

## Welsh Carbon Budgets: RSPB Response to Committee on Climate Change Call for Evidence, September 2017

Contact: Mike Wilkinson, [mike.wilkinson@rspb.org.uk](mailto:mike.wilkinson@rspb.org.uk)

RSPB Cymru is part of the RSPB - the UK's largest nature conservation charity, with over a million members and reserves covering 60,700 hectares across the UK (over 16,000 hectares in Wales). The RSPB has a long history of engagement to shape policy on climate change mitigation and adaptation to climate change, within the UK as well as at EU and international levels. Internationally, we work with our 120 BirdLife Partners throughout the World (including all EU Member States) with 13 million members and supporters and managing 4.3 million hectares of land for nature.

### Key Messages

- The RSPB strongly welcomes the setting of emissions targets and budgets for Wales. Legally binding carbon targets have proven to be a powerful incentive in the shift to low-carbon energy in the UK and Scotland and could drive further progress in Wales.
- Delivering Wales's emissions reduction targets and budgets will require the deployment of renewable energy and other low-carbon technology. A strategic spatial plan for this can help to ensure that it is done with the least risk to nature, in line with Wales' commitments to the sustainable management of natural resources.
- Despite being off course to meet its 2020 emissions reduction target Wales should set ambitious budgets and interim targets that put it back on track to achieve at least 80% emissions reductions by 2050.
- The RSPB welcomes the proposals to account for Wales's gross emissions, to use percentage targets and to formally include international aviation and shipping emissions in its accounting.

### **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?**

Climate change is the greatest long-term threat to wildlife, and evidence suggests that if business as usual trends continue then one in six species could be extinct by the end of the century<sup>1</sup>. The RSPB's own research shows that wildlife in the UK and beyond is already being adversely affected by climate change<sup>2</sup>. The 2015 Paris Agreement means that the UK has joined other countries in pursuing efforts to limit temperature rises to 1.5 degrees, and this has been endorsed by the Welsh Government.

<sup>1</sup> <http://www.sciencemag.org/lookup/doi/10.1126/science.aaa4984>

<sup>2</sup> [http://www.rspb.org.uk/Images/natureofclimatechange\\_tcm9-409709.pdf](http://www.rspb.org.uk/Images/natureofclimatechange_tcm9-409709.pdf)

After the Paris Agreement, the Committee on Climate Change concluded that a more ambitious 2050 target (such as net zero emissions) may need to be set for the UK in the near future<sup>3</sup>. However, more evidence, in particular the forthcoming IPCC report on 1.5 degrees (due in 2018) could mean that the best deadline for a net zero target could change. The Welsh Government should plan for a target that is more ambitious than an 80% reduction by 2050, and should set interim targets and carbon budgets accordingly. This means that early reductions will be important since slower cuts to begin with followed by steeper cuts later on could prove to be more costly.

In order to allow comparison, five-yearly and annual targets should both be set relative to a 1990 baseline. However, annual emissions reduction targets would be preferable to five-yearly carbon budgets. Wales currently has a system of annual targets for areas of devolved competency but not for all sectors of the economy. It would be best to use a similar approach across the economy for the new accounting framework. Annual targets have functioned well in Scotland, where they have allowed for year-on-year assessment of success in reducing emissions and for policy adjustments to be made in order to change course and increase action as required.

There are two elements of the accounting framework that the RSPB strongly welcomes:

- Accounting for emissions on a gross (rather than a net) basis, because this more transparently reflects actual emissions reductions.
- The percentage emissions reductions approach which ensures clearer communication of progress.

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

There are two main impacts of leaving the EU on Wales's emissions reduction targets and budgets:

- Even if the UK leaves the EU, it may remain a member of the EU Emissions Trading Scheme. Flaws in the Scheme mean that it has not functioned properly to date. This supports the case for a gross emissions accounting approach. It also means that it is important to extend the life of the carbon floor price and to extend it to cover more sectors than at present.
- Upon exiting the EU Wales and the UK will have more power over the future of agri-environment support and could therefore design this to drive greater emissions reductions in future.

