment and the carbon impact of transporting goods to ensure decision are supporting our emission targets.

- Prioritising support and investment in walking and cycling infrastructure to achieve wider benefits to people and communities.

Housing

Policy Recommendations

Welsh Government should:

- Within the next year, set out how a long-term plan on how they will fund the decarbonisation of homes in line with carbon emissions targets.
- Require all publicly funded housing developments to be carbon neutral and demonstrate how they are meeting the broader requirements of the Well-being of Future Generations Act.
- Explore the use of financial levers through the Social Housing Grant and Innovative Housing Programme to encourage innovation in developing intergenerational housing, and communities and use taxation levers to incentivise intergenerational house-sharing.
- Ensure that Design Quality Requirements should be updated to reflect the future in terms of smart-homes and assisted living technology.

Process Recommendations

In their day to day actions Welsh Government should stop:

- Funding the development of homes which are not carbon-neutral.

In their day to day actions Welsh Government should start:

- Better supporting and resourcing commitments to bring empty properties back into use.

You may also find the recommendations in relation to leadership and cultural change in Welsh Government and Public Bodies of interest. You can find these recommendations [here](#) and [here](#).

Annexe 2

Future Trends to Watch

Current Trends:

- Since 2010, global greenhouse gas emissions without land use change [have grown at 1.3% per year on average](#), with preliminary data suggesting a 1.1% increase in 2019.
- [More countries are passing net zero legislation.](#)
- Many impacts of climate change are already being experienced such as a warmer climate, severe weather events, flooding and sea level rise and they will continue to get worse. Global mean temperature in 2020 was the [second warmest on record](#).
- Despite a brief dip in carbon dioxide emissions caused by the coronavirus pandemic, the 2030 carbon emission reduction pledges, made by 184 countries under the Paris Agreement, aren't enough to limit global warming to below 2°C and pursue 1.5°C. [The world is still heading for a temperature rise in excess of 3°C this century.](#)
- [Over 80% of the ocean area](#) experienced at least one marine heatwave in 2020.
- Climate change is currently affecting [19% of species listed as threatened](#) on the International Union for Nature Conservation Red List of Threatened Species, increasing the likelihood of their extinction.
- Industry related greenhouse gas emissions have [continued to increase](#).
- Wales's ecological footprint, at [10.05 million global hectares](#), is roughly five times the size of Wales.
- [Flood risk has significantly increased](#), as demonstrated in January 2020, when parts of Wales experienced severe flooding.
- 80% of journeys to work in Wales are made by car, [increasing by 9% since 2003](#). Rail use has also seen an increase while bus travel has been declining

Future Predictions:

- There is likely to be [less](#) suitable land available for development as flood plains and other lower lying land becomes increasingly prone to flooding.
- It has been estimated that a [2°C rise in temperatures will add 189 million more people](#) to the 800 million already suffering from food shortages.
- With further warming we can expect further disruption and irreversible losses of natural habitats and resources.
- The 'green economy' is expected to grow, with roles in manufacturing, agriculture, construction, energy and transport.
- Moving to [100% renewables in Wales](#) can increase energy security, reduce fuel poverty and tackle climate change.



- Investment in key infrastructure projects in green industries and nature restoration could create [45,000 direct jobs and over 60,000 indirect jobs by 2022](#), including:

