Welsh Carbon Budgets – Call for Evidence Response

Organisation

Natural Resources Wales

Question 1: Does the Paris Agreement mean that Welsh emissions targets should keep open a deeper reduction in emissions than 80% by 2050? Are there implications for nearer-term targets?

Given that the Environment (Wales) Act 2016 sets out the target to reduce emissions by at least 80% by 2050, rather than by 80%, and additionally by referring to setting budgets in line with scientific evidence, the legislation certainly does not prevent setting out trajectories in terms of interim targets and 5-yearly budgets that would result in greater than 80% reductions by 2050. However, at this early stage in the implementation of the legislation we suggest that setting out targets and budgets for an 80% reduction by 2050 will provide a sufficiently strong signal for action and driver of WG policies to deliver decarbonisation across all sectors, as it would not be possible to meet the 2050 target if certain sectors failed to decarbonise. Further iterative review of the budgets and potentially the targets could address future international policy developments arising from Paris through the future reviews of the INDCs (including the development of the UK INDC post-Brexit), as well as take account of improvements in climate science, particularly future IPCC reports. We do not therefore foresee any implications for near-term targets and budgets because of the Paris Agreement.

Question 2: Do you think that leaving the EU has an impact on the targets or how they can be met?

We concur with the conclusions of the UKCCC report on the implications of Brexit that recommended no change to UK targets. We do not consider that Brexit should impact upon Welsh targets either at this stage – given the uncertainties surrounding the format that Brexit and the future relationship with the EU will take, along with the fact that the UK and Welsh statutory targets underpin and largely replicate the existing EU climate change targets that will no longer apply after Brexit. Clearly Brexit does present risks to delivery of emission reductions in terms of the potential loss of key policies. Of particular concern is the uncertainty arising from the potential loss of EU ETS, given that it provides the regulatory approach for reducing over 54% of Wales' emissions – a significantly greater percentage than elsewhere in the UK. There are also risks and uncertainties around the potential loss of the Emissions Ceiling Directive and other directives that deliver energy efficient appliances and vehicles in halting progress towards air pollution and carbon emissions targets. Additionally, the potential loss of wider legislation that may help deliver emissions savings or protect carbon stocks, e.g. planning legislation relating to the SEA and EIA Directives, or those laws that prevent the loss of habitats, e.g. Habitats and Birds Directives, could be undermined if they are not maintained (although transcribed into UK law there is a potential for repeal). However, at this stage we do not think these issues should influence the targets or budgets.

Question 3: In the area(s) of your expertise, what are the opportunities and challenges in reducing Welsh emissions in the nearer term (e.g. to 2030)?

We have, over the last two years, undertaken the Carbon Positive Project to understand the opportunities and challenges to managing the carbon impact of NRW (i.e. the NRW-managed estate and for our offices, assets, vehicle fleet and procurement). The project has comprehensively evaluated the whole of NRW's estate, estimating NRW's emissions and the carbon stored and sequestered in woodlands and peatlands habitats on the estate, to evaluate the organisation's net carbon status. It has also investigated options for reducing our carbon impact, and delivered projects to demonstrate measures across NRW. We are now planning future implementation to embed action across NRW and accelerate delivery of measures.

NRW is responsible for managing 7% of the land area in Wales, mainly composed of forests, along with national nature reserves and flood defences. Various assessments of our estate have enabled us to identify that the restoration of peatland and the management of the forest estate, to maximise wherever possible carbon sequestration and protect existing carbon stocks, should be key priorities going forward. Current estimated annual emissions from peatlands on the Estate are around 3 times NRW's operational emissions from all of our buildings, vehicles, operational assets, land management and procurement put together. At the Wales-scale, peatland restoration, expansion of woodland cover and more effective management of existing woodlands present key opportunities to enhance sequestration and protect carbon stocks.

We have also identified the following opportunities:
- building efficiency measures, such as LEDs and low carbon heat solutions.
- the transition to electric and plug-in petrol hybrid vehicles (largely for cars and small vans) as a near term opportunity over the next 5 years.
- we are also assessing the potential for further renewable energy generation on our buildings and operational assets and the estate where appropriate, and this should clearly remain a priority across Wales.
- our other key corporate priority in terms of driving emission reduction is much greater consideration of embedded carbon through the procurement process, which can potentially drive action much more widely.