**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)?**

There are several key opportunities and challenges in Wales's future decarbonisation efforts:

- The falling cost of some renewable technologies, such as onshore wind and solar, is an important opportunity. However, the deployment of renewable energy can be a challenge for the natural environment as poor siting of schemes can have damaging impacts. A strategic spatial approach to the deployment of renewable energy (such as that set out in

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<sup>3</sup> <https://www.theccc.org.uk/wp-content/uploads/2016/10/UK-climate-action-following-the-Paris-Agreement-Committee-on-Climate-Change-October-2016.pdf>

the RSPB's Energy Vision reports<sup>4</sup>) can help to ensure that emissions targets and budgets are met without damaging wildlife and the natural environment, and could help to avoid costly delays or objections to proposals.

- The significant progress in decarbonising buildings through energy efficiency measures provides a good platform on which to build. Wales should use its planning powers to press for the highest possible standards in zero-carbon new homes. Energy efficiency is one of the best ways to deliver emissions cuts since it reduces demand and can be deployed with minimal risk to the natural environment.
- Wales's transport emissions have remained broadly flat since 1990, meaning that this will be one of the most challenging sectors to decarbonise in the coming years. Recent announcements from the UK Government that it will seek to phase out the sale of new petrol and diesel vehicles by 2040 are not ambitious enough. To date, the UK Government has also placed too much hope in biofuels to decarbonise the transport sector. Many biofuels, particularly those based on crops, can pose significant risks to the natural environment as well as causing emissions increases instead of savings<sup>5</sup>. If Wales were to follow Scotland's lead and set a target to end the sale of fossil fuel vehicles by around 2030, it would be setting a good (and world-leading) example to the UK Government. In addition, the Welsh Government will need to take measures to reduce transport demand – current proposals for an M4 Relief Road run counter to this and undermine the Welsh Government's stated commitment to the Paris agreement.
- The RSPB strongly welcomes the recommendation by the Committee on Climate Change that international aviation and shipping emissions be formally included in Wales's emissions accounting. At present these sectors enjoy a 'free pass' on emissions as they are not formally included in the UK's carbon budgets. Inclusion of these emissions in Welsh carbon budgets could provide an important incentive to take appropriate measures to limit aviation demand within Wales. Without such measures aviation emissions put the UK's ability to meet its overall carbon budgets at risk. However, Welsh Government action alone will not be sufficient to keep aviation emissions to the 2005 level advised by the Committee on Climate Change, and the Welsh Government should also press the UK Government for further action.
- The land use sector can make a significant contribution to emissions reductions. However, certain practices in the land use sector can also pose a risk to the natural environment. For example, medium or large-scale afforestation for the purpose of carbon sequestration can put other important habitats at risk.
- The RSPB considers it important that all peatland emissions are included in the Welsh inventory as soon as possible (which they are not at present)<sup>6</sup>. Peatlands can be both a source and a sink of emissions depending on their quality and management. Peatlands that are managed to be carbon stores and sinks can also provide multiple benefits for wildlife, flood prevention and water filtration. Wales' approach to the sustainable management of

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<sup>4</sup> <http://www.rspb.org.uk/our-work/conservation/conservation-projects/details/350939-energy-futures-resource-constraints-and-sensitivity-mapping-for-renewable-energy-in-the-uk>

<sup>5</sup> <https://www.theccc.org.uk/wp-content/uploads/2017/04/Welsh-Carbon-Targets-Committee-on-Climate-Change-April-2017.pdf>

<sup>6</sup> <https://www.theccc.org.uk/wp-content/uploads/2017/04/Welsh-Carbon-Targets-Committee-on-Climate-Change-April-2017.pdf>

natural resources, as set out in the Environment (Wales) Act and the recently published Natural Resources Policy, recognises the importance of resilient ecosystems to human well-being, as well as the role that 'nature-based solutions' can play in helping to mitigate climate change and its impacts. It follows that protecting and enhancing the natural environment must be at the heart of Wales' response.

**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?**

It is likely that a more ambitious target will be needed for 2050 in order for the UK to contribute to holding temperature rises to 1.5 degrees. Therefore, it will be important to ensure that interim targets or budgets do not preclude the possibility of more ambition in the future, or risk a heavy reliance on environmentally damaging Negative Emissions Technologies (for example, large-scale afforestation could cause significant harm to habitats and wildlife).

