

#### **UKCCC Call for Evidence**

#### - Welsh Carbon Budgets - Natural Resources Wales response

In responding to this consultation we have internally discussed our response through a series of meetings post the recent UKCCC/Welsh Government workshop held in Cardiff, which has resulted in the delay in submission, but we believe this has been time well spent. Our response has been very helpfully informed by the workshop on the consultation and we have also given regard where relevant to the similar discussions and decisions that we were involved with during the development of the Climate Change Strategy for Wales in 2009-2010.

## **Question 1:** Is it better for carbon budgets be set on percentage or absolute terms, given that the interim targets are set as percentages?

ANSWER: As the UKCCC has set out in this consultation there are pros and cons to both approaches. We believe that the decision should be informed by an understanding of the likelihood or risk of future significant changes in the emissions data in the NAEI. Given that there have been very substantial changes since 1999 with both increases and decreases in the 1990 baseline, with a general increase in baseline emissions due to refinement of the estimation of emissions, we are of the view that there is a continuing risk of significant changes, even though those involved in the management of the NAEI expressed a 'gut feeling' of less change going forward at the recent WG/UKCCC workshop. NRW has been undertaking work with Forest Research to assess the current and future net carbon status of the NRW/WG Woodland Estate using the Carbine model and this refined modelling has led to significant changes to our understanding of the net carbon status of our estate (which represents around half of Welsh woodlands). Moreover, we are aware of the work of the GHG Platform for agriculture and believe that there may well be some significant changes in baseline data for the LULUCF sector in future. In view of the ongoing likelihood of significant changes to elements of the baseline, particularly LULUCF, we suggest that the carbon budgets should be expressed on a percentage basis, which would provide consistency with the interim targets and reduce the impact of NAEI changes not reflecting actual progress in reducing emissions, which in our view is the critically important role for them.

# **Question 2:** What else can be done to make targets resilient to future revisions to the greenhouse gas inventory?

ANSWER: Given that we are suggesting use of carbon budgets expressed in percentage terms, we believe this should be the main means of achieving resilience. However, in addition, given that the LULUCF sector may in our view particularly change in future, we believe that there may be a case for further work in the near future building upon the work undertaken by CEH for WG on peatlands and FR for NRW on woodlands to refine the Welsh NAEI data for this sector ahead of the publication of the budgets in 2018. This may help avoid subsequent significant changes after the carbon budgets have been put in place.

It is also worth noting that other measures of emissions have been adopted within Wales. A consumption-based assessment of the total net impact on Welsh emissions - "Emissions of greenhouse gases attributed to the consumption of global goods and services in Wales" - has been adopted as an indicator for the Wellbeing Goals as part of the implementation of the Wellbeing of Future Generations Act.

## **Question 3:** What is the role of the EU ETS or other trading schemes in contributing to Welsh emission reductions and could this differ between sectors (power, industry)?

ANSWER: The EU ETS or whatever other trading scheme that might be put in place post-Brexit, will remain critical to delivery of emission reductions within the traded sectors including both electricity generation and industry. Given that over half of emissions in Wales are covered by the EU ETS any proposal to exclude all traded emissions would mean that the carbon budgets and accounting would cover only a minority of actual Welsh emissions.

# **Question 4:** Given that UK carbon budgets cover all of Wales's emissions and are set on a net basis, does this influence how accounting should be approached for Welsh climate targets?

ANSWER: This issue was considered when the Climate Change Strategy for Wales was developed and the decision was made to include all Welsh emissions within the 2020 target but only electricity use and non-traded sectors within the 3% p.a. emission reduction targets given the limited competence of WG within other sectors. This 'hybrid' approach reflected the pros and cons of including or excluding the traded sector. The options would appear to be either to exclude all EU ETS emissions, include all emissions or replace EU ETS emissions with the notional capped Welsh share of traded emissions. Given that the traded sector represents such a large proportion of Welsh emissions we believe it should be included although presented and reported as a distinct category, in a manner similar to that adopted for the Climate Change Strategy 2020 target. While it is fully acknowledged that many levers for change in the power and traded sectors are outside the competence of the WG, if the purpose of the targets and budgets is to drive change through informing policies and measures then inclusion would be appropriate. There is a real risk that the use of the net approach would undermine efforts by WG and others within Wales to achieve reductions in these critically important sectors, and consequently also fail to acknowledge mitigation action achieved within the traded sector.

# **Question 5:** Given the UK context, should the design of welsh targets and budgets reflect devolved competence?

ANSWER: Given the difficulty of defining those sectors that are within devolved competence and the complexity of targets and budgets that would be required to reflect this, we recommend that a territorial 'gross' emissions approach is adopted. Any attempt to limit targets and budgets to areas of devolved competence would also be impacted by future changes in competence through further devolution of powers to Welsh Government that would require subsequent amendment of the scope of targets and budgets. As mentioned

above, this issue was similarly examined in developing the Climate Change Strategy for Wales, and the decision was made not to undertake to restrict the scope of emissions included due to the complexity of extent of Welsh competence across sectors. Indeed, it was recognised in terms of the 3% p.a. reduction target that broadly around one third of emission reduction was related to EU or UK measures, one-third to Welsh Government measures and a further third to delivery by actors within the sectors.

Given that energy supply sources contributed 38% of total Welsh GHG emissions in 2014 and despite the fact that energy is not a fully devolved sector, there would be a risk that action to deliver emission reduction within this sector would be undermined were it excluded. The question remains how well we are able to work and drive the ambition together with UK Government for non-devolved matters but we do not believe this should steer the scope of the targets and budgets. In essence, we believe that the complexity of devolved competence makes restricting the scope of the targets or budgets very difficult and likely to be difficult to justify. Nevertheless, we recognise that it would be necessary to clearly communicate the limitations of competence and address this in developing the Low Carbon Delivery Plan for reducing emissions.