As NRW also has a regulatory role in relation to pollution including compliance with the EU ETS and CRC, we can also contribute to the drive for emissions management with the industrial sector.

Question 4: What is required by 2030 to prepare for the 2050 target for an emissions reduction of at least 80% on 1990 levels, recognising that this may require that emissions in some areas are reduced close to zero? Is there any impact of the need to go beyond 80%, either in 2050 or subsequently?

Given the recently announced Welsh Government ambition for a carbon neutral public sector in Wales by 2030, we recognise the need for NRW, along with the rest of the Welsh public sector to minimise our direct emissions using all available options and seek to dramatically reduce our indirect emissions over this timescale. NRW will also need to seek to enhance the carbon sequestered and protect the existing carbon stocks on the NRW estate over this time. It will be important for the Welsh public sector to show a leadership role in reducing emissions, such that direct emissions are very low by 2030, although heating is likely to remain a significant challenge and source of direct emissions. Over this timescale it will also be critical for WG, the National Procurement Service (NPS) and major public sector procurement organisations such as the NHS, Local Authorities and NRW to work with procurement staff and suppliers to consider carbon impacts and drive decarbonisation within the supply chain. If the public sector is able to become carbon neutral by 2030, it could potentially provide the test bed for greater reductions, going beyond 80%, ahead of 2050.

Question 5: What are the respective roles of UK Government, Welsh Government, the wider public sector, business, third sector and individual or household behaviour in delivering emissions reductions between now and 2030? And, separately, between 2030 and 2050?

All actors from Government, public sector, business, third sector, communities and society have an ongoing role to play in delivering emission reductions as the scale of reductions needed over both the short (to 2030) and long-term (2030-2050) require a combination of policy, technological and behavioural changes. This is as true in Wales as it is elsewhere. Nevertheless, it is recognised that technological approaches to decarbonisation are more clearly available for some sectors e.g. housing and transport than they are for others e.g. agriculture and heavy industry but again we do not recognise this as an issue unique to Wales. However, it is important to recognise the significance of the 54% of Welsh emissions from the industrial and energy generation sectors and the challenges that this high percentage poses for delivering on the targets.

It is also important to recognise the leadership role that the public sector should play in many aspects of decarbonisation but particularly in relation to procurement. There is also the potential for the public sector to catalyse and stimulate up-take of low carbon technologies, for example, through coordinating the roll out of EV charging points at public sector facilities across Wales. Clearly this should be considered in relation to the development of the Low Carbon Delivery Plan.

Question 6: As a business, as a Public Sector Body, or as a citizen, how do emissions targets affect your planning and decision-making?

NRW and its predecessor legacy bodies have had emission reduction targets over many years. It has been recognised, through the development of the Carbon Positive Project, the need to broaden the scope of emissions considered within our targets, from principally Scope 1 and 2 emissions in the past, to additionally considering the key Scope 3 upstream and downstream emissions that the organisation is responsible for. While mindful of the national emissions targets, it is likely that in the short term (to 2030), NRW and much of the rest of the Welsh public sector will be principally guided in our decision-making by the ambition for the Welsh public sector to be carbon neutral by 2030. Regardless, the national targets and budgets will underpin the delivery of the ambition so remain important, particularly for those elements of the public sector that may not fall within the scope of the carbon neutral ambition. In NRW the achievement of this ambition is likely to be driven by an internal enabling/implementation plan to steer and influence strategic planning and decision making.

Question 7: In your area(s) of expertise, what specific circumstances need to be considered when setting targets and budgets for Wales and how could these be reflected in the targets?

In some areas, technology and tools for addressing emissions are both cost-effective and freely available, e.g. LEDs, roof mounted solar and electric vehicles. In the relevant sectors, targets could be more ambitious, or set over a shorter timeframe to accelerate decarbonisation. In other areas, the constraints of cost and availability of solutions should be considered when setting targets.

Within the land use sector, the potential conflicts between activities and policies to meet emissions targets should be recognised, e.g. between potential renewable energy development, maintaining commercial woodland extent and restoring degraded afforested peatland habitats in the same locality. It is also important that the constraints upon change in land use, e.g. woodland planting, should be recognised. The Welsh Government Woodland Estate (WGWE) managed by NRW and the rest of the NRW estate has very limited potential for further woodland expansion. Although better consideration of carbon implications in the management of the existing forest resource will clearly be important, it is unlikely to provide substantial carbon benefits at the Wales-level. Woodland expansion will require the adoption of appropriate incentives for woodland planting, while being mindful of the need to get the right species planted in the right place. Increasing the rates of planting requires planning for increased stock availability and planting capacity, as well as the measures to encourage landowners to plant. In setting targets, it is important that changes in land use are recognised as requiring significant lead in times.