To date Wales has performed less well in terms of emissions reductions than the rest of the UK, meaning it is not on track to meet its existing target to cut greenhouse gas emissions by 40% by 2020<sup>7</sup>. Power sector emissions have increased significantly since 1990, land use emissions have increased in recent years, and transport sector emissions have remained flat since 1990. On the other hand, Wales has achieved admirable emissions reductions in the buildings sector, primarily through energy efficiency schemes.

However, the possibility of Wales missing its 2020 target does not mean that subsequent targets should be less ambitious than needed to meet the 2050 target. Interim targets and budgets will need to compensate for the shortfall in meeting the 2020 target and put Wales back on track. The interim level of ambition in 2030 should be dictated by what is required in order to put Wales back on course to meeting the 2050 target and should also leave enough flexibility to meet an even more ambitious 2050 target if and when it is introduced.

**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?**

It is important that the UK and Welsh governments set clear policy direction for businesses, in particular for the low-carbon sector. The UK Government is yet to publish a Clean Growth Plan setting out how UK-wide carbon budgets will be met. In addition, the future of low-carbon funding after 2020 is yet to be decided and it is important that the UK Government provide a clear direction of travel as soon as possible in order to avoid a cliff-edge of renewable energy investment in Wales and the wider UK.

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<sup>7</sup> <https://www.theccc.org.uk/wp-content/uploads/2017/04/Welsh-Carbon-Targets-Committee-on-Climate-Change-April-2017.pdf>

As Wales progresses with setting interim emissions reduction targets it would be useful for the Welsh Government to set out a Wales-specific plan for how interim targets and carbon budgets will be met. In terms of renewable energy deployment, this should include a strategic spatial element, supported by national planning frameworks (including the Wales National Marine Plan and the National Development Framework, using evidence from Area Statements) which identifies the locations with lowest ecological risk. The third sector, particularly public or charitable bodies with technical expertise in this area (such as the RSPB) can provide an important advisory role in helping to avoid perverse or counter-productive plans or decisions.

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

The RSPB has its own organisational carbon budgets and therefore makes substantial efforts to reduce its own operational emissions independently of the UK's or of country-specific carbon budgets.

**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?**

The UK Government's phase out of unabated coal power by 2025 at the latest could have a significant impact on Wales's emissions, given the proportion of them that come from Aberthaw coal power station. In removing unabated coal power from the grid, it is important that Wales turns to an energy mix that is both low carbon (putting it back on track to meet emissions targets) and which can be delivered in harmony with nature.

The RSPB is concerned that Wales could increase its reliance on biomass for energy, particularly if its coal power plant were to co-fire with biomass or convert to it as unabated coal power is phased out. Evidence shows that the use of biomass for energy, particularly large-scale electricity production, can be very harmful to the environment and to the climate. Evidence produced by the UK Government shows that some types of woody biomass can be more polluting than the fossil fuels they replace<sup>8</sup>. Recent reports published by the European Academies Science Advisory Council and by research institute Chatham House conclude that the use of forest biomass for energy can fail to deliver emissions savings within climate-relevant time frames<sup>9</sup>. Increased reliance on unsustainable and high-carbon biomass could in fact undermine Wales's emissions reduction efforts rather than support them.

The deployment of any tidal range power in Wales (which has a significant potential resource) should be done extremely cautiously. The RSPB considers that Swansea Bay tidal lagoon project should go ahead, but only with robust scientific monitoring of its impacts on the natural environment, and only if a Marine Licence is possible without compromising how we implement the Habitats and Water Framework Directives. Only if these are acceptable or can be sufficiently

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<sup>8</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/349024/BEAC\\_Report\\_290814.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/349024/BEAC_Report_290814.pdf)

<sup>9</sup> [easac.eu/fileadmin/PDF\\_s/reports\\_statements/Forests/EASAC\\_Forests\\_web\\_complete.pdf](https://easac.eu/fileadmin/PDF_s/reports_statements/Forests/EASAC_Forests_web_complete.pdf);

<https://www.chathamhouse.org/sites/files/chathamhouse/publications/research/2017-02-23-woody-biomass-global-climate-brack-final2.pdf>

mitigated should further schemes go ahead. In order to minimise the impact of tidal schemes or other renewable energy developments on nature, strategic spatial plans should identify the areas of lowest ecological sensitivity.