**Question 6:** Are there any competitiveness implications for current traded sector business (e.g. industry) in having gross emissions targets in Wales, and if so how could they be minimised?

ANSWER: Yes, clearly there are potential competitiveness implications that would need to be considered in relation to any measures put in place as part of the Low Carbon Delivery Plan for the traded sector. However, we do not think that these should prevent a clear focus on a transition to a low carbon economy. However, critically there would be a need to consider dispensations, subsidies or other support mechanisms to manage any competitiveness implications to avoid any perverse outcomes that result in 'offshoring' of traded sector operations or production. While we recognise this as an important issue it should not dictate the scope of the targets or budgets.

**Question 7:** What is the role for purchase of international offset credits to supplement action to meet Welsh emissions targets?

ANSWER: In principle international offset credits that provide verifiable cost effective genuine emission reductions elsewhere, and deliver other benefits should not be excluded, especially given their potential role in delivering the international goal of the WoFG Act. Such offsets also provide flexibility to meet legitimate under-achievement of targets for example where changes to the baseline or historical emissions may impact on budgets. However, there is a need for a cap that strictly limits their use and clear governance on what schemes are acceptable credits. There would be greater risks in including VERs voluntary offset schemes and should they be considered very tight definition of the type allowed would be required.

Question 8: In principle, should international shipping be included within Welsh emissions

#### targets, and if so are there any practical difficulties with doing so?

ANSWER: In principle, NRW would support the inclusion of international shipping within Welsh emissions targets but for a variety of reasons outlined below, we believe that this should be an aspiration for the future rather than being part of the current targets and budgets.

International shipping represents a very small proportion of Welsh emissions (less than 2%) and because it is not considered within the Kyoto Protocol, the Paris Agreement or the UNFCCC negotiations, it is not part of the UK Emissions Inventory. It would therefore be necessary to develop a separate approach for including these emissions in the targets and budgets. At the same time there are on-going international efforts through the International Maritime Organisation that have introduced emission standards for new shipping, are currently seeking to introduce monitoring of shipping emissions and subsequently develop emission reduction measures. Moreover, there are moves to include emissions from shipping in the EU ETS with some shipping required to report emissions as a first step from 2018. There would be a real risk in view of the UK Government excluding these emissions that unilateral measures by Welsh Government would result in shipping being displaced elsewhere in the UK. Given the international efforts to tackle shipping we would suggest that Welsh Government should focus efforts on other sectors and in encouraging the UK Government to accelerate international action to reduce emissions through the IMO.

## **Question 9:** In principle, should international <u>aviation</u> be included within Welsh emissions targets, and if so are there any practical difficulties with doing so?

ANSWER: In principle, NRW would support the inclusion of international aviation within Welsh emissions targets but for a variety of reasons outlined below, we believe that this should be an aspiration for the future rather than being part of the current targets and budgets.

International aviation represents a very small proportion of Welsh emissions (less than 1%). Nevertheless, aviation emissions are likely to grow in future, both as proportion of UK emissions and in absolute terms. And there is potential for growth in capacity and demand at Cardiff airport - Wales' only international airport. Given that international aviation emissions are not included in the UK Emissions Inventory, it would be necessary to develop a separate approach for including these emissions in the targets and budgets. Under the EU ETS, NRW only regulates two small aviation operators (both private plane facilities and currently exempt from reporting requirements) for which many flights are not international. As most aviation operators have a registered office in England, the vast majority of flights are regulated by the EA. It may be difficult to account for emissions specific to Wales (Cardiff Airport) without gathering data about individual flights. Including aviation emissions would be further complicated by the fact that such a large proportion of flights taken by Welsh residents, including all international flights for those in mid and north Wales, are from English airports and so included in the English Emissions Inventory figures. Only including the emissions for Wales from Cardiff Airport would be of questionable value as they represent a relatively small proportion of the total flights of Welsh residents. At the same time there are on-going international efforts through the International Civil Aviation Organisation to cap international aviation emissions at 2020 levels through offsetting those emissions that are above the 2020 level. Moreover, flights within the EU are covered by the EU Aviation ETS scheme. There would be a real risk that unilateral Welsh Government measures such as additional passenger or airline costs introduced for Cardiff Airport to discourage flying or offset emissions would result in flights being displaced elsewhere in the UK, particularly to Bristol or Birmingham, and could result in perverse outcomes with greater vehicle mileages to English airports. Given the international efforts to tackle aviation we would suggest that Welsh Government should focus efforts on other sectors and in encouraging the UK Government to accelerate international action to reduce emissions through the EU and ICAO.

It is worth noting that Oslo Airport has become the world's first airport to offer jet biofuel to all airlines through its normal supply mechanism. The move breaks down one of the most difficult barriers in the emerging market of biofuels for aviation, which is seen as a promising solution to cutting emissions. Welsh Government as the owner of Cardiff Airport might wish to look at the Oslo Airport approach and consider introducing jet biofuel as a measure to reduce emissions from the aviation sector. This might be accepted by the aviation industry given that it has for some time advocated that eligibility for reward under the Renewable Transport Fuel Obligation which would help to provide the support needed to kick-start the use of aviation biofuels, which at present are not produced or supplied in the UK <a href="https://www.gov.uk/government/consultations/renewable-transport-fuel-obligation-proposed-changes-for-2017">https://www.gov.uk/government/consultations/renewable-transport-fuel-obligation-proposed-changes-for-2017</a>.