Procurement will be a universal cross-sectoral challenge and it will be important that emissions captured within other sectors within the UK GHG Inventory are not ignored as ‘the responsibility of others’. Both the public and

private sectors can help drive decarbonisation through ensuring that carbon emissions are considered within the procurement process. Within the supply chain, consideration should be made of the impact of targets on emissions from procurement of goods and services. Additional requirements to reduce emissions through procurement should be phased in to allow suppliers (particularly SMEs) to adapt, to ensure a fair and open tender process. Typically, this can be 3-5 years to develop and implement significant new requirements and so a longer timescale may be needed to realise these emissions savings.

The nature of Wales and its closely linked geography with England which leads to considerable cross-border movement, e.g. in terms of electricity supply to England, use of English airports by Welsh residents and cross border commuting by a significant proportion of residents along the borders, needs to be considered in the context of the targets. It is also notable that in relation to key skills that will help drive decarbonisation Wales may be reliant on people and organisations within England unless significant efforts are made to encourage the development of indigenous businesses and skills within the Green Growth sector. Therefore, some consideration of the interdependencies between England and Wales should be made when setting budgets.

Question 8: The power and industry sectors in Wales are dominated by a small number of large emitters. What are the key challenges and opportunities that this presents in setting the levels of carbon budgets and how should the process of setting them reflect these?

In the EU ETS, the clear majority of carbon dioxide emissions are from a small number of large installations (in 2016, 64% came from the top three emitters; the top six sites accounted for 85%). This provides an opportunity because there is scope to focus efforts on a small number of sites (offering funding, expertise, incentives, advice as well as regulation) and have a big impact on reducing emissions. However, this must be in the context of fair competition across the sectors to prevent carbon leakage.
At the same time, some of the largest emitters are in the power sector and the shift towards increased generation of renewable energy and UK Government policy e.g. the phasing out of coal-based generation will be key drivers for emission reductions over the first two carbon budgets. There is also a need to help raise awareness and change the culture around energy usage as delivering greater energy efficiency should go hand in hand with the shift to renewable generation.

Question 9: What evidence should the Committee draw on in assessing impacts on sustainable management of natural resources, as assessed in the state of natural resources report?

The State of Natural Resources report is of principal relevance to the land use sector in the context of the carbon budgets. We believe that the sustainable management of natural resources should include the routine consideration of the potential for nature-based mitigation and adaptation measures to be adopted. Sustainable management of natural resources, has been identified and advocated by the United Nations Environment Programme (UNEP) and the World Bank as a key mechanism for dealing with climate change. The Welsh Government is a founding signatory to the International Memorandum of Understanding on Nature Based Climate Action, so the consideration of such approaches should be an integral part of the consideration of the land use sector.

Within the State of Natural Resources report, key opportunities highlighted that should be considered in terms of carbon budgets and the sustainable management of natural resources include: expanding green infrastructure in and around urban areas; increasing woodland cover, and bringing more of our existing woodlands into appropriate management; maintaining, enhancing and restoring floodplains and hydrological systems; restoring peatlands to both safeguard carbon stores and reduce their emissions; and better soil management to maintain fertility and carbon content. In conclusion, the targets and budgets should be developed with the potential multiple benefits for the sustainable management of natural resources borne in mind in relation to the key opportunities that have been highlighted within the State of Natural Resources report.

Question 10: What evidence regarding future trends as identified and analysed in the future trends report should the Committee draw on in assessing the impacts of the targets?

The first iteration of the Future Trends report has only recently been published and NRW along with other organisations are currently in discussions with the Welsh Government to improve the content and analysis that it provides. The current report is recognised as very much a first step towards better understanding the long-term trends in Wales and their potential impacts upon policy. We recognise that the current report may have limited relevance to the development of the targets but it does highlight crucially that Wales' population is projected to increase over the next 20 years, possibly by around 5%, which should clearly be considered in the context of the housing and transport sectors in particular.