Indeed, the Welsh Government's commitment to the Sustainable Management of Natural Resources (SMNR), as set out in the Environment (Wales) Act and the recently published Natural Resources Policy, dictates that renewable energy should be developed in harmony with nature. The objective of SMNR is to maintain and enhance the resilience of ecosystems and the benefits they provide – recognising our dependence on a healthy, functioning natural environment.

**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?**

The small number of large point-source emitters in Wales supports the case for using a gross emissions accounting approach (as opposed to using a net emissions accounting approach). Accounting for gross emissions means that significant emissions cuts made in these sectors (particularly the forthcoming phase out of unabated coal power) will be accurately reflected in Wales's emissions accounting.

The closure of unabated coal power stations could result in a shift to the deployment of more renewable energy. Future deployment of renewable energy should be done in harmony with nature, through the application of a spatial mapping approach to identify those areas of lowest ecological risk. It is also important that the phase out of coal power does not result in the use of biomass co-firing or conversion.

**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 Welsh Government's commitment to the Sustainable Management of Natural Resources (SMNR), as set out in the Environment (Wales) Act and the recently published Natural Resources Policy, dictates that renewable energy should be developed in ways that are harmony with nature. The objective of SMNR is to maintain and enhance the resilience of ecosystems and the benefits they provide – recognising our dependence on a healthy, functioning natural environment

The 2016 State of Natural Resources Report (SoNaRR), as well as the 'State of Nature Wales' report, concludes that the resilience of Wales's ecosystems is compromised and that this could impact their ability to provide services and benefits to people in the future<sup>10</sup>. Further damage to these ecosystems could be caused by climate change or by poor siting of renewable energy developments. Therefore, while it is crucial that Wales make a significant contribution to reducing emissions, it also means that a strategic spatial approach to the siting of energy installations will be crucial in helping to avoid the areas with highest ecological sensitivity. The recently published Natural Resources Policy (a key statutory component in the delivery of SMNR) emphasises the importance of

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<sup>10</sup> [https://ww2.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/stateofnature2016\\_wales\\_english.pdf](https://ww2.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/stateofnature2016_wales_english.pdf)

renewable energy generation at a variety of scales; it makes the welcome statement that Area Statements, the National Development Framework and Local Development Plans will provide evidence to identify locations where particular energy solutions might be appropriate.

There are opportunities to design in carbon sequestration and lower carbon farming into new land use policies post-Brexit. These should take account of the importance of existing habitats as carbon stores and the potential to increase carbon sequestration through better management, for example by restoring peatland habitat. Increasing woodland cover may also contribute, but can conflict with other environmental objectives and should therefore be considered in the context of the need for a new overarching Sustainable Land Management policy for Wales that combines agriculture, forestry and the environment and provides an incentive framework for multiple benefits. (One of RSPB's recommendations to the CCERA's Inquiry into Forestry and Woodland Policy in Wales.)

Wetland habitats can be a significant store of 'blue carbon'. There is potential for inter-tidal and wetland habitat creation to contribute to carbon sequestration and storage. RSPB is currently reviewing the loss of inter-tidal habitat across the UK and implications for habitats and species and will report later in the year. The changes in net loss/gain of inter tidal habitat has implications for stored carbon. The effects of development including tidal lagoons on blue carbon should also be taken into account.

**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 Future Trends Report summarises the threats climate change poses to people and nature. It also notes the potential for development of renewable energy to contribute to Wales' economy. Finally, it reiterates the findings from the SoNaRR that Wales' ecosystems are not resilient. The commitment to produce the Future Trends Report is predicated on the importance of understanding the connections between different areas of government policy (as well as across the Wellbeing Goals). In this vein, we would have liked the Future Trends report to go further in drawing out the links between Wales' efforts to address climate change, including via renewable energy but also through other aspects of land management, and the efforts needed to rebuild the resilience of ecosystems (with healthy ecosystems having a vital role to play both in mitigating climate change e.g. through carbon sequestration, and in helping people to be more resilient to its impacts e.g. through flood attenuation). We hope the Committee will give consideration to these connections, which we feel lend weight to our key message that renewable energy should be developed in harmony with nature, in the context of maintaining and enhancing the resilience of ecosystems and the benefits they provide.